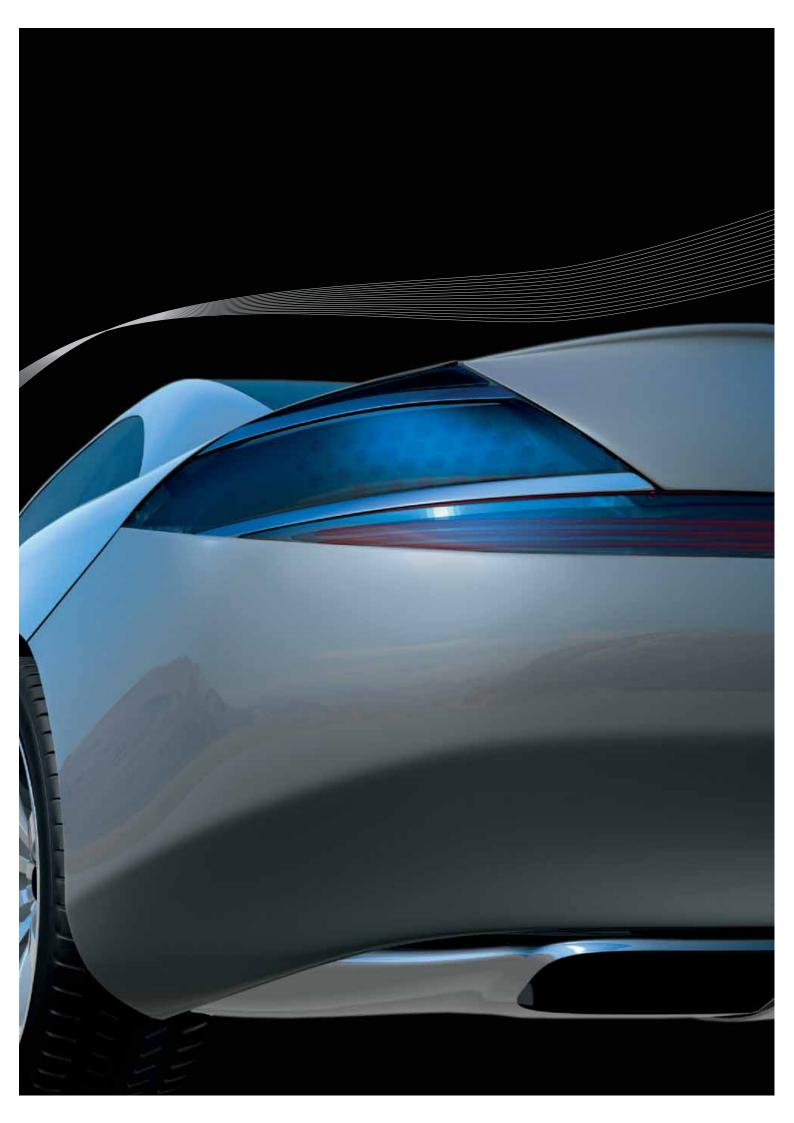
# PRS — PIONEER REFERENCE SERIES

#### TUNE INTO SOUND PERFECTION

Immerse yourself in the luxury of crystal-clear sound with PRS — the Pioneer Reference Series. When it comes to high-end sonic expertise and experience, no other audio maker comes close. PRS has set the standard for Europe's top professional sound competitors — it's the winning team. Every component — the headunit, equaliser, amplifiers and speakers — has been uniquely styled and created, using only the very best hi-fi parts, to offer pure and beautiful sound. Combined as a system, you'll get the most exhilarating sonic experience of your life. Thunderous lows are delicately balanced with crisp and clean highs. Sound simply does not get better than this.





The DEX-P9R ultra-high-quality component tuner transfers digital data directly from the CD to the audio processors, so you get as close as possible to the original sound — with absolute minimum distortion. When optically paired with the DEQ-P9 digital preamp/equaliser, it forms a system with unrivalled audio, DSP and network functions. Go for an unparalleled listening experience and use pure sound-proven PRS series amps and speakers.



#### DEQ-P9 **DIGITAL PREAMP/EQUALISER**



Add this DSP unit to the DEX-P9R and enjoy the versatility, sonic purity and distortion-free control of digital signal processing and network functions. Incoming signals are converted to digital, enabling you to balance the output signal to match your car's acoustics and to create your personal sound profile by using the parametric equaliser and Sound Field Control functions.

#### FULL DIGITAL SYSTEM

Pioneer's pure audio system — DEX-P9R component tuner and DEQ-P9 digital preamp/equaliser - redefines sonic excellence. Pioneer hi-bit technology converts the original 16-bit CD audio signal to 24 bits, which improves signal linearity and maintains pure audio quality during digital processing. The DEX-P9R has an optical digital input for connecting the XDV-P9-II multi-DVD player, and optical digital outputs for connecting to the DEQ-P9 off-board digital network. This network features 3 ultraprecise 51-bit Digital Signal Processors to implement the 31-band graphic equalisation with independent Left/Right control, Time Alignment and the 4-way digital network.

Both units are loaded with Burr-Brown 24-bit multi-bit DACs - the best of the best! Each of the DEX-P9R's audio outputs features L/R independent DACs, and the DEQ-P9 outputs are outfitted 24-bit multi-bit D/A converters with L/R independent DACs for each



high, mid and low mode. The DACs are arranged in Sign-Magnitude conversion mode. This eliminates zero cross distortion, and offers an astounding S/N ratio and an ultra-wide dynamic range. Paired with 8 times digital oversampling, the final result is unmatched sonic clarity.

Audiophiles will also appreciate the details, such as the aluminium front panel, elegant blue OEL display, gold-plated RCA terminals and 99.99 %pure Oxygen-Free Copper RCA cables. Noise-reducing features like a copper-plated chassis and Display Off mode make these products the acoustic perfectionist's dream.

> Copper-plated chassis **Display Off Mode**



The key features are indicated by means of coloured icons. For a full explanation on all icons, see pages 101-107.

Crossover Network Adiustment

Graphic Equaliser

# PRS — AMPLIFIERS

Pioneer's PRS amps are designed to drive speakers beyond the limit — with more powerful, distortion-free sound than ever before. In addition, a 4-channel crossover (PRS-X340) gives you several power options, while a high/low switch lets you choose between 3 – 9 kHz or 40 – 120 Hz. The bandpass filter makes bi-amplifying a breeze. So, if you want truly awesome power, go for PRS series amps.



#### MOUNT PRS SERIES AMPS TOGETHER

Mount two PRS series amplifiers together to create one massive amplifier. The mounting feet on the interior side can be removed or rotated inward to allow the amplifiers to mount flush against each other.



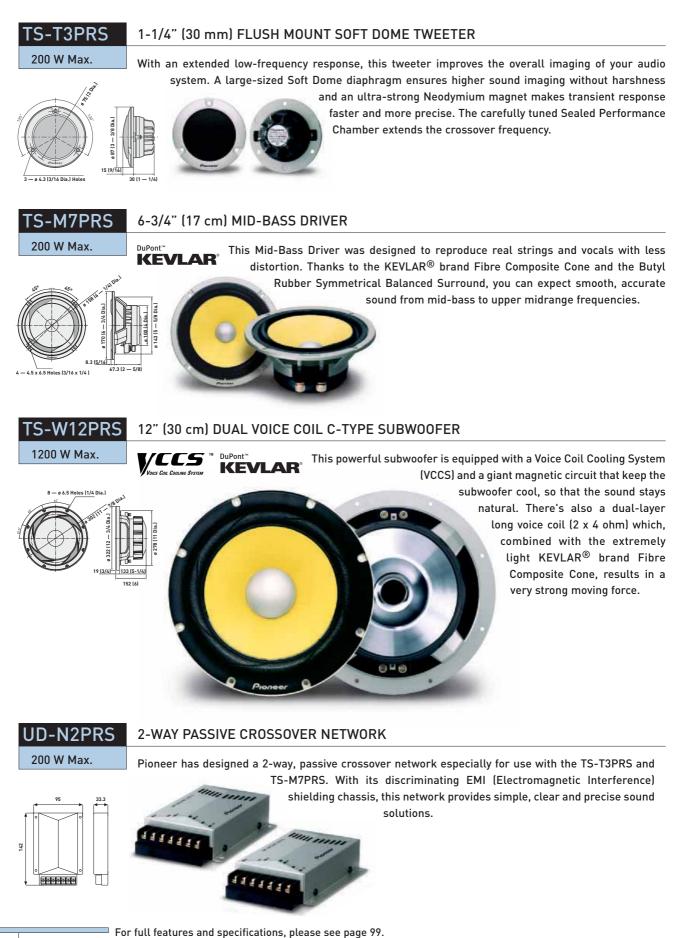
#### MOSFET DEVICES FOR OPTIMUM PERFORMANCE

Pioneer MOSFET output devices offer significant advantages over traditional bipolar devices such as faster switching results, less crossover distortion and less noise. High power used to mean high heat and resistance that could lead to noise, but the PWM Regulated MOSFET power supply unit keeps its cool even under pounding pressure. With these MOSFET devices, PRS amps deliver more power than ever!

#### INTELLIGENT POWER SYSTEM

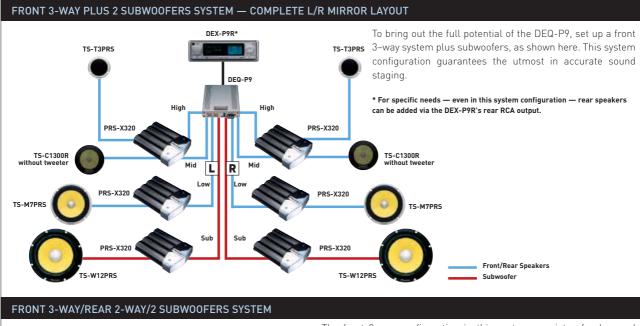
A car's normal power supply restricts output power to 50 W through a 4 ohm load. For more power, PRS amps use a PWM Regulated MOSFET power supply unit to boost the car's line voltage, while Pioneer's Intelligent Power System controls the power supply. This means you get peak power output without noise; current to the speakers is increased when other electric loads in the car cause the voltage to drop. You can now have the power you crave.

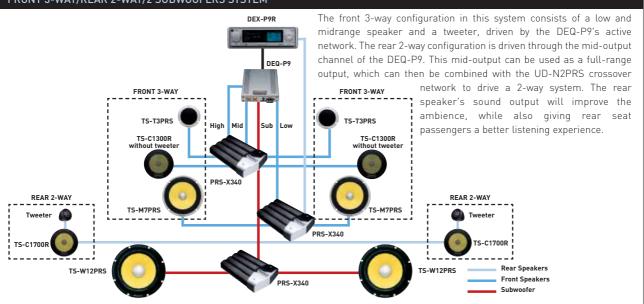
# PRS — SPEAKERS & PASSIVE CROSSOVER NETWORK



# PRS — RECOMMENDED SYSTEM SET-UPS

To get the most from the DEX-P9R, Pioneer strongly recommends using it in combination with the DEQ-P9 and the PRS amps and speakers, to create a variety of system set-ups that suit your sound preference and in-car audio characteristics. In both the configurations shown below, the external amplifiers are driven by the DEQ-P9's Hi-Volt outputs. These very high-quality outputs use their own balanced plus/minus PWM power supply to minimise noise and distortion. Create the ultimate system by using the DEQ-P9 in its 4-way (low, mid, high, subwoofer) configuration for optimum performance. Each band has its dedicated speaker, while the Crossover Network and Time Alignment feature allow for each band to be precisely tuned. Result: perfectly balanced acoustics. If you prefer to work with a 2-way plus subwoofer system, the resulting extra channel won't go to waste. It can be used to drive a full-range rear fill speaker and will enhance the rear seat acoustics.





# FUROPEAN REFERENCE SEPARATE COMPONENT SPEAKER SERIES

These super high-quality speaker systems contain precision-engineered woofers, tweeters and crossovers, all designed to bring you to new levels of sound perfection. The Soft Dome tweeter reproduces accurate high notes while the Passive Crossover Network guarantees an optimal distribution of low and high frequencies from the amplifier to the woofers and tweeters. A guaranteed unforgettable listening experience!





- with butyl rubber edge
- 25 mm Ø Soft Dome tweeter with neodymium magnet
- VCCS (Voice Coil Cooling System)
- Aluminium die-cast woofer basket
- Gold-plated binding post-screw woofer terminals
- Tweeter fitting kit included: Surface mount slant spacer/Custom tweeter bracket for Repault
- Passive Crossover Network with tweeter level control (0 dB. -3 dB)
- Nominal input power: 40 W
- 35 32,000 Hz, 90 dB (1 W/1 m)

#### KEVLAR<sup>®</sup> BRAND FIBRE COMPOSITE CONE

The woofer of the TS-W12PRS, TS-M7PRS, TS-C1700R and TS-C1300R was meticulously designed to **KEVLAR**<sup>®</sup> reproduce real strings and vocals with less distortion. Thanks to the KEVLAR® brand Fibre composite cone, you can expect accurate, smooth sound from mid-bass to upper midrange frequencies.



# PIONEER DEMO CARS/SOUND TUNING

#### **PIONEER'S 2004 DEMO CARS**

Check out five of the finest show cars around — shown below — loaded with top-of-the-line Pioneer products. They'll bedazzle you with their impressive, vamped-up interiors and imaginative integration of Pioneer products.



#### DENNIS VAN DIJK'S PORSCHE CAYENNE

This stunning jet-black car with leather interior is complemented by three ingeniously installed AVX-P7300 colour displays: one slides out of the dashboard, while two emerge from the back of the front seats. High-performance PRS amps — PRS-X340, PRS-X720 and PRS-X220 — drive the speakers, sub and centre speaker

respectively. This spectacular set-up, including a hide-away GEX-P700DAB tuner, is easily controlled using the 7-inch touch panel display of the AVH-P7500DVD multi-channel DVD

touch panel display of the AVH-P7500DVD multi-channel DVD headunit, which is connected to the AVIC-800DVD navigation unit for additional functionality.

This car can be admired at tuning events all across Europe.

#### MINI ONE'S

Inspired by Pioneer's corporate theme — sound.vision.soul —, three Mini demo cars were created in the UK. "Sound" is all about superior sound quality. Top Pioneer speakers (TS-C1700R and TS-C1300R) and first-class amps (PRS-X340) are complemented by the subtle bass of two TS-W12PRS subs, for an awe-inspiring audio experience. The stylish DEH-P8600MP headunit and the AVIC-600T navigation package complete the experience.

"Vision" turns the Mini One into a Mini-cinema. The AVH-P7500DVD allows the driver to enjoy movies and music on the move with full surround sound. Five AVD-W6200 screens, extra speakers and amps ensure that there will never be a shortage of things to watch.

"Soul" is big on volume, bass and looks. Four powerful PRS-X340 amplifiers are needed to run the TS-W5000SPL sub in the boot and the doors have been remodelled to hold the TS-A2010 speakers. Exclusive wheels and styling finish the package perfectly.







#### **TOYOTA RAV4**

This democar not only looks spectacular and sounds fabulous, it also includes full navigation capability. The futuristic creation includes two TS-W12PRS subs, cleverly installed in the boot behind lighted Plexiglas — finished with Pioneer and Toyota logos. The back door showcases an AVD-W8000 display, a TS-C1300R speaker set and high-quality PRS amps. Superb navigation functionality and entertainment are ensured by the AVH-P7500DVD Multi-Channel DVD AV Headunit



and AVIC-900DVD DVD Navigation/AV Unit. The car also includes two AVD-W6200 rear displays and the XDV-P9-II Multi-DVD player to enjoy movies, and a practical back-up camera.

#### PIONEER SOUND TUNING



Professionals on the international tuning scene count on the high-quality standard of Pioneer products to win. That's why Pioneer gear consistently appears in award-winning cars in the Sound Quality and SPL (Sound Pressure Level) competitions. Since 2003, Pioneer is also proud to be an official sponsor of EMMA (European Mobile Media Association).



# AMPLIFIERS AND SUBWOOFERS



SET SOME RECORDS OF YOUR OWN

Huge sound from a slim package, what a treat! New class-D amps are as compact and efficient as they are

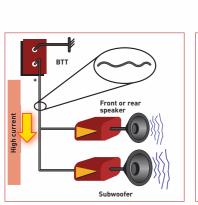
stylish, and they still give out the purest and cleanest power around. The new GM series amplifiers are power toppers as well. They pump out intense power to subs and speakers and they stand the test of time. Add that to world-class SPL subwoofers — they work together with Pioneer amps as the perfect team — and you've got solid bass performance. The groundbreaking SPL subs are dominating today's global tuning scene and have already set the world record in their class. Does sound get any better? Pioneer's amps and subwoofers are both slim and smart. In fact, they're at the top of their class.

# **CLASS-D AMPLIFIERS**

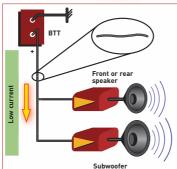
# GM-D510M CLASS-D AMPLIFIER

#### 1 x 1000 W (2 Ω) 1 x 600 W (4 Ω) Max.

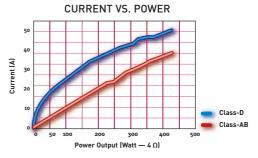
Pure intensity — 1000 W of maximum output power — charges out of this Pioneer Class-D amplifier. With its powerful yet compact design and steady voltage, this amplifier fuels your subwoofers and speakers with clean, distortion-free sound. Class-D amps require less electrical current, so there's less heat to distort the system. Digital processing also ensures constant crisp sound. Listen and believe!



The high amplifier power required to drive a subwoofer causes unstable current and voltage, which not only goes to the subwoofer but also to the front and rear speakers. As a result, the sound quality is affected and distorted.



A Class-D amplifier needs only 2/3 of the current of a conventional amplifier, so the power supply to both subwoofer and front and rear speakers is more stable. As a result, the sound quality will not be affected, so you can enjoy a very clean sound outbut without distortion.



#### CLASS-D AMPLIFIERS

Class-D amplifiers are very efficient compared to traditional Class-A or AB amplifiers. Very little power is transformed into heat while a very high percentage of the power supply (67 %) is transferred into the load. So little input power is needed to produce high output power.

## GM-D515 5-CHANNEL CLASS-D AMPLIFIER

#### $4 \times 100 \text{ W} (4 \Omega) + 1 \times 300 \text{ W} (4 \Omega) \text{ or } 1 \times 600 \text{ W} (2 \Omega) \text{ Max.}$

This 5-channel Class-D amplifier sets new standards of excellence with superior distortion-free sound, first-class power and a slim compact package. With 5 channels — 4 analogue and 1 class-D mono — and Low Pass and High Pass Filters, you are able to directly connect 4 speakers and a subwoofer. Efficient Class-D technology needs less distortion-causing input power, so your senses are filled with clear yet extremely powerful sonic pleasure.

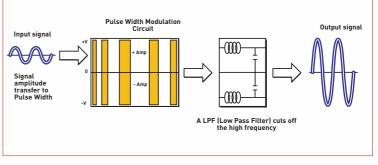


#### PULSE WIDTH MODULATOR

The Class-D amplifier's PWM (Pulse Width Modulator) modulates the original audio input signal to create a digital signal which contains the input signal and a band of frequency components around the modulation frequency. A LPF (Low Pass Filter) will then filter out the 350 kHz frequency pulses and the resulting amplified output

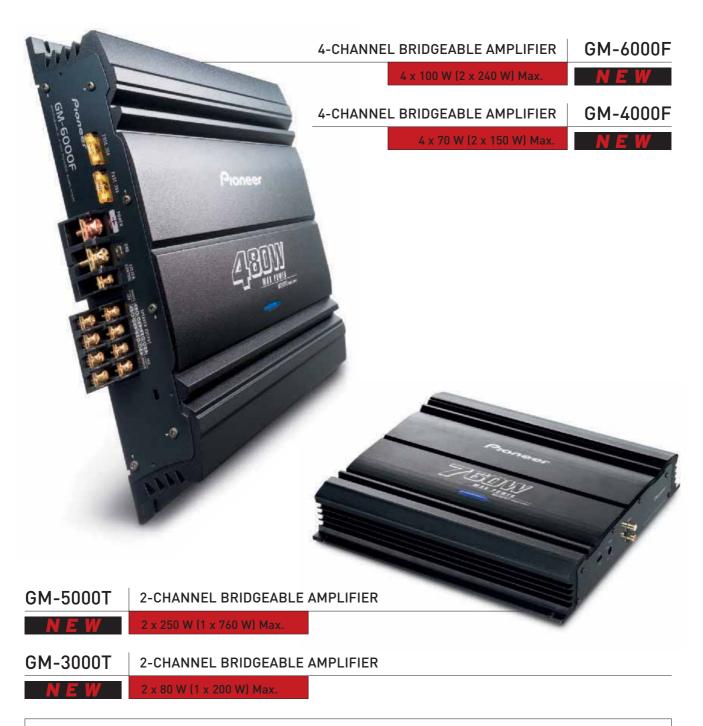
signal is then sent to the subwoofer and/or speakers. The power output FET acts like an on/off switch; when 'on', the FET closes so no voltage runs through its terminals and no wasted power is transformed into heat. Therefore, the heat sink can be smaller and the amp design very compact. A stable load can be pumped into your subs and speakers to create a maximum of undistorted, clear sound.

#### PULSE WIDTH MODULATOR METHOD



# **BRIDGEABLE AMPLIFIERS**

Ignite your system with the high pulsating power of Pioneer's latest bridgeable amplifiers. They are able to drive 4 or 2 separate speaker channels as well as multiple subwoofer leads with ease. You can be sure of distortion-free sound, high-frequency range performance and improved heat dissipation resulting from Pioneer's unique design.



#### MOSFET POWER SUPPLY AND MOSFET OUTPUT SECTION

Pioneer's bridgeable amplifiers are better than ever at delivering high-quality power, thanks to Pioneer's MOSFET devices! The MOSFET power supply offers numerous advantages over conventional bipolar output devices, assuring peak power output without noise or distortion. The high-performance MOSFET output section enhances the amp's high-frequency range performance and linear response to signals. So now you can drive your amp even harder, without compromising on sound quality.

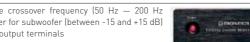
Positioned between sound sources and amplifiers, Pioneer Crossover Networks are designed to give extremely precise, clear sound reproduction. There's a choice of models, each offering accurate adjustment of frequency crossover points to match the characteristics of subwoofers, midrange speakers and tweeters.

#### CD-635 **3-WAY ELECTRONIC CROSSOVER NETWORK**

• Variable crossover frequency (Mid and Low: 50 Hz - 200 Hz or 500 Hz - 2 kHz, High and Mid 3 kHz - 10 kHz)  $\bullet$  Cut-off slope: -12 dB/Oct (all ranges)  $\bullet$  Subwoofer and High Range Phase Switches • Subwoofer output Mode Switch (Stereo/Mono) • Level Controller • Gold-plated RCA input/output terminals

#### CD-625 2-WAY ELECTRONIC CROSSOVER NETWORK

• LPF and HPF (50 - 200 Hz) • Cut-off slope: -12 dB/Oct • Variable crossover frequency (50 Hz - 200 Hz continuously variable) • Subwoofer phase switch • Variable Level Controller for subwoofer (between -15 and +15 dB) • Subwoofer output mode switch (stereo/mono) • Gold-plated RCA input/output terminals



# CD-615

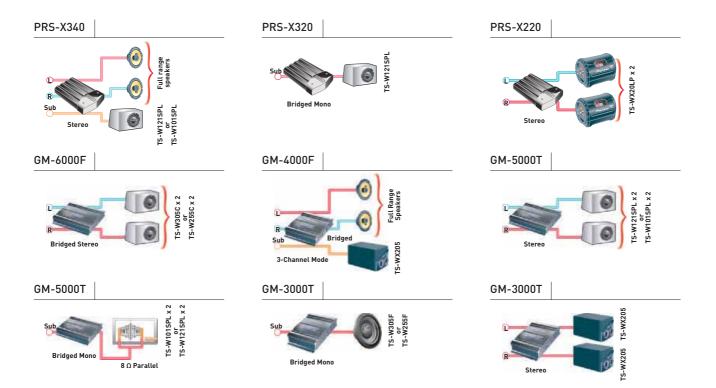
#### 2-WAY ELECTRONIC CROSSOVER NETWORK

LPF and HPF • Cut-off frequency (HPF: 80 Hz or flat; LPF: 80 Hz) • Cut-off slope: -12 dB/Oct • Subwoofer output • RCA input and output terminals • In-line Noise Filter (Signal Ground Isolator)



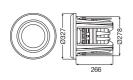
# AMPLIFIER-SUBWOOFER CONFIGURATION EXAMPLES

Below are a few examples of how to build an in-car sound system with an amplifier and subwoofer combination. These configurations match the capability of each subwoofer and amplifier, to maximise the potential of the system.



# SPL SUBWOOFERS

# TS-W5000SPL



### 

# COMPETITION CLASS SPL SUBWOOFER FOR PROFESSIONAL USE 30 CM DUAL VOICE COIL SUBWOOFER

#### 5000 W Max. For enclosure use

Experience the power and punch of an award-winning subwoofer. Pioneer's groundbreaking TS-W5000SPL helped set the SPL world record — with 172.2 dB — at the 2003 dB Drag Finals, as part of the Edge Audio team auto. Boasting four patent-pending designs, the TS-W5000SPL stands for high power handling, louder output, high-quality SPL and excellent response for bass sound. If you're looking for world-class SPL, then the search is over.



Winner of the 2003 dB Drag Racing World Finals 2003. SPL World record in the Extreme 9+ class.





# TS-W121SPL

### COMPETITION CLASS SPL SUBWOOFER 30 CM DUAL VOICE COIL SUBWOOFER

# 

### 2000 W Max. For enclosure use

Loads of decibels combined with solid, massive power make the TS-W121SPL a force to be reckoned with. This high-quality subwoofer pumps out +165 dB and 2000 W max. power. Borrowing top technologies from the groundbreaking TS-W5000SPL, such as an innovative IMPP cone and a die-cast aluminium basket, the TS-W121SPL has what it takes for your next SPL competition or trip down the street!



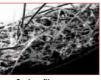
# THE RIGHT STUFF: INTERLACED FIBRE REINFORCED IMPP CONE



An extremely rigid yet lightweight cone is vital to prevent cone failure at high sound pressure levels.

Pioneer's range of IMPP cones meets this need perfectly: a proprietary composite blend of long carbon fibres for the TS-W5000SPL, glass fibres/carbon fibres for the TS-W121SPL and TS-W101SPL, carbon/KEVLAR<sup>®</sup> brand fibres for the TS-SW124D and KEVLAR<sup>®</sup> brand fibres for the TS-W305C, TSW305F, TS-W255C and TS-W255F. The fibres interlace together to form an exceptionally resilient fibre weave, which provides the strength and rigidity for low

distortion, clean and extremely powerful bass. The stuff that champions are made of!



Long Carbon fibre weave

#### HIGH DB DURABILITY: 3-LAYER FIBRE WOVEN RADIAL SURROUND

Most Pioneer subs are outfitted with a patentpending 3-layer Fibre Woven Radial Surround

design. The surround consists of two outer layers (rubber for the TS-W5000SPL) and one inner layer of interwoven fibre (KEVLAR® brand fibre for the TS-W5000SPL) with a

honeycomb weave for even distribution throughout the surround material. This eliminates weak points and improves the high power capability for an extremely durable and resilient surround, even under extreme SPL conditions.

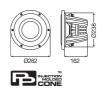


3-layer fibre woven radial surround: an extremely durable and high-performance radial surround

# SPL SUBWOOFERS

## TS-W101SPL

#### COMPETITION CLASS SPL SUBWOOFER 25 CM DUAL VOICE COIL SUBWOOFER



## 1500 W Max. For enclosure use

If you are a big fan of SPL, then the TS-W101SPL may be your winning ticket. The high SPL capability — up to 165 dB — will charge your system with 1500 W of intense power and maximum force. Based on the same technology found in the TS-W5000SPL competition model, this subwoofer is filled with quality material including a wide-roll, 3-layer fibre woven radial surround. Get ready to rock the block!



# MASSIVE FORCE OF THE HIGH POWER MOTOR ASSEMBLY

The huge motor assembly of the TS-W5000SPL uses three massive 3 kg magnets to drive the voice coil and cone with incredible force, and therefore overcome the tremendous air pressure resistance experienced in world-class SPL competitions. The TS-W121SPL and TS-W101SPL feature a double-stacked magnet assembly; the TS-W305C and TS-W255C models feature a dual mass magnet assembly. Any way you go, these subs provide exceptional force for superior bass.

# SOLID SUPPORT: ALUMINIUM DIE-CAST BASKET WITH BOTTOM HOLD STRUCTURE

During high SPL levels, the motor assembly is placed under extreme pressure. So Pioneer developed an exclusive aluminium die-cast basket for the TS-W5000SPL, TS-W121SPL, TS-W101SPL and TS-SW124D, which securely supports the motor. This basket structure prevents any unwanted flex or vibration that can cause energy loss and reduce overall performance. A solid winner!



Aluminium die-cast basket structure

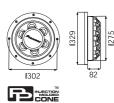
# SHALLOW-TYPE SUBWOOFER

# TS-SW124D

# **30 CM SHALLOW-TYPE SUBWOOFER**

For enclosure use

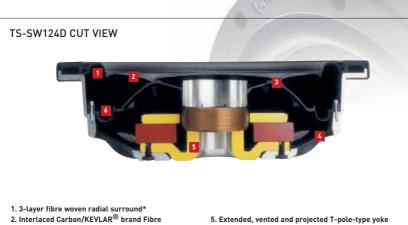
1200 W Max.



This subwoofer reinvents the concept of 'slim and compact'. Only 8.2 cm deep, it makes installation a breeze no matter how you install it. Its trim package is bursting with top technologies: the Interlaced Carbon/KEVLAR<sup>®</sup> brand Fibre Reinforced IMPP double cone and a revolutionary, patent-pending spacesaving concept. This subwoofer answers the call for high power, pure-sounding performance in a compact design.







to control the woofer cone's excursion. The Air suspension system, formed by creating a sealed air space between the double cones, effectively replaces the damper, providing excellent design and performance characteristics. It provides superior compliance linearity, regardless of volume input, for reproducing exceptionally clear, low distortion bass sound.

The typical subwoofer uses a damper (spider)

SPACE-SAVING AIR SUSPENSION EXCURSION CONTROL SYSTEM

- Reinforced IMPP double cone\* 3. Double cone reinforcement nodes\*
- 4. Aluminium die-cast one-piece rigid chassis
- 5. Extended, vented and projected T-pole-type yoke 6. Air suspension excursion control system\*

\* Patent pending

# a-CCELERATE SUBWOOFER SERIES



Pioneer's a-Ccelerate subwoofers give a truly powerful and intense bass-kicking performance. Whether it's enclosure use you're looking for, or free-air subwoofers that use your car boot as an acoustic chamber, these subs reach the very lowest frequencies with astounding tonal precision, even at high volumes. Rev up your system with extra power and SPL — purely from Pioneer.



# 30 CM SUBWOOFER

800 W Max.	For enclosure use

TAC



25 CM SUBWOOFER 700 W Max. For





For enclosure use



Spoke grille

TS-W305F with UD-G305 spoke grille



Looking to get even more performance out of your high-quality Pioneer subwoofer? The tailored, compact design of Pioneer custom enclosure boxes fully maximises the potential of your Pioneer subwoofer and they are quick and easy to install.

**UD-W300S** 



Custom enclosure box for TS-W121SPL and TS-W305C.

UD-W250S

Custom enclosure box for TS-W101SPL and TS-W255C.



# UD-SW124S

Custom enclosure box for TS-SW124D

\* For safety reasons, please attach safety belt UD-SB100 when installing custom enclosure boxes UD-W300S, UD-W250S and UD-SW124S.

# LINEAR POWER RESPONSE SUBWOOFERS

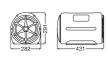


Pioneer's Pump Series subwoofers are truly out-of-this-world. They are loaded with Linear Power Response technology like the unique edgeless construction that lets the diaphragm slide smoothly over a bigger amplitude. These futuristic designed subwoofers pump out BIG bass from a relatively small body.

#### TS-WX20LPA 20 CM LINEAR POWER AMPLIFIED SUBWOOFER

200 W Max

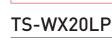
350 W Max



INJECTION







## 20 CM LINEAR POWER SUBWOOFER





- Built-in 200 W Max. monaural amplifier, MOSFET PWM power supply
- 20 cm Ø edgeless construction IMPP/Foam composite cone woofer with aluminium die-cast frame
- Bass Reflex design
- RCA/speaker level inputs
- Input gain control/phase switch
- Built-in variable LPF (50 125 Hz, -12 dB/Oct)
- 2-layer edge-wise voice coil
- Precision triple damper (large diameter Conex damper)
- Aluminium die-cast heat sink
- Nominal output power: 100 W
- 25 200 Hz, 106 dB (in-car)

- 20 cm Ø edgeless construction IMPP/Foam composite cone woofer with aluminium die-cast frame
- Bass Reflex design
- 2-layer edge-wise voice coil
- Precision triple damper (large diameter Conex damper)
- Gold-plated screw terminals
- Max. power: 350 W
- Nominal input power: 120 W
- 25 200 Hz, 106 dB (in-car)

#### LINEAR POWER RESPONSE SUBWOOFERS

Linear Power Response subwoofers use an edgeless Bass Reflex system, and a unique moving system to drive the power. The piston with precision triple damper pumps out extreme bass from a relatively small body. A high-tech 2-layer edge-wise voice coil with high density and a rigid structure - generates a greater moving force. There's no problem with apertures between wires, as in normal voice coils. Pump subwoofers live up to their name.



- 1. Aluminium frame
- 2. Ring port
- 3. Precision Triple Damper 4. High density resin cabinet
- 5. Foam IMPP Drive Cone
- 6. Foam PP side wall
- 7. Mid-ship mount magnetic circuit with large magnet

# SUBWOOFER BOXES

# TS-WX206A

# 20 CM BANDPASS AMPLIFIED SUBWOOFER

#### 150 W Max. / Max. SPL 128 dB

If you want powerful bass sound, but don't want to sacrifice boot space, then this high performing model is on the mark. Its compact design makes installation easy and flexible. And no matter how packed the trunk, the large-sized aluminium die-cast heat sink keeps cool. A MOSFET 150 W amp improves amplifier performance. The TS-WX206A looks and performs the part of a true muscle amp, with the high SPL you want.

• Built-in MOSFET 150 W power amplifier

36

274

- + 20 cm Ø IMPP composite cone woofer
- Large dual port bandpass design
- RCA/speaker level inputs
- Input level control/phase switch
  Built-in variable LPF (50 125 Hz,
- -12 dB/Oct)
- Aluminium die-cast heat sink
- Nominal output power: 60 W
- 35 200 Hz, 107 dB (in-car), Max. SPL 128 dB (in-car)









# SUBWOOFER BOXES

## TS-WX22A 20 CM SEALED AMPLIFIED SUBWOOFER

## NEW



### 150 W Max.

Fantastically powerful bass can come in small packages. Just look at the TS-WX22A, an extremely compact, 20 cm subwoofer that fits snugly in the boot or under a seat. Functional as well as flexible, it packs quite a punch too. A MOSFET 150 W amp provides massive bass, while the aluminium die-cast heat sink offers distortion-less, superior sound. A wired remote control is included for easy sound tuning.





Standard wired remote control

- Built-in MOSFET 150 W power amplifier
- 20 cm Ø IMPP composite cone woofer
- Sealed-type design
- RCA/speaker level inputs
- Wired remote controller (6 m): Input level control/phase switch Built-in variable
- LPF (50 125 Hz, -12 dB/Oct)
- Aluminium die-cast heat sink
- Available for vertical/horizontal installation
- Nominal output power: 60 W
- 40 200 Hz, 101 dB (in-car)



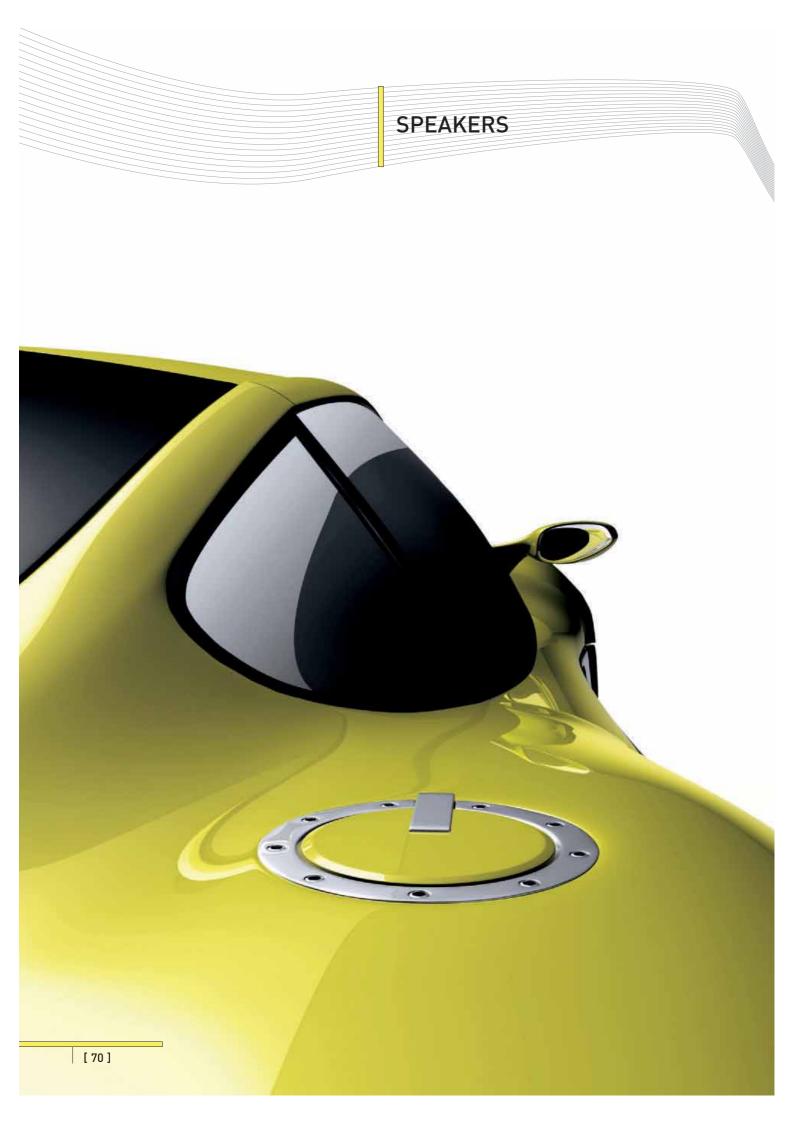
#### EXTREMELY VERSATILE AND COMPACT DESIGN

The slim-designed TS-WX22A requires only a minimum amount of space, so you'll hardly be deprived of any luggage room. It is so compact that it can be installed in various locations and positions, either horizontally or vertically.



Pioneer subwoofer boxes are a great choice for deep bass and true sound variation in an all-in-one solution. With built-in amplifier, Pioneer's TS-WX105A is small and easy-to-install, but still manages 100 watts of output power. The TS-WX205 delivers loud and kicking bass thanks to dual large ports and 20 cm woofer. These compact models can be installed easily and quickly into your location of choice.







#### PURE SOUND, ANY WAY YOU WANT IT

It's time to move up to the next level. Your in-car sound system will only be truly complete with really top-class speakers. And you won't find a better — or wider — choice anywhere else. The e-motion series is totally new. Highly stylish, you can revel in pure and accurate sound. If you like it loud, then go for a-Ccelerate. These speakers look tough and have the kicking power to match. The redesigned TS-G series has it all: ample power, sound, great looks — and they won't break the bank. Can't see what you're looking for? No prob, Pioneer has a full range of custom-fit speakers. Show us the car, we'll show you the speaker. Not to mention powerful sound and easy installation. Whichever model you choose, you can't lose with a Pioneer. From the legendary speaker maker, what else would you expect but legendary sound.

## e-MOTION SPEAKER SERIES



You want your sound to look fashionable and sound sophisticated. These high-tech new e-motion speakers fit the bill. Every sound performance is as pure and accurate as possible. Pioneer made sure of it, by incorporating outstanding and unique technology, such as the KEVLAR<sup>®</sup> brand fibre composite cone woofer and the world's first Pure Magnesium Balanced Dome midrange/tweeter. So you get precise, distortion-free audio, ideal for the latest audio formats. The separate 2-way models come with a soft dome tweeter offering great directivity and perfectly



#### KEVLAR<sup>®</sup> BRAND FIBRE COMPOSITE CONE WOOFER



Material choice can make all the difference.  $\mathsf{KEVLAR}^{\circledast}$  brand fibres create a much stronger speaker cone

that reproduces more accurate and vivid sound. You will notice the rich, full-bodied sound character with excellent midrange depth as well as more natural tones.



The e-motion coaxial speakers come equipped with a world premiere - the Pure Magnesium Balanced Dome midrange/tweeter. With the advantage of being a pure metal, yet lightweight, magnesium delivers superior detailed sound, smooth and high-speed sound reproduction, high sensitivity and a wide range. Pioneer was also able to incorporate this material in a revolutionary 0.05 mm hyper-thin design. You can be sure of distortion-free midrange sound, ideal for the latest audio formats such as DVD-Audio.



KEVLAR<sup>®</sup> brand Fibre Woofer Cone with Concave Centre Cap



Pure Magnesium Balanced Dome



	TS-E176C	TS-E136C	TS-E2096	TS-E6996	TS-E1796	TS-E1776	TS-E1396	TS-E1376	TS-E1076
KEVLAR <sup>®</sup> brand fibre composite cone	17 cm	13 cm	20 cm	6" x 9"	17 cm	17 cm	13 cm	13 cm	10 cm
woofer with butyl rubber edge (ø)				(163 x 237 mm)					
Soft Dome tweeter (ø)	25 mm	25 mm							
Pure Magnesium Balanced						30 mm		25 mm	25 mm
Dome tweeter (ø)									
Tweeter (ø)			12 mm	12 mm	10 mm		10 mm		
Pure Magnesium Balanced			43 mm	43 mm	30 mm		25 mm		
Dome midrange (ø)									
Neodymium magnet	•	•	•	•	•	•	•	•	•
Passive Crossover network	•	•							
Frequency Response	28 — 32,000 Hz	40 - 32,000 Hz	25 - 32,000 Hz	25 - 32,000 Hz	28 - 32,000 Hz	28 - 30,000 Hz	40 - 32,000 Hz	40 - 30,000 Hz	45 - 30,000 Hz
Sensitivity [1 W/1 m]	91 dB	90 dB	91 dB	91 dB	91 dB	90 dB	90 dB	90 dB	90 dB
Nominal input power	60 W	35 W	90 W	80 W	60 W	35 W	35 W	30 W	25 W

## a-CCELERATE UNIVERSAL SPEAKER SERIES



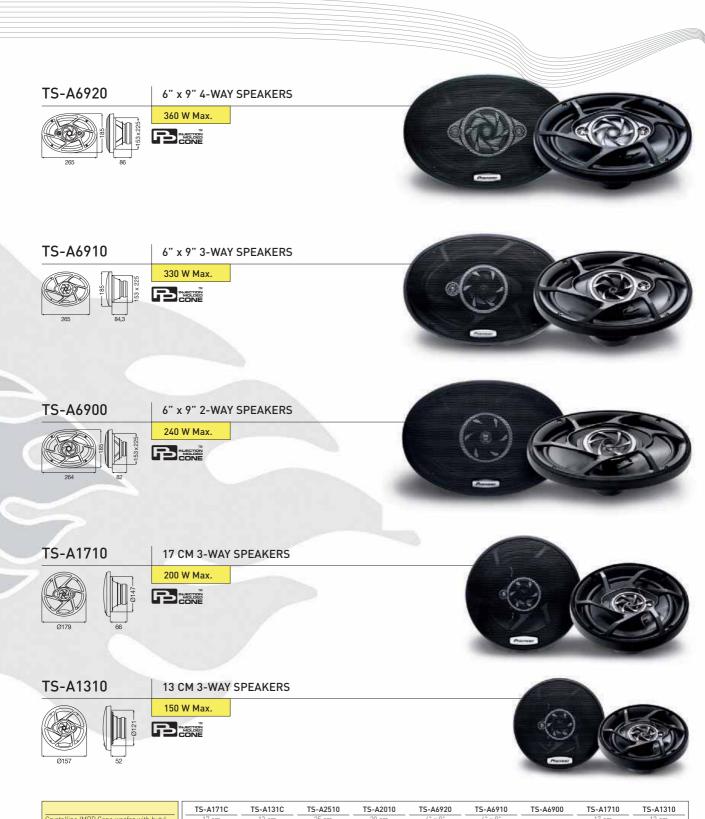
Are you tough enough to handle the power-kicking boom of Pioneer's a-Ccelerate series? These are some of the loudest and toughest speakers around. Backed up by Pioneer proven speaker technology, you're guaranteed amazing sound quality too. Choose from a full line of bass-blasting sizes; then add an a-Ccelerate subwoofer for the ultimate sound explosion.





#### Foamed PPC (Pearl PolyCarbon)

The TS-A6920 features a Foamed PPC (Pearl PolyCarbon) Balanced Dome midrange. It combines light weight with high inner loss producing lower distortion and creates high sensitivity, which ensures smooth frequency response without fatiguing harshness.



	TS-A171C	TS-A131C	TS-A2510	TS-A2010	TS-A6920	TS-A6910	TS-A6900	TS-A1710	TS-A1310
Crystalline IMPP Cone woofer with butyl	17 cm	13 cm	25 cm	20 cm	6" x 9"	6" x 9"		17 cm	13 cm
rubber edge (ø)					[163 x 237 mm]	(163 x 237 mm)			
Crystalline IMPP							6" x 9"		
Cone woofer (ø)							(163 x 237 mm)		
PPC (Pearl PolyCarbon) Balanced					66 mm				
Dome midrange (ø)									
Cone Midrange (ø)			66 mm	66 mm		66 mm		42 mm	42 mm
PEI Balanced Dome tweeter with	28 mm	28 mm							
Neodymium magnet (ø)									
Tweeter (ø)			18 mm	18 mm	18 mm	18 mm	66 mm	10 mm	10 mm
Super tweeter					18 mm				
In-line Crossover network	•	•							
Frequency Response	28 — 30,000 Hz	40 - 30,000 Hz	25 - 30,000 Hz	25 - 30,000 Hz	25 - 32,000 Hz	25 - 30,000 Hz	28 – 26,000 Hz	28 - 30,000 Hz	40 - 30,000 Hz
Sensitivity (1 W/1 m)	92 dB	91 dB	93 dB	92 dB	91 dB				
Nominal input power	60 W	40 W	100 W	90 W	80 W	80 W	40 W	50 W	35 W

SPEAKERS

# **TS-G SPEAKER SERIES**

If you are shopping for speakers that sound right, look tough and are affordable, then Pioneer's TS-G series is the perfect choice. You'll enjoy quality sound from this speaker series, thanks to the IMPP cone woofer with Power Blades. Engineers created this feature with an ear for clear and powerful sound — with a thorough analysis of vibration. The shallow basket frame and removable ear-type screw holes ensure easy fitting in most cars.



#### POWER BLADES



These protrusions act as additional support, eliminating unwanted vibration and increasing the rigidity of the cone. This in turn guarantees that TS-G speakers offer the lowest distortion possible to produce the purest, most accurate sound and maximum power handling.

#### REMOVABLE EAR-TYPE SCREW HOLES



Both the TS-G1348 and TS-G1318 have removable ear-type screw holes for easy fitting, especially in Renault cars.

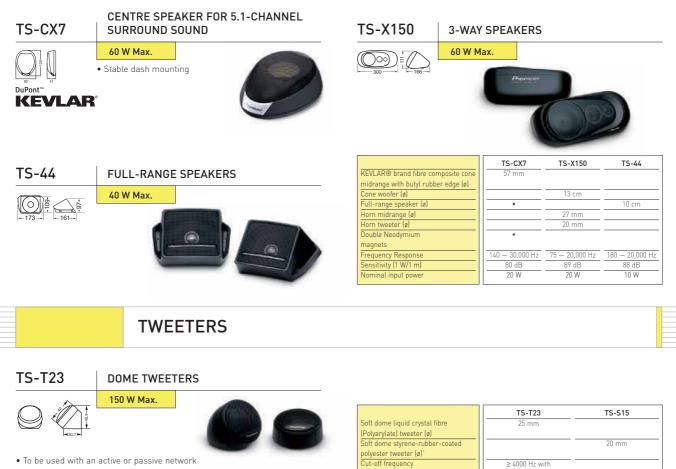
Note: Depending on the car type, it might be necessary to cut the factory installed bracket.

	TS-G1748	TS-G1718	TS-G1348	TS-G1318	TS-G1048	TS-G1018
MPP Cone Woofer (ø)	17 cm	17 cm	13 cm	13 cm	10 cm	10 cm
Cone Tweeter with	42 mm		42 mm		37 mm	
Neodymium Magnet (ø)						
Shallow basket design	•	•	•	•	•	•
Power blades	•	•	•	•	•	•
Frequency Response	30 — 25,000 Hz	30 — 22,000 Hz	40 — 25,000 Hz	40 — 22,000 Hz	45 — 25,000 Hz	45 — 22,000 Hz
Sensitivity (1 W/1 m)	92 dB	92 dB	91 dB	91 dB	90 dB	90 dB
Nominal input power	35 W	35 W	25 W	25 W	20 W	20 W



# SURFACE MOUNT SPEAKERS

Pioneer offers a selection of add-on speakers that create that perfectly tuned in-car sound. Surface mount speakers offer great installation flexibility. If you want the ultimate in-car cinema experience, add on the TS-CX7 centre speaker to achieve 5.1channel surround sound. Specialised tweeters give your system that finishing touch.



Crossover frequency

Versatile Mounting -way surface mou

Slant spacer included

ty (1 W/1 m

• To be used with an active or passive network



-12 dB/Uct	
	6000 Hz with -6 dB/Oct
 •	•
•	•
	•
 2,500 — 30,000 Hz	2,500 — 30,000 Hz
 2,500 — 30,000 Hz 90 dB (1 W/1 m)	2,500 — 30,000 Hz 90 dB (1 W/0.5 m)
 90 dB (1 W/1 m)	90 dB (1 W/0.5 m)

≥ 4000 Hz with

# SEPARATE COMPONENT HIGH-GRADE CUSTOM-FIT SPEAKERS



These systems — made up of select separate woofers and tweeters — give a truly outstanding performance. The woofers are designed to fit the car's existing speaker provision and the tweeters can be fitted either in the speaker provisions or any convenient location to optimise the overall sound image in the front of the car. The Easy Connector makes installation simple, allowing you to attach the speakers to the car's speaker connectors.

Easy Connector



35 W

Nominal input power

For impressively rich, natural sound and simple installation, Coaxial High-Grade Custom-Fit speakers are the clear choice. IMPP cone woofers with cone-integrated conical domes ensure richer bass, and the unique Swivel Tweeter allows more flexible customisation. Now connection is even easier with the Easy Connector — just hook up the speakers to the car's speaker connectors.



Alfa Romeo, Audi, Citroën, Fiat, Ford, Lancia, Mercedes-Benz, Opel/Vauxhall, Peugeot, Renault, Rover, Seat, Volkswagen





Audi, BMW, Fiat, Lancia, Mercedes-Benz, Peugeot, Renault, Rover, Saab, Seat, Suzuki, VW, Volvo



Daewoo, Fiat, Lancia, Seat, Volkswagen



Alfa Romeo, BMW, Citroën, Hyundai, Lada, Mercedes-Benz, Opel/Vauxhall, Peugeot, Renault, Rover, Seat, Volvo





Fiat\*, Saab, Seat \* Fiat Punto with adapter UD-M870

TS-H177 TS-H137 TS-H683 TS-H467 TS-H107 TS-H871 IMPP Cone woofer (ø) 4" x 6 (95 x 153 mm Foamed IMPP composite cone woofer with 6" x 8 [145<u>x</u> 204 mm] butyl rubber edge (ø) Carbon-Graphite blended IMPP Cone woofer (ø) Foamed PPC (Pearl PolyCarbon) balanced dome midrange with 36 mm Strontium magnet (ø) Metal-Coated PI balanced dome tweeter with Neodymium magnet (ø) PEI dome tweeter w Dome tweeter (ø) Swivel Tweeter Cone-integrated conical dom Frequency Response 30,000 H 28,000 H 30,000 H Sensitivity (1 W/1 m 38 dB 25 W Iominal input power 35 W 15 W

# SEPARATE COMPONENT CUSTOM-FIT SPEAKER

Want easy fitting at an affordable price? Then Separate Component Custom-Fit Speakers are for you. With separate tweeters you get better sound imaging too.



# **CUSTOM-FIT SPEAKER SERIES**

For those looking for solid quality sound for a particular car, Pioneer Custom-Fit speakers offer an affordable solution. They're easy to install too. The 17 cm models feature an Easy Connector for direct access to the car's speaker connectors, the 13 cm models have removable ear-type screw holes for Renault, and the 10 cm models come with removable screw holes, allowing compatibility with round and square basket frames.



Removable ear-type screw holes for Renault
 Alfa Romeo, BMW, Citroën, Hyundai, Lada, Mercedes-Benz,
 Opel/Vauxhall, Peugeot, Renault, Rover, Seat, Volvo

Removable ear-type screw holes for Renault
 Alfa Romeo, BMW, Citroën, Hyundai, Lada, Mercedes-Benz,
 Opel/Vauxhall, Peugeot, Renault, Rover, Seat, Volvo

Removable ear-type screw holes for Renault
 Alfa Romeo, BMW, Citroën, Hyundai, Lada, Mercedes-Benz,
 Opel/Vauxhall, Peugeot, Renault, Rover, Seat, Volvo

# **CUSTOM-FIT SPEAKER SERIES**

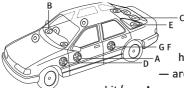


	TS-1776II	TS-1756II	TS-1746II	TS-1376II	TS-1356II	TS-1346II
IMPP Cone woofer (ø)	17 cm	17 cm	17 cm	13 cm	13 cm	13 cm
Cone midrange with Neodymium magnet (ø)	42 mm			42 mm		
Cone tweeter (ø)		42 mm			36 mm	
Tweeter (ø)	10 mm			10 mm		
Shallow basket design	•	•	•	•	٠	•
Easy Connector	•	•	•			
DIN/Peugeot type terminal				•	•	•
Frequency Response	30 — 26,000 Hz	30 — 22,000 Hz	30 — 22,000 Hz	40 — 26,000 Hz	40 — 22,000 Hz	40 — 22,000 Hz
Sensitivity (1 W/1 m)	92 dB	92 dB	92 dB	91 dB	91 dB	91 dB
Nominal input power	35 W	35 W	35 W	25 W	25 W	25 W

	TS-1056II	TS-1046II	TS-876	TS-875	TS-874	TS-4638	TS-4628	TS-4621
IMPP Cone woofer (ø)	10 cm	10 cm		8.7 cm				
Cone woofer (ø)			8.7 cm		8.7 cm	4" x 6"	4" x 6"	4" x 6"
						(95 x 153 mm)	(95 x 153 mm)	(95 x 153 mm)
Cone midrange (ø)						42 mm		
Cone tweeter (ø)	30 mm		38 mm	30 mm			42 mm	
Tweeter (ø)						11 mm		
Shallow basket design	٠	•						
DIN/VAG & Renault	٠	٠						
type terminal								
Frequency Response	45 — 22,000 Hz	45 — 22,000 Hz	90 — 20,000 Hz	75 — 30,000 Hz	90 — 20,000 Hz	45 — 28,000 Hz	45 — 25,000 Hz	50 — 20,000 Hz
Sensitivity (1 W/1 m)	90 dB	90 dB	90 dB	89 dB	90 dB	90 dB	90 dB	90 dB
Nominal input power	20 W	20 W	10 W	10 W	10 W	15 W	10 W	10 W

SPEAKERS

# CUSTOM-FIT SPEAKERS APPLICATION CHART



Pioneer offers a wide range of universal and custom-fit speakers to fit many cars. The chart below lists many popular car models, and the Pioneer speakers which can fit them.  $G_{F}$  With custom-fit speakers, installation is easy and exact; they fit perfectly in the speaker holes — no cutting or drilling necessary. If universal speakers — see chart pages 87-89 — are preferred, they can be mounted in the car's speaker provisions with the use of an adapter

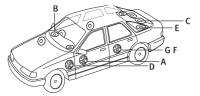
kit (see Accessories), or mounted in the back. (This list may not apply to all cars listed, because not all cars in each country have all the required speaker provisions).

CAR Brand	MODEL & INTRODUCTION DATE	LOCATION	HIGH GRADE Separate	HIGH GRADE Co-axial	SEPARATE Component	3-WAY	2-WAY	DUAL CONE	SPEAKER INTERFACE KITS	SPEAKER ADAPTER PLATES
ALFA ROMEO	145 (9/94-4/01)	A	TS-H1703* [1]	TS-H177*		TS-1776 II	TS-1756 II	TS-1746 II		*UD-M171
		F	TS-H1303	TS-H137	TS-1785 [1]	TS-1376 II	TS-1356 II	TS-1346 II		
	146 (9/95-4/01)	A	TS-H1703* [1]	TS-H177*	TC 1705 (1)	TS-1776 II	TS-1756 II	TS-1746 II		*UD-M171
		G			TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II		
		G	70.10000	70.11400	TS-1785					10.140
	155 (3/92-9/97)	C C	TS-H1703	TS-H177	TS-1785			TS-1746 II		UD-M171 UD-M171
	156 (9/97-)	A	TS-H1703*	TS-H177*		TS-1776 II	TS-1756 II	TS-1746 II		*UD-M171
		G	TS-H1703*	TS-H177*	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		*UD-M171
		G			TS-1785	10 17/01				0014111
	164 Super [3/92-9/98]	A	TS-H1703	TS-H177	TS-1785		TS-1756 II	TS-1746 II		
	166 [10/98-]	A				TS-1776 II	TS-1756 II	TS-1746 II		
		C			TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		
		C			TS-1785					
		G			TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		
AUDI	80 4-door (11/91-12/94)	В		TS-H107	15 1765		TS-1056 II	TS-1046 II		
	90 Coupé (9/88-12/94)	B		TS-H107			TS-1056 II	TS-1046 II		
	V8 (10/88-4/94) A4 4-door (01/01-)	A	TS-H1703	TS-H107 TS-H177		TS-1776 II	TS-1056 II TS-1756 II	TS-1046 II TS-1746 II		UD-M174VW
		A			TS-1785					UD-M174WW
		G	TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		UD-M174VW UD-M174VW
	A6 [3/97-]	A	TS-H1703	TS-H177		TS-1776 II	TS-1756 II	TS-1746 II		
		G	TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		-
		G			TS-1785					
	TT (10/98-)	A	TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		
BMW	3-series 2-door (10/85-1/92)	D	TS-H1303		10 1700		TS-1356 II	TS-1346 II		
	3 Touring (1/88-4/00)	E	TS-H1303	TS-H107			TS-1356 II TS-1056 II	TS-1346 II TS-1046 II		
	3-series 4-door (12/90-2/98)	D	TS-H1303	13-110/			TS-1356 II	TS-1346 II		
	3-series Coupé (1/92-1/99) 3 Compact (3/94-10/00)	D	TS-H1303 TS-H1303				TS-1356 II TS-1356 II	TS-1346 II TS-1346 II		
	5-series (1/88-6/95)	C	TS-H1303	TS-H137		TS-1376 II	TS-1356 II	TS-1346 II		
	5-series (7/95-)	D	TS-H1303 TS-H1303	TS-H137		TS-1376 II	TS-1356 II TS-1356 II	TS-1346 II TS-1346 II		
	5-series (7/95-)	C D	TS-H1303	TS-H137 TS-H137		TS-1376 II	TS-1356 II TS-1356 II	TS-1346 II		
	7-series [10/86-3/94]	C	TS-H1303	TS-H137		TS-1376 II	TS-1356 II	TS-1346 II		
	MINI (10/00-)	D	TS-H1303 TS-H1703	TS-H137 TS-H177		TS-1376 II TS-1776 II	TS-1356 II TS-1756 II	TS-1346 II TS-1746 II		UD-M177VW
CITROEN	AX exc. HIT 3-door (8/91-9/96)	F	TS-H1303	TS-H137		TS-1376 II	TS-1356 II	TS-1346 II		
	AX exc. HIT 5-door [8/91-9/96] AX HIT 3-door (8/91-9/96)	A F	TS-H1303	TS-H137		TS-1376 II TS-1376 II	TS-1356 II TS-1356 II	TS-1346 II TS-1346 II		
	AX HIT 5-door (8/91-9/96)	A				TS-1376 II	TS-1356 II	TS-1346 II		
	BX (8/86-2/93) Saxo 3-door (10/96-9/01)	A	TS-H1303	TS-H137		TS-1376 II	TS-1356 II TS-1356 II	TS-1346 II TS-1346 II		
	Saxo 5-door (10/96-9/01)	A	TS-H1303	TS-H137		TS-1376 II	TS-1356 II	TS-1346 II		
	Xantia (3/92-12/00)	G	TS-H1303 TS-H1703 [1]	TS-H137 TS-H177		TS-1376 II TS-1776 II	TS-1356 II TS-1756 II	TS-1346 II TS-1746 II		
	Aditia (3/72-12/00)	A			TS-1785 [1]					
	XM 4-door (7/89-12/00)	G	TS-H1303 TS-H1703	TS-H137 TS-H177		TS-1376 II	TS-1356 II TS-1756 II	TS-1346 II TS-1746 II		
	XWI 4-0001 (7/07-12/00)	A	13-11703	13-1177	TS-1785					
	XM Break (1/92-12/00)	E	TS-H1703	TS-H177		TS-1376 II	TS-1356 II TS-1756 II	TS-1346 II TS-1746 II		
	XM Break (1/92-12/00)	A	15-H1/03	15-H1//	TS-1785		15-1/36 11	15-1/4011		
	C3 [09/01 ]	E				TC 177/ U	TS-1356 II	TS-1346 II		
	C3 [09/01-]	A	1		TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II		1
	C5 (01/01-)	A	TS-H1703 [1]	TS-H177		TS-1776 II	TS-1756 II	TS-1746 II		
		G	TS-H1703	TS-H177	TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II		
		G			TS-1785					
	ZX Reflex/Avantage [4/91-9/97] ZX Aura/Volcano [4/91-9/97]	A	TS-H1303 TS-H1303	TS-H137 TS-H137		TS-1376 II TS-1376 II	TS-1356 II TS-1356 II	TS-1346 II TS-1366 II		
	Z/Adra/totcano (4/71 7/77)	G	TS-H1303	TS-H137		TS-1376 II	TS-1356 II	TS-1346 II		
	ZX 3-door (10/92-9/97)	F	TS-H1303 TS-H1303	TS-H137 TS-H137		TS-1376 II TS-1376 II	TS-1356 II TS-1356 II	TS-1346 II TS-1346 II		
	ZX Break [4/91-2/98]	A	TS-H1303	TS-H137		TS-1376 II	TS-1356 II	TS-1346 II		
	Xsara 5-door (10/97-)	G	TS-H1303	TS-H137		TS-1376 II	TS-1356 II	TS-1346 II		
	ASd1d 3-0001 [10/7/-]	A	TS-H1703 [1]	TS-H177	TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II		
	Durito (10/0/ 0/20)	G	TS-H1303	TS-H137		TS-1376 II	TS-1356 II	TS-1346 II		
	Berlingo (10/96-9/02) Berlingo (10/02-)	B A	1	TS-H107			TS-1056 II TS-1756 II	TS-1046 II TS-1746 II		
		A	TC LIATOR (2)	TC / MOD	TS-1785 [1]	TC 1001 1				
	Evasion (3/94-9/02)	A	TS-H1703 [1]	TS-H177	TS-1785 (1)	TS-1776 II	TS-1756 II	TS-1746 II		
		F	TS-H1703*	TS-H177*		TS-1776 II	TS-1756 II	TS-1746 II		*UD-M171
	C8 [10/02-]	F			TS-1785		TS-1756 II	TS-1746 II		UD-M171
		A			TS-1785 [1]					
	Xsara Break (3/98-)	A	TS-H1703 [1]	TS-H177	TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II		

CAR Brand	MODEL & Introduction date	LOCATION	HIGH GRADE Separate	HIGH GRADE Co-axial	SEPARATE Component	3-WAY	2-WAY	DUAL CONE	SPEAKER INTERFACE KITS	SPEAKER ADAPTER PLATES
CITROËN	Xsara Break (3/98-)	G	TS-H1303	TS-H137		TS-1376 II	TS-1356 II	TS-1346 II		
	Xsara Coupé [10/98-]	A	TS-H1703 [1]	TS-H177	TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II		
	Picasso (12/99-)	F	TS-H1303 TS-H1703 (1)	TS-H137 TS-H177		TS-1376 II TS-1776 II	TS-1356 II TS-1756 II	TS-1346 II TS-1746 II		
		AG	TS-H1303	TS-H137	TS-1785 [1]	TS-1376 II	TS-1356 II	TS-1346 II		
		G	15 11 365	15 113/	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		
DAIHATSU	Sirion (10/99-)	A				TS-1776 II	TS-1756 II	TS-1746 II		UD-M171
		G			TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		UD-M171 UD-M171
DAEWOO	Matiz (3/99-)	G		TS-H107	TS-1785		TS-1056 II	TS-1046 II		UD-M171
	Lanos 3-/5-door (1/97-) Tacuma (01/00-)	F	TS-H1303	TS-H467 TS-H137		TS-4638 TS-1376 II	TS-4628 TS-1356 II	TS-4621 TS-1346 II		
FIAT	Coupé (12/93-)	E	TS-H1703	TS-H467 TS-H177		TS-4638 TS-1776 II	TS-1756 II	TS-4621 TS-1746 II		
		A	15 11/105	TS-H467	TS-1785		TS-4628			
	Croma (7/86-9/96)	E		TS-H467		TS-4638 TS-4638	TS-4628	TS-4621 TS-4621		
	Punto (9/93-8/99)	B		TS-H871			TS-876 TS-875	TS-874		UD-M870
	Punto Cabrio (3/94-8/99)	E B		TS-H107 TS-H871			TS-1056 II TS-876	TS-1046 II TS-874		UD-M870
		B		TS-H467		TS-4638	TS-875 TS-4628	TS-4621		
	Punto (9/99-)	A	TS-H1704 (1)	15 (1407	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		
	Tempra (2/90-9/96)	A B			12-1782		TS-1056 II	TS-1046 II		
	Tempra Break (3/92-9/96) Tipo (2/88-8/95)	B				TS-4638	TS-1056 II TS-4628	TS-1046 II TS-4621		
	Uno Series (9/89-8/93)	E		TS-H107 TS-H107			TS-1056 II TS-1056 II	TS-1046 II TS-1046 II		
	Seicento / 600 [9/97-]	B		TS-H107			TS-1056 II TS-1056 II TS-1056 II	TS-1046 II TS-1046 II TS-1046 II		
	Ulysse [3/94-9/02]	A	TS-H1703 (1)	TS-H177	TS-1785 (1)	TS-1776 II	TS-1756 II	TS-1746 II		
		A F	TS-H1703*	TS-H177*		TS-1776 II	TS-1756 II	TS-1746 II		*UD-M171
	Ulysse (10/02-)	F A			TS-1785		TS-1756 II	TS-1746 II		UD-M171
	Multipla (3/98-)	A			TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II		
FORD	Focus 3-doors (10/98-)	A		TS-H683	TS-1785					
	Focus 4-/5-doors [10/98-]	A		TS-H683						
	Mondeo (3/93-11/00)	G	TS-H1703	TS-H683 TS-H177		TS-1776 II	TS-1756	TS-1746 II		UD-M172
		G	TS-H1703	TS-H683 TS-H177	TS-1785*	TS-1776 II	TS-1756 II	TS-1746 II		*UD-M172 UD-M172
	Mondeo (12/00-)	G		TS-H683 TS-H683	TS-1785*					*UD-M172
	Galaxy (9/95-)	G		TS-H683		TS-1776 II	TS-1756 II	TS-1746 II		
		A			TS-1785					
	prove provide the state	G			TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		
	Fusion 5door (3/03-)	G		TS-H683 TS-H683						
HONDA	Accord 4-door (9/89-2/93) Civic 5-door (11/95-)	A		TS-H107		TS-1376 II	TS-1356 II TS-1056 II	TS-1346 II TS-1046 II		
	Civic 5-door [11/95-] Jazz 5door [1/02-]	Ā	TS-H1703 [13]	TS-H107 TS-H177 (13)	TS-1785 (13)	TS-1776 II [13]	TS-1756 II (13)	TS-1046 II TS-1746 II [13]		UD-M1760P
		G	TS-H1703 [13]	TS-H177 [13]	TS-1785 (13)	TS-1776 II [13]	TS-1756 II [13]	TS-1746 II [13]		UD-M1760P
HYUNDAI	Getz (10/02- )	A	TS-H1703 (4)	TS-H177 [4]		TS-1776 II [4]	TS-1756 II (4)	TS-1746 II [4]		UD-MIT/OUP
	Pony 3-/5-door (1/90-9/94)	B			TS-1785 [4]		TS-1056 II	TS-1046 II		
	Pony (Excel) 4-door (1/90-9/94)	E B	TS-H1303	TS-H137		TS-1376 II	TS-1356 II TS-1056 II	TS-1346 II TS-1046 II		
	S-coupé (1/90-12/96)	C C	TS-H1303	TS-H137 TS-H107	-	TS-1376 II	TS-1356 II TS-1056 II	TS-1346 II TS-1046 II		
	Sonata (5/88-8/93) Sonata (9/93-)	B					TS-1056 II TS-1056 II TS-1056 II	TS-1046 II TS-1046 II TS-1046 II		
	Lantra 4/5-door (3/98-)	A				TS-1376 II	TS-1056 II TS-1356 II	TS-1046 II TS-1346 II		
JAGUAR	S-type (3/99-)	G		TS-H683 TS-H683						
VAZ/LADA	Samara 3-door (1/86-12/99) Samara 5-door (1/88-12/99)	E A	TS-H1303	TS-H137 TS-H467		TS-1376 II TS-4638	TS-1356 II TS-4628	TS-1346 II TS-4621		
	Diva/Sagona (8/91-12/99)	E	TS-H1303 TS-H1303	TS-H137 TS-H137		TS-1376 II TS-1376 II	TS-1356 II TS-1356 II	TS-1346 II		
	2104	E	TS-H1303 TS-H1303 TS-H1303	TS-H137 TS-H137 TS-H137		TS-1376 II TS-1376 II TS-1376 II	TS-1356 II TS-1356 II TS-1356 II	TS-1346 II TS-1346 II TS-1346 II		
	2109	В	TS-H1303	TS-H137		TS-1376 II	TS-1356 II	TS-1346 II		
	21099 2110	A	TS-H1303 TS-H1303	TS-H137 TS-H137		TS-1376 II TS-1376 II	TS-1356 II TS-1356 II	TS-1346 II TS-1346 II		
	2111 2112	A	TS-H1303 TS-H1303	TS-H137 TS-H137		TS-1376 II TS-1376 II	TS-1356 II TS-1356 II	TS-1346 II TS-1346 II		
VAZ/NIVA	2115 21213	E	TS-H1303 TS-H1303	TS-H137 TS-H137		TS-1376 II TS-1376 II	TS-1356 II TS-1356 II	TS-1346 II TS-1346 II		
	21213 2131 2141	E	TS-H1303	TS-H137 TS-H137 TS-H137		TS-1376 II TS-1376 II TS-1376 II	TS-1356 II TS-1356 II TS-1356 II	TS-1346 II TS-1346 II TS-1346 II		
MOSKVICH/MOSKVICH GAZ/VOLGA	3110	B	TS-H1303 TS-H1303	TS-H137		TS-1376 II TS-1376 II	TS-1356 II	TS-1346 II		
ANCIA	Dedra (6/89-4/99) Delta (7/93-6/00)	B C		TS-H107			TS-1056 II TS-1756 II	TS-1046 II TS-1746 II		
	Y (1/96-2/03)	C A	TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		
	Ypsilon(3/03- )	A	TS-H1703 (9)	TS-H177 [9]	TS-1785	TS-1776 II (9)	TS-1756 II (9)	TS-1746 II [9]		UD-M171
	(patiento) (of )	A			TS-1785 [9]					UD-M171
		F F	TS-H1703 (9)	TS-H177 (9)	TS-1785 [9]	TS-1776 II (9)	TS-1756 II (9)	TS-1746 II (9)		UD-M171 UD-M171
	Thema (10/88-9/94) Z (3/94-9/02)	A	TS-H1703 (1)	TS-H467 TS-H177		TS-4638 TS-1776 II	TS-4628 TS-1756 II	TS-4621 TS-1746 II		
		A	TS-H1703*	TS-H177*	TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II		*UD-M171
	Phedra (10/02-)	F			TS-1785		TS-1756 II	TS-1746 II		UD-M171
	i licula (luyuz-)	A			TS-1785 [1]		13-1/3611	10-1/40		I
1AZDA	323 4-/5-door (8/98-8/03)	A		TS-H683	13-1/03[1]					

Location: A: Front Door B: Dual Dash C: Rear Deck D: Kick Panel E: Rear Side Shelf F: Rear Seat Side G: Rear Door H: Rear Pillar 1: Hatch Door J: Rear Panel K: Rear Ceiling (1) Tweeter fits original location, (2) Need to make 2 screw holes on the original speaker location, (3) Original 13 cm speaker adapter required, (4) Original 17 cm adapter required, (5) Original 17 cm speaker location required, (6) High-range unit fits original location, (7) Front door pocket with 17 cm speaker location required, (8) Rear door pocket with 17 cm speaker location required, (9) Drill holes to fix the speaker, (10) 5-door, (11) In case original speaker place are provided (12) Modify speaker frame, (13) Steel cut or some modification. All mounting proposals and measurements contained in this guide have been checked. However, due to continual modification of certain car models, we cannot guarantee proceeding with installation. [ 83 ]

# CUSTOM-FIT SPEAKERS APPLICATION CHART

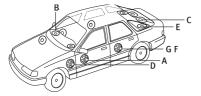


CAR BRAND	MODEL & Introduction date	LOCATION	HIGH GRADE Separate	HIGH GRADE Co-axial	SEPARATE COMPONENT	3-WAY	2-WAY	DUAL CONE	SPEAKER INTERFACE KITS	SPEAKER ADAPTER PLATES
MAZDA	3 5-door (9/03- ) 626 4-door (1/92-9/98)	G		TS-H683 TS-H683						
		C		TS-H683						
	626 5-door (1/92-9/98)	E		TS-H683 TS-H683						
	626 [10/98-]	A		TS-H683						
MERCEDES	190/190 E (W201) (1/83-5/93)	G		TS-H683 TS-H107			TS-1056 II	TS-1046 II		
	A-series (9/97-)	A	TS-H1703 [1]	TS-H177	TC 1705 (1)	TS-1776 II	TS-1756 II	TS-1746 II		UD-M175MB
		G	TS-H1303 (1)	TS-H137	TS-1785 [1]	TS-1376 II	TS-1356 II	TS-1346 II		UD-M175MB UD-M135MB
	S/SE/SEL (W126) (1/80-2/91) Vito (3/96-)	B		TS-H467 TS-H107		TS-4638	TS-4628 TS-1056 II	TS-4621 TS-1046 II		
	V-series [3/96-]	B		TS-H107			TS-1056 II	TS-1046 II		
MITSUBISHI	Galant 4-/5-door (1/96-) Spacestar (1/98-)	G	TS-H1303	TS-H137		TS-1376 II TS-1376 II	TS-1356 II TS-1356 II	TS-1346 II TS-1346 II		
NISSAN	Maxima (1/92-)	A				TS-4638	TS-4628	TS-4621		
	Primera exc. L 4-door [9/90-8/01]	C C	TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		
	Sunny L/LX 3-door [1/91-8/95]	A				TS-4638	TS-4628	TS-4621		
	Sunny SLX 3-door (1/91-8/95) Sunny L/LX 4-door (1/91-8/95)	A				TS-4638 TS-4638	TS-4628 TS-4628	TS-4621 TS-4621		
	Sunny SLX 4-door [1/91-8/95]	A	TS-H1703	70.11400		TS-4638	TS-4628	TS-4621		
	Sunny SLX 4-door [1/91-8/95]	C	15-H1/03	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		
	Sunny L/LX 5-door (1/91-8/95)	A				TS-4638	TS-4628	TS-4621		
	Sunny SLX 5-door (1/91-8/95) Sunny Wagon LX (1/91-8/95)	A				TS-4638 TS-4638	TS-4628 TS-4628	TS-4621 TS-4621		
	Nissan Wagon SLX (1/91-8/95) 100 NX (2/91-12/96)	A				TS-4638 TS-4638	TS-4628 TS-4628	TS-4621 TS-4621		
	100 NX Gti (2/91-12/96)	A				TS-4638	TS-4628	TS-4621		1
	200 SX (9/88-3/94) 300 ZX (9/89-6/97)	A E		TS-H467		TS-4638 TS-4638	TS-4628 TS-4628	TS-4621 TS-4621		
	Micra 5door (10/02-)	A	TS-H1703 *	TS-H177 *		TS-1776 II	TS-1756 II	TS-1746 II		*UD-M1760P
		G	TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		
					TS-1785					
DPEL/VAUXHALL	Astra 3-/5-door (9/91-9/97) Astra 4-door (6/92-9/97)	E C	TS-H1303 TS-H1703	TS-H137 TS-H177		TS-1376 II TS-1776 II	TS-1356 II TS-1756 II	TS-1346 II TS-1746 II		
	Astra 3-door (10/97-)	C A	TS-H1703 [1]	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		UD-M1760P
	Astra 3-0001 (10/77-)	A			TS-1785 (1)				AD-EU800S	UD-M1760P
		F	TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II	AD-EU800S	
	Frontera (6/91-)	F			15-1765	TS-4638	TS-4628	TS-4621	AD-EU00US	
	Omega (4/94-)	A	TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II	AD-EU800S	UD-M1760P UD-M1760P
	Tigra (11/95-)	A					TS-1756 II	TS-1746 II		OD-M1700F
	Vectra (9/95-2/02)	A	TS-H1303	TS-H137	TS-1785	TS-1376 II*	TS-1356 II*	TS-1346 II*	AD-EU800S *AD-EU800S	
		A				TS-1776 II	TS-1756 II	TS-1746 II		UD-M1760P
	Vectra (3/02-)	A	TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II	AD-EU800S	UD-M1760P UD-M1760P
		A G	TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II	AD-EU800S	UD-M1760P UD-M1760P
		G	13-11/03	IS-H177	TS-1785				AD-EU800S	UD-M1760P
	Zafira (3/99-)	A			TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		UD-M1760P UD-M1760P
		G	TS-H1303	TS-H137	13-1763	TS-1376 II	TS-1356 II	TS-1346 II		UD-M131
	Agila (2/01-)	B					TS-1056 II TS-1056 II	TS-1046 II TS-1046 II		
	Meriva 5-door (10/02-)	A	TS-H1703	TS-H177		TS-1776 II	TS-1756 II	TS-1746 II		UD-M1760P
		G	TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II	AD-EU800S	UD-M1760P UD-M1760P
PEUGEOT	10/ VD/M 0.1				TS-1785				AD-EU800S	UD-M1760P
PEUGEOT	106 XR/XN 3-door (9/91-) 106 XT/XSI 3-door (9/91-)	A	TS-H1303 TS-H1303	TS-H137 TS-H137		TS-1376 II TS-1376 II	TS-1356 II TS-1356 II	TS-1346 II TS-1346 II		
		F	TS-H1303	TS-H107			TS-1056 II	TS-1046 II		
	106 5-door (9/92-)	G	TS-H1303	TS-H137 TS-H137		TS-1376 II TS-1376 II	TS-1356 II TS-1356 II	TS-1346 II TS-1346 II		
	205 3-/5-door (9/83-7/98)	A	TS-H1303	TS-H137			TS-1356 II TS-1356 II	TS-1346 II TS-1346 II		
	206 Series (8/98-)	A	TS-H1704 [1]			TS-1776 II	TS-1306 II TS-1756 II	TS-1346 II TS-1746 II		
		A F,G	TS-H1303	TS-H137	TS-1785	TS-1376 II	TS-1356 II	TS-1346 II		
	306 XN/XS/XT [8/93-2/01]	A	10 11000	10 110		TS-1776 II	TS-1756 II	TS-1746 II		
	307 (03/01-)	A	TS-H1703 [1]	TS-H177	TS-1785	TS-1776	TS-1756	TS-1746		UD-M171
		A			TS-1785 [1]					UD-M171
	309 3-/5-door [11/85-7/93]	G	TS-H1303 TS-H1303	TS-H137		TS-1376 II	TS-1356 II TS-1356 II	TS-1346 II TS-1346 II		
		Н				TS-1776 II	TS-1356 II TS-1756 II	TS-1346 II TS-1746 II		UD-M171
	405 (6/87-5/92)	A	TS-H1703*	TS-H177*	TS-1785	10-1//611				
	405 (6/92-5/95)	A	TS-H1703	TS-H177	TS-1785		TS-1756 II	TS-1746 II		UD-M171 UD-M171
	406 (6/95-)	A	TS-H1703 [1]	TS-H177		TS-1776 II	TS-1756 II	TS-1746 II		00-14171
	406 Coupé (6/96-)	A	TS-H1703 [1]	TS-H177	TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II		
		A			TS-1785 [1]					<u> </u>
	605 (9/89-9/99)	A	TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		
		G	TS-H1703	TS-H177			TS-1756 II	TS-1746 II		UD-M171
	806 [3/94-9/02]	G	TS-H1703* [1]	TS-H177*	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		UD-M171 *UD-M171
		A			TS-1785 [1]					
		F F	TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		UD-M171 UD-M171
	807 (10/02-) Partner (10/97-9/02)	AB		TS-H107	TS-1785 [1]		TS-1756 II TS-1056 II	TS-1746 II TS-1046 II		
	Partner (10/97-9/02) Partner (10/02-)	A		15-HIU/	TS-1785 [1]		TS-1056 II TS-1756 II	TS-1746 II		
RENAULT		В					TS-1056 II	TS-1046 II		1

AR RAND	MODEL & INTRODUCTION DATE	LOCATION	HIGH GRADE Separate	HIGH GRADE Co-axial	SEPARATE Component	3-WAY	2-WAY	DUAL CONE	SPEAKER Interface Kits	SPEAKER Adapter Plates
ENAULT	Clio II 3-door (3/98-)	E	TS-H1303	TS-H107 TS-H137		TS-1376 II*	TS-1056 II TS-1356 II*	TS-1046 II TS-1346 II*	*AD-EU800S	
		F	TS-H1303	TS-H137		TS-1376 II	TS-1356 II	TS-1346 II TS-1346 II TS-1346 II*		
	Clio II exc. RXE 5-door (3/98-) Clio II RXE 5-door (3/98-)	A	TS-H1303 TS-H1303	TS-H137 TS-H137		TS-1376 II* TS-1376 II*	TS-1356 II* TS-1356 II*	TS-1346 II*	*AD-EU800S *AD-EU800S	
	Twingo II (10/98-)	G	TS-H1303 [13]	TS-H137 (13) TS-H107		TS-1376 II* (13)	TS-1356 II* (13) TS-1056 II	TS-1346 II* (13) TS-1046 II	*AD-EU800S AD-EU800S	
	Twingo II (09/00-) 19 RL/RN (4/92-8/95)	AB				TS-1376 II	TS-1356 II TS-1056 II	TS-1346 II TS-1046 II	AD-EU800S	UD-M101
	19 exc. RL/RN (4/92-8/95)	E	TS-H1303 TS-H1703	TS-H137 TS-H177		TS-1376 II	TS-1356 II	TS-1346 II TS-1746 II		
		A	10 11/00	10 11/7	TS-1785		TS-1056 II	TS-1046 II	AD-EU800S AD-EU800S	UD-M101
		E	TS-H1303 TS-H1703	TS-H137 TS-H177		TS-1376 II*	TS-1356 II*	TS-1346 II* TS-1746 II	*AD-EU800S	0D-MITUT
	19 Chamade exc. RL/LN (4/92-8/95)	A	IS-H1/U3	IS-HI//	TS-1785				AD-EU800S	
	19 Chamade RL/RN (4/92-8/95)	B		TS-H107			TS-1056 II TS-1056 II	TS-1046 II TS-1046 II	AD-EU800S AD-EU800S	UD-M101 UD-M101
	19 Cabrio (4/92-4/97)	A	TS-H1703	TS-H177	TS-1785			TS-1746 II	AD-EU800S	
		B					TS-1056 II TS-1056 II	TS-1046 II TS-1046 II	AD-EU800S	UD-M101
	Mégane RL/RN 5-door (9/95-9/02)	A	TS-H1303 [1] TS-H1303	TS-H137 TS-H137		TS-1376 II* TS-1376 II*	TS-1056 II TS-1356 II* TS-1356 II*	TS-1346 II* TS-1346 II*	*AD-EU800S *AD-EU800S	
	Mégane RT 5-door (9/95-9/02)	A	TS-H1703 [1]	TS-H177	TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II	AD-EU800S	
		E	TS-H1303	TS-H137	15-1/83[1]	TS-1376 II*	TS-1356 II*	TS-1346 II*	*AD-EU800S	
	Mégane (10/02-) Mégane Classic (9/95-9/02)	A	TS-H1303 (12/13) TS-H1703 (1)	TS-H137 [12/13] TS-H177		TS-1376 II (12/13) TS-1776 II	TS-1356 II (12/13) TS-1756 II	TS-1346 II (12/13) TS-1746 II	AD-EU800S	
		A C	TS-H1303 (3)	TS-H137 [3]	TS-1785 [1]	TS-1376 II [3]*	TS-1356 II [3]*	TS-1346 II [3]*	AD-EU800S *AD-EU800S	
	Mégane Coupé (9/95-9/02)	A	TS-H1703 (1)	TS-H177	TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II	AD-FU800S	
	Mégane Scénic (10/96-6/03)	C A	TS-H1303 TS-H1303 [1]	TS-H137 TS-H137		TS-1376 II* TS-1376 II*	TS-1356 II* TS-1356 II*	TS-1346 II* TS-1346 II*	*AD-EU800S *AD-EU800S	
	megane Scenic (10/70*0/03)	A			TS-1384 [1]				AD-EU800S	
		E	TS-H1303	TS-H137	TS-1384	TS-1376 II*	TS-1356 II*	TS-1346 II*	*AD-EU800S AD-EU800S	
	Mégane Break (6/99-6/03)	A	TS-H1303 (1)	TS-H137	TS-1384 [1]	TS-1376 II	TS-1356 II	TS-1346 II	AD-EU800S AD-EU800S	
	Laguna (1/94-9/99)	K	TS-H1703 (1)	TS-H107 TS-H177		TS-1776 II	TS-1056 II TS-1756 II	TS-1046 II TS-1746 II	AD-EU800S	
		A	TS-H1703 (4)	TS-H177 [4]	TS-1785 (1)	TS-1776 II (4)	TS-1756 II (4)	TS-1746 II [4]	AD-EU800S AD-EU800S	
	Laguna Break (9/95-9/99)	E	TS-H1703 [1]	TS-H177	TS-1785 [4]	TS-1776 II	TS-1756 II	TS-1746 II	AD-EU800S	
	Layuna Dreak (///3-////)	A	13-11703 [1]	13-11/7	TS-1785 [1]	13-17/01				
	Laguna series (10/99-)	K A	TS-H1303 (12)	TS-H137 (12)		TS-1376 II [12]*	TS-1056 II TS-1356 II (12)*	TS-1046 II TS-1346 II (12)*	*AD-EU800S	
	Safrane (3/92-10/01)	G A	TS-H1303 [12] TS-H1703 [1]	TS-H137 (12) TS-H177		TS-1376 II [12]* TS-1776 II	TS-1356 II (12)* TS-1756 II	TS-1346 II (12)* TS-1746 II	*AD-EU800S	
		G	TS-H1703	TS-H177	TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II	AD-EU800S	
	Kangoo (9/97-)	G		TS-H107	TS-1785		TS-1056 II	TS-1046 II	AD-EU800S AD-EU800S	
	Kangoo Express (9/97-)	E		TS-H107 TS-H107			TS-1056 II TS-1056 II	TS-1046 II TS-1046 II	AD-EU800S AD-EU800S	
	Espace (5/91-1/97)	В	TS-H1703 (1)	TS-H177	TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II	AD-EU800S	
		H	TS-H1703	TS-H177		TS-1776 II	TS-1756 II	TS-1746 II		
	Espace (11/02-)	H			TS-1785 [1]	TS-1376    (12/13) TS-1376    (12)*	TS-1356 II (12/13) TS-1356 II (12)*	TS-1346 II [12/13]	AD-EU800S AD-EU800S	
	Velsatis (10/01-)	G	TS-H1303 (12)	TS-H137 (12)		TS-1376 II [12]*	TS-1356 II	TS-1346 II (12)* TS-1346 II	*AD-EU800S	
OVER	100 (Metro)-series 3-door (6/90-12/98) 100 (Metro)-series 5-door (6/90-12/98)	E		TS-H107 TS-H107			TS-1056 II TS-1056 II	TS-1046 II TS-1046 II		
	214/216 5-door (1/90-9/95)	A	TS-H1703 [1]	TS-H177	TS-1785 [1]		TS-1756 II	TS-1746 II		
	01/01/ antice (10/05 )	E	TS-H1303	TS-H137	10 1100(1)	TS-1376 II	TS-1356 II	TS-1346 II		
	214/216 series [10/95-] 216 Gti 3-door (7/90-9/95]	A	TS-H1303 TS-H1703	TS-H137 TS-H177		IS-1376 II	TS-1356 II TS-1756 II	TS-1346 II TS-1746 II		
		E	TS-H1303	TS-H137	TS-1785	TS-1376 II	TS-1356 II	TS-1346 II		
	414/416-series (4/90-1/96)	A	TS-H1703	TS-H177			TS-1756 II TS-1785	TS-1746 II		
AAB	900 (9/93-8/97) 9000 CS (10/84-9/97)	B		TS-H871 TS-H107			TS-876 TS-1056 II	TS-874 TS-1046 II		
EAT	Arosa (10/97-)	A	TS-H1710 (1) TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		UD-M177VW UD-M177VW
	Cordoba (10/93-10/99)	B	TS-H1710 (1)	TS-H107 TS-H177		TS-1776 II	TS-1056 II TS-1756 II	TS-1046 II TS-1746 II		
		A	TS-H1703		TS-1785	13-17/01	TS-1056 II	TS-1746 II	AD-EU800S AD-EU800S	
		C B		TS-H107		TS-4638	TS-4628	TS-4621	AD-EU8005	
	Ibiza GL/Junior 3-/5-door (1/89-4/93) Ibiza 3-door (1/89-4/93)	E A	TS-H1303	TS-H467 TS-H137		TS-4638 TS-1376 II	TS-4628 TS-1356 II	TS-4621 TS-1346 II		
		E		TS-H107 TS-H467		TS-4638	TS-1056 II TS-4628	TS-1046 II TS-4621		
	Ibiza 5-door (1/89-4/93)	A	TS-H1303	TS-H137 TS-H107		TS-1376 II	TS-1356 II TS-1056 II	TS-1346 II TS-1046 II		
	lbiza (4/93-5/99)	E	TS-H1710 (1)	TS-H467 TS-H177		TS-4638 TS-1776 II	TS-4628 TS-1756 II	TS-4621 TS-1746 II		
		A	TS-H1710(1)	TS-H1/7 TS-H107	TS-1785	13 1/1011	TS-1756 II	TS-1746 II TS-1046 II	AD-EU800S AD-EU800S	
	and the second second	E	-	TS-H467		TS-4638	TS-4628	TS-4621	AD-EU800S AD-EU800S	
	lbiza 3-door (1/02-)	A	TS-H1703 (1)	TS-H177	TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II		UD-M177VW UD-M177VW
		A	TS-H1703 (1)	TS-H177	TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II		UD-M177VW UD-M177VW
	Ibiza 5-door (1/02-)	A				TS-1776 II	TS-1756 II	TS-1746 II		UD-M174VW
	Ibiza 5-door (1/02-)	G	TS-H1703 [1]	TS-H177	TC_1785 [1]					UD_M17/\\\\
	biza 5-door [1/02-]	G G A	TS-H1703 (1) TS-H1703	TS-H177 TS-H177	TS-1785 [1]	TS-1776 II	TS-1756 II	TS-1746 II		UD-M174VW UD-M174VW
		G G A A G			TS-1785	TS-1776 II TS-1776 II	TS-1756 II TS-1756 II	TS-1746 II TS-1746 II		UD-M174VW UD-M174VW UD-M174VW
		G G A G G B	TS-H1703	TS-H177 TS-H177 TS-H871		TS-1776 II	TS-1756 II TS-876	TS-1746 II TS-874		UD-M174VW UD-M174VW
	Leon (9/99-)	G G A G G	TS-H1703	TS-H177 TS-H177	TS-1785		TS-1756 II	TS-1746 II		UD-M174VW UD-M174VW UD-M174VW

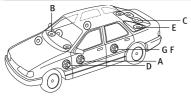
# CUSTOM-FIT SPEAKERS APPLICATION CHART





NomeN	CAR Brand	MODEL & INTRODUCTION DATE	LOCATION	HIGH GRADE Separate	HIGH GRADE Co-axial	SEPARATE Component	3-WAY	2-WAY	DUAL CONE	SPEAKER INTERFACE KITS	SPEAKER Adapter Plates
Partner         Sold	SEAT	Alhambra (9/95-)				TC 1205	TS-1776 II	TS-1756 II	TS-1746 II	AD 510000	
Sol         No.         No. <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>TS-1776 II</td> <td>TS-1756 II</td> <td>TS-1746 II</td> <td>AD-EU800S</td> <td></td>							TS-1776 II	TS-1756 II	TS-1746 II	AD-EU800S	
No	SKODA	Fahia (9/99-)				TS-1785	TS-1776 II	TS-1756 II	TS-17/6 II	AD-EU800S	UD-M177VW
Soci00:         <			A	75.10000	75.11405	TS-1785 [1]					UD-M177VW
Part of the sector o		Felicia (10/94-)		IS-H1303	IS-H137						
Sum bind         A         A         B				TS-H1703 [11]	TS-H177 (11)	TC 1705 (11)		TS-1756 II (11)	TS-1746 II [11]		
Residuation         Second and one of the second and one second and one second and one of the second and one of the secon		Octavia 5-door (9/96-)	A					TS-1756 II	TS-1746 II		
Date back MS-1AAForm<						TS-1785		TS-1356 II	TS-13/6 II		
NUMBN		Octavia Break (9/96-)	A					TS-1756 II	TS-1746 II		
TROMSin 100Sin 100						15-1785	TS-4638	TS-4628	TS-4621		
Sum         Interface         Int	TOYOTA			TS-H1703	TS-H177		TS-1776 II	TS-1756 II			UD-M171
Set 5.0001291.000Set 5.000S.16.00S		Swift Cabrio (1/92-12/00)	В					TS-1056 II	TS-1046 II		
Noto         Noto <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>											
NHOP         NHOP <th< td=""><td></td><td>Vitara 3-door (2/91-12/96)</td><td>В</td><td></td><td>TS-H107</td><td></td><td></td><td>TS-1056 II</td><td>TS-1046 II</td><td></td><td></td></th<>		Vitara 3-door (2/91-12/96)	В		TS-H107			TS-1056 II	TS-1046 II		
NUMBER         C.C.         Bate 20         Bate 20 <thbate 20<="" th=""> <thbate 20<="" th=""> <thbate< td=""><td>VOLVO</td><td><u>S40 (9/95-)</u></td><td></td><td>TS-H1303</td><td></td><td></td><td>TS-1376 II</td><td>TS-1356 II TS-1056 II</td><td>TS-1346 II TS-1046 II</td><td></td><td></td></thbate<></thbate></thbate>	VOLVO	<u>S40 (9/95-)</u>		TS-H1303			TS-1376 II	TS-1356 II TS-1056 II	TS-1346 II TS-1046 II		
No.         Tatura         Tatura <td></td> <td></td> <td>C</td> <td></td> <td></td> <td></td> <td></td> <td>TS-1356 II</td> <td>TS-1346 II</td> <td></td> <td></td>			C					TS-1356 II	TS-1346 II		
40109-803         54.00         53.103         63.103           0.113.5500.5500.5500.5500.5500.5500         A         A         53.1010         A         53.1010         53.101         A         53.1010         53.1010         53.1010         53.1010         53.1010         53.1010         53.1010         53.1010         53.1010         53.1010         53.1010         53.1010         53.1010         53.1010         53.1010         53.1010<		¥40 (7/73-)	В				13-13/611	TS-1056 II	TS-1046 II		
80% (19)         12% (19)         15 ±100		//n (1n/9/-8/95)			TS-H127		TS-1274 II		TS-1346 II TS-1346 II		
Skolutop: 12%         A         A         Frace         Frace <thfrace< th=""> <thf< td=""><td></td><td></td><td>A</td><td></td><td></td><td></td><td></td><td>TS-1356 II</td><td>TS-1346 II</td><td></td><td></td></thf<></thfrace<>			A					TS-1356 II	TS-1346 II		
Bernel         Control 1088-1291         Cont		940/960 (10/90-12/96)									
Image: borner			G					TS-1356 II	TS-1346 II		
Bot 32-base 188-1071         B	/w	Corrado (10/88-12/95)			TS-H107		TS-4638	TS-1056 II TS-4628	TS-4621	AD-EU800S AD-EU800S	
Bolf Weak CL (1973-369)         A         TS-1170 (1)         TS-1170 (1) <thts-1170 (1)<="" th=""> <thts-1170 (1)<="" th=""></thts-1170></thts-1170>		Golf II 3/5-door (8/83-10/91)			TS-H871			TS-876	TS-874		
Image: state in the s		Golf Variant CL (9/93-9/99)		TS-H1710(1)	TS-H46/ TS-H177		TS-1776 II	TS-1756 II	TS-1746 II		
Image: starting in the				TS-H1703	TC U107	TS-1785		TC 1054 II	TC 1044 II	AD-EU800S AD-EU800S	
Self 13-Sec [11/21-377]         A         TS-1781/20.7         TS-1784/17         T			G	TS-H1703			TS-1776 II			AD-LOODS	
Image: constraint of the start of		Golf III 3-door (11/91-9/97)		TS-H1710 (1/7)	TS-H177 [7]	TS-1785	TS-1776 II (7)	TS-1756 II (7)	TS-17/6 II [7]		
Gell II Stage [11]91-997]         A         TS-H170 [17]         TS-H78 [17]         TS-T78 [17]			A	TS-H1703 (7)		TS-1785 [7]	10 17/01(1)				
A         FS-H02 (D)		Golf III 5-door (11/91-9/97)		TS-H1710 (1/7)			TS-1776 II (7)				
Image: state in the s					TC 11407	TS-1785 [7]					
Web 1/82-8781         A         TS-H781         TS-178.01         TS-178.01         TS-178.01         TS-178.01           A         TS-H78.01         TS-178.01			G	TS-H1703 (5)	TS-H107 TS-H177 [5]		TS-1776 II (5)	TS-1056 II (5)			
Image: stand		Vento [1/92_9/98]		TS_H1710 (1)	TS_H177	TS-1785 [5]	TS-1776 II	TS-1754 II	TS-17/6 II		
Control         Control         TS-1172         TS-1172         TS-1778-III         TS-1786         TS-1786         TS-1786           Golf W 3-dow [1097-903]         A         TS-1172         TS-1786         TS-1786         TS-1786         TS-1786           Golf W 3-dow [1097-903]         A         TS-11720 [11]         TS-11777         TS-1778 [11]         TS-1786 [11]         TS-1786 [11]           Golf W 5-dow [1097-903]         A         TS-1170 [11]         TS-11778 [11]         TS-1778 [11]         TS-1786 [11]         TS-1778 [11]         TS-1786 [11]			A			TS-1785	10 17/01				
Gen         Gen         TS-1786         Jone         Jone <t< td=""><td></td><td></td><td></td><td>TS-H1703</td><td>TS-H107 TS-H177</td><td></td><td>TS-1776 II</td><td>TS-1056 II TS-1756 II</td><td>TS-1046 II TS-1746 II</td><td></td><td></td></t<>				TS-H1703	TS-H107 TS-H177		TS-1776 II	TS-1056 II TS-1756 II	TS-1046 II TS-1746 II		
A         Description         A         Test result         Test result </td <td></td> <td>0.1010.0.1</td> <td>G</td> <td></td> <td></td> <td>TS-1785</td> <td></td> <td></td> <td></td> <td></td> <td></td>		0.1010.0.1	G			TS-1785					
A         -         TS-1785 [1]         TS-1778 [1]         TS-1758 [1]         TS-1768 [1]         TS-1768 [1]         TS-1758 [1] </td <td></td> <td></td> <td>A</td> <td></td> <td></td> <td>TS-1785 [1]</td> <td></td> <td></td> <td>15-1/461</td> <td></td> <td>UD-M174VW UD-M174VW</td>			A			TS-1785 [1]			15-1/461		UD-M174VW UD-M174VW
G         T5-H703 [1]         T5-H776 [1]         T5-		Golf IV 5-door (10/97-9/03)		TS-H1703 [1]	TS-H177	TC 1705 [1]	TS-1776 II	TS-1756 II	TS-1746 II		UD-M174VW UD-M174VW
Borg 100%-1.         A         TS-H702 III         TS-H752 IIII         T			G	TS-H1703 [1]	TS-H177		TS-1776 II	TS-1756 II	TS-1746 II		UD-M174WW
A         C         TS-1726 [1]         C         C         C         C           G         TS-H1703 [1]         TS-H726 [1]         TS-1756 [1]         TS-1656 [1]         TS-1666 [1]         AD-E           Passat Variant (Le [973-876])         B         TS-11703 [1]         TS-11776 [1]         TS-1756 [1]         TS-1666 [1]         AD-E           Passat Variant (Le [973-876])         B         TS-11703 [1]         TS-11776 [1]         TS-1756 [1]         TS-1666 [1]         AD-E           Passat Variant (Le [973-876]) <t< td=""><td></td><td>Bora (10/98-)</td><td></td><td>TS-H1703 (1)</td><td>TS-H177</td><td>TS-1785 [1]</td><td>TS-1776 II</td><td>TS-1756 II</td><td>TS-17/6 II</td><td></td><td>UD-M174VW UD-M174VW</td></t<>		Bora (10/98-)		TS-H1703 (1)	TS-H177	TS-1785 [1]	TS-1776 II	TS-1756 II	TS-17/6 II		UD-M174VW UD-M174VW
Image: Constraint of			A			TS-1785 [1]					UD-M174VW
Lupo [1098-]         A         TS-H1703 [1]         TS-H177         TS-1776 [1]         TS-1726 [1]         TS-1026 [1]         TS-10				IS-H1703 [1]	IS-H177	TS-1785 [1]	IS-1776 II	IS-1756 II	IS-1746 II		UD-M174VW UD-M174VW
Passat 4-dor. (488-893)         B         TS-H107         TS-H05 II         TS-H04 II           Passat Variant (488-893)         B         TS-H107         TS-H05 II         TS-H04 II           Passat Variant (488-893)         E         TS-H07         TS-4638         TS-4628         TS-4628         TS-4628         TS-4628         TS-4628         TS-4628         TS-1064 II         AD           Passat (1993-896)         B         TS-H107         TS-1056 II         TS-1064 II         AD           Passat (1996-1         A         TS-H170 II         TS-1176 II         TS-1064 II         AD           Passat (1996-1         A         TS-H170 II         TS-1176 III         TS-1176 III         TS-1764 III           Passat (1996-1         A         TS-H170 II         TS-H177 III         TS-1764 III         TS-1764 III           Passat (1996-1         A         TS-H170 III         TS-H177 III         TS-1764 III         TS-1764 III         TS-1764 III           Passat (1996-1         A         TS-H170 III         TS-1776 III (7)         TS-1764 III         TS-1764 III         TS-1764 III           Passat (1090-990         A         TS-H1700* 17)         TS-1768 III         TS-1768 III         TS-1768 III         TS-1764 III           Passat (		Lupo (10/98-)		TS-H1703 (1)	TS-H177	TC 1705 [1]	TS-1776 II	TS-1756 II	TS-1746 II		UD-M177VW UD-M177VW
E         E         TS-4638         TS-4638 <td></td> <td></td> <td>В</td> <td></td> <td>TS-H107</td> <td>13-1763(1)</td> <td></td> <td></td> <td></td> <td></td> <td>UD-MIT/TWW</td>			В		TS-H107	13-1763(1)					UD-MIT/TWW
Passat CL (1978-876)         B         TS-H07         TS-H05 II         TS-H06 II         AD-F           Passat (1, 1978-876)         B         TS-H107         TS-H05 II         TS-H06 II         AD-F           Passat (1, 1978-876)         A         TS-H107 II         TS-H07 III         TS-H06 III         AD-F           Passat (1, 1978-100         A         TS-H170 III         TS-H76 III         TS-		Passat Variant (4/88-8/93)			TS-H107		TS-4638				
Passal (9/8-)         A         T5-H708 (II)         T5-H76 (II         T5-176 (II<		Passat CL (9/93-8/96)						TS-1056 II	TS-1046 II	AD-EU800S	
A				TS-H1703 (1)			TS-1776 II			AD-EU800S	UD-M174VW
G         G         TS-1785 [1]         C_4         F         <			A			TS-1785 [1]	TC 177/ II	TC 17E/ II			UD-M174VW UD-M174VW
Polo 3-door [10/94-9/99]         A         TS-H778 /I /I         TS-1778 /I /I         TS-1778 /I /I         TS-1778 /I /I         TS-1788 /I /I         TS-1788 /I /I           Polo 3-door [10/94-9/99]         A         TS-H170 /I /I         TS-178 /I /I         TS-104 /I			G	13-H1703 [1]		TS-1785 [1]					UD-M174VW UD-M174VW
A         TS-H170 [17]         TS-1785 [7]         C <thc< th="">         C         C         <thc< th=""></thc<></thc<>		Polo 3-door + Coupé (10/90-9/94) Polo 3-door (10/96-9/99)		TS-H1703* [7]	TS-H467 TS-H177* (7)		TS-4638 TS-1776 II (7)	TS-4628 TS-1756 II (7)	TS-4621 TS-17/6 II [7]		*UD-M171
Polo Classic [1/96-9/99]         A         TS-H1702* [7]         TS-H177* [7]         TS-1776    [7]         TS-1765    [7]         TS-1766    [7			A	TS-H1710* (1/7)		TS-1785 [7]	10 17/011(7)				*UD-M171
A         TS-H1710*[1/7]         TS-1755 [7]         C         TS-1054		Polo Classic (1/96-9/99)		TS-H1703* [7]			TS-1776 II (7)				*UD-M171
C         TS-H47         TS-H47         TS-H678         TS-4628         TS-H261           Polo 5-door (10/99-801)         A         TS-H170*         TS-H177*         TS-H776.11         TS-H76.11			A			TS-1785 [7]					*UD-M171
A         A         TS-H703         TS-H703         TS-H776         TS-H776 <td></td> <td></td> <td>C</td> <td></td> <td>TS-H467</td> <td></td> <td></td> <td>TS-4628</td> <td>TS-4621</td> <td></td> <td></td>			C		TS-H467			TS-4628	TS-4621		
A         B         TS-1785         TS-1785         TS-1776            TS-		Polo 5-door (10/99-8/01)		TS-H1703*	TS-H177*		TS-1776 II TS-1785	TS-1756 II	TS-1746 II		UD-M174VW UD-M174VW
G         TS-H1703         TS-H177         TS-1776.II		Polo (9/01-)	A	TS-H1703	TS-H177		TS-1776 II	TS-1756 II	TS-1746 II		UD-M174VW
G         TS-1785         F         F         F           Sharan (9/95-]         A         TS-1776 II         TS-1776 II         TS-1776 II         TS-1776 II         AD-E           A         TS-1776 II         TS-1776 II         TS-1776 II         TS-1776 II         TS-1776 II         AD-E           G         TS-1776 II         TS-1776 II         TS-1776 II         TS-1776 II         TS-1776 II				TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1756 II	TS-1746 II		UD-M174VW
A         TS-1785         E         AD-E           G         TS-17761I         TS-17761I         TS-17761I         TS-17761I         TS-17761I		Charges (0/0E 1	G			TS-1785					
G TS-1776 II TS-1776 II TS-1776 II TS-1746 II		511d1 8D (9/93-)				TS-1785				AD-EU800S	
G T5-1785 AD-E			G				TS-1776 II	TS-1756 II	TS-1746 II	AD-EU800S	
Beetle (10/98-)         A         TS-H1703         TS-H177         TS-1776 II         TS-1756 II         TS-1756 II		Beetle [10/98-]	A	TS-H1703	TS-H177		TS-1776 II	TS-1756 II	TS-1746 II	AD-L00003	UD-M174WW
A TS-1785 F TS-1776 II TS-1776 II TS-1776 II TS-1776 II TS-1776 II TS-1776 II				TS-H1703	TS-H177	TS-1785	TS-1776 II	TS-1754 II	TS-1746 II		UD-M174VW UD-M174VW
F TS-1785						TS-1785					UD-M174VW

# UNIVERSAL SPEAKERS APPLICATION CHART FOR ORIGINAL SPEAKER LOCATION

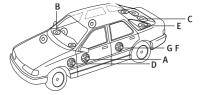


CAR Brand	MODEL & INTRODUCTION	LOCATION	EUR REF. SEPARATE Compo Series	E-MOTION SEPARATE COMPO SERIES	E-MOTION 3-WAY SERIES	E-MOTION 2-WAY SERIES	A-CCELERATE SEPARATE COMPO SERIES		A-CCELERATE 3-WAY	A-CCELERATE 2-WAY	G-SERIES 2-WAY	G-SERIES DUAL CONE	SPEAKER INTERFACE KITS	SPEAKER ADAPTER PLATES
ALFA ROMEO	Alfa 145 (9/94-4/01)	A F	TS-C1700R * [1] TS-C1300R	TS-E176C* [1] TS-E136C	TS-E1396	TS-E1776 TS-E1376	TS-A171C* [1] TS-A131C		TS-A1710* TS-A1310		TS-G1748 TS-G1348	TS-G1718 TS-G1318		*UD-M171
	Alfa 146 (9/95-4/01)	A G	TS-C1700R * [1]	TS-E176C* [1]		TS-E1776 TS-E1776	TS-A171C* [1] TS-A171C		TS-A1710* TS-A1710		TS-G1748 TS-G1748	TS-G1718 TS-G1718		*UD-M171
	Alfa 155 (3/92-9/97)	С	TS-C1700R	TS-E176C	TC 5480/4		TS-A171C		TS-A1710		TS-G1748	TS-G1718		UD-M171
	Alfa 156 [9/97-]	G	TS-C1700R* TS-C1700R*	TS-E176C* TS-E176C*	TS-E1796* TS-E1796*	TS-E1776 TS-E1776	TS-A171C* TS-A171C*		TS-A1710* TS-A1710*		TS-G1748 TS-G1748	TS-G1718 TS-G1718		*UD-M171 *UD-M171
	164-super (3/92-9/98)	C	TS-C1700R	TS-E176C	TS-E6996		TS-A171C	TS-A6920	TS-A6910 TS-A1710	TS-A6900	TS-G1748	TS-G1718		
		C	13 617661	15 21/00	TS-E6996		15 AI/IC	TS-A6920	TS-A6910	TS-A6900				
	166 [10/98-]	A G									TS-G1748 TS-G1748	TS-G1718 TS-G1718		
41151	A. (	C	TS-C1700R TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		10.117044
AUDI	A4 4-door (1/01-)	A G	TS-C1700R TS-C1700R	TS-E176C TS-E176C	TS-E1796 TS-E1796	TS-E1776 TS-E1776	TS-A171C TS-A171C		TS-A1710 TS-A1710		TS-G1748 TS-G1748	TS-G1718 TS-G1718		UD-M174VW UD-M174VW
	A6 [3/97-]	A G		TS-E176C	TS-E1796	TS-E1776 TS-E1776	TS-A171C TS-A171C		TS-A1710 TS-A1710		TS-G1748 TS-G1748	TS-G1718 TS-G1718		
	TT (10/98-)	A	TS-C1700R TS-C1300R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		
BMW	3-series 2-door (10/85-1/92) 3 Touring (1/88-4/00)	D	TS-C1300R TS-C1300R	TS-E136C TS-E136C			TS-A131C TS-A131C					TS-G1318 TS-G1318		
		E				TS-E1076					TS-G1048	TS-G1018		
	3-series 4-door [12/90-2/98] 3-series coupé [1/92-1/99]	D	TS-C1300R TS-C1300R	TS-E136C TS-E136C			TS-A131C TS-A131C				TS-G1348	TS-G1318 TS-G1318		
	3-series compact (5/94 - 10/00)	D	TS-C1300R	TS-E136C			TS-A131C					TS-G1318		
	5-series (1/88-6/95)	D C	TS-C1300R TS-C1300R	TS-E136C TS-E136C	TS-E1396	TS-E1376	TS-A131C TS-A131C		TS-A1310		TS-G1348	TS-G1318 TS-G1318		
	5-series (7/95-)	D	TS-C1300R TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
	7-series (10/86-3/94)	D	TS-C1300R	TS-E136C TS-E136C	TS-E1396 TS-E1396	TS-E1376 TS-E1376	TS-A131C TS-A131C		TS-A1310 TS-A1310		TS-G1348 TS-G1348	TS-G1318 TS-G1318		
	MINI (10/00-)	C	TS-C1300R TS-C1700R	TS-E136C TS-E176C	TS-E1396 TS-E1796	TS-E1376 TS-E1776	TS-A131C TS-A171C		TS-A1310 TS-A1710		TS-G1348 TS-G1748	TS-G1318 TS-G1718		UD-M177VW
		F			15 21770				13 80/10	TS-A6900				00 1017770
CITROEN	AX series 3-door (8/91-9/96) AX series 5-door (8/91-9/96)	F	TS-C1300R	TS-E136C		TS-E1376	TS-A131C				TS-G1348 TS-G1348	TS-G1318 TS-G1318		
	BX [8/86-2/93]	A	TS-C1300R	TS-E136C			TS-A131C					TS-G1318		
	Saxo 3-door (10/96-9/01) Saxo 5-door (10/96-9/01)	A	TS-C1300R TS-C1300R	TS-E136C TS-E136C	TS-E1396 TS-E1396	TS-E1376 TS-E1376	TS-A131C TS-A131C		TS-A1310 TS-A1310		TS-G1348 TS-G1348	TS-G1318 TS-G1318		
		G	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
	Xantia (3/92-12/00)	A G	TS-C1700R [1] TS-C1300R	TS-E176C [1] TS-E136C	TS-E1796 TS-E1396	TS-E1776 TS-E1376	TS-A171C [1] TS-A131C		TS-A1710 TS-A1310		TS-G1748 TS-G1348	TS-G1718 TS-G1318		
	XM 4-door (7/89-12/00)	A	TS-C1700R	TS-E176C			TS-A171C				TS-G1348	TS-G1718 TS-G1318		
	XM Break (1/92-12/00)	A	TS-C1700R	TS-E176C			TS-A171C				15-01348	TS-G1318 TS-G1718		
	ZX Reflex Avantage (4/91-9/97)	E A	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318 TS-G1318		
	ZX Aura/Volcane [4/91-9/97]	A	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
	ZX 3-door (10/92-9/97)	G	TS-C1300R TS-C1300R	TS-E136C TS-E136C	TS-E1396 TS-E1396	TS-E1376 TS-E1376	TS-A131C TS-A131C		TS-A1310 TS-A1310		TS-G1348 TS-G1348	TS-G1318 TS-G1318		
		F	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
	ZX Break [1/94-2/98]	A. G	TS-C1300R TS-C1300R	TS-E136C TS-E136C	TS-E1396 TS-E1396	TS-E1376 TS-E1376	TS-A131C TS-A131C		TS-A1310 TS-A1310		TS-G1348 TS-G1348	TS-G1318 TS-G1318		
	Xsara [10/97-]	A	TS-C1700R [1]	TS-E176C [1]	TS-E1796	TS-E1776	TS-A171C [1] TS-A171C [1]		TS-A1710		TS-G1748 TS-G1748	TS-G1718		
	Xsara 5-door (10/97-)	G	TS-C1700R [1] TS-C1300R	TS-E176C [1] TS-E136C	TS-E1796 TS-E1396	TS-E1776 TS-E1376	TS-A1710 [1]		TS-A1710 TS-A1310		TS-G1748 TS-G1348	TS-G1718 TS-G1318		
	Xsara Break (3/98-)	A. G	TS-C1700R [1] TS-C1300R	TS-E176C [1] TS-E136C	TS-E1796 TS-E1396	TS-E1776 TS-E1376	TS-A171C [1] TS-A131C		TS-A1710 TS-A1310		TS-G1748 TS-G1348	TS-G1718 TS-G1318		
	Xsara Coupé (10/98-)	A	TS-C1700R [1]	TS-E176C [1]	TS-E1796	TS-E1776	TS-A171C [1]		TS-A1710		TS-G1748	TS-G1718		
	Picasso (12/99-)	F	TS-C1300R TS-C1700R [1]	TS-E136C TS-E176C [1]	TS-E1396 TS-E1796	TS-E1376 TS-E1776	TS-A131C TS-A171C [1]		TS-A1310 TS-A1710		TS-G1348 TS-G1748	TS-G1318 TS-G1718		
	1108330 (12/77 )	G									TS-G1748	TS-G1718		
	Berlingo (10/96-9/02)	G	TS-C1300R	TS-E136C	TS-E1396	TS-E1376 TS-E1076	TS-A131C		TS-A1310		TS-G1348 TS-G1048	TS-G1318 TS-G1018		
	Berlingo (10/02-)	A	TC 047000 (4)	70 54540 (4)	70 5480/		75 14740 (4)		70.14740		TS-G1748	TS-G1718		
	Evasion (3/94-9/02)	A F	TS-C1700R [1] TS-C1700R *	TS-E176C [1] TS-E176C*	TS-E1796 TS-E1796*	TS-E1776 TS-E1776	TS-A171C [1] TS-A171C*		TS-A1710 TS-A1710*		TS-G1748 TS-G1748	TS-G1718 TS-G1718		*UD-M171
	C3 (09/01-)	A	TC 01700D (1)			TS-E1776	TC 41710 (1)				TS-G1748	TS-G1718		
	C5 (01/01-)	A G	TS-C1700R [1] TS-C1700R	TS-E176C (1) TS-E176C	TS-E1796 TS-E1796	TS-E1776 TS-E1776	TS-A171C [1] TS-A171C		TS-A1710 TS-A1710		TS-G1748 TS-G1748	TS-G1718 TS-G1718		
DAEW00	C8(10/02-) Tacuma (10/00-)	A	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1748 TS-G1348	TS-G1718 TS-G1318		
FIAT	Coupé (12/93-)	А	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		
	Punto (9/93-8/99) Punto 3-/5-door (9/99-)	E				TS-E1076 TS-E1776 [2]					TS-G1048 TS-G1748 [2]	TS-G1018 TS-G1718 [2]		
	Tipo (2/88-8/95)	E				TS-E1076					TS-G1048	TS-G1018		
	500 [4/92-9/98] Seicento / 600 [9/97-]	B										TS-G1018 TS-G1018		
	Ulysse [3/94-9/02]	A	TS-C1700R (1)	TS-E176C [1]	TS-E1796	TS-E1776	TS-A171C [1]		TS-A1710		TS-G1048	TS-G1718		
	Ulysse (10/02-)	F	TS-C1700R *	TS-E176C*	TS-E1796*	TS-E1776	TS-A171C*		TS-A1710*		TS-G1748 TS-G1748	TS-G1718 TS-G1718		*UD-M171
5000	Multipla (3/98-)	A				TS-E1776					TS-G1748	TS-G1718		
FORD	Galaxy (9/95-)	A G				TS-E1776* TS-E1776*					TS-G1748 TS-G1748	TS-G1718 TS-G1718		*UD-M171 *UD-M171
	Mondeo-series (3/93-11/00)	A G	TS-C1700R TS-C1700R	TS-E176C TS-E176C	TS-E1796 TS-E1796	TS-E1776 TS-E1776	TS-A171C TS-A171C		TS-A1710 TS-A1710		TS-G1748 TS-G1748	TS-G1718 TS-G1718		UD-M172 UD-M172
HONDA	Jazz 5door (1/02-)	A	TS-C1700R [13]	TS-E176C [13]	TS-E1796 (13)	TS-E1776 [13]	TS-A171C [13]		TS-A1710 (13)		TS-G1748 [13]	TS-G1718 [13]		UD-M1760P
HYUNDAI	Getz (10/02- )	G	TS-C1700R [13]	TS-E176C [13]	TS-E1796 (13)	TS-E1776 (13)	TS-A171C [13]		TS-A1710 (13)		TS-G1748 [13] TS-G1748	TS-G1718 [13] TS-G1718		UD-M1760P
	Pony 3+5-door (1/90-9/94)	A				TS-E1076					TS-G1048	TS-G1018		
VAZ/LADA	Pony 4-door[Excel] [1/90-9/94] Samara 3-door (1/86-12/99]	A E	TS-C1300R	TS-E136C	TS-E1396	TS-E1076 TS-E1376	TS-A131C		TS-A1310		TS-G1048 TS-G1348	TS-G1018 TS-G1318		
	Samara 5-door (1/88-12/99)	E	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
		C	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348 TS-G1348	TS-G1318		
	Diva/Sagona (8/91-12/99) 2104	E		TS-E136C	TS-E1396	5-13/6	5-A131C							
	2104 2108	B	TS-C1300R TS-C1300R	TS-E136C TS-E136C	TS-E1396 TS-E1396	TS-E1376 TS-E1376	TS-A131C TS-A131C		TS-A1310 TS-A1310		TS-G1348	TS-G1318 TS-G1318		
	2104 2108 2109	B	TS-C1300R TS-C1300R TS-C1300R	TS-E136C TS-E136C	TS-E1396 TS-E1396	TS-E1376 TS-E1376	TS-A131C TS-A131C		TS-A1310 TS-A1310		TS-G1348 TS-G1348	TS-G1318 TS-G1318		
	2104 2108	B	TS-C1300R TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		

Location: A: Front Door B: Dual Dash C: Rear Deck D: Kick Panel E: Rear Side Shelf F: Rear Seat Side G: Rear Door H: Rear Pillar I: Hatch Door J: Rear Panel K: Rear Ceiling
(1) Tweeter fils original location, (2) Need to make 2 screw holes on the original speaker location, (3) Original 13 cm speaker adapter required, (4) Original 17 cm adapter required, (5) Original 17 cm
speaker location required, (6) High-range unit fits original location, (7) Front door pocket with 17 cm speaker to cation required, (8) Rear door pocket with 17 cm speaker location required, (9) Dril holes to fix the speaker (10) 3-door, (11) In case original speaker provided (12) Modify speaker frame, (13) Steel cut or some modification.
All mounting proposals and measurements contained in this guide have been checked. However, due to continual modification of certain car models, we cannot guarantee
the complete accuracy of all statements, technical information and recommendements.
For that reason, a thorough inspection of the mounting area should be made before proceeding with installation.

SPEAKERS

# UNIVERSAL SPEAKERS APPLICATION CHART FOR ORIGINAL SPEAKER LOCATION



CAR Brand	MODEL & INTRODUCTION	LOCATION	EUR REF. Separate Compo Series	E-MOTION SEPARATE COMPO SERIES	E-MOTION 3-WAY SERIES	E-MOTION 2-WAY SERIES	A-CCELERATE SEPARATE COMPO SERIES	A-CCELERATE 4-WAY	A-CCELERATE 3-WAY	A-CCELERATE 2-WAY	G-SERIES 2-WAY	G-SERIES DUAL CONE	SPEAKER INTERFACE KITS	SPEAKER ADAPTER PLATES
VAZ/LADA	2115	E	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
VAZ/NIVA	21213 2131	E	TS-C1300R TS-C1300R	TS-E136C TS-E136C	TS-E1396 TS-E1396	TS-E1376 TS-E1376	TS-A131C TS-A131C		TS-A1310 TS-A1310		TS-G1348 TS-G1348	TS-G1318 TS-G1318		
MOSKVICH/	2141	В	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
MOSKVICH GAZ/VOLGA	3110	В	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
LANCIA	Dedra (6/89-4/99)	B										TS-G1018		
	Delta (7/93-6/00) Y (1/96-2/03)	C A	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718 TS-G1718		
	Ypsilon(3/03- )	A	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		UD-M171
	Z (3/94-9/02)	F	TS-C1700R TS-C1700R [1]	TS-E176C TS-E176C (1)	TS-E1796 TS-E1796	TS-E1776 TS-E1776	TS-A171C		TS-A1710 TS-A1710		TS-G1748 TS-G1748	TS-G1718 TS-G1718		UD-M171
		F	TS-C1700R *	TS-E176C*	TS-E1796*	TS-E1776	TS-A171C*		TS-A1710*		TS-G1748	TS-G1718		*UD-M171
MERCEDES	Phedra (10/02-) 190/190E (W201) (1/83-5/93)	B				TS-E1076					TS-G1748 TS-G1048	TS-G1718 TS-G1018		
MERCEDES	A-series (9/97-)	A	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		UD-M175MB
	15 (5/0) 1	G	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		UD-M135MB
	Vito (3/96-) V-series (3/96-)	B									TS-G1048 TS-G1048	TS-G1018 TS-G1018		
NISSAN	Micra 5door (10/02-)	A	TS-C1700R*	TS-E176C*	TS-E1796*	TS-E1776*	TS-A171C*		TS-A1710*		TS-G1748	TS-G1718		*UD-M1760P
OPEL/	Astra 3-/5-door (9/91-9/97)	G	TS-C1700R TS-C1300R	TS-E176C TS-E136C	TS-E1796 TS-E1396	TS-E1776 TS-E1376	TS-A171C TS-A131C		TS-A1710 TS-A1310		TS-G1748 TS-G1348	TS-G1718 TS-G1318		
VAUXHALL	Asira 3-/3-0001 (///1-////)	L.	13-613001	13-21306	13-11370	13-213/0	13-A1310		13-A1310		13-01340	13-01310		
	Astra 4-door (6/92- 9/97)	C	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A1710		TS-A1710		TS-G1748	TS-G1718	AD-EU800S	UD 1417/00
	Astra series (10/97-) Astra 3-door (10/97-)	A F	TS-C1700R TS-C1700R	TS-E176C TS-E176C	TS-E1796 TS-E1796	TS-E1776 TS-E1776	TS-A171C TS-A171C		TS-A1710 TS-A1710		TS-G1748 TS-G1748	TS-G1718 TS-G1718	AD-EU800S AD-EU800S	UD-M1760P
	Omega (4/94-)	A	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718	AD-EU800S	UD-M1760P
	Tigra (11/95-) Vectra (9/95-2/02)	A									TS-G1748	TS-G1718 TS-G1718	AD-EU800S AD-EU800S	UD-M1760P
	Vectra (3/02-)	A	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718	AD-EU800S AD-EU800S	UD-M1760P
		G	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		UD-M1760P
	Aqila (2/01-)	B K				-					TS-G1048 TS-G1048	TS-G1018 TS-G1018		
	Meriva 5-door (10/02-)	A	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718	AD-EU800S	UD-M1760P
PEUGEOT	106 XR/XN 3-door (9/91-)	G	TS-C1700R	TS-E176C	TS-E1796	TS-E1776 TS-E1376	TS-A171C TS-A131C		TS-A1710 TS-A1310		TS-G1748 TS-G1348	TS-G1718 TS-G1318	AD-EU800S	UD-M1760P
FEUDEDI	106 XT/XSI 3-door (9/91-)	F				13-L13/0	13-41310		13-A1310		TS-G1048	TS-G1018		
		A				TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
	106 5-door (9/92-)	G				TS-E1376 TS-E1376	TS-A131C TS-A131C		TS-A1310 TS-A1310		TS-G1348 TS-G1348	TS-G1318 TS-G1318		
	206 series (8/98-)	A				TS-E1776					TS-G1748	TS-G1718		
	205.2.5.4	F, G	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
	205 3+5-door (9/83-7/97)	H A				TS-E1376					TS-G1348	TS-G1318 TS-G1318		
	306 XS/XT [8/93-2/01]	A				TS-E1776					TS-G1748	TS-G1718		
	307 5-door (3/01-)	G	TS-C1700R (1) TS-C1300R	TS-E176C [1] TS-E136C	TS-E1796	TS-E1776	TS-A171C [1] TS-A131C		TS-A1710		TS-G1748	TS-G1718 TS-G1318		UD-M171
	309 3+5-door (11/85-7/93)	H										TS-G1318		
	(05 (//07 5/00)	A	TS-C1300R TS-C1700R*	TS-E136C TS-E176C*	TS-E1396 TS-E1796*	TS-E1376	TS-A131C TS-A171C*		TS-A1310 TS-A1710*		TS-G1348	TS-G1318 TS-G1718		UD-M171*
	405 (6/87-5/92) 405 (6/92-5/95)	A	TS-C1700R* TS-C1700R	TS-E176C	15-E1/96*	TS-E1776	TS-A171C		15-A1/10*		TS-G1748	TS-G1718		UD-M171*
	406 (6/95-)	A	TS-C1700R [1]	TS-E176C [1]	TS-E1796	TS-E1776	TS-A171C [1]		TS-A1710		TS-G1748	TS-G1718		
	406 coupe [6/95-] 605 [9/89-9/99]	A	TS-C1700R (1) TS-C1700R	TS-E176C [1] TS-E176C	TS-E1796 TS-E1796	TS-E1776 TS-E1776	TS-A171C [1] TS-A171C		TS-A1710 TS-A1710		TS-G1748 TS-G1748	TS-G1718 TS-G1718		
		G	TS-C1700R	TS-E176C			TS-A171C					TS-G1718		
	806 (3/94-9/02)	A	TS-C1700R (1)	TS-E176C [1]	TS-E1796	TS-E1776	TS-A171C [1]		TS-A1710		TS-G1748	TS-G1718		
	807 (10/02-)	A	TS-C1700R *	TS-E176C*	TS-E1796*	TS-E1776	TS-A171C*		TS-A1710*		TS-G1748 TS-G1748	TS-G1718 TS-G1718		UD-M171*
	Partner (10/96 - 9/02)	В				TS-E1076					TS-G1748 TS-G1048	TS-G1718 TS-G1018		
RENAULT	Partner (10/02-) Clio (5/90-2/98)	B									TS-G1748	TS-G1718 TS-G1018		
ILEIU/OEI		E				TS-E1076					TS-G1048	TS-G1018	AD-EU800S	
	Clip II 5-door except RXE [3/98-]	A	TS-C1300R	TS-E136C	TS-E1396	TS-E1376 TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318	AD-EU800S	
	Clio II 5-door RXE (3/98-)	G	TS-C1300R TS-C1300R [13]	TS-E136C TS-E136C [13]	TS-E1396 TS-E1396 (13)	TS-E1376 [13]	TS-A131C TS-A131C [13]		TS-A1310 TS-A1310 (13)		TS-G1348 TS-G1348 (13)	TS-G1318 TS-G1318 (13)	AD-EU800S AD-EU800S	
	Clio II 3-door (3/98- )	A	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
	Safrane (3/92-10/01)	F	TS-C1300R TS-C1700R [1]	TS-E136C TS-E176C	TS-E1396 TS-E1796	TS-E1376 TS-E1776	TS-A131C TS-A171C [1]		TS-A1310 TS-A1710		TS-G1348 TS-G1748	TS-G1318 TS-G1718	AD-EU800S AD-EU800S	
		G	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A1710		TS-A1710		TS-G1748	TS-G1718	AD-EU800S	
	Twingo II (10/98-) Twingo II (09/00-)	B				TS-E1076					TS-G1048 TS-G1348	TS-G1018 TS-G1318	AD-EU800S	
	Mégane 5-door RT (9/95-9/02)	A	TS-C1700R (1)	TS-E176C [1]	TS-E1796	TS-E1776	TS-A171C [1]		TS-A1710		TS-G1348 TS-G1748	TS-G1318 TS-G1718	AD-EU800S	
		E	TS-C1300R [1]	TS-E136C	TS-E1396	TS-E1376	TS-A131C [1]		TS-A1310		TS-G1348	TS-G1318	AD-EU800S	
	Mégane 5-door RL/RN (9/95-9/02)	A E	TS-C1300R [1] TS-C1300R	TS-E136C TS-E136C	TS-E1396 TS-E1396	TS-E1376 TS-E1376	TS-A131C [1] TS-A131C		TS-A1310 TS-A1310		TS-G1348 TS-G1348	TS-G1318 TS-G1318	AD-EU800S AD-EU800S	
	Mégane (10/02-)	A				TS-E1376 [12/13]	TS-A131C [12/13]		TS-A1310 [12/13]		TS-G1348 [12/13]	TS-G1318 [12/13]	AD-EU800S	
	Mégane Classic (9/95-9/02)	A	TS-C1700R [1] TS-C1300R [3]	TS-E176C [1] TS-E136C [3]	TS-E1796 TS-E1396 [3]	TS-E1776 TS-E1376 [3]	TS-A171C [1] TS-A131C [3]		TS-A1710 TS-A1310 [3]		TS-G1748 TS-G1348 [3]	TS-G1718 TS-G1318 [3]	AD-EU800S AD-EU800S	
	Mégane Coupé (9/95-9/02)	A	TS-C1300R (3)	TS-E136C (3) TS-E176C (1)	TS-E1796	TS-E1376 (3)	TS-A171C [1]		TS-A1310 (3)		TS-G1748	TS-G1718	AD-EU800S AD-EU800S	
		E	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318	AD-EU800S	
	Mégane Scénic (10/96-6/03)	A F	TS-C1300R (1) TS-C1300R	TS-E136C TS-E136C	TS-E1396 TS-E1396	TS-E1376 TS-E1376	TS-A131C [1] TS-A131C		TS-A1310 TS-A1310		TS-G1348 TS-G1348	TS-G1318 TS-G1318	AD-EU800S	
	Express (6/87-8/97)	B	15 615001	15 21000	15 21570	15 210/0	13 81310		15 41510		TS-G1048	TS-G1018	AD-EU800S	
	19 RL,RN (4/92-8/95)	B	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1018 TS-G1318	AD-EU800S	UD-M101
	19 (except RL,RN) (4/92-8/95)	B	13-61300K	13-21300	13-E1370	13-E13/6	13-A1310		13-A1310		13-01348	TS-G1318 TS-G1018	AD-EU800S AD-EU800S	UD-M101
		A	TS-C1700R			TS-E1776	TS-A171C		TO 11-1-1			TS-G1718		
		EB	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318 TS-G1018	AD-EU800S AD-EU800S	UD-M101
			TC 01700D			TS-E1776	TS-A171C					TS-G1718	AD-EU800S	
	19 Chamade (except RL,RN) (4/92-8/95)	A	TS-C1700R									TS-G1018	10.5100005	UD-M101
	19 Chamade RL,RN [4/92-8/95]	В	IS-CI/UUR										AD-EU800S	
			TS-C1700R			TS-E1776	TS-A171C					TS-G1018 TS-G1018 TS-G1718	AD-EU800S AD-EU800S	UD-M101
	19 Chamade RL,RN [4/92-8/95] 19 Cabrio [4/92-4/97]	B B A F	TS-C1700R									TS-G1018 TS-G1718 TS-G1018	AD-EU800S AD-EU800S	
	19 Chamade RL,RN [4/92-8/95]	B B A F A	TS-C1700R TS-C1700R	TS_F1740 (4)	TC_E1704 [4]	TS-E1776	TS-A171C		TS-A1710 [4]		TS_017/0 (/)	TS-G1018 TS-G1718 TS-G1018 TS-G1718	AD-EU800S AD-EU800S AD-EU800S	
	19 Chamade RL,RN (4/92-8/95) 19 Cabrio (4/92-4/97) Laguna (1/94-9/99) Laguna Break (9/95-9/99)	B B A F	TS-C1700R	TS-E176C (4)	TS-E1796 [4]	TS-E1776 TS-E1776 [4] TS-E1776			TS-A1710 (4) TS-A1710		TS-G1748 [4] TS-G1748	TS-G1018 TS-G1718 TS-G1018 TS-G1718 TS-G1718 [4] TS-G1718	AD-EU800S AD-EU800S AD-EU800S AD-EU800S AD-EU800S AD-EU800S	
	19 Chamade RL,RN (4/92-8/95) 19 Cabrio (4/92-4/97) Laquna (1/94-9/99)	B B A F A E	TS-C1700R TS-C1700R	TS-E176C [4]	TS-E1796 [4]	TS-E1776 TS-E1776 (4)	TS-A171C TS-A171C [4]					TS-G1018 TS-G1718 TS-G1018 TS-G1718 TS-G1718 [4]	AD-EU800S AD-EU800S AD-EU800S AD-EU800S	

CAR Brand	MODEL & INTRODUCTION	LOCATION	EUR REF. SEPARATE Compo Series	E-MOTION SEPARATE COMPO SERIES	E-MOTION 3-WAY SERIES	E-MOTION 2-Way Series	A-CCELERATE SEPARATE COMPO SERIES		A-CCELERATE 3-WAY	A-CCELERATE 2-WAY	G-SERIES 2-WAY	G-SERIES DUAL CONE	SPEAKER INTERFACE KITS	SPEAKER ADAPTER PLATES
RENAULT	Kangoo (9/97-)	В				TS-E1076					TS-G1048	TS-G1018	AD-EU800S	
		E				TS-E1076					TS-G1048	TS-G1018	AD-EU800S	
	Kangoo Express (9/97-)	В				TS-E1076					TS-G1048	TS-G1018	AD-EU800S	
	Espace (5/91-1/97)	В	TS-C1700R [1]	TS-E176C [1]	TS-E1796	TS-E1776	TS-A171C [1]		TS-A1710		TS-G1748	TS-G1718	AD-EU800S	
		Н	TS-C1700R [1]	TS-E176C [1]	TS-E1796	TS-E1776	TS-A171C [1]		TS-A1710		TS-G1748	TS-G1718	AD-EU800S	
	Espace (11/02-)	A									TS-G1348 [12/13]	TS-G1318 [12/13]	AD-EU800S	
		G	TS-C1300R [12]	TS-E136C [12]	TS-E1396[12]	TS-E1376[12]	TS-A131C [12]		TS-A1310 (12)		TS-G1348 [12]	TS-G1318 [12]	AD-EU800S	
	Velsatis (10/01-)	A									TS-G1348 [12]	TS-G1318 [12]		
ROVER	214/216 series (1/90-9/95)	A	TS-C1700R [1]	TS-E176C [1]			TS-A171C [1]					TS-G1718		
		E	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
	216 Gti 3-door (7/90-9/95)	A	TS-C1700R	TS-E176C	70 5400/	70 5405/	TS-A171C		TC 14040		70.040/0	TS-G1718		
	214/216 series (10/95-)	E	TS-C1300R TS-C1300R	TS-E136C TS-E136C	TS-E1396 TS-E1396	TS-E1376 TS-E1376	TS-A131C TS-A131C		TS-A1310 TS-A1310		TS-G1348 TS-G1348	TS-G1318		
		E	IS-CI300R	IS-E1360	IS-E1396	IS-E13/6	15-A1310		IS-AI3IU		15-61348	TS-G1318		
CEAT	414/416 serie [4/90-1/96]	A	TC 017002	TC 517/0	TC E170/	TC E1221	TS-A171C		TC 11710		TC 017/0	TS-G1718		LID MITTAN
SEAT	Arosa [10/97-] Cordoba [10/93-10/99]	A	TS-C1700R TS-C1700R	TS-E176C TS-E176C	TS-E1796 TS-E1796	TS-E1776 TS-E1776	TS-A171C TS-A171C		TS-A1710 TS-A1710		TS-G1748 TS-G1748	TS-G1718 TS-G1718	AD-EU800S	UD-M177VW
	Lordoba (10/93-10/99) Ibiza 3+5-door (1/89-4/93)	A	TS-C1700R TS-C1300R	TS-E1760 TS-E1360	TS-E1/96 TS-E1396	TS-E1776 TS-E1376	TS-A1710 TS-A1310		TS-A1/10 TS-A1310		TS-G1748 TS-G1348	TS-G1318	AD-EU8005	
	1012d 3+3-0001 (1/07-4/93)	A	13-013008	13-E1300	13-E1370	TS-E13/6 TS-E1076	IS-AISIG		ID-AIDIU		TS-G1348 TS-G1048	TS-G1018		
	Ibiza (4/93-5/99)	A	TS-C1700R	TS-E176C	TS-E1796	TS-E1076	TS-A171C		TS-A1710		TS-G1048	TS-G1718	AD-EU800S	
	Ibiza (4/93-5/99) Ibiza 3-door (1/02-)	A	TS-C1700R TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A1710		TS-A1710 TS-A1710		TS-G1748 TS-G1748	TS-G1718 TS-G1718	AD-EOOODS	UD-M177VW
	Ibiza 5-door (1/02-)	A	TS-C1700R	TS-E176C	TS-E1776	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		UD-M177VW
	10120 3 0001 (1/02 )	G	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		UD-M174VW
	Toledo (10/98- )	A	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A1710		TS-A1710		TS-G1748	TS-G1718		UD-M174 VW
	Totedo (Toj 70 )	G	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		UD-M174 VW
	Alhambra (9/95-)	A	10 01/001	10 21/00	10 21/10	TS-E1776*	10711710		10/11/10		TS-G1748	TS-G1718	AD-EU800S	*UD-M171
	, and the target of	G				TS-E1776*					TS-G1748	TS-G1718	AD-EU800S	*UD-M171
SKODA	Fabia (9/99-)	A									TS-G1748	TS-G1718		
		E									TS-G1348	TS-G1318		
SUBARU	Vivio (3/92-12/00)	В									TS-G1048	TS-G1018		
SUZUKI	Swift cabrio (1/92-12/00)	В									TS-G1048	TS-G1018		
		J									TS-G1048	TS-G1018		
	Swift series (12/91-12/00)	В									TS-G1048	TS-G1018		
	Vitara 3-door (2/91-12/96)	В									TS-G1048	TS-G1018		
VOLVO	S40 (9/95-)	A	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
		C	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
	V40 (9/95-)	A	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
		Н										TS-G1318		
	440 [10/94-8/95]	A	TS-C1300R	TS-E136C	TS-E1396	TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
	850/Wagon (10/91-12/96)	A				TS-E1376	TS-A131C		TS-A1310		TS-G1348	TS-G1318		
VW	Lupo (10/98- )	A	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		UD-M177VW
	New Beetle (10/98-)	A	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		UD-M174 VW
	0.10111	F	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		UD-M174 VW
	Golf III-series (11/91-9/97)	G		TS-E176C [7] TS-E176C [5]	TS-E1796 [7] TS-E1796 [5]	TS-E1776 [7] TS-E1776 [5]	TS-A171C [7] TS-A171C[5]		TS-A1710 [7] TS-A1710 [5]		TS-G1748 [7] TS-G1748 [5]	TS-G1718 [7] TS-G1718 [5]		
	Golf Variant CL (9/93-9/99)	A		TS-E1760 (5)	TS-E1796 (5) TS-E1796	TS-E1776	TS-A1710[ 5]		TS-A1710 (5) TS-A1710		TS-G1748 [5]	TS-G1718 [5]	AD-EU800S	
	000 VdHdHLGE (7/73-7/99)	G		TS-E176C	TS-E1796 TS-E1796	TS-E1776	TS-A1710		TS-A1710 TS-A1710		TS-G1748 TS-G1748	TS-G1718 TS-G1718	AD-EU800S AD-EU800S	
	Golf IV-series (9/97-9/03)	A	TS-C1700R	TS-E176C	TS-E1796 TS-E1796	TS-E1776	TS-A1710 TS-A1710		TS-A1710 TS-A1710		TS-G1748 TS-G1748	TS-G1718 TS-G1718	AD-ECOUDS	UD-M174 VW
	000 W150105 [////11/(00]	G	TS-C1700R	TS-E176C	TS-E1776 TS-E1796	TS-E1776	TS-A171C		TS-A1710 TS-A1710		TS-G1748	TS-G1718		UD-M174 VW
	Bora (10/98-)	A	TS-C1700R	TS-E176C	TS-E1776	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		UD-M174 VW
	Dord [10/70*]	G	TS-C1700R	TS-E176C	TS-E1776	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		UD-M174 VW
	Vento [1/92-9/98]	A	13 017001	TS-E176C	TS-E1776	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		30 011/4 ///
	1.1.0 (1) 12 1/10	G		TS-E176C	TS-E1796	TS-E1776	TS-A1710		TS-A1710		TS-G1748	TS-G1718		
	Passat series (9/96-)	A	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		UD-M174 VW
	r dobat berieb (770 )	G	TS-C1700R	TS-E176C	TS-E1776	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		UD-M174 VW
	Polo Classic (1/96-9/99)	A	10 017001	10 21/00		TS-E1776*	TS-A171C*		TS-A1710*		TS-G1748	TS-G1718		*UD-M171
	Polo 3-/5-door [10/94 -9/99]	A				TS-E1776*	TS-A171C*		TS-A1710*		TS-G1748	TS-G1718		*UD-M171
	Polo 3-/5-door (10/99-8/01)	A	TS-C1700R *	TS-E176C*	TS-E1796*	TS-E1776*	TS-A171C*		TS-A1710*		TS-G1748	TS-G1718		*UD-M171
	Polo (9/01-)	A	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710	1	TS-G1748	TS-G1718		UD-M174 VW
		G	TS-C1700R	TS-E176C	TS-E1796	TS-E1776	TS-A171C		TS-A1710		TS-G1748	TS-G1718		UD-M174 VW
	Sharan (9/95-)	A				TS-E1776*					TS-G1748	TS-G1718	AD-EU800S	*UD-M171
		G				TS-E1776*					TS-G1748	TS-G1718	AD-EU800S	*UD-M171

Location: A: Front Door B: Dual Dash C: Rear Deck D: Kick Panel E: Rear Side Shelf F: Rear Seat Side G: Rear Door H: Rear Pitlar 1: Hatch Door J: Rear Panel K: Rear Ceilling (1) Tweeter fits original location, (2) Need to make 2 screw holes on the original speaker location, (3) Original 13 cm speaker adapter required, (4) Original 17 cm adapter required, (5) Original 17 cm speaker location required, (6) High-range unit fits original location, (7) Front door pocket with 17 cm speaker location required, (8) Rear door pocket with 17 cm speaker location required, (6) High-range unit fits original location, (7) Front door pocket with 17 cm speaker location required, (8) Rear door pocket with 17 cm speaker location required, (9) Dril holes to fix the speaker, 10) 5-door, (11) In case original speaker places are provided (12) Modify speaker frame, (13) Steel cut or some modification. All mounting proposals and measurements contained in this guide have been checked. However, due to continual modification of certain car models, we cannot guarantee the complete accuracy of all statements, technical information and recommendements. For that reason, a thorough inspection of the mounting area should be made before proceeding with installation.

# **ACCESSORIES**

## CONNECTORS

Speaker outputs to RCA connectors which enable the connection of high power amps having RCA connectors to the speaker outputs of car stereo models.



For high power car stereo models with 2 x 25 W output (power).

**RD-SR510** For car stereo models with 2 x 8.5 W output (power).



CD-RD100 RCA-DIN interconnector which enables the connection of any car stereo unit with RCA ouput to a Pioneer component system with DIN input.

OTHERS



UD-G305 Subwoofer Grille for TS-W121SPL\*, TS-SW124D, TS-W305C and TS-W305F

UD-G255 Subwoofer Grille for TS-W101SPL\*, TS-W255C and TS-W255F

\* Necessary to take off the gasket.



CD-727

Converts an ISO10599 type female antenna connector into a DIN41585 (Sept. 1953) male

INTERCONNECTORS

17P081

Antenna Adapter

antenna connector.

AD-M16

[25 mm thick]

RD-223

RD-221

Battery Cord

for model GM-X972.

Component Dual Amp Balancer Adjusts front to rear balance in component dual amp systems with RCA connectors.

Battery Cord Amplifier battery cord specially designed

Amplifier battery cord specially designed

for model DEH-P80MP (with a vehicle whose ACC fuse is less than 10 A).

## LINE NOISE SUPPRESSORS



High power line noise suppressors which reduce alternator and other noise reaching the car stereo or amplifier through the power line.

AD-990C (Handles up to 4 A)

REMOTE CONTROLLER KIT

Designed with safety in mind, Pioneer's full-function smart remote works with remote

control ready headunits, to

give you easy control of all operations — without having to reach for the headunit.

CD-R600

## CD/DVD MAGAZINE



CD-612V CD/DVD Magazine for XDV-P9-II, CDX-P670, CDX-FM657 and multi-CD Packages.

#### **OPTIONAL SPACER RINGS**



UD-M16S (17 – 42 mm thick) Spacer rings designed for 16 cm flush-mount speakers.

AD-EU800S

Interfaces Pioneer car speakers with the

Seat Toledo and Opel/Vauxhall Astra

speaker harness in Renault Espace, Safrane and 19 (5/'92-), Volkswagen Golf III and Vento,



CD-RB20

IP-Bus — RCA Interconnector Allows you to connect an external

audio source and a Multi-CD player through the IP-Bus input of any

P-series headunit (except KEH-P1010(13)R).

(11 – 27 mm thick) Designed for 10 cm flush-mount speakers.

CABLES



CD-140 [4 m] Component DIN extension cable



63P989 (5 m) RCA cable (Audio)

96P774 (5 m) RCA cable (Audio + Video).

## **OPTIONAL CUSTOM-FIT SPEAKER ADAPTER PLATES**

UD-M172 Adapter kit designed to mount 17 cm Ø speakers.



UD-M135M Adapter kit for Mercedes A Class to mount 13 cm speakers (rear door).

UD-M174VW Adapter kit for Volkswagen Golf/Passat to mount 17 cm speakers (front and rear door).

UD-M177VW Adapter kit for Volkswagen Lupo and Seat Arosa to mount 17 cm speakers (front door).

UD-M175MB Adapter kit for Mercedes A Class to mount 17 cm speakers (front door).

UD-M1760P Adapter kit for Opel/Vauxhall cars to mount 17 cm speakers.

# NAVIGATION AND AV ACCESSORIES

NEW

#### AD-HM6002 HEADREST MOUNTING KIT FOR AVD-W6200

The AD-HM6002 allows for the AVD-W6200 display to be mounted in the headrest so passengers in the back seat can enjoy AV entertainment.

#### AD-HM6200 BETWEEN SEAT MOUNTING KIT FOR AVD-W6200

With the AD-HM6200, the AVD-W6200 display can be installed between the two front seats to ensure AV pleasure for one or more passengers in the back seat.

#### AD-GA10 OFF-SET INSTALLATION KIT

For installing AVIC-X1 and AVH-P6600/7500DVD deeper into the dashboard if there is enough available space behind the unit.

#### AD-RM6100 TRIM RING FOR AVR-W6100

The optional AD-RM6100 trim ring is recommended to install the AVR-W6100.



NEW

# CD-RGB600 | RGB CONNECTION CABLE (6 M)

Audio-visual RGB connection cable between the 2001 AVIC-8/9DVD or the 2002 AVIC-8DVD-II and the AVH-P7500/6600DVD and AVH-P6400CD/R.

#### TV ANTENNA AN-G3

The AN-G3 diversity TV antenna with built-in booster improves signal reception, especially when signals are weak. Mountable on the innerside of the car window.

AN-TMC1

#### UNIVERSAL FM ANTENNA

Active transparent windshield antenna for optimal reception of TMC broadcasts on the AVIC-800/900DVD. Not required for AVIC-X1 or ANH-P10MP.

CD-65RGB	RGB CABLE (6 M)
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For connecting the Navigation system with Pioneer's AVD-W8000 colour display.

#### CD-AB300 AV-BUS CABLE (3 M)

For connecting SDV-P7 or XDV-P9-II to the new AVIC-X1, the AVH-P7500DVD, or the AVH-P6600DVD

## CD-AB301E AV-BUS EXTENSION CABLE (3 M)

For extending an AV-Bus cable

#### AV-BUS CABLE (0.5 M) CD-AB50

For connecting SDV-P7 or XDV-P9-II to the new AVIC-X1, the AVH-P7500DVD or the new AVH-P6600DVD

CD-RV1	REAR SEAT REMOTE CONTROL	NEW

This remote control gives rear seat passengers control over the basic DVD-V functions of the AVIC-X1

# CD-SC300E

TRUNK/BOOT MOUNT EXTENSION CABLE

 _	

This cable can be used to extend the 3 m system cable between the AVIC-X1's main and hide-away unit. It will allow users to install the hide-away unit in the trunk/boot of their car.

CD-SR100	AV STEER REMOTE





Steering wheel remote control for Pioneer's AV headunits and standard audio headunits. Has a Voice Trigger Key for Navigation System.



**GUIDANCE SPEAKER** 



This add-on speaker is meant to be used with the AVIC-900/800DVD navigation system and either an AVX-7600 display or an AVH-P7500/6600DVD AV headunit. It enables you to hear the navigation system's voice guidance instructions through this dedicated speaker.

#### CD-V61FM **FM MODULATOR**

This FM modulator is ideal for connecting a video source (XDV-P9-II or SDV-P7) to any stereo FM receiver, including OEM headunits. Alternatively, connect the modulator to the AV output of the AVR-W6100 to listen to the sound over the system's speakers. The CD-V61FM also has noise cancellation circuitry and features a wide audio bandwidth to ensure excellent audio quality\*

\* Depends on the performance of the receiving tuner.

#### CD-IP601E **IP-BUS EXTENSION CABLE (6 M)**

**CD-AD600** 

**CD-AR600** 

relay

For Pioneer P-series headunit in-dash installation with SDV-P7.

OPTICAL DIGITAL CABLE (6 M)

AVH-P6600DVD, SDV-P7 or XDV-P9-II to the DEQ-P6600.

Optical digital cable to connect a multi-channel processor, such as the

AV REMOTE CABLE FOR AVR-W6100

Gives an extra composite input on the AVR-W6100. Also includes a remote control

CD-R11	OPTIONAL REMOTE	io C
	e control for users of AVIC-900DVD/800DVD allowing full VH-P6400CD/R AV headunits.	
		000

# NAVIGATION AND AV ACCESSORIES

CD-VC1

#### VOICE COMMAND PACK FOR AVIC-X1

Includes microphone and steering wheel remote control. It lets users operate their AVIC-X1 'hands on the wheel'. Most functions can be controlled using the remote control. Further instructions can be given through the microphone.



NEW

NEW

# ND-BC1

TS-CX7

60 W Max.

#### UNIVERSAL BACK-UP CAMERA

NEW

This 'mirror image' NTSC high-quality universal camera can be hooked up to Pioneer's AVIC-X1, an AV headunit (AVH-P7500/6600DVD) or a Pioneer display with camera input (AVD-W8000/6210/6200 and AVX-7600). Its compact size allows for installation in virtually any location.

CENTRE SPEAKER FOR 5.1-CHANNEL SOUND

For more information, please refer to page 77.

## CNDV-40MT DVD MAP DISC



DVD Map disc available for upscaling a Pioneer touch screen operated navigation system (AVIC-800/900DVD\* combined with AVH-P6500/6600/7500DVD or AVD-W6210). Contains the TeleAtlas map data with detailed City Maps, extra coverage and more POIs, plus the application programme for touch panel operation

#### \* Or AVIC-9/8DVD-II

# FEATURES NAVIGATION AND AUDIO VISUAL

DVD-Video playback with Direct Search
 (Title/Chapter/Time, Next/Previous Chapter, Fast

Forward/Reverse, Pause, Chapter Repeat, Condition

• CD playback with Track Search/Scan/Pause/Repeat,

Random Play, CD Text, List Search

Auto MP3 File/CD Track display

Adaptive RDS (PL, PS, AF, TP/TA)

High speed PLL Synthesizer Tuner

1 video input for Rear View camera
Dual Zone operation

PNS (Pulse Noise Suppressor)

BSM (Best Stations Memory)

DVD Capabilities

Resume play

CD Capabilities

Tuner

Memory (30 discs)

96 KHz/24-bit DAC

24-bit D/A converter

 Fast Forward/Reverse Track Manual Search

• MP3 ID3 tag data display

PTY (search and alarm)

Station Name List (PS)

NEWS interrupt feature

• D4Q Digital AM/FM tuner

Radio Text

24 Presets

Audio Visual

1 RCA AV input

DVD Player

• 1 RCA AV rear output

#### AVIC-X1

## DVD NAVIGATION AV HEADUNIT

## Built in Navigation Unit

- 32-bit RISC CPU
  Exclusive Graphic Accelerator for smooth line drawing
- Europe on one DVD-ROM disc
  Advanced and super fast (Re-)routing
- Voice guidance and DISPLAY menu (8 Languages Support: English, German, French, Italian, Dutch/Flemish, Spanish, Danish, Swedish)
- Voice recognition with optional Voice Command Pack (6 Languages Support: English, German, French, Italian, Dutch, Spanish) Selectable Voice Guidance Channel (L, R, or L+R)
- 6 Guidance Modes, including the exclusive Driver's View mode and the new Split Screen modes (Rear view + Navi
- Map/AV status + Navi Map) Memory Navi for simultaneous navigation and AV
- entertainment Built-in GPS receiver
- Built-in 3-D positioning sensor
  Built-in RDS-TMC tuner for real-time Traffic Information
- Background picture customisation via CD-ROM

#### Display

- Fully motorised high-quality 6.5-inch TFT active matrix LCD colour display with Anti-Glare technology
- Display area : 144 mm x 76 mm / 336,960 (1,440 x 234) pixels
- Touch panel operation • Auto dimmer control
- Picture Adjustment
- Adjustable viewing angle (50° 110°)
- Selectable wide-screen mode (Just/Full/Cinema/Zoom/Normal)
- 10-character sub display

- Built-in DVD/CD/MP3 PLAYER DVD-Video, DVD-R/DVD-RW<sup>1</sup>, CD/CD-R/CD-RW<sup>2</sup>/MP3 playback even while navigating
- Built-in Linear PCM/Dolby Digital decoder
- Region Number: 2

#### AVIC-900DVD | DVD NAVIGATION/AV UNIT

#### Navigation/AV Unit

- 1-DIN or hide-away installation
- Voice Recognition (6 Languages Support: English, German, French, Italian, Dutch, Spanish)
   Voice Guidance and Display MENU (8 Languages Support:
- English, German, French, Italian, Dutch/Flemish, Spanish, Danish, Swedishl
- 32-bit RISC CPU
- · Exclusive Graphic Accelerator for smooth line drawing
- Super-fast operation Route Calculation
- Built-in RDS-TMC tuner for Traffic Information
   Built-in Hybrid sensor (G-force sensor) for distance ection on slopes
- Built-in GPS receiver

• 4 Guidance Modes (Map Mode, Street List Mode, Mixed Mode, Driver's View) PC Card Slot built-in (Type II)

IP-bus control for adding TV Tuner/Multi-CD Player/ DAB Tuner/AUX/EXT 1&2

• AV-bus control for (PAL) TV Tuner/Multi-DVD Player/Single

- Speaker Out (8 Ω miniplug out) for voice guidance
   Ultra-slim built-in DVD-Video/DVD-ROM/CD Player
- Built-in MPEG 2/1 decoder-stereo sound
- CD functions: Track Scan, CD Pause, Random/Repeat Play Region Number: 2

#### Accessories

- Voice recognition Microphone
  GPS Antenna
- -Waterproof
- -On-dash/roof mounting • Power Cable

## Audio

- MOSFET 50 W x 4 Amplifier
  Optimum sound reproduction for in-car entertainment: Built-in EEQ (Easy EQ) Plus system with 5-mode factory preset equaliser, 2 custom preset equalisers, 3-band
- parametric equaliser, Source Equalisation memory, 3-mode loudness and HPF/LPF network • EQ-EX
- Direct Sub Drive
- Source Level Adjuster Eader
- 3-channel RCA Pre-Outs (Front+Rear+Subwoofer)

#### General

- Multi-CD control
- Source TV control DAB tuner control
- Source DVD control
- External unit control via IP-bus
- AUX-in
- Wired Remote control ready BGV selectable
- Selectable background pictures
- ISO connector
- Rotary volume
- Removable Front PanelDual button illumination (green/red)
- Cellular telephone auto muting
- · Speaker input for hands-free

DVD-ROM Navigation Disc: CNDV-40M[T]

- Application programme and map data on 1 DVD disc Coverage Area: UK (incl. Northern Ireland), Germany, France, Italy, Benelux, Austria, Switzerland, Spain, Portugal, Denmark, Sweden, Finland (areas of Helsinki, Varsiais-Suomi, Kanta-Häme, Pirkanmaa, Ahvenanmaa), Norway, Ireland (= Dublin, Cork, Galway, Limerick and selected motorways), Czech Republic (Prague area and selected motorways), Monaco, Liechtenstein, Andorra, San Marino, The Vatican
- RGB cable to connect AVH series
- Steering wheel remote control
  Joystick-type Remote Control for DVD-Video

DVD-ROM Navigation Disc: CNDV-40MT

 Application programme and map data on 1 DVD disc
 Coverage Area: UK (incl. Northern Ireland), Germany, France, Italy, Benelux, Austria, Switzerland, Spain, Portugal, Denmark, Sweden, Finland (areas of Helsinki, Varsiais-Suomi, Kanta-Häme, Pirkanmaa, Ahvenanmaa), Norway, Ireland (= Dublin, Cork, Galway, Limerick and selected motorways), Czech Republic (Prague area and selected motorways), Monaco, Liechtenstein, Andorra, Sar Marino, The Vatican

FEATURES

#### AVIC-800DVD | DVD NAVIGATION UNIT

#### Navigation Unit

- 1-DIN or hide-away installation
   Voice Recognition (6 Languages Support: English, German, French, Italian, Dutch, Spanish)
   Voice Guidance and Display MENU (8 Languages Support:
- English, German, French, Ítalian, Dutch/Flemish, Spanish, Danish, Swedish) 32-bit RISC CPU
- Exclusive Graphic Accelerator for smooth line drawing
- Super-fast operation Route Calculation
  Built-in RDS-TMC tuner for Traffic Information
- Built-in Hybrid sensor (G-force sensor) for distance correction on slopes

#### ANH-P10MP | NAVIGATION CD TUNER

- Navigation Features
- 1-DIN installation
  Built-in RDS-TMC tuner for Traffic Information
- Built-in GPS receiver
  Selectable Voice Guidance: Male/Female'
- Menu language: UK English, German, French, Italian, Flemish, Swedish, Spanish, Danish, Dutch, Turkish, Portuguese
- Destination Memory: permanent memory for approx 50 destinations + 50 last destinations
- Route planner modes: shortest/fastest route with/without motorways, with/without toll roads, with/without ferries
- TMC support: Austria, Germany, North of Italy, The Netherlands, Switzerland
- CD playback whilst navigating
  Address Search
- POI Search
  Speed Limit Display

#### **CD-ROM Navigation Disc** Application programme and map data

- Coverage Area: UK, Ireland, Germany, France, Italy, Benelux, Austria, Switzerland, Spain, Portugal, Denmark,
- Sweden, Monaco, Liechtenstein, Andorra, San Marino, The Vatican, Czech Republic, Norway and Finland
- Tuner
- Adaptive RDS (PI, PS, AF, TP/TA)
  PTY (Search and Alarm)
- News interrupt feature Radio Text
- BSA (Best TP Station Auto Search)

#### AVH-P7500DVD | MULTI-CHANNEL DVD AV HEADUNIT

- Pioneer Graphical User Interface (GUI) with full-colour virtual reality graphics
- Display
- 7-inch wide TFT active matrix LCD colour display
- Touch panel operation High-quality AGLR (Anti-Glare, Low-Reflection) coating
   Picture Adjustment
- Fully motorised display with auto dimmer and free-adjustable viewing angle (50 110°)
   Selectable wide-screen mode
- (Just/Full/Cinema/Zoom/Normal)

#### Built-in DVD/CD/MP3 Player

- DVD-Audio/DVD-Video/Video CD/MP3 CD player
- 5.1-channel surround sound capability:
   Built-in Linear PCM/MPEG-A/DTS/Dolby Digital/Dolby Pro Logic II decoder - 6-channel DAC & 6-channel DSP
- Digital Sound Field Control (SFC) for multi-channel sources (Musical/Drama/Action/5D Theatre)
- DVD-R/DVD-RW<sup>1</sup> and CD-R/CD-RW<sup>2</sup> playback
   Region Number: 2

#### DVD Capabilities

AVX-7600

• Touch panel operation

DVD Capabilities > DVD-Audio/DVD-Video/VideoCD Playback with Direct Search Chapter/Track, Next/Previous Chapter/Track, Fast Forward/Reverse, Pause, Track/Chapter Repeat, Condition Memory (30 discs), Playback Control (VideoCD only), Direct Search Title/Group, Time Direct Search, Scan, Digital Direct Direct

7-inch wide TET active matrix LCD colour display

Anti-Glare coatingFully motorised display with auto dimmer

and free-adjustable viewing angle • RGB input for navigation

7-INCH WIDE-SCREEN IN-DASH COLOUR DISPLAY

- Built-in GPS receiver
  4 Guidance Modes (Map Mode, Street List Mode, Mixed) Mode, Driver's View)
- PC Card Slot built-in (Type II)
- Speaker Out (8 Ω miniplug out) for voice guidance

#### Accessories

- Voice recognition Microphone
  GPS Antenna
- Waterproof On-dash/roof mounting
- Power Cable
  RGB cable to connect AVH series

- High speed PLL Synthesiser tuner • PNS (Pulse Noise Suppressor)
- 24 Presets
- BSM (Best Stations Memory)
  Digital Processing Tuner (D4Q)

- CD Player • 8 x oversampling digital filter
- 1-bit D/A converter
- Fast forward/reverse
- Track Search/Scan/Repeat
- Track/Manual search Random Play
- Last position memory
- Disc Title Memory
   CD Text
- CD-R/CD-RW Playback
   CD-ROM

#### • MP3/WMA/WAV Playback

#### Audio

- MOSFET 50 W x 4 max. output power (watts)
   MOSFET 50 W x 4 max. output power (watts)
   4 x 27 W DIN output power watts (DIN 45324, +B = 14.4 V)
   Built-in EEQ (Easy EQ) Plus system with 5-mode factory preset equaliser, 3-band parametric equaliser, 3-mode Loudness, and HPF/LPF Network SFEQ (Sound Focus Equaliser)/EQ-EX
- Direct Sub Drive
- Loudnes

CD Capabilities

• 96 KHz/24-bit DAC

• 24-bit D/A converter

• Track/Manual search Last position memory • Disc Title Memory

PTY (Search and Alarm)

· News interrupt feature Radio Text

Tuner

Audio Visual

1 RCA AV input

AV Bus input 10-bit DAC (Video)
24-bit DAC (Audio)

AV-Bus Input

RCA AV output

Fast forward/reverseTrack Search/Scan/Repeat

Adaptive RDS (PI, PS, AF, TP/TA)

Radio Text
D4Q Digital AM/FM Tuner
BSA (Best TP Station Auto Search)

High speed PLL Synthesiser tuner
PNS (Pulse Noise Suppressor)

PAL/NTSC compatible RGB input

RGB Input for Navigation system

IN2 (for back-up camera) • Selectable wide-screen mode

1 RCA Audio Output for rear entertainment
Back-up camera input

• 2 RCA Video Input (PAL & NTSC Video): Visual IN1, Visual

1 Even if a DVD-R[W] disc is recorded in Video format [Video Mode], it may not be playable as a result of scratches, dirt or characteristics specific to the disc, or dirt or condensation on the pickup lens. DVD-R[W] discs that haven't been finalised, cannot be played. In general, discs recorded in the current (video format [Video Format [Video Mode], it may not be played in a papication software environments may not be able to play these discs. Please ask your application software sales agent for more details. 20 Set inalised music DP-R[W] discs for playable, However, certain settings and application software environments may not be able to play these discs. Please ask your application software sales agent for more details. 20 Set inalised music DP-R[W] discs for playable, However, advert more details. CD-R[W] disc for playable, However, certain settings and application software environments may not be able to play these discs. Please ask your application software sales agent for more details. CD-R[W] discs for playable, However, details may be able correctly, unless they have been recorded using a 1CD-R[W] disc for playable, However, details music CD-R[W] discs resould start disc, dir or characteristic specific to these discs, or, dir to condensation on the pickup lens. Text with information such as titles recorded on CD-R[W] discs may not be displayed. Read directions carefully regarding disc use before handling CD-R[W] discs. Text of playable, the south play take vereral seconds before actual source of reproduction before actual source

(Just/Full/Cinema/Zoom/Normal)

Partially removable front panel with warning LED

24 Presets
BSM (Best Stations Memory)

- Source Level Adjuster Fade
- Dual RCA pre-out (Front + Rear or Subwoofer)

CD Playback with Track Scan/Pause/Repeat, Random

Play, CD Text, List Search MP3/CD-R/CD-RW/CD-ROM, Random Play

#### • Steering wheel remote control

- DVD-ROM Navigation Disc: CNDV-40MT
- Application programme and map data on 1 DVD disc
   Coverage Area: UK (incl. Northern Ireland), Germany, France, Italy, Benelux, Austria, Switzerland, Spain, Portugal, Denmark, Sweden, Finland (areas of Helsinki, Varsiais-Suomi, Kanta-Häme, Pirkanmaa, Ahvenanmaa), Norway, Ireland (= Dublin, Cork, Galway, Limerick and selected motorways), Czech Republic (Prague area and selected motorways), Monaco, Liechtenstein, Andorra, San Marino, The Vatican

#### • ASL (Automatic Sound Leveliser)

#### General

- Multi-CD Control ITS (Instant Track Selection)
- Source TV Control
- DAB Tuner Control
- External Source DVD Control
- External unit control via IP-Bus AUX-In (with optional CD-RB20)
- Remote control ready
- ISO Connector
- Digital Clock

Accessories

• DIN trim

Audio

layout

• Fader

General

• AUX-In

0SD

ISO Connector

Source Level Adjuster

+ Centre + Subwoofer)

Multi-CD Control
 ITS (Instant Track Selection) for MCD

External unit control via IP-Bus [2]

Cellular telephone auto muting
Flexible angle installation (0 - 60°)

Rotary volume Removable Front Panel with safety warning beep

[93]

Spectrum Analyser
 Level indicator

Source TV Control
DAB Tuner Control Source DVD Control

Standard remote control

 Dual button illumination Remote control sensor

- OEL Blue Display Illumination
- Soft Key Control Rotary volume
- Flap-type Front Panel
  Removable Front Panel

 Dual Button Illumination Speaker input hands-free

• DIN Installation holder

Detach case (hard)

- Cellular telephone auto muting
  Flexible angle installation (0 30°)
- Wired Remote input

• GPS Antenna (5 m cable) included

· 30 cm Power Cord cassy with ISO Interconnector

\* Male only: Turkish: Female only: Danish. Dutch. Flemish

MOSFET 50 W x 5 max. output power (watts) 5 x 27 W DIN output power watts (DIN 45324, +B = 14.4 V)
Optimum sound reproduction for in-car environment:

- Built-in EEQ (Easy EQ) Plus system with 5-mode factory preset equaliser, 2 custom preset equalisers, Source

Equalisation Memory, and HPF/LPF Network - Built-in DSP (Digital Sound Processor) with Multi-Channel Auto-EQ, 13-band Graphic Equaliser, Auto Time Alignment and Optimum downmix for normal speaker

6-channel Hi-Volt (5 V) RCA Pre-Outs (FR + FL + RR + RL

# FEATURES NAVIGATION, AUDIO VISUAL AND MULTIMEDIA

#### AVH-P6600DVD | DVD AV HEADUNIT

• Pioneer New Graphical User Interface (GUI) with hexagon-shaped on-screen buttons and matching menu visuals

#### Display

- 6.5-inch wide TFT active matrix LCD colour display
  Touch panel operation
- Display area: 144 x 77 mm, 336,960 (1,440 x 234) pixels
  High-quality AG (Anti-Glare) coating
- Picture Adjustment
- Fully motorised display with auto dimmer and freeadjustable viewing angle (50 – 110°)
  Selectable wide-screen mode
- (Just/Full/Cinema/Zoom/Normal)

## Built-in DVD/CD/MP3/WMA Playe

- DVD-Video/Video CD/MP3/WMA CD player
   Built-in Linear PCM/Dolby Digital decoder
- DVD-R/DVD-RW<sup>1</sup> and CD-R/CD-RW<sup>2</sup> playback
   Region Number: 2

#### **DVD** Capabilities

- DVD-Video/Video CD Playback with Direct Search Chapter/ Track, Next/Previous Chapter/Track, Fast forward/reverse, Pause, Track/Chapter Repeat, Condition Memory (30 discs), Play back Control (Video CD only), Direct Search Title, Time Direct Search, Scan, Digital Direct
- DVD Auto Play\*, DVD Bookmark Play, DVD Eject Bookmark Play

#### CD Capabilities

• CD Playback with Track Scan/Pause/Repeat, Random Play, CD Text, List Search

- 96KHz/24-bit DAC
- 24-bit D/A converter Fast forward/reverse
- Track Search/Scan/Repeat
- Track/Manual search
- Last position memory (for CD function only)

#### Tuner

- Adaptive RDS (PI, PS, AF, TP/TA)
- PTY (Search and Alarm)
- News interrupt feature
- Radio Text
  D4Q Digital AM/FM Tuner
- BSA (Best TP Station Auto Search)
  High speed PLL Synthesiser tuner
- PNS (Pulse Noise Suppressor) 24 Presets
- BSM (Best Stations Memory)

- Audio Visual PAL/NTSC compatible RGB input 1 RCA AV input

- 1 RCA AV output
  1 RCA Audio Output for rear entertainment • Back-up camera input
- RGB Input for Navigation system
- AV Bus input
  10-bit DAC (Video)
- 24-bit DAC (Audio)

#### Audio

Outputs

- MOSFET 50 W x 4 max. output power (watts)
- 4 x 27 W DIN output power watts (DIN 45324, +B = 14.4 V)

- Optimum sound reproduction for in-car environment:
   Built-in EEQ (Easy EQ) Plus system with 5-mode factory preset equaliser, 2 custom preset equalisers, 3-band parametric equaliser, Source Equalisation Memory, 3-mode Loudness, and HPF/LPF Network
- SFEQ (Sound Focus Equaliser) Direct Sub Drive
- Loudness
- Source Level Adjuster
- Fader
- 3-channel Hi-Volt (4 V) RCA Pre-Outs (Front + Rear + Subwoofer)

#### General

- Multi-CD Control
- ITS (Instant Track Selection) for MCD
   Source TV Control
- DAB Tuner Control
- Source DVD Control
  External unit control via IP-Bus (2) • Multi-channel surround sound ready (with DEQ-P6600
- Digital Signal Processor)
- AUX-InStandard remote control
- ISO Connector
- Rotary volume Removable Front Panel with safety warning beep
- Dual button illumination (green/red)
- Cellular telephone auto muting
- Flexible angle installation  $(0 60^{\circ})$

\* Some discs may not fully operate on this system.

DEQ-P6600	MULTI-CHANNEL DIGITAL SIGNAL P	ROCESSOR	
<ul> <li>Linear PCM/Doll</li> <li>6-channel DAC a</li> <li>Digital sound Fie</li> <li>Sources (Musica</li> <li>Optimum sound re</li> </ul>	eld Control (SFC) for Multi channel I/Drama/Action/Jazz/Hall/Club) eproduction for in-car environment: on Selector with rear position	<ul> <li>Time Alignment [0 – 500 cm]</li> <li>Optimum downmix for nomal speaker lay-out</li> <li>MOSFET 50 W x 5 max. output power (watts)</li> <li>IP Bus In/Out</li> <li>6 RCA pre-outs (FR + FL + RR + RL + Centre + Subwoofer)</li> <li>Parametric Equaliser (Flat/Super Vass/Powerful/Natural/ Vocal/Custom1/Custom2)</li> </ul>	• 24 bit D/A converter • Cellular telephone muting
AVD-W8000	8-INCH WIDE-SCREEN LCD COLOUF	R DISPLAY	
<ul> <li>High-quality anti-g</li> <li>RGB input for Nav CD-65 RGB)</li> </ul>	ctive matrix LCD colour display glare coating rigation system (with optional cable PAL/NTSC Video & L + R Audio)	with S-Video • 1 RCA AV Output (PAL/NTSC Video & L + R Audio) • Auto Display brightness and backlight adjustment • Remote Control sensor • Built-in high-quality speaker (36 mm) with volume control	• Selectable wide-screen mode (Just/Full/Cinema/Zoom/Normal)
AVD-W6210	6.5-INCH WIDE-SCREEN LCD COLOU	JR TOUCH PANEL DISPLAY	
<ul> <li>High quality anti-g</li> <li>RGB input for Nav</li> <li>2 RCA AV Inputs (F</li> </ul>		<ul> <li>Auto Display brightness and backlight adjustment</li> <li>Remote Control sensor</li> <li>Built-in high-quality speaker (36 mm) with volume control</li> <li>Selectable wide-screen mode</li> <li>[Just/Full/Cinema/Zoom/Normal]</li> </ul>	<ul> <li>Touch Panel operation ready (with CNDV-40MT)</li> <li>Smoothly trimmed product edge for easy installation</li> </ul>
AVD-W6200	6.5-INCH WIDE-SCREEN LCD COLO	UR DISPLAY	
<ul> <li>High-quality anti-g</li> <li>Built-in high-quali</li> <li>2 RCA AV Inputs (F</li> </ul>	active matrix LCD colour display glare coating ity speaker (36 mm) with volume control AL/NTSC Video & L + R Audio) PAL/NTSC Video & L + R Audio)	<ul> <li>Power Supply In</li> <li>Auto Display brightness and backlight adjustment</li> <li>Selectable wide-screen mode [Just/Full/Cinema/Zoom/Normal]</li> <li>Semi-quick release mechanism</li> </ul>	<ul> <li>Smoothly trimmed product edge for easy installation</li> <li>Optional installation kit available</li> </ul>
AVR-W6100	6.5-INCH WIDE-SCREEN LCD COLOU	JR DISPLAY FOR ROOF MOUNT	
<ul> <li>High-quality anti-g</li> <li>2 RCA AV inputs (1)</li> </ul>	active matrix LCD colour display glare coating I via standard AV remote cable) CA input with CD-AR600 AV remote	<ul> <li>1 RCA AV output</li> <li>Power Supply In</li> <li>Auto Display brightness and backlight adjustment</li> <li>Remote Control sensor</li> <li>Selectable wide-screen mode</li> </ul>	(Just/Full/Cinema/Zoom/Nomal) • Wired Headphone mini jack 2 • Dome Light
GEX-6100TVP	OPTIONAL TV TUNER FOR AVR-W610	00	
<ul> <li>PAL TV Tuner</li> <li>24 Station Presets (Best Station Sequ</li> </ul>	s (12TV1/12TV2) by BSSM Jential Memory)	System Connection Features • For AVR-W6100 cable output • Antenna included	ITALY/B, G, H, K: VHF A-H2ch, UHF: 21-69ch, UK/(RE: UHF 21-69ch, OIRT/G,H, F, K: R1-R12ch, UHF21-69ch Colour system:
System Features <ul> <li>Country setting</li> <li>Picture Colour/Sha</li> </ul>	arpness adjustment	Specifications TV Tuner: - Reception channels/TV system: CCIR/B, G, H, K: VHF 2-12ch, UHF: 21-69ch,	TV: PAL Video: PAL
CD-VS33	AV SELECTOR		
Audio) in hide-awa	(PAL/SECAM*/NTSC Video & L + R ay box PAL/SECAM*/NTSC Video & L + R Audio)	on the control panel • 2 Independent Headphone outputs with volume control [AV out 1, AV out 3] on the control panel • Audio/Video independent selector for 3 Video Source	Slim profile control panel     Cannot accept SECAM L, as used in France.

1 RCA AV Input (PAL/SECAM\*/NTSC Video & L + R Audio)

XDV-P9-II   MULTI-DVD PLAYER WITH DOLBY DI	GITAL/DTS DIGITAL OUTPUT	
<ul> <li>6-Disc DVD-Video/VideoCD/CD Player</li> <li>Built-in MPEG 2/1 decoder</li> <li>24-bit D/A converter</li> <li>Stand-alone use with optional remote and remote sensor for rear AV entertainment</li> </ul>	<ul> <li>Optical digital output for Multi-Channel AV Headunit (DTS/Dolby Digital/Dolby Pro Logic/Linear PCM)</li> <li>Analogue IP-Bus output for front + RCA output for rear</li> <li>RCA Video Output (Front + Rear)</li> </ul>	• GUI control with new OSD • Region Number: 2
SDV-P7   SINGLE DVD PLAYER WITH DIGITAL	TUTPUT	
<ul> <li>DVD-Video/VideoCD/CD Player</li> <li>Built-in MPEG 2/1 decoder</li> <li>24-bit D/A converter</li> <li>DVD-R/DVD-RW<sup>1</sup> and CD-R/CD-RW<sup>2</sup> playback*</li> <li>Stand-alone use with standard remote and remote sensor for rear AV entertainment</li> <li>GUI control with new OSD</li> <li>Optical digital output for multi-channel AV Headunit</li> </ul>	(DTS/Dolby Digital/Dolby Pro Logic/Linear PCM) • IP-Bus input/output • AV-Bus output • Analogue IP-Bus output for front + RCA output [L + R audio] for rear entertainment • RCA video output (Front + Rear) • Joystick remote controller • 1-DIN or hide-away installation	<ul> <li>Flap design with removable front panel</li> <li>White display illumination</li> <li>Region Number: 2</li> <li>Can play DVD-R/DVD-RW discs recorded in Video format (Video Mode) only. Cannot play DVD-RW recorded in Video recording format (VR Mode).<sup>1</sup></li> </ul>
SE-IRM250 INFRARED HEADPHONE		
Cordless Stereo Headphone     Infrared Type	Noise Mute Function     Volume Adjustment Included	Automatic Power Off Function
DVH-P5000MP   HIGH POWER DVD/MP3 TUNER		
Tuner • Adaptive RDS (PI, PS, AF, TP/TA) • PTY (Search and Alarm) • News interrupt feature • Radio Text • D4Q Digital AM/FM Tuner • BSA (Best TP Station Auto Search) • High speed PLL Synthesiser tuner • PNS (Pulse Noise Suppressor) • 24 Presets • BSM (Best Stations Memory)	CD Capabilities • CD Playback with Track Scan/Pause/Repeat, Random Play, Disc Title Memory, CD Text, List Search • 96 kH2/24-bit DAC • 24-bit D/A converter • Fast forward/reverse • Track Search/Scan/Repeat • Track/Manual search • Last position memory • Disc Title Memory	Direct Sub Drive     I/R level meter     Level Indicator     Loudness     Source Level Adjuster     Fader     2 RCA Pre-Outs (Front +Subwoofer or Non Fading)     Generat     Multi-CD Control     ITS (Instant Track Selection) for MCD
DVD/CD/MP3 Player • DVD Video/Video CD/MP3 CD Player • DVD-R/DVD-RW <sup>1</sup> and CD-R/CD-RW <sup>2</sup> playback • Region Number: 2 • 10-bit D/A converter (Video) • 24-bit D/A converter (Audio) DVD Capabilities • DVD-Video/Video CD Playback with Direct Search Chapter/Track/Title/Group, Next/Previous, Fast Forward/Reverse, Pause, Track/Chapter Repeat, Condition Memory (30 discs), Playback Control (Video CD only), Direct Search Title/Group/Chapter/Track/Time	Audio Visual  IP-Bus input Optical digital output RCA Audio output [L + R] for rear entertainment RCA Video output [Front + Rear]  Audio MOSFET 50 W x 4 max. output power (watts] A x 27 W DIN output power watts (DIN 45324, +B = 14.4 V) Built-in EEQ [Easy EQ] Plus system with 5-mode factory preset equaliser, 2 custom preset equalisers, 3-band parametric equaliser, 2 custom Preset equaliser, 3-band parametric equaliser, 2 custom Preset equaliser, 3-band parametric equaliser, 3-band Preset e	<ul> <li>Source TV Control</li> <li>DAB Tuner Control</li> <li>Source DVD Control</li> <li>External unit control via IP-Bus (2)</li> <li>AUX-In (with optional CD-RB20)</li> <li>Standard nemote control</li> <li>ISO Connector</li> <li>Digital clock</li> <li>Multi-colour LCD Display</li> <li>Flap-type Front Panel</li> <li>Removable Front Panel</li> <li>Cellular telephone auto muting</li> <li>Flexible angle installation (0 — 30°)</li> </ul>
GEX-P6400TVP   HIDE-AWAY TV TUNER • PAL TV tuner • 12 Station presets [12TV1/12TV2] by BSSM (Best Station Sequential Memory) System Features • Country setting • 4 Channel diversity antenna system (with optional antenna kit AN-G3] • Card-type remote control	System Connection Features • IP Bus Input/Output (controlled by AV Headunit, AV System Master and selected no. of Pioneer IP Bus headunits) • 1 RCA AV Output (PAL/Video & L + R Audio) for rear display Specifications: TV tuner: - Reception channels/TV system:	CCIR/B, G, H, K: VHF 2-12ch, UHF: 21-69ch, ITALY/B, G, H: VHF A-H2ch, UHF: 21-69ch, UK, Ireland/I: A-Kch, UHF 21-69ch, OIRT/D, K: R1-R12ch, UHF21-69ch - Colour system: TV: PAL compatible
DEH-P900HDD* HARD DISK DRIVE HEADUNIT		
Tuner • Adaptive RDS (PI, PS, AF, TP/TA) • PTY (search & alarm) • News interrupt feature • ARC 5 FM • BSA (Best TP Station Auto Search) • High speed PLL Synthesiser tuner • PNS (Pulse Noise Suppressor) • 24 Presets • BSM (Best Stations Memory)	Pre-installed Gracenote CDDB®     Title input     Erase     10 GB Storage     Digital/Analogue Recording (w/o tuner)     132 kbps/105 kbps recording bit rate     ATRAC3 Encode/Decode     Check-IN/OUT (Memory Stick)  Audio     MOSFET 50 W x 4 max. output power (watts)	General         • Multi-CD Control         • ITS (Instant Track Selection)         • Disc Title Memory         • Do Text         • Digital Compression/Dynamic Bass Emphasis         • Source TV Control         • DAB Tuner Control         • External Unit Control via IP-Bus         • AUX-In (with optional CD-RB20)         • Standard remote control
CD Player • Fast Forward/Reverse • Track/Search/Scan/Repeat • Track/Manual Search • Random Play • Last Position Memory • Disc Title Memory • DIsc Title Memory • CD Text • CD-R/CD-RW Playback • CD-ROM	<ul> <li>4 x 27 W DIN output power (watts: DIN 45324, +B = 14.4 V)</li> <li>Built-in DSP with13-band Graphic Equaliser, Listening Position Selector, 5-mode Preset Equaliser, 2-mode User Preset Equaliser, Source Equalisation Memory, 4-mode Sound Field Control, Time Alignment, Auto EQ, 2-mode Octaver, BBE, HPF, LPF</li> <li>Digital ASL (Automatic Sound Leveliser)</li> <li>ASL [Automatic Sound Leveliser]</li> <li>Spectrum analyser</li> <li>Level indicator</li> </ul>	<ul> <li>ISO Connector</li> <li>Digital clock</li> <li>OEL-Blue display illumination</li> <li>Soft Key Operation</li> <li>Pop-Out rotary volume</li> <li>Flat-type Front Panel</li> <li>Removable Front Panel</li> <li>Cellular telephone auto muting</li> <li>Flexible angle installation (0 - 30°)</li> </ul>
Hard Disk Drive • Play list folder: rec. date [all]/Digital/Analogue/Artist/Custom • 6 custom play list	<ul> <li>Loudness</li> <li>Source level adjuster</li> <li>Fader</li> <li>3 gold-plated RCA pre-outs (Front + Rear + Subwoofer)</li> </ul>	MagicGate Memory Stick <ul> <li>1 Slot</li> <li>Track scan/Repeat/Random Play/Pause</li> </ul> <li>Not available in the UK.</li>

1 Even if a DVD-R(W) disc is recorded in Video format (Video Mode), it may not be playable as a result of scratches, dirt or characteristics specific to the disc, or dirt or condensation on the pickup lens. DVD-R(W) discs that haven't been finalised, cannot be playad. In general, discs recorded in the current format using a PC (personal computer) are playable. However, certain satisfies and application software environments may not be able to play these discs. Please ask your application software sales agent for more details. 20 be finalised in the survey of the survey

# FEATURES CD RDS TUNERS AND DAB

FEATURES CD RDS TUNERS	DEH-P9600MP	DEH-P8600MP	DEH-P80MP	DEH-P77MP	DEH-P7600MP	DEH-P6600R	DEH-P5600MP DEH-P5630MP	DEH-P3600MP DEH-P3630MP DEH-P3600MPB	DEH-P2600R	DEH-1600RB DEH-1600R DEH-1630R
TUNER										
Adaptive RDS (PI, PS, AF, TP/TA)	•	•	•	•	•	•	•	•	•	•
PTY (Search and Alarm)	•	•	•	•	•	•	•			
News interrupt feature	•	•	•	•	•	•				
Radio Text	•	•	•	•	•	•	•			
ARC FM	D4Q	D4Q	D4Q	D4Q	D4Q	D4Q	D4Q	D4Q	D4Q	D4Q
BSA (Best TP Station Auto Search)	•			•	•	•	•	•	•	•
High speed PLL Synthesiser tuner	•	•	•	•	•	•	•	•	•	•
PNS (Pulse Noise Suppressor)	•	•	•	•	•	•	•	•	•	•
No. of presets	24	24	24	24	24	24	24	24	24	18
BSM (Best Stations Memory)	•	•	•	•	•	•	•	•	•	•
CD PLAYER			0	0	0		0	0		
Oversampling digital filter	8x	8x	8x	8x	8x	8x	8x	8x	8x	8x
D/A Converter	1-bit (Burr Brown)	1-bit (Burr Brown)	1-bit	1-bit (Burr Brown)	1-bit	1-bit	1-bit	1-bit	1-bit	1-bit
Fast forward/reverse	•	•	•	•	•	•	•	•	•	•
Track Search/Scan/Repeat	•	•	•	•	•	•	•	•	•	Search/Repeat
Track/Manual search	•	•	•	•	•	•	•	•	•	•
Random Play			•							
Last position memory	•	•	•	•	•	•	•	•	•	•
Disc Title Memory	•	•	•		•	•	•	•	•	
CD Text	•	•	•	•	•	•	•	•		
CD-R Playback	•	•	•	•	•	•	•	•	•	•
CD-RW Playback	•	•	•	•	•	•	•	•	•	•
Compressed Audio Playback	MP3/WMA/WAV [2]	MP3/WMA/WAV [2]	MP3/WMA/WAV (2)	MP3/WMA [2]	MP3/WMA/WAV (2)		MP3/WMA/WAV [2]	MP3/WMA/WAV [2]		
AUDIO										
Max. output power (watts)	MOSFET 50 W x 4	MOSFET 50 W x 4	MOSFET 60 W x 4	MOSFET 50 W x 4	MOSFET 50 W x 4	MOSFET 50 W x 4	MOSFET 50 W x 4	MOSFET 50 W x 4	MOSFET 50 W x 4	4 x 45
DIN output power	4 x 27	4 x 27	4 x 36	4 x 27	4 x 27	4 x 27	4 x 27	4 x 27	4 x 27	4 x 25
[watts: DIN 45324, +B = 14.4 V]										
Built in DSP	•	•								
Graphic equaliser	13-band	13-band								
Listening Position Selector	•	•								
Preset equaliser	5-mode	5-mode								
User preset equaliser	2-mode	2-mode								
Source Equalisation Memory	•	•								
Auto Time Alignment	•	•								
Auto EQ	•	•								
BBE	•	•								
HPF	•	•								
LPF	•	•								
Digital ASL (Automatic Sound Leveliser)	•	•								
3-way network	•	•								
EEQ Plus			•	•	•	•	•			
EEQ								•	•	•
5-mode preset equaliser (3)			•	•	•	•	•	•	•	•
Custom preset equaliser			1	1	2	2	2	1	1	1
3-band parametric equaliser			•		•	•	•	•	•	•
Source Equalisation Memory				•	•	•				
			•					•	•	
				•	•	•	•	•	•	•
Selectable Loudness			•							
Selectable Loudness Selectable FIE (Front Image Enhancer)			•	•	•	•		•	•	•
Selectable Loudness Selectable FIE (Front Image Enhancer) HPF			•	•			•	•	•	
Selectable Loudness Selectable FIE (Front Image Enhancer) HPF LPF			•	•	•	•	•	•	•	
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF EQ-EX			•	•	•	•	•	•	•	
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF EQ-EX SFEQ [Sound Focus Equaliser]			• • • • • • • • • • • • • • • • • • • •	•	• • • • • • • • • • • • • • • • • • • •	•	•	•	•	
Selectable Loudness Selectable FIE (Front Image Enhancer) HPF LPF LPF SFE0 (Sound Focus Equaliser) SFE0 (Sound Leveliser)			•	•	• • • •	• • • •	• • • • • • • • • • • • • • • • • • • •	•	•	
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF EQ-EX SFEQ [Sound Focus Equaliser] ASL [Automatic Sound Levelser] Direct Sub Drive			• • • • • • • • • • • • • • • • • • • •	•	• • • • • • • • • • • • • • • • • • • •	•	•	•	•	
Selectable Loudness Selectable FIE (Front Image Enhancer) HPF LPF LPF SFEQ (Sound Focus Equaliser) ASL (Automatic Sound Leveliser) Direct Sub Drive Spectrum analyser		•	• • • • • • • • • • • • • • • • • • • •	•	• • • •	• • • •	• • • • • • • • • • • • • • • • • • • •	•	•	
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF E0-EX SFE0 [Sound Focus Equaliser] ASL [Automatic Sound Leveliser] Direct Sub Drive Spectrum analyser LVR level meter	•	•	• • • • •	•	• • • • • • • • • • • • • • • • • • • •	•	•	•	•	
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF ED-EX SFED (Sound Focus Equaliser] ASL (Automatic Sound Leveliser) Direct Sub Direc Spectrum analyser L/R level meter Level Indicator	•	•	• • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • •	• • • • • •	• • • • •	•	•	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF E0-EX SFED [Sourd Focus Equaliser] ASL [Automatic Sound Leveliser] Direct Sub Drive Spectrum analyser LVR level meter Level Indicator Loudness L	•	•	• • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • •	• • • • • • • • • •	• • • • • • • • • *	•	•	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF UPF E0-EX SFED (Sound Focus Equaliser] ASL [Automatic Sound Leveliser] Direct Sub Drive Spectrum analyser Level Indicator Level Indicator Loudness Source Level adjuster	•	• • • •	• • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •	• • • • • * *	• • • • • (x2) •	•	•	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF LPF E0-EX Sel-EX Sel-EX Selectable Reser Selecture analyser L/R level meter Level Indicator Loudness Source Level adjuster Fader	• • • •	• • •	• • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • • • •	•	•	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF UPF E0-EX SFED (Sound Focus Equaliser] ASL [Automatic Sound Leveliser] Direct Sub Drive Spectrum analyser Level Indicator Level Indicator Loudness Source Level adjuster	•	• • • •	• • • • 3 (F + R + S/W	• • • 3 (F + R + S/W	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	•	•	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF LPF LPF ASL Nationatic Sound Leveliser] Selectual matyer LPR level Indicator Level Indicator Level Indicator Source Level adjuster Fader RCA Pre-Out	• • 3 (F + R + S/W)	• • • 3 (F + R + S/W)	• • • 3 [F + R + S/W or Non FAD]	• • • 3 [F + R + S/W or Mon FAD]	• • • • • • • • •	• • • • • • • • •	• • • • • • • • • •	•	•	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF E0-EX SFED (Sound Focus Equation of the select o	• • • •	• • •	• • • • 3 (F + R + S/W	• • • 3 (F + R + S/W	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	•	•	•
Selectable Loudness Selectable FIE (Front Image Enhancer) HPF LPF LPF K SFEQ (Sound Focus Equaliser) SFEQ (Sound Evelser) Dired Sub Drive Spectrum analyser L/R level Indicator Loudness Source (evel adjuster Fader RCA Pre-Out High Voltage Output GENERAL GENERAL GENERAL GENERAL GENERAL GENERAL SSURCE SUB-SSURCE SUB-SSUB-SSURCE SUB-SSURCE SUB	• 3 [F + R + S/W]	• • 3 (F + R + S/W) •	3 [F + R + S/W or Non FAD]	3 (F + R + S/W or Non FAD)	• • • • • 3 [F + R + S/W or Non FAD]	• (x2) •	• (s2) •	• • • 2 [F + R]	•	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF E0-EX SFED [Sound Focus Equation SFED [Sound Focus Equation Direct Sub Drive Spectrum analyser LVE level meter Level Indicator Loudness Source Level adjuster Fader RCA Pre-Out High Voltage Output GENERAL Mult-CD Control	• • 3 (F + R + S/W) •	• • 3 (F + R + S/W) •	3 [F + R + S/W or Non FAD]	* * 3 (F + R + S/W or Non FAD)	• • • 3 (F + R + S/W or Non FAD)	• • • • • • • • • • • • • • • • • • •	• [x2] • [x2] • 2[F • SW or Non FAD]	• • • 2 [F + R]	•	•
Selectable Loudness Selectable FIE (Front Image Enhancer) HPF E0-EX SFEQ (Sound Focus Equaliser) ASL (Automatic Sound Levelser) Direct Sub Drive Spectrum analyser L/R level Indicator Loudness Source level adjuster Fader RCA Pre-Out High Voltage Output General General Mult-C0 Control C0 Text C0	* 3 (F + R + S/W)	• • 3 (F + R + S/W) •	3 (F + R + S/W or Non FAD)	* * 3 (F + R + S/W or Non FAD)	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• (x2) • (x2) • • • • • • • • • • • • • • • • • • •	• • 2 [F + R]	•	•
Selectable Loudness           Selectable FIE [Front Image Enhancer]           HPF           LFF           DFA           SFEQ (Sourch Focus Equation of Source V/Control           SPEQ (Source)           Spectrum analyser           LRV (Source)           Level Indicator           Loudness           Source I Vect Journal	3 (F + R + S/W)	• • 3 (F + R + S/W) • •	* * * * * * * * * * * * * * * * * * *	3 (F + R + S/W or Non FAD)	• • • • 3 (F+ R + S/W or Non FAD)	• • • • • • • • • • • • • • • • • • •	• (x2) • (x2) • (F + S/W or Nen FAD)	• • 2 [F + R] •	•	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF E0-EX SFED (Sound Focus Equation of the select o	3 (F + R + S/W)	• • 3 (F + R + S/W) • •	3 (F + R + S/W or Non FAD)	3 (F + R + S/W or Non FAD)	• • • • 3 (F + R + S/W or Non FAD)	• [x2] • [x2] • 2 [F + S/W or Non FAD]	• (x2) •	• • 2 [F + R] • • EXT	• • • • • • • • • • • • • • • • • • •	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF LPF LPF LPF LeF LeF SFE0 [South Focus Equaliser] SFE0 [South Focus Equaliser] SFE0 [South Focus Equaliser] Sectrum analyser LR level meter Level Indicator Loudness Source Ivel adjuster Fader RCA Pre-Out High Voltage Output CBTREAL Multi-CD Control CD Text Source IVC Control DAB Tuner Control DAB Tuner Control Source IVC Contr	3 (F + R + S/W)	• • 3 (F + R + S/W) • • •	3 (F + R + S/W or Non FAD)	3 (F + R + S/W or Non FAD)	• • • • 3 (F+ R + S/W or Non FAD)	• • • • • • • • • • • • • • • • • • •	• (x2) • (x2) • (F + S/W or Nen FAD)	• • 2 [F + R] •	•	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF E0-EX SFED [Sound Focus Equation SFED [Sound Focus Equation SFED [Sound Focus Equation Proceeding Selection Selection Proceeding Selection S	3 (F + R + S/W)	3 (F + R + S/W)	• • • • • • • • • • • • • • • • • • •	3 (F + R + S/W or Non FAD)	• • • • 3 (F + R + S/W or Non FAD)	• • • • • • • • • • • • • • • • • • •	• (x2) •	• • 2 [F + R] • • EXT	• • • • • • • • • • • • • • • • • • •	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF LPF LPF LPF LeF LeF SFE0 [South Focus Equaliser] SFE0 [South Focus Equaliser] SFE0 [South Focus Equaliser] Sectrum analyser LR level meter Level Indicator Loudness Source Ivel adjuster Fader RCA Pre-Out High Voltage Output CBTREAL Multi-CD Control CD Text Source IVC Control DAB Tuner Control DAB Tuner Control Source IVC Contr	3 (F + R + S/W)	• • 3 (F + R + S/W) • • •	3 (F + R + S/W or Non FAD)	3 (F + R + S/W or Non FAD)	• • • • 3 (F + R + S/W or Non FAD)	• [x2] • [x2] • 2 [F + S/W or Non FAD]	• (x2) •	• • 2 [F + R] • • EXT	• • • • • • • • • • • • • • • • • • •	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF ED-X SFE0 [Sound Focus Equation SFE0 [Sound Focus Equation Direct Sub Drive Selectrum mailyser Level Indicator Level Indicator Level Indicator Level Indicator Fader RCA Pre-Out High Voltage Output GENERAL Mult-C0 Control C0 Text Source IVC Control DAB Tuner Control DAB Tuner Control Lots earch function Lest earch function Lest earch function Lest earch function [C0-RB20]	3 (F + R + S/W) • • •	* * 3 (F + R + S/W) * * * *	• • • • • • • • • • • • • • • • • • •	3 (F + R + S/W or Non FAD)	• • • • 3 (F + R + S/W or Non FAD)	• • • • • • • • • • • • • • • • • • •	• (x2) •	• • 2 [F + R] • • EXT	• • • • • • • • • • • • • • • • • • •	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF E0-EX SFEQ [Sound Focus Equaliser] SSL [Automatic Sound Leveliser] Direct Sub Drive Spectrum analyser L/R level meter Level Indicator Loudness Source level adjuster Fader RCA Pre-Out High Voltage Output GENERAL GENERAL Multi-C0 Control DF Tw Source I/C Control DBA Tune Control Source I/C Control External Unit	3 (F + R + S/W)	3 (F + R + S/W)	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • 2 [F + R] • • EXT	• • • • • • • • • • • • • • • • • • •	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF LF Selectable FIE [Front Image Enhancer] HPF LPF LF Selectable Sel	3 (F + R + S/W)	3 (F + R + SW)	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • 2 [F + R] • • EXT EXT EXT 2 •	• • • 1 • • • • • • • • • • • • • • • •	•
Selectable Loudness Selectable FIE (Front Image Enhancer) HPF EPF EFX SFEQ (Sound Focus Equaliser) SFEQ (Sound Eventser) Direct Sub Drive Sectrum analyser L/R level meter Level Indicator Loudness Source level adjuster Fader RCA Pre-Dut High Voltage Output Generat Generat Multi-CD Control DAB Tuner Control Source D/D Control List search function Extra control AUX-in (with optiona) (CD-R820) Standard remote control Remote Ready	3 [F + R + S/W]	3 (F + R + S/W) • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF LF EF EF Selectable FIE [Front Image Enhancer] HPF LPF LF Sel-X sourd Focus Equaliser] SFED Sourd Evelser] Direct Sub Drive Selectrum analyser LR level meter Level Indicator Level Indicator Level Indicator Level Indicator Level Indicator Control CD Text Multi-CD Control CD Text Source IV/C Control DAB Tuner Control DAB Tuner Control DAB Tuner Control List search function LUT select Select AUX-In With optional CD-RB20] Standard remote Control Standard Remote Contro	3 (F + R + S/W)	3 (F + R + S/W)	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • 2 [F+R] • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	•
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF LPF LPF LPF LPF LPF LPF LPF LPF L	3 [F + R + S/W]	3 (F + R + S/W) • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	•
Selectable Loudness Selectable FLE (Front Image Enhancer) HPF E0-EX SFEQ (Sound Facus Equaliser) SFEQ (Sound Eveloser) Direct Sub Drive Spectrum analyser L/R level meter Level Indicator Loudness Source level adjuster Fader RCA Pre-Out High Voltage Output General General Mult-OD Control OT ext Source IV Control DAB Tuner Control Source DVD Control DAB Tuner Control Source DVD Control External unit control via P-Bus AUXIn (with giorana) CD-Bat20] Standard remote control Ready Cherol Standard remote control Source DVD Control Dab Tuner Control DBA Super Control DBA Tuner Control Standard remote control Dab Uton illumination Dual button illumination	3 (F + R + S/W) - - - - - - - - - - - - -	* * * * * * * * * * * * * * * * * * *	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • 1
Selectable Loudness Selectable FIE (Front Image Enhancer) HPF LPF ED-X Selectable FIE (Front Image Enhancer) HPF LPF ED-X Sel-Automatic Sound Leveliser] Direct Sub Drive Spectrum analyser LR level Indicator Loudness Source Ivex Indicator Loudness Source Ivex Indicator Col Text Source TV Control DAB Tuner Control DAB Tuner Control DAB Tuner Control Source IVD Control List search function Lesternal unit control is-Buss AUX-In With optional (Do-B820) Standard remote Control Remote Control Second Passo AUX-IN Best AUX-IN With optional (Do-B820) Standard remote Control Second Passo AUX-IN With optional (Do-B820) Standard remote Control Dest) Display Illumination Dual button illumination Dual button illumination Das button illumination Das button illumination Das button illumination	3 (F + R + S/W) - - - - - - - - - - - - -	3 (F + R + S/W) • • • • • • • • • • • • •	3 (F - R + S/W or Non FAD) 	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • 2 [F + R] • • EXT EXT EXT 2 • • • • •	• • • • • • • • • • • • • • • • • • •	• • • 1
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF LF Selectable FIE [Front Image Enhancer] HP LF Selectable FIE [Front Image Enhancer] SFED (Sound Focus Equation I SFED (Sound Focus Equation I SFED (Sound Focus Equation I Selectable Analyser L/R level meter Level Indicator Level Indicator Level Indicator Level Indicator Level Revel Adjuster Fader RCA Pre-Out High Voltage Output GENERAL Multi-CD Control CD Text Source IVC Control DAB Tuner Control DAB Tuner Control List search function External unit control via (IP-Bus AUX-in Wint Bread List Searce IVC Control List search function External unit control via (IP-Bus AUX-in Wint Bread Hard vemote control Revel Equation Display illumination Rcataryoulume Auto-flag mechanism	3 (F + R + S/W) - - - - - - - - - - - - -	* * * * * * * * * * * * * * * * * * *	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • 1
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF LF Selectable FIE [Front Image Enhancer] HP LF Selectable FIE [Front Image Enhancer] SFED (Sound Focus Equation I SFED (Sound Focus Equation I SFED (Sound Focus Equation I Selectable Analyser L/R level meter Level Indicator Level Indicator Level Indicator Level Indicator Level Revel Adjuster Fader RCA Pre-Out High Voltage Output GENERAL Multi-CD Control CD Text Source IVC Control DAB Tuner Control DAB Tuner Control List search function External unit control via (IP-Bus AUX-in Wint Bread List Searce IVC Control List search function External unit control via (IP-Bus AUX-in Wint Bread Hard vemote control Revel Equation Display illumination Rcataryoulume Auto-flag mechanism	3 (F + R + S/W) - - - - - - - - - - - - -	3 (F + R + S/W) • • • • • • • • • • • • •	* * * * * * * * * * * * * * * * * * *	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • 1
Selectable Loudness Selectable FIE (Front Image Enhancer) HPF E0-EX Selectable FIE (Front Image Enhancer) HPF E0-EX SFE0 (South Encurse) SFE0 (South Encurse) Sectrum analyser L/R level meter Loudness Source level adjuster Fader RCA Pre-Out High Voltage Output COT text Source Invest Multi-CO Control DAB Tuner Control DAB Tuner Control DAB Tuner Control Source IV Control List search function List search function List search function List search function List Source Invest Studied HIM High Voltage Output Studied DaB Tuner Control Display Ilumination Remote Control Ready Hard-wider Green Control Dal button illumination Rator yolume Auto-Tige mechanism Figa-type Front Ranel	3 (F + R + S/W)  Colour Organic EL  (dual motion)	3 (F + R + S/W) • • • • • • • • • • • • •	3 (F - R + SW or Non FAD) 	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • 2 [F + R] • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • 1
Selectable Loudness Selectable FIE [Front Image Enhancer] HPF LPF LF ED-X Selectable FIE [Front Image Enhancer] HPF LPF LF Sel-X Selectable FIE [Front Image Enhancer] SFE0 [Sound Focus Equationsr] SFE0 [Sound Focus Equationsr] SFE0 [Sound Focus Equationsr] Sectrum analyser LPR event meter Level Indicator Source IVC Output GENERAL Multi-C0 Control CD Text Source IVC Control DAB Tuner Control Source IVC Control List search function List Search function List Search function Source IVC Control Standard remote Control Standard remote Control Source IVC Control Source IVC Control List Search function List Search function CD Fabe AuX-In With optional CD-RB20] Standard remote Control Standard remote Control Ready Hard-wird remote Input SIO Connecter Display illumination Relary Youlme Auto-Tage mechanism Fiap-type Front Panel	3 (F + R + S/W) • • • • • • • • • • • • •	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • 2 [F + R] • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • 1 WHITE/BLUE (DEH-1600RB)
Selectable Loudness Selectable FIE (Front Image Enhancer) HPF E0-EX Selectable FIE (Front Image Enhancer) SFE0 (South Focus Equaliser) SFE0 (South Focus Equaliser) SFE0 (South Focus Equaliser) SFE0 (South Engleser) Direct Sub Drive Spectrum analyser UR level meter Loudness Source level adjuster Fader RCA Pre-Out High Voltage Output GENERAL GENERAL Multi-C0 Control DAB Tuner Control DAB Tuner Control Source IV Control DAB Tuner Control Standard remote input HS0 Control Display Ilumination Remote Control Ready Hard-wind remote input HS0 Control Display Ilumination Remote Control Remote Control Remote Control Display Ilumination Remote Control Collast tegra Pre- Display Ilumination Remote Collast Remote Input Remote Collast Remote Input Remote Collast Remote Input Remote Control Collast tegra Pre- Display Ilumination Remote Control Collast tegra Pre- Collast Remote Input Remote Collast Remote Input Re	3 (F + R + S/W)  Colour Organic EL  (dual motion)	3 (F + R + S/W) • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • 2 [F + R] • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • 1 WHITE/BLUE (DEH-1600RB)
Selectable Loudness Selectable FIE (Front Image Enhancer) HPF E0-EX Selectable FIE (Front Image Enhancer) HPF E0-EX SFE0 (South Encurse) SFE0 (South Encurse) Sectrum analyser L/R level meter Loudness Source level adjuster Fader RCA Pre-Out High Voltage Output COT text Source Invest Multi-CO Control DAB Tuner Control DAB Tuner Control DAB Tuner Control Source IV Control List search function List search function List search function List search function List Source Invest Studied HIM High Voltage Output Studied DaB Tuner Control Display Ilumination Remote Control Ready Hard-wider Green Control Dal button illumination Rator yolume Auto-Tige mechanism Figa-type Front Ranel	3 [F + R + S/W] • • • • • • • • • • • • •	3 (F + R + S/W) • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • 2 [F + R] • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • 1 WHITE/BLUE (DEH-1600RB)

(1) Without scan (2) With Repeat Play (File/Current Folder) (3) Superbass/Powerful/Natural/Vocal/Flat (4) With safety warning beep.

FEATURES DAB TUNER	GEX-P700DAB FULL CONTROL	GEX-P700DAB EXTERNAL CONTROL
Auto seek, Ensemble seek	•	•
Service up/down	•	•
Switching between Primary/Secondary services	•	•
18 Services preset memory	•	•
Preset recall, channel up/down, band switch [DAB 1/2/3]	•	•
Label display selection (Ensemble/Service/Service Component/PTY)	•	•
Dynamic Label Segment Headline	•	•
PTY selection/search	•	
Available PTY List	•	
Preset List Search	•	
Announcement support (AS): Alarm, Traffic, News, Transport, Warning, Weather, Event, Special Event, Information, Finance	•	
DLS (Dynamic Label Segment) scrolling	•	•
Service Following [SF]: DAB-DAB and DAB-RDS*	•	
Function settings menu (AS/SF/Primary-Secondary/DLS)	•	

\* Not available in Germany.

# FEATURES DOUBLE-DIN, CASSETTE TUNERS AND MCD

FEATURES DOUBLE-DIN AND CASSETTE TUNERS	FH-P4100R	KEH-P7020R	KEH-P6020R KEH-P6020RB	KEH-P4020R KEH-P4023R	KEH-P2030R KEH-P2033R	KEH-1033 KEH-1032
	•	•	•	•		
Adaptive RDS (PI, PS, AF, TP/TA)	•	•	•	•	•	
PTY (Search and Alarm) News interrupt feature	•	•	•	•	•	
Radio Text			•			
ARC FM	ARC 5	ARC 5	ARC 5	ARC 5	ARC 5	ARC 5
3SA (Best TP Station Auto Search)	AIG 3	•	• ANG 3	AI\G J	•	AILO J
High speed PLL Synthesiser tuner	•	•	•	•	•	
PNS (Pulse Noise Suppressor)	•		•	•	•	•
No. of presets	24	24	24	18	18	24
BSM (Best Stations Memory)	•	•	•	•	•	•
CASSETTE						
luto-Reverse	•	•	•	•	•	•
ull Logic Control	•	•	•	•		
Jolby NR	В	В				
Metal 70's Tape Selector	AUTO	AUTO	AUTO			
Music Search	•	•	•	•		
Blank Skip and Repeat	•	•	•	•		
Radio Intercept	· ·	•	•	•	•	•
Playing Time Tape Counter	•	•	•	•		
lead *	•	•	•	•		
CD PLAYER						
Oversampling digital filter	8x					
D/A Converter	1-bit					
Frack Search/Scan/Repeat	•					
Random Play	•					
ast position memory	•					
Disc Title Memory	•					
CD Text	•					
CD-R Playback	•					
CD-RW Playback	•					
AUDIO						
Aax. output power (watts)	MOSFET 50 W x 4	MOSFET 50 W x 4	MOSFET 50 W x 4	MOSFET 50 W x 4	4 x 40	4 x 40
DIN output power	4 x 27	4 x 27	4 x 27	4 x 27	4 x 22	4 x 22
watts: DIN 45324, +B = 14.4 V						
Built-in DSP	•					
EEQ Plus	•	•	•			
EEQ				•		
-mode preset equaliser (1)	•	•	•	•		
Custom preset equaliser	2	2	2	1		
8-band parametric equaliser	•	•	•			
3-band equaliser				•		
Source Equalisation Memory	•	•	•			
electable Loudness (3-mode)	•	•	•	•	•	•
Selectable FIE (Front Image Enhancer)				•		
HPF	•	•				
PF	•	•	•			
FEQ (Sound Focus Equaliser)		•	•			
ISL (Automatic Sound Leveliser)		•				
Direct Sub Drive	•	•	•			
pectrum analyser	•					
/R level meter	•	•				
3TB (Bass/Treble booster)					•	•
-mode Loudness					•	•
ource level adjuster	•	•	•	•	•	•
ader	•	•	•	•	•	•
ICA Pre-Out	2 (F + R or S/W)	3 (F + R + S/W or Non Fad)	2 (F + R or S/W)	1	1	
SENERAL						
/ulti-CD Control/CD Ready	•	•	•	•	•	
TS (Instant Track Selection)	•	•	•			
lisc Title Memory	•	•	•			
D Text	•	•	•			
ligital Compression/Dynamic Bass Emphasis	•	•	•			
ource TV Control	•	•	EXT	EXT	EXT	
ource CD Control	•	•	EXT	EXT	EXT	
AB Tuner Control	EXT	•	EXT	EXT	EXT	
xternal unit control via IP-Bus	2	2	1	1	1	
UX-In (with optional CD-RB20)	•	•	•	•		
Remote Control Ready	•		•	•		
itandard remote control		•				
50 Connector	•	•	•	•	•	•
isplay illumination	BLUE	OEL-BLUE	MULTI/BLUE (3)	MULTI	SINGLE	SINGLE
ual button illumination	[2]	•	•			
lotary volume		Pop-up	Pop-up			
lap-type Front panel		•	•	•		
	• [4]	<ul> <li>[4]</li> </ul>	• [4]	•	•	•
emovable Front Panel						
Removable Front Panel Cellular telephone auto muting Hands-free ready	•	•	•	•		

\* SAT TWIN-CUT (1) Superbass/Powerful/Natural/Vocal/Flat (2) FH-P4100R: VW red button illumination (3) Multi-colour illumination: KEH-P6020R, blue illumination: KEH-P6020RB (4) With safety warning beep

FEATURES MULTI-CD PLAYERS	CDX-P1270	CDX-P670	CDX-FM657
CD PLAYER			
Oversampling digital filter	8x	8x	8x
D/A converter	1-bit	1-bit	1-bit
Fast forward/reverse	•	•	•
Track Search/Scan/Repeat	•	•	• [1]
Track/Manual search	•	•	•
Random Play	• [2]	• [3]	• [3]
ITS (Instant Track Selection)	<ul> <li>[4]</li> </ul>	• [4]	• [4]
ADPS	•	•	•
(Automatic Disc Programming Selection)			
Last Position Memory	•	•	•
Disc Title Memory	•	•	•
CD Text	•	•	•
CD-R Playback	• [5]	• [5]	•
CD-RW Playback	• [5]	• [5]	•
GENERAL			
IP-Bus Output	•	•	•
Standard Remote Control		•	
Display illumination			AMBER
Flexible angle installation	0 — 90°	0 - 90°	0 - 90°

(1) Without scan (2) Overall 12 discs (3) Overall 6 discs (4) With FH-P4100R, DEH-P9600MP, DEH-P8600MP, DEH-P7600MP, KEH-P7020R (5) With Skip Play

# FEATURES AND SPECIFICATIONS PRS

Tuner	<ul> <li>CD-R/CD-RW playback with Skip Play</li> </ul>	<ul> <li>AUX-In (with optional CD-RB20)</li> </ul>
<ul> <li>RDS (PI, PS, AF, TP/TA), PTY (Search and Alarm),</li> </ul>		<ul> <li>Slide-type Remote Control</li> </ul>
News Interrupt feature and Radio Text	Audio	<ul> <li>Digital Clock</li> </ul>
High Speed PLL ARC 5 Synthesiser tuner with BSA	<ul> <li>Separate Bass/Treble</li> </ul>	<ul> <li>OEL blue-colour display illumination</li> </ul>
(Best TP Station Auto Search), BSM (Best Stations	Source Level Adjuster	<ul> <li>Display Off</li> </ul>
Memory) and PNS (Pulse Noise Suppressor)	• Fader	<ul> <li>Auto-flap mechanism</li> </ul>
24 Station Presets	<ul> <li>3 Gold-plated RCA pre-outs</li> </ul>	<ul> <li>Removable front panel with safety warning beep</li> </ul>
	(Front + Rear + Non Fading)	Cellular telephone auto muting
CD Player	<ul> <li>High Voltage output</li> </ul>	<ul> <li>Flexible angle installation (0 — 60°)</li> </ul>
<ul> <li>24-bit D/A converter with 8 times Oversampling Digital</li> </ul>	<ul> <li>IP-Bus input/output</li> </ul>	<ul> <li>Copper-plated chassis</li> </ul>
filter	<ul> <li>Optical input/output</li> </ul>	<ul> <li>Aluminium finished front panel</li> </ul>
<ul> <li>Fast forward/reverse</li> </ul>		
<ul> <li>Track Search/Scan/Repeat</li> </ul>	General	
<ul> <li>Track/Manual search</li> </ul>	<ul> <li>Multi-CD Control with Disc Title Memory and CD Text</li> </ul>	
Random Play	Source TV Control	
Last Position Memory	<ul> <li>DAB Tuner Control</li> </ul>	
Disc Title Memory	<ul> <li>Source DVD Control</li> </ul>	

#### DEQ-P9 DIGITAL PREAMP/EQUALISER

31-Band L/R independent graphic equaliser [1/3 oct] with level control [0.5 step, ± 12 dB] 4-Way independent L/R crossover network

CD Text

- 4-way independent Lrk crossover network
  [High, Mid, Low, Subworfer]
   Crossover frequency: 20 Hz 20 kHz [1/3 oct]
   Slope: 0\*, -6, -12, -18, -24, -30, -36 dB/oct
  Time Alignment for clear sound focus
  Listening Position selector [FR/FL/F/OFF]

- 24-bit Burr-Brown D/A converters

External Unit Control via IP-Bus (2 units)

- High performance 8 times oversampling digital filter
  Optical Input for connection with DEX-P9R

- High Voltage output
   Gold-plated 8-channel RCA output
   (High/Mid/Low/Subwoofer)
   Parametric Bass/Treble

- Electronic Volume

- Gold-plated Power Screw Terminals
- Copper-plated chassis
  Installation Kit

\* Not available for HPF of high mode.

PRS AMPLIFIERS FEATURES	PRS-X340	PRS-X320	PRS-X220*
Max. output power	4 x 150 W	2 x 200 W	2 x 120 W
Hax. output power	2 x 500 W	1 x 800 W	1 x 400 W
Continuous output power (RMS) [14.4 V]	2,000 11	17,000 11	12.4001
20 - 20 kHz/4 0	4 x 37.5 W	2 x 50 W	2 x 30 W
20 - 20 kHz/2 0	4 x 75 W	2 x 100 W	2 x 60 W
Bridged 4 Q	2 x 150 W	1 x 200 W	1 x 120 W
DIN output power	4 x 115 W or	2 x 163 W or	2 x 87 W or
[DIN 45324. +B = 14.4 V]	2 x 360 W	1 x 486 W	1 x 313 W
Variable Crossover network			
A channel	LPF-Low, LPF-High,		
	HPF-Low, BPF		
B channel	LPF-Low, LPF-High,		
	HPF-Low, HPF-High		
Low Frequencies (-12 dB/oct)	40 — 120 Hz		
High Frequencies (-12 dB/oct)	3 — 9 kHz		
LPF/HPF Network [-12 dB/oct]		50 — 120 Hz	50 — 120 Hz
Input level/gain control	•	•	•
PWM Regulated MOSFET power supply	•	•	•
High Voltage Input capability (400 mV - 6.5 V)	•	•	•
Low load impedance capability (1 - 8 0)	•	•	•
Variable Bass Emphasis (0 – 18 dB)		40 — 120 Hz	60 Hz
Subsonic filter: 15 Hz (-24 dB/oct)		•	
Gold-plated RCA input and output terminals	•	•	•
[full range] enabling Link Top connection			
Gold-plated screw-type speaker terminals		•	
Screw-type speaker terminals	•		
Large gold-plated power/ground terminals (screw type)	•	•	•
High performance balanced isolator circuit	•	•	•
Reversible endcaps for installation versatility	•	•	•
MOSFET output section	•	•	•

Warning: Pioneer Power Series amplifiers are designed to supply higher output power than conventional amplifiers.

Therefore, please use a subwoofer whose nominal input power is about twice the connected Power Series amplifier's continuous output power. \* Not available in the UK.

PRS AMPLIFIERS SPECIFICATIONS	PRS-X340	PRS-X320	PRS-X220*
DIN output power	4 x 115 W or	2 x 163 W or	2 x 87 W or
(DIN 45324, +B = 14,4 V)	2 x 360 W	1 x 486 W	1 x 313 W
Continuous output power (RMS)           Continuous output power (RMS)           (20 – 20 kHz/2 0)           (20 – 20 kHz/2 0)           (Bridged 4 0)           (20 – 20 kHz/2 0)           (Bridged 4 0)           (20 – 20 kHz/2 0)           (Bridged 4 0)	4 x 37.5 (0.04 %) 4 x 75 (0.04 %) 2 x 150 (0.4 %) 4 x 75 (0.04 %) 4 x 75 (0.04 %) 4 x 75 (0.04 %) 2 x 150 (0.4 %)	2 x 50 (0.08 %) 2 x 100 (0.8 %) 1 x 200 (0.8 %) 2 x 50 (0.8 %) 2 x 50 (0.8 %) 2 x 50 (0.8 %) 1 x 200 (0.8 %)	2 x 30 (0.06 %) 2 x 60 (0.8 %) 1 x 720 (0.8 %) 2 x 30 (0.06 %) 2 x 40 (0.8 %) 1 x 120 (0.8 %)
Frequency Response (Hz) (+0 dB, -1 dB) Distortion (%)	10 - 50,000	10 - 50,000	10 - 50,000
	0.05 (10 W/1 kHz)	0.01 [10 W/1 kHz]	0.05 (10 W/1 kHz)
S/N Ratio	105	100	100
Input Level Control	400 mV – 6.5 V	400 mV – 6.5 V	400 mV - 6.5 V
Max. Current consumption (Α/4 Ω)	43.7	32.5	19.2
Chassis Size (W x H x D mm)	264 x 65 x 345	264 x 65 x 290	264 x 65 x 240
Unit Weight (kg)	7.0	5.5	4.5

<ul> <li>30 mm Polyester fibre diaphragm</li> <li>Large neodymium magnet [30.5 g]</li> <li>Die-cast aluminium flange</li> <li>Die-cast aluminium back chamber</li> <li>Removable metal mesh protector</li> <li>Flush mount application</li> <li>Maximum input power: 200 W</li> <li>Nominal input power: 60 W</li> <li>1,000 – 30,000 Hz, 92 dB [1 W/1 m]</li> <li>Recommended crossover frequency: 3,000 Hz</li> <li>Normial impedance: 8 Ω</li> </ul>		KEVLAR® woofer     Ready for     [e.g. kick p volume: 5     Symmetric Surround	small enclo banel) Reco Litres	e composite sure applic mmended	cation enclosure	• A • G • N • N • 2	Aluminiur Gold-plat Maximum Nominal i 18 — 10,0	input pov nput powe	post-screv ver: 200 W vr: 60 W dB (1 W/1 n	
	Revc (Ω)         Levc (mH)           6.5         0.03	Revc (Ω)	Levc (mH)	Fs (Hz)	Zmax (Ω)	Qms	Qes	Qts		/as /Liters)
		3.6 Rms (Ns/m)	0.36 Mms (g)	48 Cms (m/N)	43 BL (T m)	4.58 Sd (sq in) (sq m)	0.42 Hvc (in) (mm)	0.38 Hag (in) (mm)	Depla (c	2/11.1 cement u ft) ters)
		1.15	15.4	5.57E 04	6.76	18.5 0.012	0.48	0.24		015 .42
	OIL C-TYPE SUBWOOFER	SEALED	ENCLOSURE	SERIES		LOW	"Q" SERIE	S SUW00F	ERS FOR SEA	ALED BOX
<ul> <li>Dual-Layer rolled Urethane Surround</li> <li>Dual 4 Ω Voice Coil design (2 or 8 Ω)</li> <li>2 Ω rated (parallel wired)</li> <li>8 Ω rated (series wired)</li> <li>VCCS (Voice Coil Cooling System)</li> <li>4-Spoke aluminium die-cast frame</li> </ul>	OL C-TIFE SUBWOOPEN	SEALED Revc [Ω] dual 3.6	ENCLOSURE [mH] [8 Ω/ 2 Ω] 1.61 0.40	SERIES Zmax (0) (8 Ω/ 2 Ω) 175 43.8	Fs (Hz)	<b>LOW</b> Qms 9.00	"Q" SERIE Qes 0.41	S SUWOOF Qts 0.39	ERS FOR SEA	ALED BOX Rms (NS/m) 2.3
Dual-Layer rolled Urethane Surround Dual 4 Ω Voice Coil design (2 or 8 Ω) 2 Ω rated (parallel wired) 8 Ω rated (series wired) VCCS (Voice Coil Cooling System) 4-Spoke aluminium die-cast frame Gold-plated binding post-screw terminals Low-Q design for use in small sealed box (28 Lite Maximum input power: 1200 W		Revc (Ω) dual	Levc (mH) (8 Ω/ 2 Ω) 1.61	Zmax (Ω) (8 Ω/ 2 Ω) 175	(Hz)	Qms 9.00	Qes	Qts	Vas (cu ft) (Mers)m	Rms (NS/m)
<ul> <li>Dual-Layer rolled Urethane Surround</li> <li>Dual 4 Ω Voice Coil design (2 or 8 Ω)</li> <li>2 Ω rated (parallel wired)</li> <li>8 Ω rated (series wired)</li> <li>VCCS (Voice Coil Cooling System)</li> <li>4-Spoke aluminium die-cast frame</li> <li>Gold-plated binding post-screw terminals</li> <li>Low-Q design for use in small sealed box [28 Lite</li> <li>Maximum input power: 1200 W</li> <li>Nominal input power: 300 W</li> </ul>		Revc (Ω) dual 3.6 Mms (g)	Levc (mH) (8 Ω/ 2 Ω) 1.61 0.40 Cms (m/N)	Zmax (Ω) (8 Ω/ 2 Ω) 175 43.8 Diam (in) (8 Ω/2 Ω)	(Hz) 24 Sd (sq in)	Qms 9.00 [1 [ 1 ]	Qes 0.41 BL [ m)	Qts 0.39 Xmax (in)	Vas (cu ft) (Mers)m 3.3 93 Hvc	Rms (NS/m) 2.3 Hag
<ul> <li>Dual-Layer rolled Urethane Surround Dual 4 Ω Voice Coil design (2 or 8 Ω)</li> <li>2 Ω rated (parallel wired)</li> <li>8 Ω rated (series wired)</li> <li>VCCS (Voice Coil Cooling System)</li> <li>4-Spoke aluminium die-cast frame</li> <li>Cold-plated binding post-screw terminals</li> <li>Low-Q design for use in small sealed box (28 Lite Maximum input power: 1200 W</li> <li>Nominal input power: 300 W</li> </ul>		Revc (D) dual 3.6 Mms (g) (mm) 135	Levc (mH) (8 Ω/ 2 Ω) 1.61 0.40 Cms (m/N) (sq m)	Zmax (Ω) (8 Ω/ 2 Ω)           175 43.8           Diam (in) (8 Ω/2 Ω)           9.5 241	(Hz) 24 Sd (sq in) (mm) 70.9	Qms 9.00 [1] [1] [2] [3] [3] [3] [3] [3] [3] [3] [3] [3] [3	Qes 0.41 BL T m) mm) 9.46	Qts           0.39           Xmax (in) (mm)           0.53 13.5           Depth	Vas (cu ft) (Mers)m 3.3 93 Hvc (in) 1.56	Rms (NS/m) 2.3 Hag (in) 0.47 12.0 nended sure
<ul> <li>KEVLAR<sup>®</sup> brand Fibre composite cone woofer</li> <li>Dual-Layer rolled Urethane Surround</li> <li>Dual 4 Ω Voice Coil design (2 or 8 Ω)</li> <li>2 Ω rated (parallel wired)</li> <li>8 Ω rated (series wired)</li> <li>VCCS (Voice Coil Cooling System)</li> <li>4-Spoke aluminium die-cast frame</li> <li>Gold-plated binding post-screw terminals</li> <li>Low-Q design for use in small sealed box (28 Lite</li> <li>Maximum input power: 1200 W</li> <li>Nominal input power: 300 W</li> <li>15 — 2,000 Hz, 92 dB (1 W/1 m)</li> </ul>		Revc (Ω) dual 3.6 (g) (mm) 135	Levc [mH] [8 Ω/ 2 Ω] 1.61 0.40 Cms [m/N] [sq m] 3.15 x 10-4	Zmax (0) (8 0/ 2 0) 175 43.8 Diam (in) (8 0/2 0) 9.5 241 Cuto	(Hz) 24 Sd (sq in) (mm) 70.9 0.0456	Qms 9.00 [1] [1] [2] [3] [3] [3] [3] [3] [3] [3] [3] [3] [3	Qes 0.41 0.41 0.41 0.73 0.73 0.73 0.73	Qts 0.39 Xmax (in) (mm) 0.53 13.5 Depth ch)	Vas (cu ft) (Mers]m 3.3 93 Hvc (in) 1.56 39.5 Recomm enclo	Rms (NS/m) 2.3 Hag (in) 0.47 12.0 hended sure Lft/Liters] 10 %]

- Crossover Frequency 3,000 Hz
   Crossover Frequency 3,000 Hz
   Low Pass Filter (LPF) -12 dB/oct.
   High Pass Filter (HPF) -12 dB/oct.
   Load impedance
   Midrange [TS-M7PRS]: 4 Ω
   Tweeter (TS-T3PRS): 8 Ω
   Tweeter attenuation: 0 dB/-3 dB
   Nominal input power: 60 W

# SPECIFICATIONS EUROPEAN REFERENCE SEPARATE **COMPONENT SPEAKER SERIES**

TECHNICAL PARAMETERS	TS-C1700R	TS-C1300R
TWEETER		
Revc (Ω)	5.7	7.5
Levc (mH)	0.02	0.04

TECHNICAL PARAMETERS	TS-C1700R	TS-C1300R		
WOOFER				
Revc [Ω]	3.1	3.1		
Levc (mH)	0.35	0.26		
Fs [Hz]	67	74		
Zmax (Q)	21	25		
Qms	4.16	4.67		
Qes	0.71	0.66		
Qts	0.61	0.58		
Vas	0.34	0.18		
[cu ft/Litres]	9.5	5.2		
Rms (NS/m)	1.49	0.94		
Mms (g)	14.8	9.5		
Cms (m/N)	0.000383	0.00049		
BL (T m)	5.20	4.53		
Sd	20.51	13.37		
[sq in/sq m]	0.0132	0.00863		
Hvc	0.46	0.36		
(in/mm)	11.6	9.2		
Hag	0.24	0.24		
(in/mm)	6	6		

# FEATURES AND SPECIFICATIONS AMPLIFIERS AND SUBWOOFERS

FEATURES AMPLIFIERS	GM-D510M	GM-D515	GM-6000F	GM-4000F	GM-5000T	GM-3000T
Variable LPF [-24 dB/Oct]	40 — 240 Hz					
(-12 dB/Oct)		40 — 240 Hz	40 — 120 Hz			
Variable HPF [-12 dB/Oct]			40 — 120 Hz			
LPF [-12 dB/Oct]					80 Hz	80 Hz
LPF/HPF Network (A and B channel)				80 Hz		
[-12 dB/Oct]						
Input level/gain control	•		•	•	•	•
PWM Regulated MOSFET	•	•	•	•	•	•
power supply						
MOSFET Output sections	•	•				
Speaker level input				•		•
[A and B channel]						
Load impedance capability (2 - 8 0)	•	•		•	•	•
Bass Level Control (-22 - +12 dB)	•	•				
Large screw-type	•	•		•	•	•
power/ground terminals						
Screw-type speaker terminals	•	•	•	•	•	•
High-performance	•	•	•	•	•	•
balanced isolator circuit						
RCA input terminals	•	•	•	•	•	
RCA output terminals	i	İ	•	•	İ	

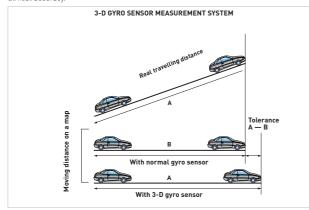
SPECIFICATIONS AMPLIFIERS	GM-D510M	GM-D515	GM-6000F	GM-4000F	GM-5000T	GM-3000T
DIN output power	1 x 490 W (4 Q)	4 x 65 W [4 Q] + 1 x 225 W [4 Q]	4 x 75 W	4 x 45 W	2 x 175 W	2 x 60 W
[DIN 45324, +B = 14.4 V]	or 1 x 630 W [2 0]	or 4 x 56 W (4 Ω) + 1 x 350 W (2 Ω)	or 2 x 200 W [4 Ω]	or 2 x 100 W (4 Q)	or 1 x 530 W (4 Q)	or 1 x 150 W (4 Ω)
Continuous output power (RMS)           Watts 14.4 V         (20 - 240 kHz/2 Ω)           (20 - 240 kHz/4 Ω)         (20 - 240 kHz/4 Ω)	1 x 500 W 1 x 300 W	1 x 300 W 1 x 150 W 4 x 50 W	4 x 50 W or 2 x 120 W	4 x 35 W or 2 x 70 W	2 x 125 W or 1 x 380 W	2 x 40 W or 1 x 100 W
(20 — 20 kHz/2 Ω)			4 x 60 W	4 x 40 W	2 x 190 W	2 x 50 W
Frequency Response (Hz) (+o dB, -1 dB) (+o.5 dB, -3 dB)	5 Hz — 240 Hz	10 Hz — 40,000 Hz 5 Hz — 240 Hz	10 Hz — 50,000 Hz	10 Hz — 50,000 Hz	10 Hz — 50,000 Hz	10 Hz — 45,000 Hz
Distortion (%) [10 W/1 kHz] [10 W/120 Hz]	0.03	0.01	0.008	0.008	0.008	0.008
S/N Ratio	0.03 95 dB	0.03 95 dB	95 dB	100 dB	100 dB	100 dB
High Voltage Input capability	125 mV - 6.5 V	125 mV - 6.5 V	400 mV - 6.5 V	400 mV - 6.5 V	200 mV - 6.5 V	400 mV - 6.5 V
Max. Current Consumption (A/4 0)	31	43.8	27.1	18.1	25	11.3
Chassis Size (W x H x D mm)	268 x 52 x 250	268 x 52 x 350	300 x 61 x 324	300 x 61 x 237	300 x 61 x 324	300 x 61 x 157
Unit Weight (kg)	2.9	3.9	5.2	3.8	5.5	2.6

SPECIFICATIONS SUBWOOFERS	TS-W5000SPL	TS-W121PL	TS-W101SPL	TS-SW124D	TS-W305C	TS-W255C	TS-W305F	TS-W255F
Interlaced Carbon Fibre Reinforced IMPP cone	30 cm							
Interlaced Glass Fibre/		30 cm	25 cm					
Carbon Fibre Reinforced IMPP cone								
Interlaced Carbon/KEVLAR® brand				30 cm				
Fibre Reinforced IMPP double cone								
Interlaced KEVLAR® brand					30 cm	25 cm	30 cm	25 cm
Fibre Reinforced IMPP cone								
Double cone reinforcement nodes				•				
3-layer, KEVLAR® brand	•							
fibre woven radial rubber surround								
Wide-roll, overhung surround design	•							
Wide-roll, 3-layer fibre woven radial surround		•	•		•	•		
3-layer fibre woven radial surround				•				
Tall dual-layer surround							•	•
Triple-stacked high-power magnets	• [3 x 3 kg]							
Double-stacked high-power magnets		•	•					
Dual mass high-power magnet					•	•		
Dual ceramic-coated voice coils	•							
ADMG (Aero-Dynamic Magnetic Gap) design	•							
Aluminium die-cast basket	•	•	•					
with bottom hold structure								
Aluminium die-cast one-piece rigid chassis				•				
Extended and vented pole yoke	•	•	•	<ul> <li>(T-pole)</li> </ul>	•	•	•	•
Large diameter Conex double damper	•							
with dual damper ring								
Large diameter Conex damper with damper ring		•	•					
Conex damper with damper ring					•	•	•	•
Damper-less,				•				
Air suspension excursion control system								
8-gauge wire terminal	•							
Silver binding post terminal		•	•	•				
Dual 4 ohm voice coils design (2 or 8 ohm)	•	•	•					
4 ohm single voice coil design				•	•	•	•	•
Enclosure use	•	•	•	•	•	•		
Free air use							•	•
Frequency Response	18 — 2,000 Hz	18 — 2,000 Hz	18 — 2,500 Hz	18 — 1,000 Hz	18 — 2,000 Hz	18 — 2,500 Hz	20 — 2,000 Hz	20 — 2,500 Hz
Lowest Resonance Frequency [Fs]	32.2 Hz	29.9 Hz	37.3 Hz	31.7 Hz	32.7 Hz	35 Hz	26.2 Hz	35.8 Hz
Qts	0.32	0.328	0.376	0.55	0.34	0.351	0.63	0.79
Recommended Sealed Enclosure (Litres) (± 10 %)	42.5	42.5	28.3	22.64	42.5	28.3	-	-
Vas (Litres)	30.92	34.53	17.54	28.05	51.45	24.88	129.46	50.33
Sensitivity (1 W/1 m)	88 dB	89 dB	87 dB	88 dB	89 dB	87 dB	94 dB	92 dB
Nominal input power	2000 W	750 W	600 W	300 W	400 W	350 W	300 W	250 W

# GLOSSARY

#### NAVIGATION

3-D Gyro Sensor: The 3-D Gyro Sensor allows the navigation system to take measurements in three directions — height (up/down), speed (distance) and direction (left/right) — calculate inclines, and detect special road features such as tunnels to pinpoint the driving position with utmost accuracy



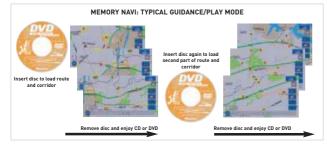


Memory Navi: The AVIC-X1's built-in Memory Navi capacity of 64 MB provides advanced navigation at the same time as offering audio entertainment or DVD-Video viewing to rear seat passengers (using an optional rear screen).

Just insert the map navigation disc, search for a destination, choose a route, and the map data for the route (with surrounding corridor) will be loaded automatically into the AVIC-X1's Memory Navi. It can hold over 400 km of routeing (this figure may vary, depending on the complexity of the map information). During downloading, you can already start driving to the

complexity of the map information). During downloading, you can already start driving to the destination, guided by navigation instructions. Once the route is loaded, the DVD map disc can be exchanged for a single CD, MP3 CD or DVD-Video disc. If the journey is longer than the available memory capacity, the system will request you to reinsert the navigation disc to load an extra stretch of map data. The AVIC-X1 is so clever it remembers exactly where the CD or DVD was removed and plays again from where it left off

Half of the Memory Navi's 64 MB capacity is dedicated to storing the 'corridor' around the route (approximately 10 km radius) to the destination. If you leave the calculated route, the system will guide you back to the original path, all in a matter of seconds. If you reach the limits of the corridor, the system will request you to reinsert the DVD map disc. If the boundary is crossed, AVIC-X1 automatically switches to a 50 km scale map. The Memory Navi also holds the TMC traffic information of the country where the map disc was last ejected.



MERIAN Autoscout: Pioneer's Arrow-type Navigation Unit is compatible with Merian Autoscout travel guides. (See pg. 15 for full details).

POI (Point of Interest): Pioneer's new navigation DVD map discs CNDV-40M and CNDV-40MT store a very large amount of POIs (Points of Interest), over 1.3 million divided in 65 different categories! You can do a fast POIs earch by name or by category (destination search) to locate a particular point of interest (e.g. restaurants, petrol stations, etc.). For your convenience, brand icons of 7 petrol stations have been added, while restaurants have been classified according to kitchen 'type'. (See pg. 12 for full details).



Rotary Stick: Commanding the Arrow-type Navigation Unit is incredibly easy with the Pioneer original multi-functional 'Rotary Stick'. Rotate it to choose navigation functions needed, then push it in to activate navigation commands. It can be used like a joystick to control audio functions



TeleAtlas: Map coverage for the DVD Cyber Navi units has been vastly extended thanks to input from TeleAtlas, Pioneer's new information provider

TMC (Traffic Message Channel): The Navigation unit's built-in TMC (Traffic TŴG

Message Channel) receiver keeps you updated on current traffic events and suggests alternative routes. Refer to maps on pages 13 and 14 for TMC coverage as of respective Pioneer navigation units.

lote: When using the AVIC-X1's Memory Navi function, TMC is also available. However, only traffic news of the ountry where the journey was loaded into memory — and only up to that point in time — can be viewed. To have ceess to updated information, the Map DVD disc must be reloaded into the system.



Touch Panel Ready: Pioneer navigation units with this logo were designed to be used with a Pioneer touch panel display. The Graphical User Interface works seamlessly with the display, for fast and intuitive operation. Every function is immediately accessible by pressing the appropriate on-screen button or icon. Additional navigation capabilities and functions are available only when a touch panel display is used.

#### AV UNITS AND HEADUNITS — SOURCES

#### TV Tuner

PAL: PAL is the TV standard used in most of Western Europe

#### Radio Tuner



**ARC 5**: The Automatic Reception Control system — used in all Pioneer headunits — increases sensitivity and improves FM reception.

BSM (Best Stations Memory): An ideal tuner feature for travelling. At the touch of a button, BSM scans the radio band, finds and automatically presets the 6 strongest stations



D4Q: D4Q is Pioneer's digital AM/FM tuner. It uses a digital processing technique, which improves the audio performance and selectivity of the receiver, allowing you to enjoy high-quality radio without interference. (See pg. 39 for full details).

PNS (Pulse Noise Suppressor): 'Pulse Noise' is unwanted noise generated by electrical motors. It can come from the car's engine or through the antenna, even from another car PNS provides a cleaner sound by reducing noise that interferes with the FM signal.



Radio Intercept: Avoids lengthy silences by automatically switching to your radio source when the cassette deck is fast-forwarding, rewinding, or in Auto Reverse.



Radio Text: By pressing the Radio Text button, text messages sent as RDS data are received. These messages scroll across the screen for convenient viewing, and can be stored in memory for review.



**RDS:** Pioneer has incorporated the "Non Interruption Philosophy" into the "Intelligent RDS Tuner" for improved network following (NF). Thanks to the sophisticated algorithms, the different programme alternative frequencies are screened out and continuous, uninterrupted listening pleasure is achieved.

#### DAB Tuner

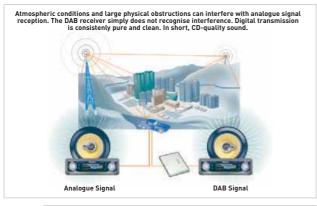


DAB: A DAB tuner allows access to the Digital Audio Broadcasting (DAB) system for distortion-free, interference-free CD quality radio and multimedia services

Audio Compression (DAB): DAB uses advanced digital audio compression techniques (MPEG 1 and 2) to reduce the bit rate six to twelve times compared to the conventional PCM sound coding. Only the audible parts of the audio spectrum are extracted; the imperceptible parts are "masked". In addition, broadcasters can determine the sampling rate of a transmission, allowing more efficient use of the ensemble. For example, voice-only programming could be broadcast at half-rate, with the additional capacity used to expand other programming. Audio Compression results in more flexible and efficient transmission while maintaining highfidelity sound.

# GLOSSARY

COFDM (Coded Orthogonal Frequency Division Multiplex): The complete ensemble is transmitted via several hundreds (or thousands) of tightly packed RF carriers. Due to the low data rate of each RF carrier, any delayed signal reflections add to the signals already received, allowing interference-free reception under conditions of multipath propagation.



#### DVD

Auto Play: Auto Play ensures that playback of a DVD-Video's first chapter starts 5 seconds after the power of the unit is switched on.

Bookmark Play: Press the Bookmark button to "memorise" the preferred starting position for a DVD-Video disc. Each time the disc is inserted, it will start playing from that point on.

DIGITAL Digital. The current surround sound quality encoding standard, Dolby Digital, means in-car movie theatre sound performance. The front left and right, centre, rear left and right speakers span frequencies from 20 Hz - 20 kHz and there is a dedicated subwoofer channel for additional low frequency sound effects.

Dolby Pro Logic: The forerunner to the increasingly popular Dolby Digital format, Dolby Pro Logic. The lost of the formation of the



Dolby Digital Pro Logic II: Dolby Digital Pro Logic II reproduces multi-channel surround sound from a variety of sound sources, to create the thrill of 5.1-channel surround sound even from 2-channel sources.

DTS: DTS 5.1-channel playback encoding technology is rapidly gaining dts dts popularity thanks to its dynamic sound impact.



**DVD-Audio**: The DVD-Audio format provides audio fidelity far superior to that of normal CDs. In addition to audio in stereo and multi-channel surround sound, DVD-Audio discs can hold artist bios, background information, lyrics and liner notes.

**DVD-Video**: This multimedia digital technology guarantees second-to-none picture quality. The ultra-sharp digital picture and surround sound bring impressive cinema into your car. Plus, DVD is packed with useful features, e.g. DVD multiple languages, soundtracks and subtitles, support for various multi-channel audio encoding technologies such as DTS and Dolby Digital.

Eject Bookmark Play: A long press on the Eject key sets an 'Eject Bookmark': the next time that DVD disc is inserted, it will start playing from that point onwards.

CD

Burr-Brown 1-bit D/A Converter with 24-bit resolution Burr-Brown Corporation's 1-bit D/A Converter with 24-bit resolution offers a very wide dynamic range and an excellent signal-to-noise ratio, giving more accurate and true-to-the-original sound. Sound quality is further enhanced by the use of high-quality audio capacitors and very low noise design.





CD-R/CD-RW Compatibility\*: All Pioneer CD headunits can play back CD-R/ CD-RW discs, allowing you to enjoy your favourite compilations in-car.

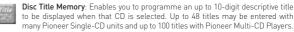
\* Use finalised music CD-R/CD-RW discs for playback. In some cases, CD-R/CD-RW discs may not play back correctly, unless they have been recorded using a CD-R/CD-RW unit for recording music. Furthermore, CD players may not play back music on CD-R/CD-RW discs recorded from a music CD-R/CD-RW recorder if there are scratches, dirt or other characteristics specific to these discs; or dirt or condensation on the pick-up lens. Text information such as titles recorded on CD-R/CD-RW discs may not be displayed. Read directions carefully regarding disc use he CD-R/CD-RW discs. Even if playback of a CD-R/CD-RW disc is possible, it may take several seconds sound reproduction begins.

CD-R/CD-RW Skip Play: Allows you to skip misrecorded tracks on a CD-R/CD-RW disc. First set "Skip ID" on the CD recorder unit and your car CD player will not play that particular track, but skip to the next one on the disc.



CD Text: Use the CD Text feature to view text information from a music compact disc (which has been encoded with CD Text data). By pushing the display key, you can scroll between disc titles, track titles and artist name





ITS (Instant Track Selection): Gives the choice of programming any favourite CD track - for up to 24 tracks per disc. Selections are then played back utilising ADPS and the "Program" button.

Last Position Memory: Last Position Memory automatically resumes CD play from the last point if there is interruption to CD play.



MP3: Popular compression format that allows large amounts of audio files to be stored onto one CD-R/CD-RW disc. Pioneer players come equipped with large buffering capabilities, which means they are all able to handle data rates from UPDUM and DEDUP is a store of the and the store of the 16 kbps and VBR Variable Bit Rate recording. (See pg. 34 and 37 for full details).

Random Play: CD playback mode mixes the order of songs (and entire magazines, in the case of MCD Players), providing a different sequence each time.



WAY: WAV files are used to store high-quality, uncompressed audio data of CD-quality [44.1 KHz/16-bit]. This file format requires a huge amount of memory — roughly 10 MB per minute of music. Compressed audio files such as MP3 and WMA require significantly less memory, but reproduce poorer quality sound. Audio CDs are automatically saved in WAV format in the Windows operating system for perfect original sound quality without quality loss. The formats and sampling frequencies that are supported by Pioneer products are LPCM (16/22.05/24/32/44.1/48 kHz) and MS ADPCM (22.05/44.1 kHz)



WMA (Windows Media™ Audio): WMA is a music compression format developed by the Microsoft Corporation. It uses the latest coding technologies to compress an original audio track, minimising file sizes while maintaining good audio quality even at rates as low as 64 KB/sec. (See pg. 34 and 37 for full details).

#### Cassette

Blank Skip: Automatically skips over long portions of unrecorded tapes (at the end of one side, for example).



Dolby B: A noise reduction system\* used with most pre-recorded tapes. Pressing the Dolby B button improves the signal-to-noise ratio by greatly reducing background "hiss"

#### \* Dolby and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation



Full Logic Control: Full Logic cassette decks feature feather-touch, electronic control buttons that make cassette operation easier. A "Logic" system ensures that when you press "forward", the deck will always move forward, regardless of which side of the tape is currently playing.



HDD

Music Search: Locates the beginning of the next song for fast forward or the beginning of the present song on rewind.

ATRAC3: ATRAC3 is an audio compression technology used in "MagicGate Memory Stick" and MDLP. The digitised music data can be compressed into 1/10th of the volume of a conventional music CD. A 64 MB capacity "Memory Stick" can record about 60 minutes of music.

Check-in/Check-out: "Check-out"= transferring data from the HDD to the "MagicGate Memory Stick". "Check-in" = returning "checked-out" music data to the HDD. The "Check-in" can only be done by the HDD which did the "Check-out". According to MagicGate regulation, it is possible to make 4 copies of the music data. One copy is recorded on the HDD, which leaves you with 3 additional "Check-out" possibilities.



Gracenote CDDB®: The Gracenote CDDB® Music Recognition Service automatically adds artist names and disc titles when audio CDs are backed up from the CD player onto the hard disc. Files can be organised into play lists and selected at the touch of a button

 ${\tt CDDB}^{\otimes}$  is a registered trademark of Gracenote. The Gracenote logo and logotype, the Gracenote  ${\tt CDDB}^{\otimes}$  logo and logotype, and the "Powered by Gracenote  ${\tt CDDB}^{\otimes}$  logo are trademarks of Gracenote. Music recognition service and MRS are service trademarks of Gracenote.

ID3 Tag: This is the format used to record information with an MP3 file. Recordable information: title, artist, album name and music genre



MagicGate Memory Stick: This compact and lightweight IC recording medium can be used with an increasing number of products. Download music from your PC and play it back on a MagicGate Memory Stick compatible player.

#### AV UNITS AND HEADUNITS - AUDIO

3-Way Network Mode/Standard Mode: Systems designed around external amplifiers and either the DEH-P9600MP or DEH-P8600MP can be set up in one of two different configurations, called Standard and Network configurations.

In Standard mode, the speakers are used in the traditional format, the pre-outs driving the front, rear and subwoofer channels. In this type of configuration 2- or 3-way speakers are commonly used for the front and rear.

In Network mode, instead of front, rear and subwoofer channels, low, mid and high frequency channels are used. For each channel the cut-off frequency, filter slope, level and phase can be adjusted. This allows for component woofers and tweeters to be used to create a highly tailored system, offering optimum staging and acoustic performance. The combination of Network mode and Auto Time Alignment offers an incredible level of control and tuning flexibility.



40 W x 4 / 45 W x 4: Pioneer co-developed and was the first to introduce this internal power chip which allows increased bass response and system clarity.



ASL (Automatic Sound Leveliser): Automatic Sound Leveliser (ASL) technology electronically and automatically adjusts volume and frequencies to mask varying degrees of exterior noise.

Auto EQ: Auto EQ is a powerful sound tuning feature which uses a microphone to monitor and analyse the acoustics inside the car. It then automatically adjusts the equalisation across the entire range of the music's frequency bandwidths to optimise the performance. In addition, it offers digital 13-band graphic equalisation for both front and rear speakers



(Auto) Time Alignment: The Time Alignment feature adjusts the speaker sound output timing within the vehicle for each speaker by 1/20,000 second, so the sound from each speaker reaches the driver's ears at the same time. Auto Time Alignment automatically estimates the delay from each speaker to the listening

position and adjusts the Time Alignment accordingly.



\* Licensed by BBE Sound, Inc. under USP4638258 and 4482866. BBE and BBE symbol are registered trademarks of BBE Sound Inc.

BMX (Bitmetric Equaliser): Enhances digital compressed audio by adjusting the signal output level and tonal characteristics according to the signal input level, resulting in a more natural and more comfortable sound. BMX can also improve вмх the listening experience of uncompressed audio files that originate from a poor original source. (See pg. 34 for full details).



**BTB (Bass Treble Boost)**: BTB sound tuning is a simple, yet effective, sound customisation function. One push of the BTB button allows you to switch between 3 preset equalisation curves that boost the bass and high-range frequencies.



Built-in DSP: Uses digital technology to correct a vehicle's interior acoustics. The system also offers various sound fields to recreate different listening environments in your car (Studio, Jazz Club, etc.).

New Built-in DSP: Pioneer's new built-in DSP and Burr Brown 1-bit DAC with 24-bit resolution produce the highest quality in-car sound. Flexible sound customisation can be achieved automatically, equivalent to a professional system. Sound tuning perfection is enabled thanks to the Burr Brown 1-bit DAC with 24-bit resolution, Advanced Auto Time Alignment (optimises the sound field by acoustically adjusting the sound image depending on the listening position and Auto Equaliser (monitors the car's interior acoustic environment, and after one of the three target curves is chosen, completes a sound correction process to balance the acoustics). Additionally, the digital 13-band graphic equaliser's fine-tuning flexibility finds the perfect balance of lows, mids and highs, while the Source EQ Memory effortlessly recalls tone settings you set for each individual audio source. In addition, there are 6-mode preset equalisation curves plus a nuance control function for subtle sound adjustments.

Digital Compression: This feature is useful for music with an exceedingly wide dynamic range (classical is a good example). Quiet passages are boosted so that they don't get buried in background noise and loud passages are reduced, preventing overload and distortion of the speakers.

Direct Sub Drive: MOSFET 50 and EEQ+ can be used together to get Direct Sub Drive. EEQ+ filters the rear channels output; then, MOSFET 50 — due to ample audio power — drives Pioneer's high sensitivity subwoofers directly, without using a separate component amplifier. MOSFET 50 can also drive 2-ohm speakers, pumping out an incredible 1 x 70 W in the rear, giving the unique setup of a 2 x 50 W front and 1 x 70 W subwoofer system.



Dynamic Bass Emphasis: This feature digitally boosts low and high frequencies at lower volume levels to compensate for ambient road noise.



# GLOSSARY



EO-EX

EEQ (Easy Equaliser) +: EEQ (Easy Equaliser) + expands EEQ further with either capability. (See pg. 36 for full details).

EQ-EX (Equaliser Expansion): EQ-EX (Equaliser Expansion) gives a boost to the current preset equaliser settings. By pressing the EQ-EX button each EEQ curve

FIE (Front Image Enhancer): This function shifts the sound focus forward

electronically, without having to adjust the fader control, by cutting off high frequency signals to the rear speakers. It gives an extremely clear sound image

Hi-Volt Pre-Outs: By providing a strong signal, with less noise and more

definition, the Hi-Volt pre-outs reduce demand on the input circuit of the amps so they can work with lower gain settings, resulting in improved sound quality and a

is acoustically tuned for optimum effect, giving a more dramatic effect and a new edge to the music. (See pg. 36 for full details).

in the front of the car, without attenuating dynamic bass response from the rear speakers.

Listening Position Selector: The Digital Listening Position Selector automatically adjusts the sound field and stereo image to optimal levels for each of the four preset seating positions -

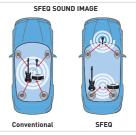
Octaver: The 2-mode Octaver Bass Enhancement System is a DSP technology featuring a bass boosting Octaver that processes signals under 200 Hz by shifting down an octave and adding an original sound low-frequency signal output.



 $\mbox{RCA Pre-Out}:$  The standard connection system to carry sound from a headunit to an amplifier or equaliser. RCA pre-outs provide easy output for connection to an outboard amplifier. (See pg. 38 for full details).

RCA Pre-Out Subwoofer output: The dedicated subwoofer output allows connection of an amplifier for a subwoofer without having to purchase a separate crossover. It also simplifies controls by providing subwoofer crossover and level controls as part of the headunits.

SFEQ (Sound Focus Equaliser): SFEO SFEQ lets you control bass and treble settings for front and rear independently for easy customisation of the total sound. Vocals can be brought to the front stage while bass performance is kept well balanced, producing a more natural effect





Source Level Adjuster (SLA): Independently adjusts the volume ratio between all of the headunit's sources (using the FM volume level as a reference), so the start-up volume between sources will always be the same

#### AV UNITS AND HEADUNITS — SYSTEM CONTROL

10-key Remote Control: Pioneer's top-end MP3/WAV/CD RDS tuners come with a standard practical 10-key remote control. It gives you full control over your headunit and allows for direct access to files





AUX-In for External Music Sources: All Pioneer IP-Bus headunits units allow the connection of external music sources (with RCA outputs), such as portable recorders, micro-cassettes, etc., through the MCD bus connection. (Adapter

Back-up Camera Input: The Back-up Camera Input is a video input that can be used for a reverse view camera. The input on some AV units can be set so that it automatically switches to a reverse view whenever the reverse gear is engaged.



 $\mbox{DAB Control:}$  Pioneer products with IP-Bus connectivity offer 2 levels of DAB control - Full and External (EXT) - for pure CD-quality sound of DAB control — Full and External [EXT] — for pure CD-quality sound by digital radio. Full Control offers you the possibility to take full advantage of an optional DAB tuner, with convenient added features such as Automatic Switching between DAB and FM RDS whenever the DAB signal is lost. EXT Control means you can control most DAB features, such as Service Component Selection and Text Display, but not DAB to FM Automatic Switching. Full DAB Control features include: Dynamic Label Segment (Radio Text), Service Following to DAB and RDS/FM, Announcement selection by type, Language Filtering. External DAB Control features include: Superb RF performance, Full- and half-rate audio (32 — 256 kbps), Dynamic Multiplex Reconfiguration support, Primary and Secondary Components, Minimum 8 character display.



Dual Zone: Many Pioneer AV products are Dual Zone ready, meaning the rear seat passengers can enjoy in-car entertainment from a different source (such as DVD-Video) than the driver and front seat passenger (radio, CD, DAB). (See pg. 17 for full details).

Hard-Wired Remote: This convenient feature allows you to operate your Pioneer headunit with the car's existing steering wheel remote control. These headunits feature a mini-jack input on the rear. By using an optional hard-wired remote control adapter, the headunit can be hard-wired directly to the car's remote control system. (See pg. 45 for details on optional adapter kits).

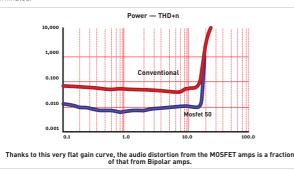


wider dynamic range

front left, front right, rear left and rear right.

Loudness Control: At low volume levels, ambient noise levels in the vehicle can overpower low- and high-frequency sounds in music. Loudness control provides a one-button way to boost these frequencies and provide better overall sound at low volume levels.

MOSFET 50: Pioneer's MOSFET 50 power amp pumps out an impressive 4 x 50 W of power. Audio performance is boosted to ever-higher levels thanks to superior technologies such as the 99.99 % pure OFC (oxygen-free copper) bonding wire, which has low electric resistance. This means that only minimal power is lost in the IC chip so power handling efficiency is enhanced along with sound quality. Audio distortion is minimised and the switching distortion that plagues conventional bipolar amps is completely eliminated



**MOSFET 60**: The revolutionary MOSFET 60 power amp delivers a very impressive 60 W x 4 of output power — without requiring a direct battery connection. This has

been achieved by the integration of two intelligent technologies. First, to reach an even higher power output, a separate dual power supply structure is used. The headunit is fed through two cables: the backup and ACC cables, each with a 10 A fuse or more\*. Using this system, direct connection to the battery is not needed, avoiding complicated installation. Secondly, MOSFET 60 incorporates a new, highly efficient power amp IC. Its very low power dissipation allows for a smaller heat sink. Therefore, 60 W x 4 output power can be delivered in a 1-DIN headunit, even with a dual power supply system

\* If the ACC fuse is lower than 10 A or if there is no ACC cable, max, power is still 40 W.

Power comparison	MOSFET 50	MOSFET 60
Max Power	50 W	60 W
DIN Output Power	27 W	36 W
5-15 K @ 5 % Dist	22 W	27 W

IP-Bus: The IP-Bus connections on Pioneer P-series headunits allow you to connect optional source units and create a true mobile multimedia centre. You can easily add on a hide-away TV tuner, allowing passengers to watch their favourite TV programmes in the car. A DVD player can be added, to enjoy DVD images on one of Pioneer's premium-quality colour displays - you can choose from Pioneer's range of front on-dash or in-dash or rear displays. A DAB tuner can also be connected for pure high-quality digital radio

Pioneer's full range of CD tuners with IP-Bus can now all control 2 external source units, and offer either full control or external (EXT) control of source units

RCA AV input/output: Standard connection for AV sources

RCA Video input/output: Standard connection for Video sources

RGB input/output for Navigation/AV: Pioneer proprietary format cable for high-quality connection of video sources.

Speaker Input for Hands-free Phoning: When the standard mini-jack cable from the hands-free car kit "speaker out" socket is plugged into the system, calls will come in directly through the main speakers and the source will mute to TEL. When the call is finished, the system automatically switches back to the source that was in use

Steering Wheel Remote Control: Keeping your eyes on the road is easy with a Pioneer steering wheel remote control — the CD-SR100, which comes standard with some Pioneer units. The remote control can be mounted right onto the steering wheel so you have control of the most frequently used features of the audio system at your fingertips. The CD-SR100 also has a voice trigger for navigation commands.

TV Control: TV Control allows Pioneer headunits with IP-Bus connectivity to control a hideaway TV tuner

Virtual Sonic Output: Provides all the excitement of 3-D surround sound over conventional headphones. It allows rear seat passengers to enjoy their favourite forms of entertainment without disturbing the driver

#### AV UNITS AND HEADUNITS - ERGONOMIC FEATURES

Anti-Glare, Low-Reflection Display: A special coating used on Pioneer AV displays minimises reflection and glare, absorbs light, diffuses sunshine and maintains high contrast no matter how bright the environment is. The display offers optimal image quality and the most comfortable viewing.

Direct Key Operation: Direct Key Operation is an easy mode on the CD tuners with OEL display. By pressing the Entertainment key for 2 seconds, the headunit switches from Entertainment mode (classic, animated Organic EL display) to Direct Key Operation mode. The OEL display then indicates the function of each of the 4 Soft Keys (which changes depending on the source) in a clear and easy-to-read way.





Dual Button Illumination: Denotes units that can switch front panel illumination

colour between green and red to match the dashboard.

Full Flap Design: In a full flap designed headunit, the CD or cassette slot is hidden behind the front panel. This results in a larger display with improved visibility and more impressive display animations

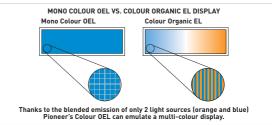
Multi-Language Display: A user-friendly multi-language display allows you to select from up to 6 languages\* to navigate the menu in the language of your choice.

\* English, French, German, Italian, Spanish, Dutch



**OEL:** Pioneer OEL (Organic EL display detivers high-contrast, moving 3-D images, even in sunlight. Its smart functionality lets you control and confirm play source operating information and provides plenty of space for text, for lists of tracks, discs or other data from MDs or CDs. [See pg. 35 for full details].

**Colour Organic EL:** The Colour Organic EL is a hybrid concept that — using only 2 (blue and orange) light emitting sources (Dual Paint Process) — can emulate a (0)=1 multi-colour display. These colours offer a very wide range of vivid animation possibilities with excellent 3-D realism and make the display impressive to look at. By blending the 2-colour light emission, the display can also create a very pure white. It also offers the benefits of traditional OEL displays (see 'OEL', previous column; see pg. 30 and 35 for full details)



**Blue OEL:** A new colour is used for the OEL display, a trendy blue. It plays customised animations, and also offers the benefits of traditional OEL displays (see 'OEL', previous column; see pg. 32 and 35 for full details).

**OEL Screensaver Studio:** Pioneer's OEL Screensaver Studio lets you customise your OEL headunit display\* using a CD-R or CD-RW. The software can be downloaded via <a href="https://www.pioneer.co.jp/car/pclink3a">www.pioneer.co.jp/car/pclink3a</a> (for the DEH-P9600MP and DEH-P8600MP) or <a href="https://www.pioneer.co.jp/car/pclink3b">www.pioneer.co.jp/car/pclink3a</a> (for the DEH-P9600MP and DEH-P8600MP) or <a href="https://www.pioneer.co.jp/car/pclink3b">www.pioneer.co.jp/car/pclink3b</a> (for the DEH-P800MP and petters a revised easy-to-use) interface that offers more entertainment possibilities and animations. It lets you process and edit your favourite digital camera images (BMP, JPEG or PNG formats) or digital video movies AVI format) into all kinds of special customised OEL animations from movies and backgrounds to images and level indicators\*\* — all complete with special effects and text. Frame size, timing and sequencing can be adjusted. When the file is complete, all you have to do is insert the burned CD-R/CD-RW into the headunit to automatically upload the new

\* DEH-P9600MP, DEH-P8600MP, and DEH-P80MP only. \*\* DEH-P80MP only.



Pop-Out Rotary Volume: The pop-out rotary volume control is a neat . Pioneei design and ergonomic element. Press it and the button pops out to turn up the volume. Press it back into place to return to a smooth, stylish panel.





Rotary Commander: Lets you control all the headunit's features and functions with one knob. It can be turned left or right, pushed up, down, left or right, or pressed to navigate joystick-style through the different radio stations, access folders and files. (See pg. 32 for full details).



Removable Front Panel (RFP): A theft-deterrent system invented by Pioneer With RFP, the front panel of the unit can be lifted off and slipped into a protective case. The unit's sensitive electronics remain protected in the dash; all that remains visible is a black panel that won't attract thieves.

# GLOSSARY



Soft Key Concept: The Soft Key Concept makes operation super easy. Button assignments change according to the source or function engaged. You can access the function you need directly, with one touch. Some functions are also accessible via the remote controller's cross-key or the steering wheel remote.

Sub-Display Output: The sub-display output is a practical new feature which allows you to connect certain Pioneer CD tuners and the ANH-P10MP Navigation unit to your existing in-car digital display. Basic tuner information – such as frequency and track numbers – is output through the IP-Bus connection via an optional interface\*. (See pgs. 15 and 45 for full details).

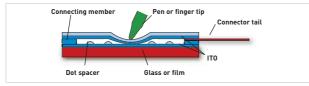
\* Please refer to http://www.pioneer-eur.com for a list of the available interfaces.

TFT LCD: TFT LCD's offer high-quality video pictures with wide viewing angles, perfect for in-car viewing



Touch Panel: Several Pioneer AV/Navi products and AV displays feature touch panel operation. Its easy-to-use interface allows you to control the entire in-car system just by touching the on-screen buttons. The touch screen technology is superfast, intuitive and precise, which makes it perfect to combine with a Pioneer navigation unit.

The basis of the touch panel display technology lies in two glass plates, the inside of which contain isolated resistive films. A finger on the top film presses both films together and the location of the touch is defined by the X/V voltage. The electronic circuit then converts this voltage into a command word to the computer. This technology works extremely quickly and precisely. The highly efficient anti-glare screen coating reduces the reflection without affecting the contrast. It does this by keeping the reflection of incoming light to a minimum while ensuring the backlight returning to the viewer for very high transparency. As a final rouch. Pioneer touch pand displays are fingerprint resistant, improving clarity of vision and reducing cleaning time!



#### AMPLIFIERS

Balanced Isolator Circuit: Prevents ground voltage flows from interfering with the signal. Pioneer improved existing designs by separating the left and right channel grounds. This puts each channel's signal wave in phase, which helps cancel noise components within the grounds. The output is cleaner, with less interference.

Class-D Amplifiers: Class-D amplifiers require less electrical current and produce less distorting heat, while 67 % of the power supply is transferred into the load. A digital signal is generated and filtered through the Low Pass Filter. The power output FETs ensure more efficient operation, and the design is more compact thanks to a smaller heat sink. The final result is undistorted and clear sound.

Hi-Volt Inputs: All of Pioneer's PRS series and bridgeable amplifiers have an Input Level Control, which is adjustable over 6.5 volts of input signal. This means that these Pioneer amplifiers can pick up signals from Hi-Volt headunits or line drivers, without any clipping.

Input Level Control: Level Control adjustment is provided to match the amplifier's input with the source unit's output. Proper adjustment ensures less noise and distortion.

Link Top: Amplifiers with "Link Top" are equipped with output terminals for convenient, efficient, low noise connection to an additional amplifier driving a subwoofer or to create a multi-channel speaker system.

Low Impedance Load Capability (High Current): Refers to power amplifiers that provide 1 - 1/2 times the power output of standard 4  $\Omega$  operation at 2  $\Omega$ . Since they have the power to drive more speakers, these amps also increase system flexibility by enabling the hook-up of multiple pairs of speakers.

MOSFET Power Supply: MOSFET power supplies offer significant advantages over traditional bipolar devices. Input power is applied with greater efficiency, stability and switching speed. The result is high-quality sound at peak power output, with less distortion and noise.

MOSFET Output Section: A MOSFET output section utilises a high-density circuit layout to reduce line impedance and maintain stability. Switching noise is eliminated, resulting in enhanced high-frequency range performance and improved linear response.

**PWM Regulated MOSFET Power Supply:** During the process of DC-to-DC step-up transforming, the voltage at the secondary winding must be kept stable despite voltage fluctuations or loads fluctuations during windings. Pioneer's PWM (Pulse Width Modulation) power supply design maintains stability between primary and secondary windings, and uses a MOSFET to switch the power supply on and off very quickly in response to input. This translates into cleaner output with less distortion.

Screw-Type Terminals: Pioneer uses Screw-Type terminals for the speaker connections as well as the power and ground connections. These terminals make a more reliable connection and allow the use of larger gauge wire for improved performance.

Speaker Level Input: This allows a Pioneer amplifier to be connected to an OEM radio without requiring costly add-on adapters. The added flexibility allows your Pioneer amplifier to be a part of your system as it grows and expands.

Variable Bass Emphasis: Allows bass frequencies to be boosted for each equipped amplifier. This allows you to set the optimal bass level for the speakers connected to that individual amplifier, allowing you to best utilise the headunit's tone controls for all speakers in the

#### SPEAKERS AND SUBWOOFERS

3-layer Fibre Woven Radial Surround: The innovative patent-pending 3-layer Fibre Woven Radial Surround consists of two outer layers and one inner layer of interwoven fibre. This results in an extremely durable and resilient surround which improves the high power capability. (See pg. 61 for full details).

ADMG (Aero-Dynamic Magnetic Gap): The ADMG is designed to overcome the mechanical and air pressure resistance typical of +170 dB situations. Each pole piece and top plate of the ADMG has an air channel in a narrow magnetic gap, which reduces physical resistance by over 10 %. This leads to greatly improved linearity at high power input.



Air Suspension Control Excursion System: An airtight space is built-in between the two cones, which enables the main cone to move solidly and smoothly. Furthermore, the drive cone deflects air pressure from the enclosure, which results in very tight bass — even in a very small enclosure. (See pg. 63 for full details).

Aluminium Die-Cast Basket with Bottom Hold Structure: Pioneer's aluminium die-cast basket securely supports the motor, and provides excellent damping characteristics to attenuate vibrations quickly and prevent distortion. (See pg. 62 for full details).

Bass Reflex: A loudspeaker design in which the sound waves generated by the driver's rear surface are allowed to pass through a port in the enclosure to reinforce bass response. This enables smaller drivers to offer increased bass response with less power

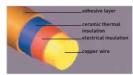
Butyl Rubber Edge: The rolled edge where the speaker cone meets the frame is made of a specially blended, highly durable and moisture-resistant compound. Butyl Rubber keeps the cone moving in a linear direction and stops the cone from vibrating. This leads to less distortion and superior frequency response.

Conex Damper: The damper guides the speaker cone and voice coil as it moves back and forth during use. While typical dampers are made of cloth, on many models Pioneer uses Conex. This special material provides increased rigidity, longer travel and improved moisture resistance.

**Conical Dome Technology:** The Pioneer IMPP cone woofers give smoother low to upper midrange reproduction and high rigidity through the use of highly Crystallised Polypropylene. The integration in the cone of conical domes (Bass Bullets) results in lower distortion, richer bass sounds and increased cone rigidity. Linear Power Response: With no roll to restrict the cone's movements, this innovative system mimics a finely tuned precision piston, smoothly moving the speaker cone up to a higher level than ever. And thanks to its unique edgeless diaphragm, there is no stress or distortion around its diaphragm. (See pg. 66 for full details).

Crystalline IMPP Cone: This material with high young modulus and high propagation rate makes the cone more rigid and improves the transient response, resulting in accurate sound.

**Double Damper:** A damper supports the speaker cone and guides the cone as it moves back and forth during use. By using two dampers instead of one in many of its speakers, Pioneer has greatly improved linearity over the entire frequency range of the speaker.



Dual Ceramic-Coated Voice Coil: The ceramic coating superbly insulates the voice coil wire, preventing short circuits due to overheating and drastically improving reliability; meaning double power handling capacity of a conventional voice coil.

**Dual Voice Coil:** The flexible wiring configurations of the Dual Voice Coil (DVC) subwoofers, when used in combination with a low load impedance compatible amplifier, can give even more powerful bass reproduction capability. DVC subwoofers have 2 voice coils, of 4 ohm impedance each. Connect the voice coils in parallel for the power of a 2 ohm subwoofer or connect them in series and get an 8 ohm subwoofer. These in turn allow various installation configurations and creation of a superior system.

Additionally, some headunits can combine MOSFET 50 W x 4 with the Crossover Network [Low Pass Filter] of the EEQ [Easy EQ] Plus system, enabling subwoofers to be connected without amplifiers.



Easy Connector: Most 17 cm and 13 cm custom-fit models are equipped with a handy Easy Connector, making it easier to cable them with the car's speaker connectors.

Foamed PPC (Pearl Polycarbon) Diaphragm: The Pioneer foamed PPC diaphragm is lightweight yet rigid, resulting in an improved low-mid transient response and smoother midranges, opening the sound character.

**Glass-Imide Voice Coil Bobbin:** Many Pioneer speakers utilise a voice coil whose cylinder is made from a woven fibreglass material bound by a polyimide resin. This Glass-Imide material has much higher heat resistance, which translates into higher power handling capability for the speaker and less distortion.

High-Power Motor Assembly: The huge motor structure provides more powerful force to move the cone assembly harder and consequently overcome the tremendous air pressure resistance. [See pg. 62 for full details].

IMPP™ (Injection-Moulded Polypropylene) Composite Cone: Pioneer uses a special injection moulding that ensures uniform cone thickness for superior linearity and clarity. Pioneer's "Composite" technology guarantees the perfect mix of polypropylene and carbon-fibre, graphite and other materials to optimise the speaker cone for its specific application (woofers, midranges, or tweeters, etc.).

Interlaced Fibre Reinforced IMPP Cone: Pioneer's patent-pending IMPP cone utilises a composite blend of interlaced long fibres (e.g. carbon fibres). This cone is extremely rigid yet lightweight, for low distortion and powerful bass at high sound pressure levels. [See pg. 61 for full details].

DuPont\* KEVLAR® brand Fibre Cone Woofer: This woofer was meticulously designed to reproduce real strings and vocals with less distortion. Thanks to the KEVLAR® brand Fibre Composite Cone, you can expect accurate, smooth sound from mid-bass to upper midrange frequencies. **Neodymium Magnet:** Neodymium has a high magnetic flux density. It is about 7.5 times stronger than a standard magnet and allows Pioneer speaker designers to make a tweeter that is smaller and has reduced distortion as compared to a model using a standard magnet.

**Overhung Surround:** By extending the wide-roll surround over the typical gasket area, this design provides 22 % more cone surface than traditional surround designs. The increased surface moves more area and achieves higher sound pressure levels. [See pg. 60 for full details].

**Power Blades:** Power Blades are protrusions integrated in the cone, which increase cone rigidity. Unwanted vibration is eliminated for the lowest distortion possible. The result is pure and accurate sound and maximum power handling.

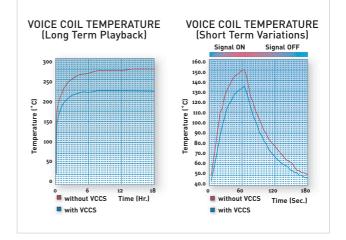
Pure Magnesium Balanced Dome: The revolutionary 0.05 mm thin Pure Magnesium Balanced Dome midrange and tweeter delivers superior sound details, smooth and high-speed sound reproduction, high sensitivity, low distortion, and a wide sound range — ideal for DVD-Audio reproduction. [See pg. 72 for full details].

Separate Component Speakers: These are speakers, such as woofers, midranges and tweeters, which reproduce only certain frequencies. Component Speakers not only reproduce the audio signal more accurately, but also increase the listener's control over the audio signal.

Swivel Mount Tweeter: The swivel mount tweeter offers the best of all installation possibilities. Featuring a specially designed flush-mount cup, this mounting system allows the tweeter to be angled in any direction for optimum imaging and placement.

Tall Dual-layer Surround: The tall dual-layer surround allows for extended excursion of the cone, while keeping the same cone surface area. It also handles the huge power increase for more controlled bass response, even at loud volumes.

VICCS (Voice Coil Cooling System): VCCS brings high power to the Pioneer subwoofers. The Voice Coil Cooling System takes the heat away from the 4-layer voice coil using a heat resistant, highly conductive aluminium bobbin. Plus, extra slits in the bobbin reduce eddy currents while radiating the heat. This results in distortion-free, tonally accurate sound.



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