MicW Audio

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Pictures for reference only, subject to our available products.

Professional Microphones

For Studio, Broadcast and Live applications.



Introduction

At MicW/BSWA, we are committed to the research, design and manufacture of high-quality microphones for measurement, studio, and broadcast use. Passionate about pure sound, captured or amplified, we always demand the highest levels of craftsmanship and employ dedicated audio engineers, test engineers and highly skilled craftsmen to produce the best possible products for an increasingly demanding market. All our microphones undergo rigorous testing in a range of studio and other recording sessions that replicate actual customer applications.

Only the best quality materials, such as nickel and titanium, are used in our microphone ranges. These include the nickel diaphragm N-Series and the titanium large diaphragm T-Series. Both of these ranges have impressive specifications that result in clear, pure sound. Our innovative design approach, combined with the use of high-grade materials, aims to bring you a new and exciting recording experience.

As well as researching new approaches, we constantly strive for innovation. 2011 saw the release of our i-Series external professional microphones for iPhone, iPad, iPod Touch and other mobile devices, with the i436 Class 2 mic in particular garnering an overwhelming amount of interest. For more information on this series, we invite you to read our new i-Series brochure, or visit http://www.micwaudio.com.

We are proud that our products can contribute to the optimization and refinement of your recordings, live performances, and broadcasts. Our goals for 2013/14 include enhancing our product ranges and delivering increasingly high levels of service. We also hope to meet you at one of this year's pro audio exhibitions where we will be pleased to demonstrate our products and discuss your particular requirements.

WU QUINLI, PhD, CEO

Mu 8:



T-Series unique LDC titanium capsule.



N-Series recording microphone for high-end recording and broadcasting.



L-Series professional Lavalier microphones for TV, ENG, video production and stage applications.



H-Series headworn microphones.



for interviews, ENG, podcasts and film/video production.



M-Series
measurement microphones complying
with the IEC 61094 and IEC61672 Sound
Level Meter standards.

The T-Series

General Description

The capsule is the most important element of any microphone. However in this series, it's the absolute highlight! Made from pure titanium, the T-Series 38mm capsule is manufactured under clean room conditions using a special secret process.

Why Titanium?

For a capsule of this size, the material must meet several very specific requirements:

- Light weight
- Robust construction
- Optimum vibration characteristics

This particular combination can only be found with pure titanium.

The capsule housing is made from solid copper, providing the necessary weight to effectively suppress resonances.

Following manufacture, each capsule spends 24 hours in a climate chamber being artificially "aged". This helps prevent the sound changes that can often occur through standard ageing.

Recommanded
Solo vocals
Grand piano
Upright piano
Cello
Clarinet
Tom-tom
Violin
Guitar amplifier
Bass amplifier
Woodwind
Marimba

Microphone Placement:

There is a common view in the recording industry that sound from a properly miked high-quality instrument, played by a skilled musician, can be sent directly to a DAW / recording device with little or no modification necessary.

The T-Series capsule housing contains an integral pop filter.

T-Series

MicW's T-Series offers new and innovative microphone

remarkable flexibility, the microphone's extremely wide

technology. The T551 cardioid LCD model boasts a 1.5" / 38

mm titanium diaphragm and an elegant body design. Offering

range, low-distortion performance and temperature/humidity

resistance makes it suitable for a wide range of applications.



T551 Cardioid LCD

MicW's T-Series offers new and innovative microphone technology. The T551 cardioid LCD model boasts a 1.5" / 38 mm titanium diaphragm and an elegant body design. Offering remarkable flexibility, the microphone's extremely wide range, low-distortion performance and temperature/humidity resistance makes it suitable for a wide range of applications.

Applications







Specifications

M	licrophone T551
Туре	Pre-polarized condenser
Capsule diameter	38mm (1.5")
Polar pattern	Cardioid
Sensitivity (±3dB)	40mV/Pa;
Frequency response	20Hz~20kHz
Power supply	48V phantom power
Max. SPL (<1% THD)	135 dB
Equ. noise level	<16 dBA
Output impedance	<200 Ohm
Length	163mm
Weight	340g
Connector	3-pin XLR





With their nickel diaphragm capsules and high-quality preamplifiers, N-Series microphones deliver an extremely natural, transparent sound with very high fidelity. A 5µm-thick nickel membrane, mounted in a stainless steel housing, is optimized and manually stretched to enable the best transmission. An elaborate process, it is nevertheless the only way to achieve such an extraordinary sound quality. N-Series microphones are also remarkable for their very low noise floor and impressive SPLs (up to 140dB max), along with an unparalleled frequency response of 20Hz - 40kHz. This enables the microphones to deliver pure sound with no added color. Due to their discreet size, the CN Series microphones are ideal for close miking of instruments during live performances and TV production work

Preferred	Recommanded
Acoustic guitar	Ensemble / choir
Acoustic bass	Solo vocals
Double bass	Grand piano
Backing vocals	Upright piano
Bongos	Cello
Congas	Clarinet
Cymbals	Tom-tom
Horn	Violin
Hi-hat	Guitar amplifier
Harmonica	Bass amplifier
Flute	Woodwind
Trumpet	Marimba
Trombone	Kick drum
Sax / brass	Mallets
Bassoon	



What's in the N-Series box: N-Series microphones are supplied in a hard plastic case with professional shock mount, windscreen and frequency test report included.

N101 Large Diaphragm

The N101 is an omnidirectional microphone with 1" capsule and totally transparent preamplifier. The capsule design includes stainless steel housing and a 5µm-thick nickel diaphragm. The diaphragm tension is carefully adjusted during manufacture to ensure a frequency response of 20Hz - 20kHz. The N101 offers a totally transparent audio path with an exceptionally low noise floor and an SPL handling capability of 135dB. The N101 Pair is a state-of-the-art stereo kit featuring two matched N101 microphones. Each pair has a guaranteed sensitivity match to within 0.5 dB and a phase match to within 59.

Applications







Specifications

Microphone N101	
Туре	Pre-polarized condenser
Capsule diameter	23.8mm (1")
Polar pattern	Omni
Sensitivity (±2dB)	50mV/Pa;
Frequency response	20Hz~20kHz
Power supply	48V phantom power
Max. SPL (<1% THD)	135 dB
Equ. noise level	<18 dBA
Output impedance	<200 Ohm
Length	157mm
Weight	165g
Connector	3-pin XLR



N151 Cardioid Large Diaphragm

The N151 is a cardioid microphone with pressure gradient capsule. The capsule uses similar construction materials to the N101, with a nickel diaphragm and stainless steel housing. It is carefully handcrafted to provide optimal neutrality, accuracy and extremely low distortion. The first-order cardioid pick-up pattern gives superb separation between sound sources while spot miking in every kind of live music situation.

Applications







Specifications

Microphone N151	
Туре	Pre-polarized condenser
Capsule diameter	23.8mm (1")
Polar pattern	Cardioid
Sensitivity (±2dB)	32mV/Pa;
Frequency response	20Hz~20kHz
Power supply	48V phantom power
Max. SPL (<1% THD)	137 dB
Equ. noise level	<19 dBA
Output impedance	<200 Ohm
Length	157mm
Weight	165g
Connector	3-pin XLR



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N201 Standard Omni

The N201 is an omnidirectional microphone with ½" capsule and totally transparent preamplifier. It is suitable for the most critical recording applications that require extreme performance and environmental stability. The microphone has a flat frequency response from 20Hz - 20kHz, with a low noise floor of 18dB(A). Acoustic accessories are also available for the N201 including directional modifiers and protection grids. These modify the acoustic behavior of the microphone in terms of directional pattern and high frequency response.

The N201 Pair is a state-of-the-art stereo kit featuring two matched N201 microphones. Each pair has a guaranteed sensitivity match to within 0.5 dB and a phase match to within 5°.

Applications







Specifications

Microphone N201	
Туре	Pre-polarized condenser
Capsule diameter	12.7mm (½")
Polar pattern	Omni
Sensitivity (±2dB)	40mV/Pa;
Frequency response	20Hz~20kHz
Power supply	48V phantom power
Max. SPL (<1% THD)	135 dB
Equ. noise level	<18 dBA
Output impedance	<75 Ohm
Length	155mm
Weight	120g
Connector	3-pin XLR



N241 Reference

The N241 is a reference microphone with ½" all-metal capsule. Carefully engineered to give long-term reliability and accuracy, it has a linear frequency response of up to 40kHz achieved through superior acoustic and mechanical design.

The N241 can handle extreme sound levels up to 140dB. Drums, percussion, brass and other powerful sound sources can be close miked with total accuracy for a clean, undistorted, dynamic sound. Designed according to IEC 61094 standard dimensions, the N241 can be calibrated using the BSWA CA 114 Sound Level Calibrator.

Applications







Specifications

Pre-polarized condenser 12.7mm (½")
12.7mm (½")
Omni
26mV/Pa;
20Hz~40kHz
48V phantom power
140 dB
<22 dBA
<750hm
150mm
120g



MicW's N-Series

The CN Series is - due to its small footprint - very suitable for TV and Video live productions.

CN201 Compact Microphone

The omnidirectional CN201 compact microphone has a similar ½" capsule to the N201. However, its small footprint makes it ideal for direct instrument miking in orchestral environments, as well as for use on drums, overheads, string sections etc.

Applications



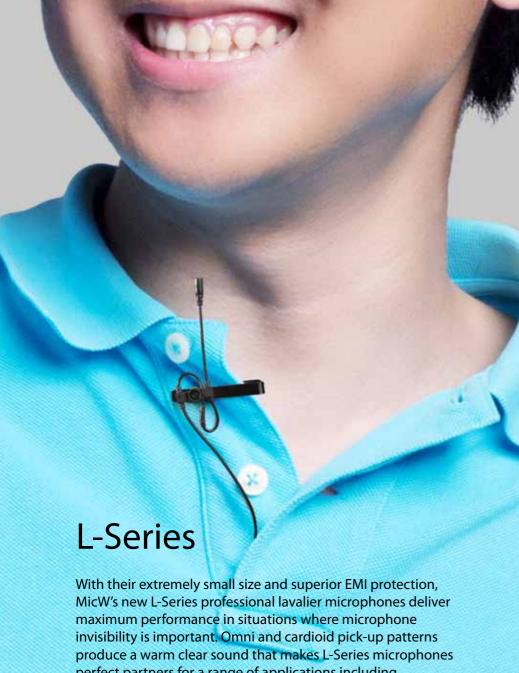




Specifications

•	
Micro	phone CN201
Туре	Pre-polarized condenser
Capsule diameter	12.7mm (½")
Polar pattern	Omni
Sensitivity (±2dB)	40mV/Pa;
Frequency response	20Hz~20kHz
Power supply	48V phantom power
Max. SPL (<1% THD)	135dB
Equ. noise level	<18 dBA
Output impedance	<200 Ohm
Cable length	3m
Mic Length	22mm
Weight	34g
Connector	3-pin XLR





perfect partners for a range of applications including broadcast, ENG, conferences and stage work.

L-Series

Lavalier Microphones

The omnidirectional L825 and cardioid L855 lavalier microphones are highly recommended for on air productions and forum discussions. They are also durable enough for ENG use. Their discreet dimensions make them well suited to television and video production.

L825 Omnidirectional

Applications







Specifications

Micro	phone L825	
Туре	Condenser	
Capsule diameter	4.0mm	
Principle of operation	Pressure	
Polar pattern	Omni	
Sensitivity (±3dB)	5.6mV/Pa	
Frequency response	20Hz~20kHz	
Max. SPL (<0.1% THD)	126dB	
Equ. noise level	31dB(A)	
Power	0.8-5V DC	
Operating temperature	-17°C ~+60°C	
Cable length	1.6m	
Weight	1g	
Connector	Microdot*	



MicW's L-Series

The L-Series has been designed with a Microdot connector, MicW also provides several breakout adapters (see photo below) for a wide range of wireless systems or XLR input applications.

* Connector options

- LC131AK Microdot to TA3F for connection to an AKG transmitter.
- LC241SH Microdot to TA4F for connection to a SHURE transmitter.
- LC031SE Microdot to mini jack with thread for connection to a Sennheiser transmitter.







- LC032SE Microdot to Lemo, for connection to a Sennheiser transmitter.
- LC441MW Microdot to mobile device for connection to iPhone, iPad and other smart devices.





The L825 Kit contains the following items:





H-Series

Headworn Microphones

The headworn omnidirectional H825 is designed for applications such as spoken word, singing, keyboard/vocal performance and other voice applications that require a headworn microphone with superior noise rejection and a smooth, natural-sounding frequency response.

The omnidirectional H825 has an extremely small capsule diameter (only 4mm) and is fitted with a very thin but robust cable, which is durable enough for ENG use.



Applications







Specifications

Microphone H825	
Туре	Condenser
Capsule diameter	4.0mm
Principle of operation	Pressure
Polar Pattern	Omni
Sensitivity(±3dB)	5.6mV/Pa
Frequency response	20Hz~20kHz
Max. SPL(<0.1% THD)	126dB
Equ. noise level	31dB(A)
Power	0.8-5V DC
Operating temperature	-17°C ~+60°C
Cable length	1.6m
Connector	Microdot*

With optional adapters, the microphone can be used with virtually any manufacturer's wireless beltpack system.

* Connector options

• LC131AK Microdot to TA3F for connection to an AKG transmitter.

• LC241SH Microdot to TA4F for connection to a SHURE transmitter.

• LC031SE Microdot to mini jack with thread for connection to a Sennheiser transmitter.







• LC032SE Microdot to Lemo, for connection to a Sennheiser transmitter. • LC441MW Microdot to mobile device for connection to iPhone, iPad and other smart devices.



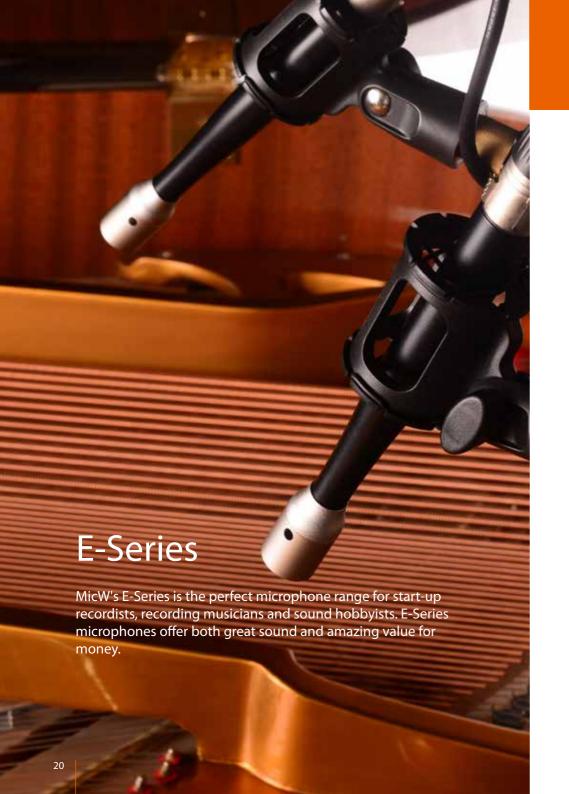


The H825 Kit contains the following items:

- 1 Connector of choice
- Microdot to Sennheiser Minijack (LC031SE) or
- Microdot to AKG (LC131AK) or



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E-Series

"E" stands for Entry Level. This microphone range is derived from the N-Series, but uses a less expensive capsule. Nevertheless, the polymer gold-layered diaphragm captures every detail in the sound field. Offering amazing value for money, E-Series microphones are ideal for start-up sound engineers, recording musicians and hobbyists.





Preferred	Recommanded
Acoustic guitar	Ensemble / choir
Acoustic bass	Solo vocals
Backing vocals	Grand piano
Bongos	Upright piano
Congas	Cello
Cymbals	Clarinet
Horn	Tom-tom
Hi-hat	Violin
Harmonica	Guitar amplifier
Flute	Bass amplifier
Trumpet	Woodwind
Trombone	Marimba
Sax / brass	Kick drum
Outdoor bird sounds	Mallets
Overdubs	

E216 Omnidirectional

The E216 is an omnidirectional microphone with ½" capsule. It offers extraordinary performance at a low cost. The microphone's polymer diaphragm (covered with a thin gold layer) and its copper housing yield a flat frequency response up to 20kHz, with excellent dynamic range and low self noise. The E216 is ideal for miking delicate instruments and for spot miking during live performances and TV/ broadcast productions.

Applications







Specifications

Microphone E216	
Туре	Pre-polarized condenser
Capsule diameter	12.7mm (½")
Polar pattern	Omni
Sensitivity (±2dB)	30mV/Pa;
Frequency response	20Hz~20kHz
Power supply	48V phantom power
Max. SPL (<1% THD)	135dB
Equ. noise level	<28 dBA
Output impedance	<75 Ohm
Length	155mm
Weight	120g
Connector	3-pin XLR



E150 Series Modular Microphone

New Technology - Natural Sound.

With the E150 Series, MicW once again breaks new ground. For the first time, a micro-perforated stainless steel panel is used as a front grille - an incredible 2,300 holes with a diameter of just 0.25mm!

The resulting effect on the sound is significant. Popping and sibilance are greatly reduced without any negative impact on the overall quality.

This technology is very common in aerospace and industrial audio measurement. It enables every nuance (detail) of the signal is transmitted unaltered*. Recordings sound extremely natural and "rounded", with high resolution and transient response.



Applications







Specifications

Microphone E150		
E151 E152 E153		
Cardioid Hypercardioid Omni		
20 mm		
-42 dB re. 1v/Pa		
20 Hz ~ 20kHz		
48V phantom power		
< 1% up to 135 dB SPL peak		
< 17 dBA		
< 100 Ohm		
155mm		
185g		
3-pin XLR		

^{*}The polar pattern and frequency response graphs are available on the MicWaudio.com website.



MicW's E-Series

The E150 modular microphone offers a choice of omni, cardioid and super-cardioid condenser capsules. The following packages cater for a range of recording applications and are highly recommended for students and start-up engineers:

E150 Set: microphone preamplifier; cardioid capsule; hyper cardioid capsule; omni capsule; windscreen; shock mount; box; user manual

E150 Stereo Set: 2 x microphone preamplifier; 2 x cardioid capsule; 2 x super cardioid capsule; 2 x omni capsule; 2 x windscreen; 2 times shock mount; user manual



E151 cardioid: microphone preamplifier; cardioid capsule; windscreen; shock mount



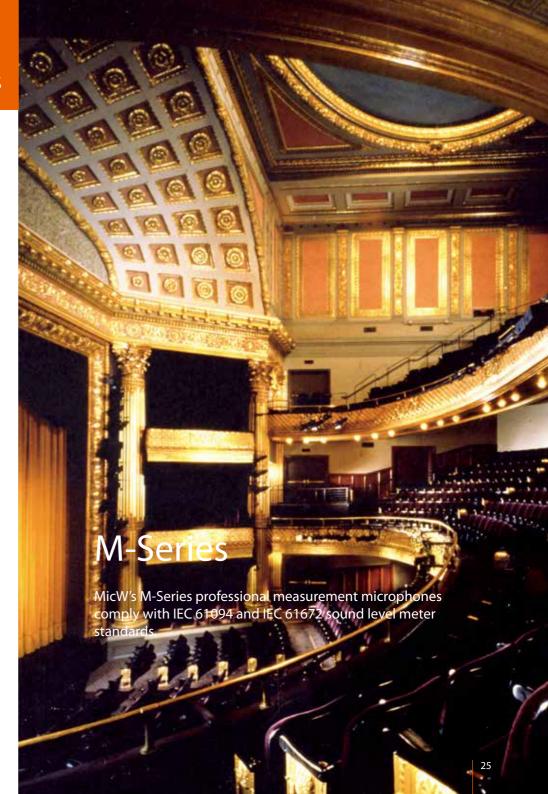
E152 super cardioid: microphone preamplifier; super cardioid capsule; windscreen; shock mount



E153 omni: microphone preamplifier; omni capsule; windscreen; shock mount







M-Series

Measurement Microphones

What makes a good measurement microphone for audio applications? In addition to frequency response, sensitivity, omnidirectional polar pattern and dynamic range, the IEC 61094 specification for measurement microphones lists two further requirements:



- Calibration: The microphone should be capable of being calibrated by one of the following methods:
 - Calibration methods specified in IEC 61094-2 or IEC 61094-3.
 - Comparison with a standard calibrated laboratory microphone.
 - Calibration using a sound calibrator as specified in IEC 60942.

The majority of measurement microphones currently on the market lack calibration capability due to structural or dimensional limitations.

ullet Environmental Sensitivity Stability: The standards also specify that microphone sensitivity changes due to temperature, humidity and static pressure should be within ± 0.03 dB/C, ± 0.001 dB/% and ± 0.03 dB/kPa. Most currently available measurement microphones do not meet these criteria, or are not tested under specific environmental conditions.

MicW/BSWA has 14 years of experience in manufacturing measurement microphones for industrial use. The M-Series measurement microphones for audio applications reflect that experience.







M416 Measurement Microphone

The M416 is a calibrated measurement microphone with a detachable $\frac{1}{2}$ capsule. It complies with the IEC 61672 Class 2 sound level meter standard and is suitable for measuring sound pressure in simple sound fields such as home recording studios and high-end hift rooms.

Applications







Specifications

Microphone M416	
Type	Pre-polarized condenser
Capsule diameter	7mm (1/4")
Polar pattern	Omni
Sensitivity (±2dB)	30mV/Pa;
Frequency response	20Hz~20kHz
Power supply	48V phantom power
Max. SPL(<1% THD)	130 dB
Equ. noise level	<30 dBA
Output impedance	<600 Ohm
Maximum sensitivity change due	
to Temperature -10 to 50°C	+-1.0 dB
Humidity up to 98%RH	
Pressure: 65 to 115 kPa	
Length	144mm
Weight	110g
Connector	3-pin XLR



MicW's M-Series

M215 Measurement Microphone

The M215 is a calibrated measurement microphone with a detachable ½" capsule. It complies with the IEC 61094 and IEC 61672 Class 1 sound level meter standards that are widely used during technical reference measurement in professional audio environments such as theaters, recording studios, control room design and stage acoustics.

Applications







Specifications

Microphone M215		
Type	Pre-polarized condenser	
Capsule diameter	12.7mm (½")	
Polar pattern	Omni	
Sensitivity (±2dB)	40mV/Pa;	
Frequency response	20Hz~31.5kHz	
Power supply	48V phantom power	
Max. SPL (<1% THD)	135 dB	
Equ. noise level	<18 dBA	
Output impedance	<75 Ohm	
Temperature coefficient (dB/°C)	0.009	
Humidity coefficient (dB/%RH)	0.001	
Pressure coefficient (dB/kPa)	0.008	
Length	155mm	
Weight	120g	
Connector	3-pin XLR	



Accessories



PP190 Shock mount for N-Series



PP290 Shock mount for E-Series



PP390 Mic holder for M-Series



Shock mount for T-Series



Shock mount for T-Series



WS015 Windscreen for E150 Series



WS018
Windscreen for L-Series,
H-Series



WS034
Windscreen for M-Series



WS051 Windscreen for 1" mic (50mm diameter)



WS052 Windscreen for ½" mic (50mm diameter)



WS054
Windscreen for ¼" mic
(50mm diameter)



WS092 Windscreen for ½" mic (90mm diameter)



WS094 Windscreen for 1/4" mic (90mm diameter)



AM032 Acoustic equalizer (30mm diameter)



AM042 Acoustic equalizer (40mm diameter)



AM052 Acoustic equalizer (50mm diameter)



LC131AK Microdot to TA3F for connection to an AKG transmitter



LC441MW Microdot to mobile device for connection to iPhone, iPad and other smart devices



PI50 Microdot to XLR adaptor – provides 48V phantom power



ATO11 Storage tube for M-Series



GD012 Grid for N201 and N241



GD031 Grid for N101 and N151



GD041 Grid for N101 and N151



GD051 Grid for N101 and N151



PB025 Plastic box for L-Series



Plastic box for CN201 and M-Series



PB035 Plastic box for H-Series



PB040 Plastic box for E150 Series



CA114 Sound level calibrator



Collar clip for CN



CLO12 Collar clip



CLO28 Crocodile clip



PB050 Plastic box



PB060 Plastic box



Windscreen for L-Series



LC031SE

Microdot to mini
jack with thread
for connection to a
Sennheiser transmitter



LC032SE
Microdot to Lemo,
for connection to a
Sennheiser transmitter



LC241SH
Microdot to TA4F for
connection to a SHURE
transmitter

Company profile

Renowned for its pure clean sound, quality craftsmanship and elegant styling, MicW prides itself in designing and manufacturing high-quality, high performance microphones for a wide range of audio measurement and recording applications. MicW microphones and accessories are a perfect choice when only the best will do for vocal, instrumental, broadcast, film and video recording.

MicW's product ranges include the E-Series entry-level microphones, i-Series microphones for iOS and other portable devices, L-Series lavalier microphones, M-Series test measurement microphones, N-Series nickel diaphragm high performance microphones, H-Series headworn microphones, and the T-Series titanium diaphragm large diameter microphone.

Features

- Flat frequency response for pure sound without unwanted coloring
- Titanium, nickel, stainless steel and polymer composite capsule diaphragm designs for the best possible microphone frequency response
- Excellent high humidity performance
- Fast transient response, wide dynamic range, low noise floor with models that easy handle up to 160 dB SPL
- Quality assurance through ISO 9001 certification



Heritage

MicW is a division of BSWA Technology Ltd., a measurement microphone company. BSWA was founded in 1998 as a joint venture between the Chinese Academy of Sciences and five sound engineers looking to market high-quality affordable measurement microphones. Today, BSWA microphones are widely used in aerospace, automotive and environmental noise measurement. The experience and expertise gained from designing and manufacturing measurement microphones has enabled BSWA to create MicW, a microphone brand primarily aimed at the pro audio and music oriented markets.

Unique methods are used in the production of MicW's microphone capsules (the heart of any microphone), resulting in enhanced performance, increased reliability, greater sound definition and transparency. MicW capsule diaphragms are made from titanium, nickel, stainless steel and polymer composites, ensuring that the best material is always used for a specific design. Carefully selected quartz insulating material is also used in the microphone construction to guard against high temperatures and humidity. Each capsule is individually calibrated using the free field method in accordance with IEC 61049 measurement microphone standards, and "aged" in an environmental chamber for long-term stability.

Quality Assurance

As a leader in the field of microphone technology, MicW invests heavily in product research and development. The company's main design campus and manufacturing facilities are located in Beijing, China and include anechoic chambers, clean rooms, environmental rooms and production areas.

MicW is committed to total quality management and is ISO 9001 certified, ensuring that every product meets stringent performance standards.





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