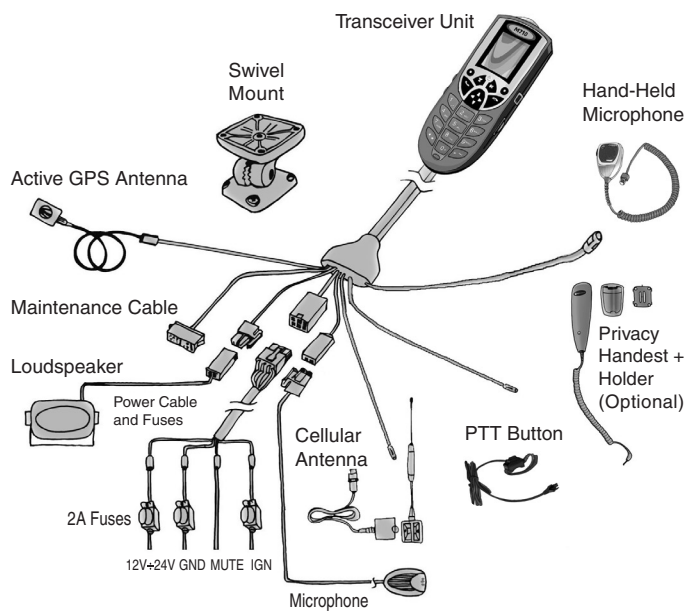


M710 Installation Guide

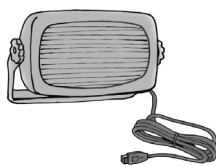
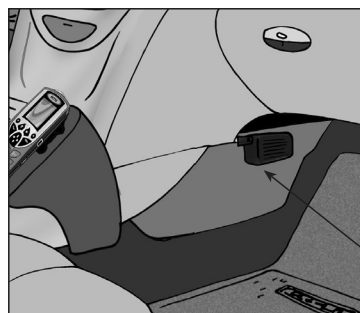
Product parts list



6889192v48

Motorola Proprietary 1

Speaker



Install the speaker on the side of the central console, ideally alongside the legs of the passenger sitting beside the driver, as far as possible from the microphone.

Thread the speaker cable under the carpet along the floor of the vehicle.

Plug the speaker cable into the compatible connection in the control cable.

Verify that the cable does not interfere with the proper operation of the vehicle and/or its components.

Do not conceal the speaker behind any obstacle such as dashboard, carpet or any other barrier which will result in bad audio quality.

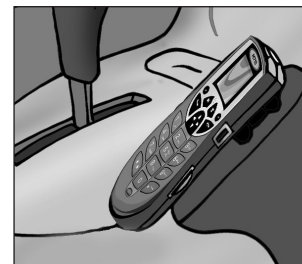
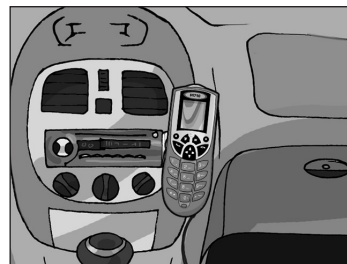
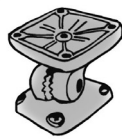
Attention!

The speaker and microphone (which is fitted on the sun visor above the driver) should be pointed towards opposite directions to avoid echo. speaker slots should be pointed towards passenger door.

Motorola Proprietary 4

Transceiver Unit

Unit Holder



When installing the fixed mobile car phone avoid positioning the transceiver unit where it may disrupt the proper operation of the vehicle and/or its components, such as car stereo, air bags, cubbyhole, glove compartment, ashtray, lighter, gear stick, hand brake, etc...

Attach the fixed mobile car phone on a stable surface, in a position that is safe and convenient for the driver to use.

Special warning:

Do not position the transceiver unit in front of the air bag or where it may impair air bag performance, as the air bag might inflate in an accident and cause damage.

Verify that the control unit does not face the sun or source of humidity, such as air conditioner vents.

Motorola Proprietary 2

Antennas

Specifications

Physical & Environmental Specifications

- * GPS Antenna connector: SMA Male
- * Radio iDEN Antenna connector: Mini-UHF male
- * Cable for the cellular: RG58U, PVC coated / polyethylene dielectric cable, length 5M / 16Ft
- * Cable for the GPS: RG174U, PVC coated / polyethylene dielectric cable, length 5M / 16Ft
- * Operating temperature: -30 °C / -22 °F to +85 °C / +185 °F
- * Heat and UV stabilized
- * All parts meet Flammability UL94 V0 grade
- * Adhesive pads: Operating temperature: -40 °C / -40 °F to +90 °C / +194 °F and bond not effected by moisture

Electrical - GPS

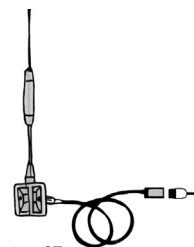
- * Impedance: 50Ω
- * GPS Module Noise Figure: 2dB max
- * Overall Gain: 26dB (GPS Antenna Element Gain 0dBi Min)
- * Polarization: Right Hand Circular
- * Operating voltage: 3V
- * Current (typical): 14mA
- * VSWR <2.0:1 @ 1575.4MHz +/- 2MHz

Electrical - Radio iDEN

- * Impedance: 50Ω
- * Frequency Band:
 - * 800 MHz Band: TX 806 - 870 MHz.
 - * 900 MHz Band: TX 896 - 940 MHz.
- * VSWR: Tx<=1.5:1; Rx <=2:1
- * Gain: +3dBi @ 820 MHz
- * Polarization: Vertical

Attention!

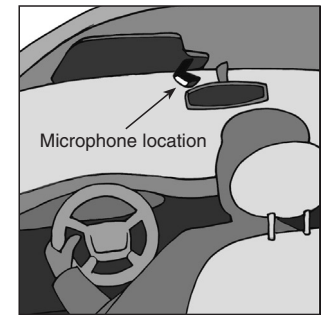
Ensure that antenna is at least 20cm from the driver or passengers



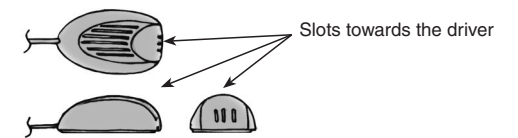
Motorola Proprietary 5

Microphone

Install the microphone at a distance of no more than 30 cm (12 inch) away from the driver's mouth, ideally on the upper right hand side of the sun visor and away from any noise source such as windscreens, window, fan/air conditioner, car stereo etc.



Make sure the microphone is at a distance of at least 1.5m (4.9 ft) from the speaker and is not directed towards the speaker. Make sure that the microphone is correctly positioned. See picture below for microphone position.



Do not thread the microphone cable close to antenna cable, to avoid audio interference.

Plug the microphone cable into the compatible connection in the control cable.

Important: Make sure that the microphone cable does not come in contact and does not interfere with the steering wheel and/or the pedals of the vehicle.

Attention!

The speaker and microphone (which is fitted on the sun visor above the driver) should be pointed towards opposite directions to avoid echo.

Motorola Proprietary 3

Antenna Installation

The preferred position for the antenna is on the upper right side of the windshield. Should additional antennas be installed in the vehicle, the antennas should be located at least 30cm apart.

Remember:

In certain car models (such as "Renault Megane" and "Renault Kangoo"), the anterior windshield has a radiation filter, and therefore it is necessary to paste the antenna in the side or rear windshield only.

Attention!

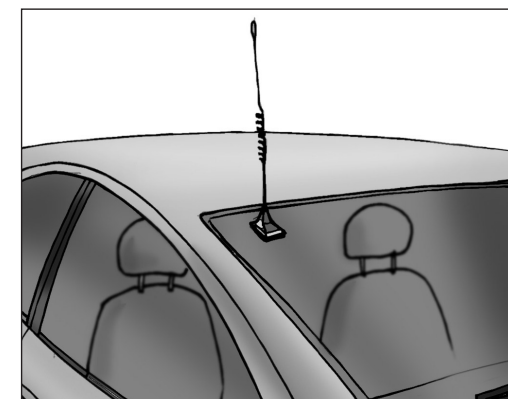
Do not thread the antenna cable close to the microphone cable to avoid audio interference.

Use original antenna plug and clamping tools only.

Test antenna and cable performance using a VSWR meter.

Note:

Avoid proximity to the rear fog heater metal strips. In case the rear heater cannot be avoided, the metal base area of the antenna should be clear from strips. The metal base area of the antenna and coupling box should be mounted vertically only.



Motorola Proprietary 6

Cable connections

Power

Connect the **RED** wire to a positive (+) 12V ÷ 24V pole for steady power supply. Ensure the use of a 2A/250V fuse.

Ground

Connect the **BLACK** wire to a negative pole (-) in the vehicle body. Ensure the use of a 2A/250V fuse.

Ignition

Connect the **GREEN** wire to car IGN voltage and check the appropriate voltage using voltmeter. This connection switches the phone on when turning the ignition on and it switches the phone off when turning the ignition off. Ensure the use of a 2A/250V fuse.

Entertainment Mute

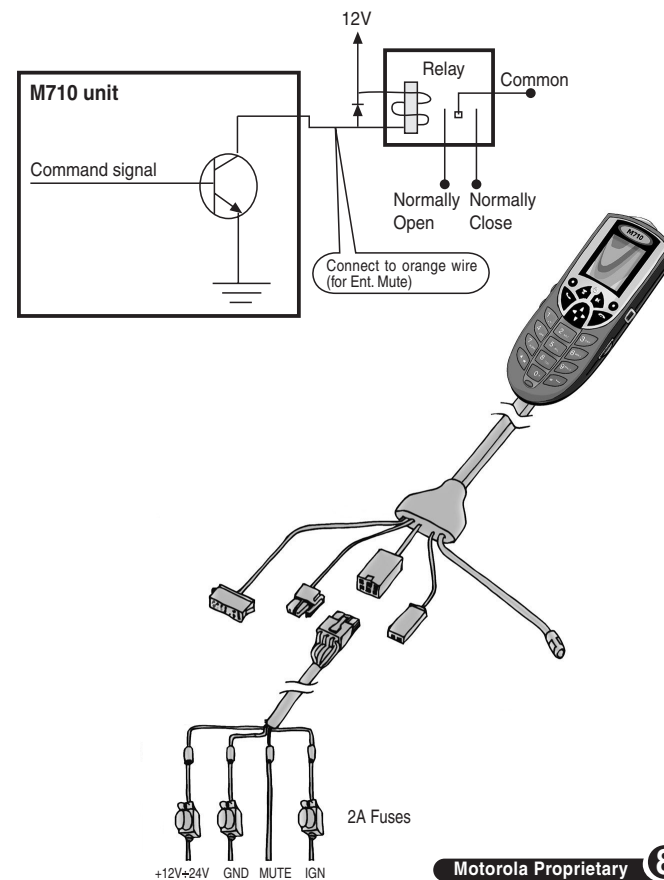
Connect the **ORANGE** wire to the car stereo system entertainment mute connection to mute the stereo system when receiving or dialing a call.

*Ent. Mute is an optional feature.

Motorola Proprietary 7

Cable connections (continue)

Entertainment Mute Open Collector connection

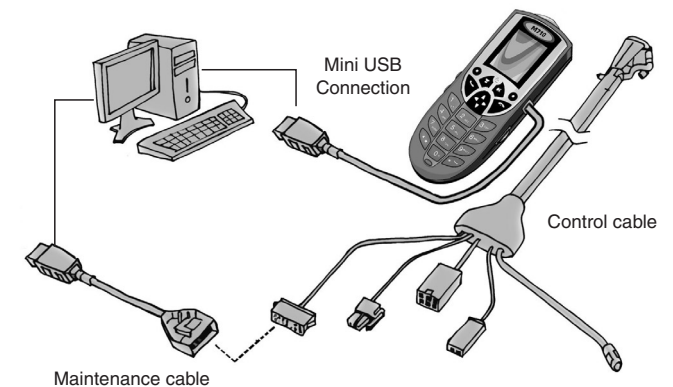


Motorola Proprietary 8

Data connection/maintenance cable

The Data connection wire in the mini USB connection in M710 enables using the fixed mobile car phone as a modem or to synchronize data with external computers.

The data connections also enable authorized technicians to maintain the fixed mobile car phone for technical service purposes (Software programming).



Motorola Proprietary 9

Connections summary

Wire color	Function	Connect to...	Ensure...
RED	To supply steady (+) power source.	12V or 24V steady power. An additional fuse is supplied that must be connected to the positive (+) pole.	The use of a 2A/250V fuse.
BLACK	To supply steady (-) power source.	Vehicle body	That the contact point is only connected to the vehicle body.
GREEN	To switch the phone on when the car ignition is turned on, and off when the car ignition is turned off.	IGN voltage	The appropriate voltage using voltmeter. Ensure the use of a 2A/250V fuse.
ORANGE	To mute the car stereo system when receiving or dialing a call.	Car stereo system Entertainment Mute connection (optional)	That the connection between the Fixed Mobile Car Phone and car stereo system should be done by an authorized installer only. sink should be up to 150mA.

Motorola Proprietary 10

Accessories

Hand-Held Microphone

Mount the Hand-Held Microphone in the vehicle where it will not disrupt the proper operation of the car and / or its components. Plug the Hand-Held Microphone into the hand-held microphone socket in the control cable.



Privacy Handset

Mount the privacy handset using the plastic base and connect the handset jack to the socket at the end of the control cable.



PTT Button

Mount the PTT Button in the vehicle where it will not disrupt the proper operation of the car and / or its components. Plug the PTT cable into the PTT socket in the control cable.



Motorola Proprietary 11

Special functions

Voice Activation Dialing key (VAD)

The VAD is the blue illuminated key on the top side of the main control unit. This special button, designed as a mouse key is a multiple operations button which enables the user to voice activate Name dialing, notice incoming calls, record voice memos and calls and end or receive phone calls by clicking on the button once.

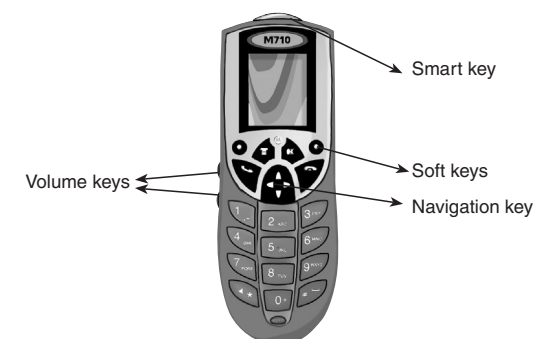
Volume keys

The volume keys, located on the left hand side of the main control unit enable the users to adjust audio volume during a call and to adjust the ringer volume during stand by. While installing the phone in the vehicle don't place the main control unit close to the car dashboard or to any other component that might interrupt with the volume keys operation.

Soft keys and shortcuts

The two soft keys located on the lower part of the phone display enable users to customize their phone and set useful menus for their convenience and intuitive location on their phone display.

The navigation key enables the users to launch pre-defined menus in a very quick and intuitive way instead of entering the phone menus. The navigation key setup may vary from model to model.



Motorola Proprietary 12