

GMLN7825_Junction Box Installation Manual





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Disclaimer

Please note that certain features, facilities, and capabilities described in this document may not be applicable to or licensed for use on a specific system, or may be dependent upon the characteristics of a specific mobile subscriber unit or configuration of certain parameters. Please refer to your Motorola Solutions contact for further information.

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Safety Information

RF Energy Exposure and Product Safety Guide for Mobile Two-Way Radios

ATTENTION!

This radio is restricted to Occupational use only. Before using the radio, read the RF Energy Exposure and Product Safety Guide for Mobile Two-Way Radios that contains important operating instructions for safe usage and RF energy awareness and control for Compliance with applicable standards and Regulations.

For a list of Motorola Solutions-approved antennas and other accessories, visit the following website: http://www.motorolasolutions.com

Under Innovation, Science, and Economic Development Canada (ISED) regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by ISED. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This radio transmitter has been approved by ISED to operate with Motorola Solutions-approved antenna with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Read Me First

This manual is intended for use by service technicians familiar with similar types of equipment. This manual contains information required for the installation of the equipment described and is current as of the printing date. Changes that occur after the printing date are incorporated as a complete Manual revision or alternatively as additions. The radio platform is available in different software versions and various hardware configurations around the mobile radio. Different configurations are reflected in the product names. This manual separates information between the different products when a difference occurs.



WARNING: The junction box (GMLN7825_) is only compatible with MXM600.

NOTE: Only trained personnel can install the mobile terminal. All installations must take place in accordance with the requirements of the vehicle and antenna manufacturer or supplier.

General Information

The junction box assists the installation of the dash and remote mount configurations. The junction box provides easy access for terminal flashing and key loading for encryption by using laptop.

- CAUTION: This information is useful when programming or troubleshooting a radio.
- The junction box can be installed horizontally or vertically.
- Use the connecting cable for installation purposes. See Connector 1.
- The junction box has no connector sealing and is designed for use in dust and water protected location only.
- Ensure that the pin 7 of the Screw Head terminal is connected to the ground during the installation. See Connector 4.

Rear and Front Connectors

Figure 1: Rear Connectors



Table 1: Rear Connectors Description

Label	Name	
1	Connecting cable PMKN4300 (length 2 m) Connecting cable PMKN4301 (length 4 m) Connecting cable PMKN4302 (length 5 m) NOTE: The connecting cable between the junction box and the mobile (MXM600) terminal (accessory plug on the rear side of the transceiver) is for installation purposes only. The cable must be fastened on the junction box with the plug-screws.	
2	GCAI connector for Mobile Microphone Port (MMP) audio accessories	

Figure 2: Front Connectors



Table 2: Front Connectors Description

Label	Name	
3	USB-C for programming and data (PEI)	
4	Accessory plug. See Table 3: Connectivity on Accessory Plug on page 2.	

Table 3: Connectivity on Accessory Plug

Pin	Accessory
1	Speaker +
2	Speaker -
3	External PTT
4	Ignition sense cable
5	Emergency cable
6	1-wire
7	GND
8	Mic +1
9	Mic GND
10	Mic +2 (Smart noise canceling visor mic)

Connection Plan for Accessory Plug

Table 4: Connection Plan for Accessory Connector Kit				
Part Number	Description	Cable Connectivity		
PMKN4119	Speaker extension cable	1 5 m		
PMKN4120	Ignition sense cable	Ignition 4 A Ignition 4 +12V Car Ignition Switch		
PMMN4087	Visor-Mounted Microphone	MIC+1 8 MIC GND 9 MIC GND 9		
RLN4836	Tri-state emergency foot switch and cable	Emergency 5		
RLN4858	Goose neck PTT ¹			
RLN5926	Push button for Push-to-Talk (PTT) ¹	External PTT 3/ Emergency 5 GND 7		
RMN5054	Smart-visor microphone	MIC+1 8 MIC+ MIC_GND 9 MIC- 1-WIRE 6 ADS		
RSN4002	Speaker 13 W	_ 4		
RSN4003	Speaker 7.5 W	SPKR-2 >		

Table 4: Connection Plan for Accessory Connector Kit

Service

The Printed Circuit Board (PCB) of your junction box is not repairable. If necessary, order a new junction box.

¹ You can use this accessory for PTT, or Emergency function.

Notes





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