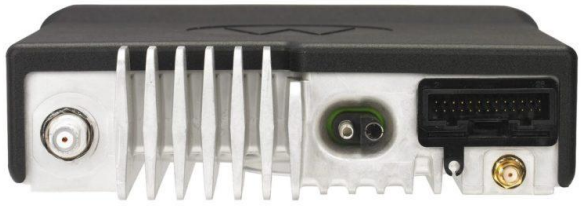
Using The Motorola DM4000 & DM4000E Series Rear Accessory Port

by Tech *on* 05/08/2020

The Motorola DM4000 and the newer Motorola DM4000E radios have a rear 26-pin accessory connector. This can be used for a number of different purposes including programming and controlling external equipment.

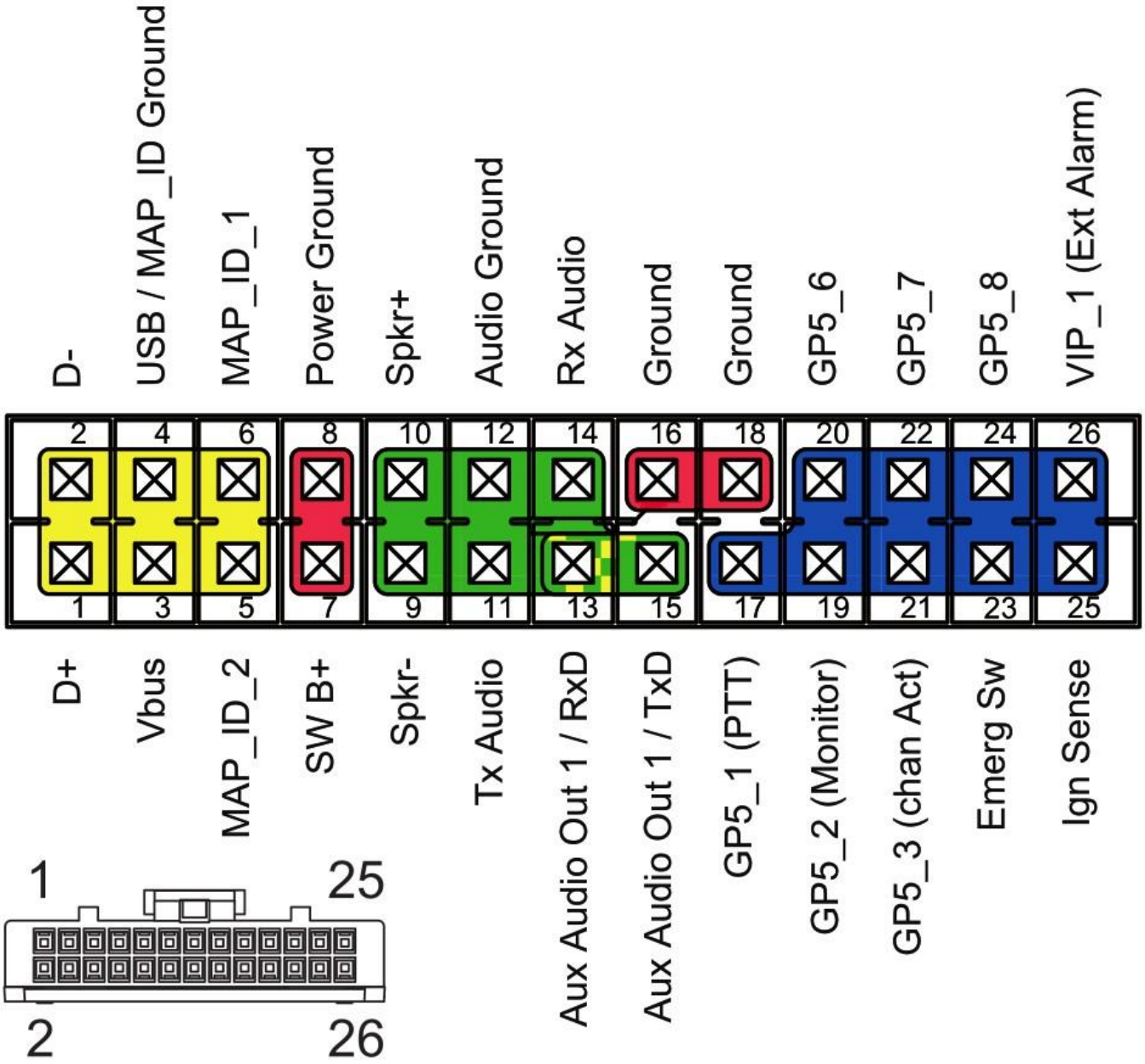


Motorola Solutions has asked us to place this note on this page: Motorola terms and conditions apply with regard to responsibilities and warranties for what is connected through this connector kit.

This article applies to the following radios:

- DM4000: DM4400, DM4401, DM4600 and DM4601
- DM4000E: DM4400e, DM4401e, DM4600e and DM4601e
- DM3000: DM3400, DM3401, DM3600 and DM3601
- XPR5000: XPR5350 and XPR5550
- XPR5000e: XPR5350e and XPR5550e

Pin Numbering



Pin Out

Pin No.	Pin Name	Pin Function	Pin No.	Pin Name	Pin Function
1	USB+	USB + (Data)	14	Rx Audio	Receive Live Audio[2]
2	USB-	USB - (Data)	15	AUX Audio 2	PUBLIC Address 2
3	VBUS	USB Power (5V from USB accessory/cable)	16	GND	Ground
4	USB/MAP_ID GND	USB/MAP_ID Ground	17	GP5-1 (PTT)	5V Level GPIO, PTT Input[1]
5	MAP_ID_2	Accessory Identifier	18	GND	Ground
6	MAP_ID_1	Accessory Identifier	19	GP5-2 (Monitor)	5V Level GPIO, Monitor Input[3]
7	SW B+	Switched Battery Voltage	20	GP5-6	5V Level GPIO
8	PWRGND	Ground	21	GP5-3	5V Level GPIO, Channel Activity Function
9	SPKR-	Speaker - (3.2 ohm minimum impedance)	22	GP5-7	5V Level GPIO
10	SPKR+	Speaker + (3.2 ohm minimum impedance)	23	EMERGENCY	Emergency Switch Input
11	Tx Audio	Rear External Microphone Input[4]	24	GP5-8	5V Level GPIO
12	Audio GND	Audio Ground	25	IGN SENSE	Ignition Sense
13	AUX Audio 1	PUBLIC Address 1	26	VIP-1	12V Tolerant, 5V GPIO, External Alarm

^ USB refers to USB cables PMKN4010 (http://www.radiotronics.co.uk/motorola-pmkn4010) and PMKN4016 (https://www.radiotronics.co.uk/motorola-pmkn4016) (special order item)
* DB25P refers to PMKN4016 (https://www.radiotronics.co.uk/motorola-pmkn4016) only

Rear Connector Options

In order to use this rear accessory connector, you will need the following connector kits:

Order Code	Description
PMLN5072 (http://www.radiotronics.co.uk/motorola-pmln5072)	Complete rear accessory connector kit including the black connector, crimp pins and a cable tie. Water-resistant boot not included.
RKN4136 (http://www.radiotronics.co.uk/motorola-rkn4136)	Ignition sense cable kit. Also requires the PMLN5072 above.

Also see: Motorola DM Series Mobile Microphone Port (MMP) Interface Wiring (https://www.radiotronics.co.uk/blog/2021/01/motorola-dm-series-mobile-microphone-port-mmp-interface-wiring/)

Comments:

Sgt Porter

29/03/2023