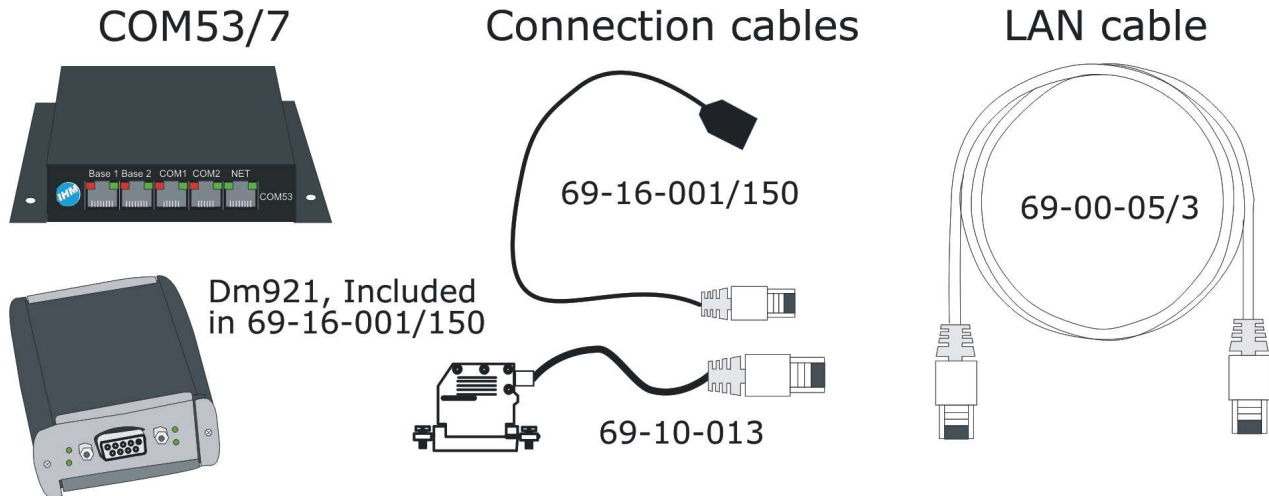


87-COM53/7 - MOTOROLA – MOTOTRBO - DMR

PRODUCT SHEET

The COM53/7 is a VoIP Base Station Controller for one MOTOROLA DM4600 or XPR5580 MOTOTRBO terminal.

The COM53/7 kit includes interfaces cables for connection of one radio unit.



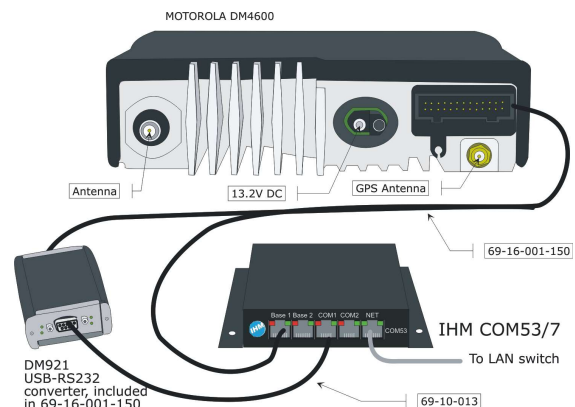
The radio interface

The DM4600 or XPR5580 terminal shall be programmed with the required Talk Groups (TG).

Please note: The radio unit is not part of the IHM delivery.

Functions included

- Audio input and output to and from the radio.
- PTT output (relay), TG communication is always performed in simplex mode, whereas Private Calls can be performed in either duplex or simplex mode.
- RSSI indicates the received field strength from the DMR backbone.
- Power output control, Used with IHM MCS Flexible series, the power output can be set to low or high.
- Talk Groups (TG), the radio is typically used with several TG's. The TG, found in the radio shall be coded in the ActServ.ini file of the connected system, provided connected to an MCS PnP system, this can be setup using the MCS Setup application.
- Private calls, private calls can be performed to other DMR terminals in simplex mode.
- Text messaging, SDS messages can be sent and received.



Functions – not supported

- Analogue mode



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Technical data

Parameter	Test conditions	Min.	Typ.	Max.	Unit
Supply voltage					
Vsupply		10.6		30.0	Vdc
Current consumption					
Isupply	Vsupply = 12Vdc		250	350	mA
	Vsupply = 24Vdc		150	250	mA
Ethernet					
Connection	IEEE 802.3 / RJ45				
Speed	Dual Speed 10/100 Mbit/s		100		Mbit/s
Auto	Auto Negotiation Enabled				
Bandwidth required	Per active voice channel	128			Kbit
Latency	one direction, both directions			150 300	msec
Jitter		160			msec
Broadcast	Should be avoided or kept to a minimum				
Base Station					
Input-level		-25	-10	-3	dBm
Output-level		-25	-10	-3	dBm
Impedance			600		ohm
RS232					
Vout Low			-5V		V
Vout High			5V		V
Baud rate	Adjustable	2400		115200	Baud
Temperature range					
Ambient		0°		55°	C
Storage		-10°		65°	C
Mechanical specifications					
Module type (PCB)	120*100mm				
Weight (PCB)	100 g				
Box size	110 x 130 x 28mm				
Weight (PCB + Box)	250 g				
Weight (PCB + Box + Cables)	600 g				

Important !

COM53/8 firmware: c53_FWT_v10_16.hex and code file C53_FWT_default_v10.com53.ihm supports MOTOROLA DM4600 with firmware release 02 50 05 and code file DM4601_UHF_v1.0_ctb or use the Motorola 'CPS' application to set parameters found on next page.

If you have another firmware version in your MOTOROLA terminal, either upgrade to version 02 50 05 or please contact IHM for availability of COM53 firmware and if applicable McsService32 supporting newer Motorola firmware versions.



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DM4600 – Data settings

Setup to be conducted in CPS:

DM 4600 -> General settings -> Intelligent Audio Response ->	Disabled		
DM 4600 -> General settings -> Noise Suppressor ->	Disabled		
DM 4600 -> General settings -> Analogue Mic AGC ->	Unchecked		
DM4600 -> Accessories -> Analogue Rear Mic Gain (db) ->	-12		
DM 4600 -> Accessories -> RX Audio Type - Filtered Squelch			
DM 4600 -> Accessories -> Cable type - Rear Data Accessories			
DM 4600 -> Accessories -> GPIO #1 Physical Pins - Pin #17	Ext Mic PTT	Low	unchecked
DM 4600 -> Accessories -> GPIO #2 Physical Pins - Pin #19	Unassigned	Low	unchecked
DM 4600 -> Accessories -> GPIO #6 Physical Pins - Pin #20	Unassigned	Low	unchecked
DM 4600 -> Accessories -> GPIO #3 Physical Pins - Pin #21	PL/Talkgroup detect	High	unchecked
DM 4600 -> Accessories -> GPIO #7 Physical Pins - Pin #22	Unassigned	Low	unchecked
DM 4600 -> Accessories -> GPIO #8 Physical Pins - Pin #24	Unassigned	Low	unchecked
DM 4600 -> Accessories -> GPIO VIP1 Physical Pins - Pin #26	Unassigned	Low	unchecked

Please note: After programming, remove the programming cable and reboot the radio