

# 87-COM53/18 - KENWOOD - NX382G - DMR

PRODUCT SHEET

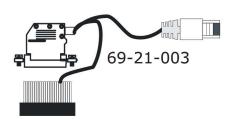
The COM53/18 is a VoIP Base Station Controller for one KENWOOD NX-3820G DMR terminal.

The COM53/18 kit includes interfaces cable for connection of one radio unit.

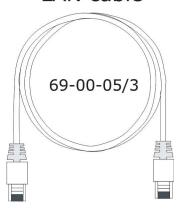




# Connection cable



# LAN cable



## The radio interface

This mobile radio supports DMR digital protocols as well as mixed digital & FM analogue operation. It is used operation-critical applications, e.g. IHM IP Flexible.

The NX-3860G terminal shall be programmed with the required Channels/Talk Groups (TG).

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

# Antenna Antenna I3.2V DC GPS Antenna 69-21-003 IHM COM53/18 To LAN switch

### **Functions**

- Audio input and output to and from the radio.
- PTT output (relay), TG communication is always performed in simplex mode.
- Talk Groups (TG), the radio is typically used with several TG's, maximum 15. The TGs in the radio shall be
  coded in the ActServ.ini file of the connected system, provided connected to an MCS PnP system, when
  using the MCS Setup application.
- Private calls can be performed to other DMR terminals in simplex mode.

# Functions - not supported

- RSSI
- SDS messaging



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# **Technical data**

Parameter	Test conditions	Min.	Тур.	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°	С
Storage		-10°		65°	С
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\_VTS\_v306.hex and code file C53\_VTS\_Kenwood\_default\_v10.com53.ihm supports KENWOOD NX-3820. Use the Kenwood programming tool to set parameters found on next page.



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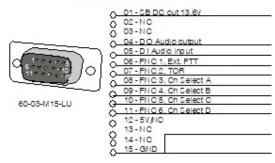
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# NX-3820G Data settings

Setup to be conducted in the FPU and jumper settings in the terminal:

### KENWOOD NX-3820

D-SUB High Density 15-PIN Male



Check if hardware modifications are needed for the following pins of the Kenwood NX-3820 Sub-D connector:

- Pin 4 must be set to AFO
- Pin 5 must be set to DATAI
- Pin 6, 7, 8, 9,10 and 11 must be configured as shown in above drawing of the 15-pin D-SUB HD connector, all set to active low.

Please refer to Service manual RA054C rev.0017 2017/6 Chapter 2.3.6.1 and 2.3.6.2

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