

# Cable Kit 3022/02 Interface 3009/16

# Mimer SoftRadio - Motorola MotoTrbo DM360X/DM460X

(DM4600 AKA: XPR5550, XPR5580, DGM5500, DGM8500, XiR M8660, XiR M8668) (DM3600 AKA: XPR4500, XPR4550, XPR4580, DGM6100, XiR M8260, XiR M8268) Also works with the e-versions.

### **Remote functionality**

This cable kit will together with the Mimer Network Interface give remote control of the radio's audio and PTT functions and it will present a full function Virtual Control Head on the operator PC.



#### Radio firmware

We recommend the use of 2.30.01 or later in DM460X radios. Also see page 3, regarding radio firmware. All versions of firmware in DM360X works.

There is a setting in the Network Interface to choose between DM360X or DM460X radios. See further down.

#### Cable Kit

The red and black wires shall be connected to 12VDC, red is positive.

The network interface consumes max 0,3A.







The remote function cannot work at the same time as the radios programming cable is attached. Disconnect the programming cable before connecting the Network Interface. And then reboot the radio.

# **Radio settings**

One setting must be changed in the radio for Mimer to get access. All other settings are default but might need to be checked if something is not working as intended.

### Cable Type

The setting to change is "Cable Type" on the Accessories page: Set to "**Rear Data Accessory**"

Device Licenses Tools Help			_			- 0	3
▶ 남 ) 문 ) 답 답 Den Save Read Write CI	ione Clone Express Update	☆★ Register Acti	<b>⊟</b> ∕ate				
DM4600-ID211  Accessories Categories		Ge	neral GPIO Phy	sical Pins Horn	& Lights		
Configuration	(n) General				-		
Device Information	<u> </u>		Hook Type	Disabled			
General			Volume Control				
Weicome Bitmap			Ignition Sense	On/Off Or Ignitio	on		
General Settings	la	nition Sense Auto Power De	own Timer (min)	0			
Accessories 🚯		Analog Accesso	ry Mic Gain (dB)	-7		8	
Control Buttons		Digital Accesso	ry Mic Gain (dB)	-3		0	
Text Messages	BX Audio Type			Filtered Squelch			
Telemetry		rt Channel Zone	None				
Menu De la	Data Revert Channel			Selected			
Security		Debourg	e Duration (n	beleetes			
Voice Announcement	Cable Ty			Rear Data Acces	50P/	<b>v</b>	
Job Tickets		Cable ly					
Systems	GPIO Physical Pins						
Encoder	Feature Acti			ve Level	Debounce		
Decoder      Contacts	PIOT	Ext Mic PTT	Low		~		
RX Group Lists				_			
Zone/Channel Assignment	GPI03	Unassigned	High		<b>v</b>		
Scan Lists	GPI06	Unassigned	High		<b>v</b>		
Capacity Plus Lists	GPI07	Unassigned	Low	<b>•</b>			
	GPI08	PL/Talkgroup Detec	High	<u> </u>	✓		
	PIO10	Ext Alarm/Horn & Li	High	<b>*</b>	✓		
	Horn & Lights						
			Am	Permanent Ext A	larm		
			Duration				
			Delay Time (sec)	7			

### Microphone

GPIO1 (Pin #17) should be set to Ext Mic PTT, active Low.

## External Alarm

GPIO10 (Pin #26) should be set to Ext Alarm, High, and Alarm to "Permanent Ext Alarm" if you want Mimer to react to selective calls.

### Keypad use

The keypad on the Virtual Control Panel, on DM460X, can be used for channel change. This is practical if you have many channels and don't want to use the arrows to step up/down.

Program "Numeric Keypad" to "Channel" under the "Buttons" menu.

LSE DM4600-ID211.ctb2 - MOTOTRBO CPS 2.0	- 0	ı ×
File Device Licenses Tools Help		
Copen Save Read Write	BB -=BB ↑B ☆ ★B Clone Clone Express Update Register Activate	
LSE DM4600-ID211  Control Buttons*	0	×
Set Categories	General Conventional Radio Buttons Mobile Conventional Accessory Buttons Mobile One Touch Access	
Configuration*	Number Key Quick Contact Access	
Device Information		
General     Welcome Bitman	General     General	
Language Packs	Numeric Kennad Channel in All Zones	
General Settings	Emergency Short Press Duration ns) 100	
Accessories	Long Press Duration (ms)   1000 🛛 🗧 🗮	' 1
Control Buttons 🔅	Dual Knob Press Duration (ms) 500	- 1
Text Messages	Channel Up/Down via Knob	- 1
Telemetry	Finance Channel Up/Down is assigned to a programmable button when the above control is unchecked	- 1
🗅 Menu		- 1
Security	<ul> <li>Conventional Radio Buttons Mobile</li> </ul>	- 1
Network	Short Press Long Press	
Voice Announcement	Front	- 1
Job lickets	Table Selection Table Selection	

# Interface settings

#### Motorola firmware problem

When using firmware R02.24.01.1002 and later for the DM4600-series of radios, there is an error message displayed at start up of the radio, saying "Invalid rear accessory" when SoftRadio is connecting.

Updating the Interface firmware to 6.124 or higher in the Network Interface, takes care of this problem.

If you have an old network interface and a new radio unit, and experience this, please let us know and we will help with a new firmware version. Note, only works on interface's with serial numbers from 3000 and upwards.

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#### Needed settings in the interface

In "Mimer Network Interface Setup" there are two extra settings for MotoTrbo radios.

- You need to set the type of radio you are connecting, the old DM3600 series or the new DM4600 series.
- If you are using a non-default type of DMR network, you also need to set the CAI Network Address. This is very seldom needed.

🗑 Mimer Network Inte	rface Setup						-			×
File Help										
Connected Units:				IP of this	computer:	192	168	0	54	٦
ID: 118 IP: 192.168.0	118 ^	Update the	ist	Netmask of this	computer:	255	255	255	0	٦.
ID: 120 IP: 192.168.0	120			Set abov	e subnet ad	ldress a	n all Mi	mer units	s	1
ID: 122 IP: 192.168.0	.122			This function set	s the IP ad	dress or	all Min	ner units		
ID: 125 IP: 192.168.0	125 💙			connected to thi	s network s	o they	will be a	accessible	e for	
Select a unit from the lis	t above			the setup progra	im.					
Settings for the selecte	d unit					Audio-b	ouffer d	lelay:		
ID:	124 🌲	SerNr: 102	1 Set	all values to defau	ults	16	-			
ID String:	DM4601e	MotoTrbo				Delay:	512 m	s		
Password:	Password		Crei	ate random passw	ord	AF dete	ect:			
IP address:	192 168	0 124	MAC: 00:	50:C2:7D:D4:0C		Level	20	-		
Netmask:	255 255	255 0	]			high=	less s	sensitive		
Gateway:	192 168	0 1	]			Monitor	TX aud	dio	_	
TCP server port:	20924		Softwa	are rev: 5.053			ive -			
	Mimer Network Interface					Full Duplex allowed				
	Motorola DM4600					Active				
_			_							
						1.				
	Type of rad	DM2600	CAT Net adr: 12							
	Motorola DM4600     CAL Gro			oup Net adr: 22		Re	ad sett	tings fror	n unit	
	0.0000		Cru Cr	22.	· •	W	/rite ch	anges to	unit	
	Auvar	ceu					j	Exit		

#### **Duplex operation**

The radios are simplex or semi-duplex, so you transmit, <u>or</u> you receive, not both at the same time. But there are in some radio systems the need to hear beeps from the radios speaker at the same time as you are transmitting. For example, a "clear to send" beep.

To be able to hear this beep when you are holding the PTT key, you need to activate full duplex in the SoftRadio system. This will allow the radios speaker audio to come through, to the PC, also during PTT.

Tick in the box "Full Duplex allowed" in Network Interface Setup.



