

SGM-5E VoIP

Remote control for two-way radios

User guide

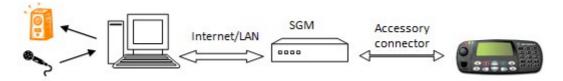
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Usage:



SGM VOIP remote control allow to remotly operate many two-way radios via Internet or separate TCP/IP links. Remote controlling include two-way communication, screen and all buttons.



Minimal transfer needed for SGM5E is 100kb/s. Very important is stable latency(ping). To properly work radio need to have four signals on accessory connector: audio input, audio output, SQELCH signal, TX signal.

Port forwarding is needed to connect to SGM from outside local network.

LED AND CONNECTORS DESCRIPTION





SGM-5ES device.

- 1 Power LED
- 2 Status LED
- 3 LAN communication LED
- 4 not used

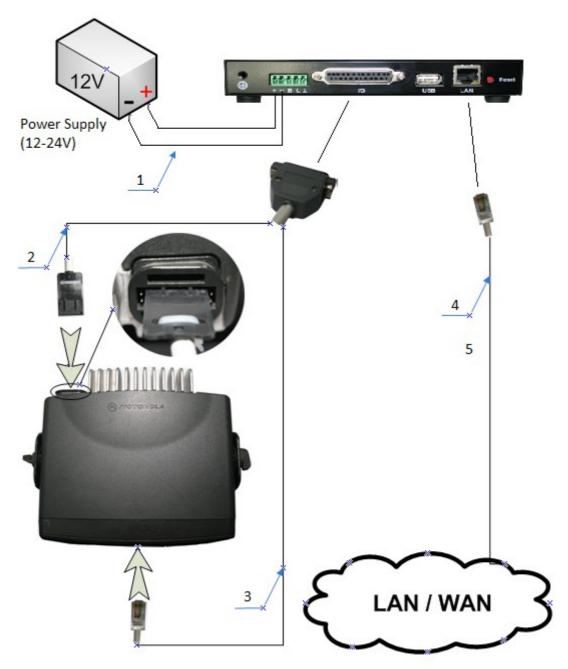
5 - 12-24V power connector, B, L – logical states(work form battery, low battery) works with for example: GPN-6145B Motorola power supply.

- 6 Logical states input output connector (DB-25)
- 7-USB connector(DM4000 communication)
- 8 Network connector(LAN/WAN) (RJ-45)

9 – Reset button, short click to reset device, long click(~30s, voice signal) to restore fabric settings

SGM5ES remote control default IP address is 172.168.0.189. More details how to configure SGM5ES are in RoIP user guide.

CONNECTING SGM-5E (WITH MOTOROLA RADIO)



Connecting SGM-5ES wiith Motorola

- 1-SGM-5E 12-24V power connector
- 2, 3 Connect SGM with radio accessory connector and front panel connector
- 4 LAN cable

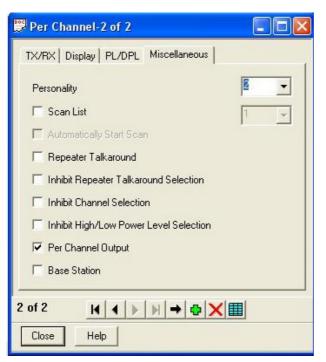
- Accessory connector pin8 set for PL Detect Active Level - Low

- Accessory connector pin12 set for Caririer Detect Active Level Low
- Accessory connector pin14 set for Per Channel Output Active Level Low
- Channel with PL configuration Per Channel Output checked - Miscellaneous configuration Ingnition Sense cheched

Wire connecting SGM5E with Motorola radio.

🚏 Per	Radio GP I/O Lines				
Accessory Package General I/O Pac			ge	•	
Pin #	Function		Active Leve	el Debounce Enable	
3	Voice PTT	•	Low	•	
4	Disabled	•	Low	-	
6	Disabled	•	Low	-	
8	PL/DPL Detect	•	Low	•	
9	Disabled	•	Low	-	
12	Carrier Detect	•	Low	•	
14	Per Channel Output	•	Low	-	
Accessory Power Up Delay (ms) (0 6300, 100) 500 +					
Accessory Debounce Duration (ms) (50 750, 50)					
Clos	Help				

GP I/O Lines Settings for Motorola radios.



Settings per Channel for Motorola radios working with PL/DPL channels.

🖫 Per Radio Miscellaneous						
Memory and Power Up Channels Global Display	Timers	Microphone	Vox Prefix			
Language	Γ	English	_			
Option Board Type	ſ	No Option Board	•			
Rx Audio (Accessory Connector)		Filtered Squelche	ed 👻			
Radio ID	F	0000000				
📕 Enable Radio Lock 🛛 🛛 R	adio Lock Pa	assword 0000	00			
T Handset Audio						
✓ Ignition Sense						
🔲 Ignition Override						
🥅 Single Status List						
Fast Vote RSSI Level (dBm) (-120	70, 1)	-7				
Start Scan RSSI Level (dBm) (-12070, 1)						
Close Help						

Miscellaneous settings for Motorola radios (Ignition Sense and Rx Audio - Filtred Squelched)

📅 Per Radio Miscellaneous	
Global Display and Keypad Memory and Power Up Channels Timers	Prefix Microphone Vox
Mic. Gain (Internal)(dB)	36.0 💌
Mic. Gain (External)(dB)	27.0 👻
Whisper Mic.Gain (Internal)(dB)	45.0 👻
Whisper Mic. Gain (External)(dB)	45.0 🗸
✓ Accessory Connector Mic. Enable	
Close Help	

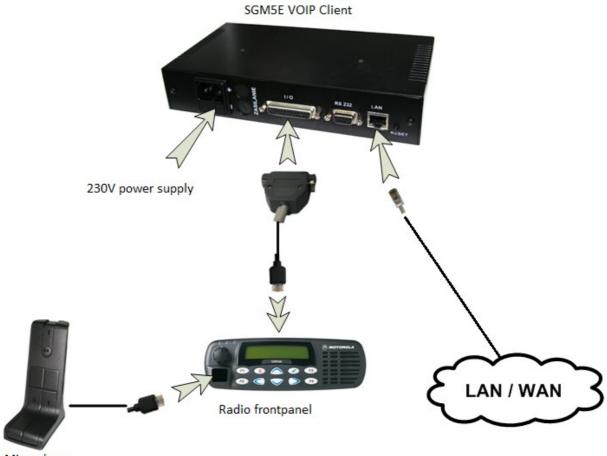
Microphone settings for Motorola radios (Accessory Connector Mic. Enable)

🗒 Per Radio Misc	ellaneous			
Memory and Power Global		Timers and Keypad	Microphon	e Vox Prefix
Radio On Messa	<u>qe</u>			
) Default Radio Displa	у	Channel		•
Default Text Messag Ready	je			
Keypad Enable Default Numeric Key	pad Selection	Char	nnel	-
Default Up/Down B	utton Mode	Char	nnel	-
Show Keyboard				
Close Help				

Channel selection from extended keyboard settings for Motorola radios.

(Keypad Enable – Dafault Numeric Keypad Selection - Channel)

CONNECTING SGM5E CLIENT

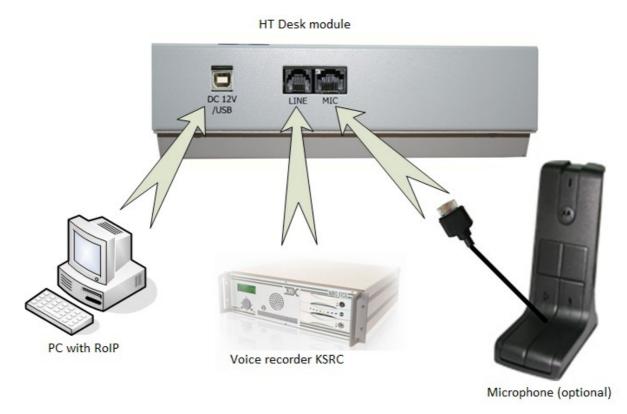


Microphone

CONNECTING VOIP HT DESK MODULE

Attention:

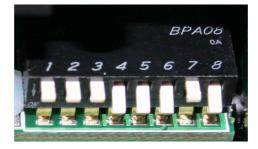
VOIP HT desk module should be connected to computer after starting ROIP application.



Sposób podłączenia pulpitu VoIP HT.

Attention:

DEEP switch inside external microphone must be set:



Settings for switch in MOTOROLA RMN5068A microphone (1-OFF; 2-OFF; 3-OFF; 4-ON; 5-ON; 6-ON; 7-OFF; 8-ON)

PROPOSED INSTALLATION:



RESET TO FABRIC SETTINGS:

To restore default settings in SGM5E device push and hold reset button for about 30 seconds till you hear three beeps.

CONFIGURATION:

Configuration is made from computer. Default IP address is 172.168.0.188 and 5556 (SSL). More details how to configure SGM5E client are in RoIP user guide.

Port forwarding:

- TCP port 5555 for no SSL connections
- TCP port 5556 for SSL connections
- UDP port 8000 always

