



SGM-5E VoIP

Remote control for two-way radios

User guide

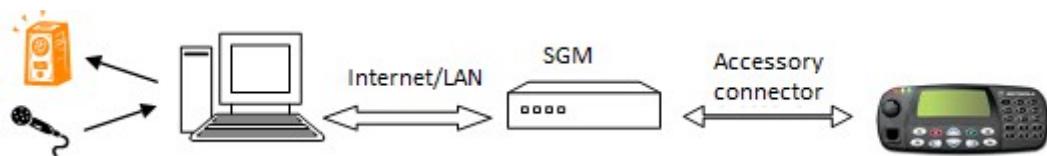
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Usage:



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.

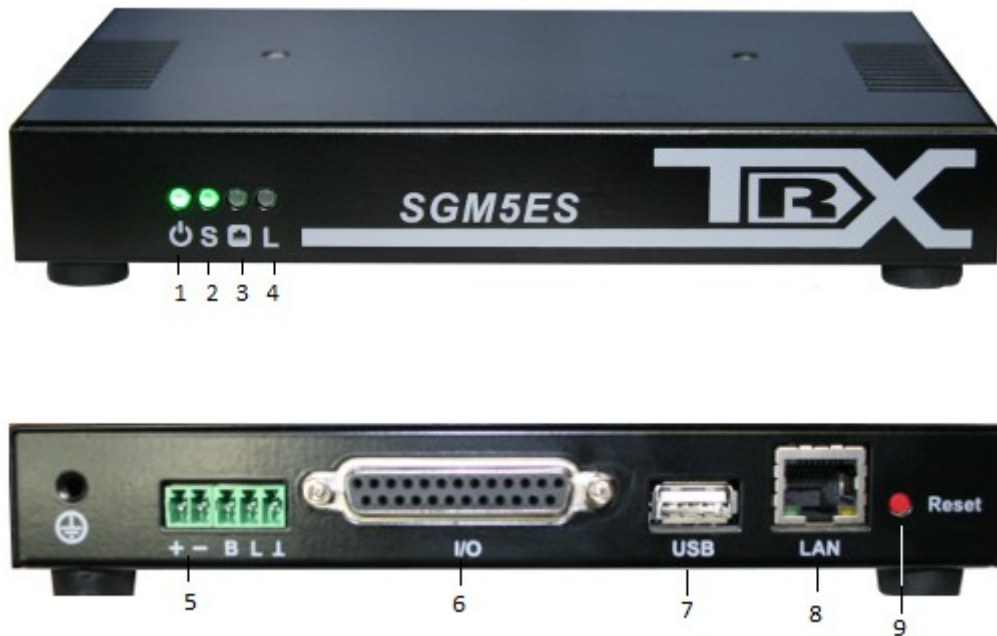


Minimal transfer needed for SGM5E is 100kb/s. Very important is stable latency(ping).

To properly work radio need to have four signals on accessory connector: audio input, audio output, SQUELCH signal, TX signal.

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

LED AND CONNECTORS DESCRIPTION

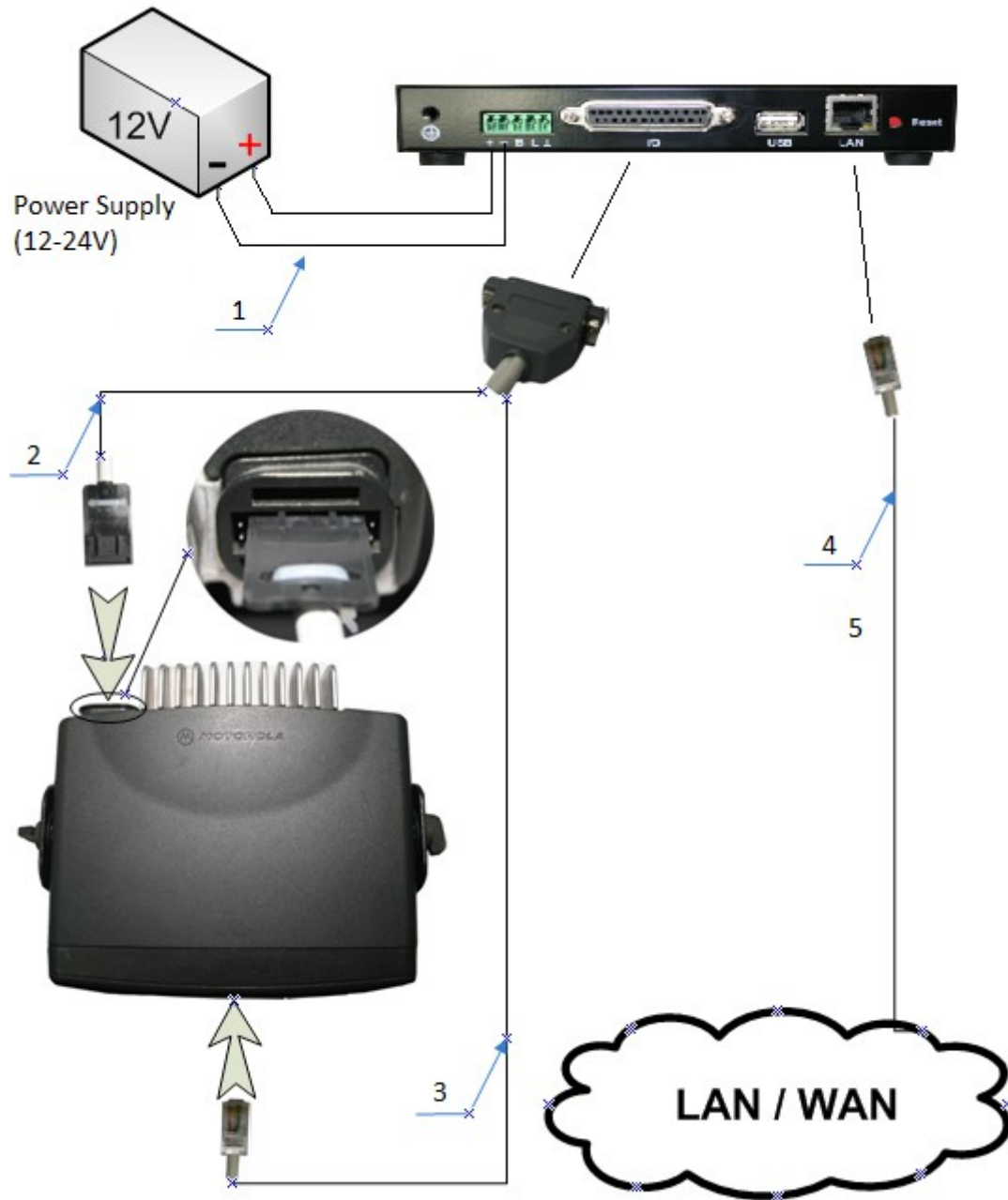


SGM-5ES device.

- 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 with 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 Carrier 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 Ignition Sense checked

Wire connecting SGM5E with Motorola radio.

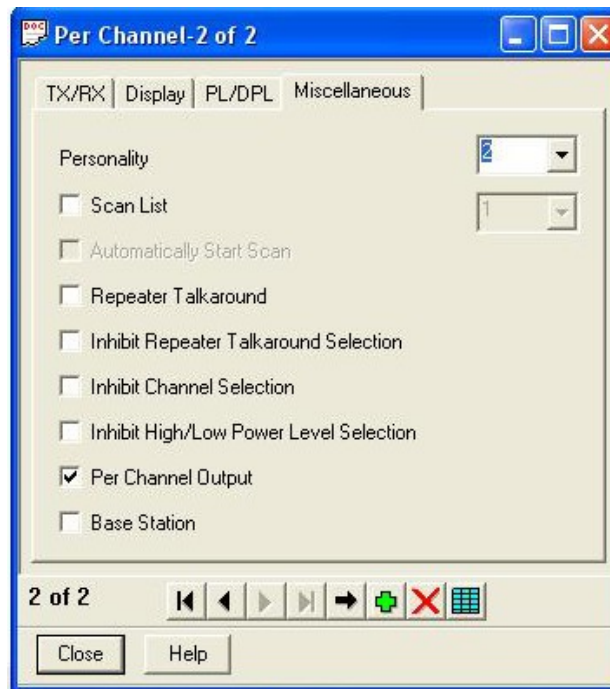
Pin #	Function	Active Level	Debounce Enable
3	Voice PTT	Low	<input type="checkbox"/>
4	Disabled	Low	<input type="checkbox"/>
6	Disabled	Low	<input type="checkbox"/>
8	PL/DPL Detect	Low	<input type="checkbox"/>
9	Disabled	Low	<input type="checkbox"/>
12	Carrier Detect	Low	<input type="checkbox"/>
14	Per Channel Output	Low	<input type="checkbox"/>

Accessory Power Up Delay (ms) (0 .. 6300, 100) 500

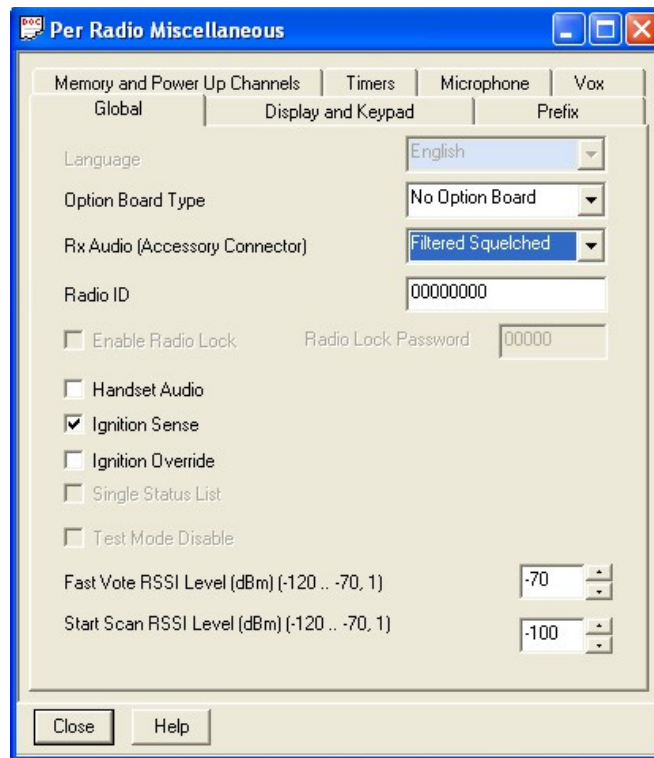
Accessory Debounce Duration (ms) (50 .. 750, 50) 100

Close Help

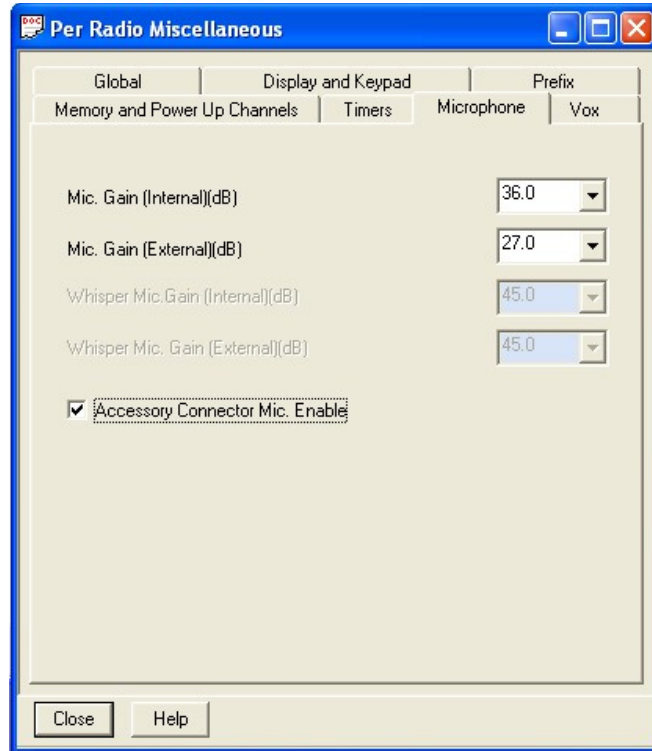
GP I/O Lines Settings for Motorola radios.



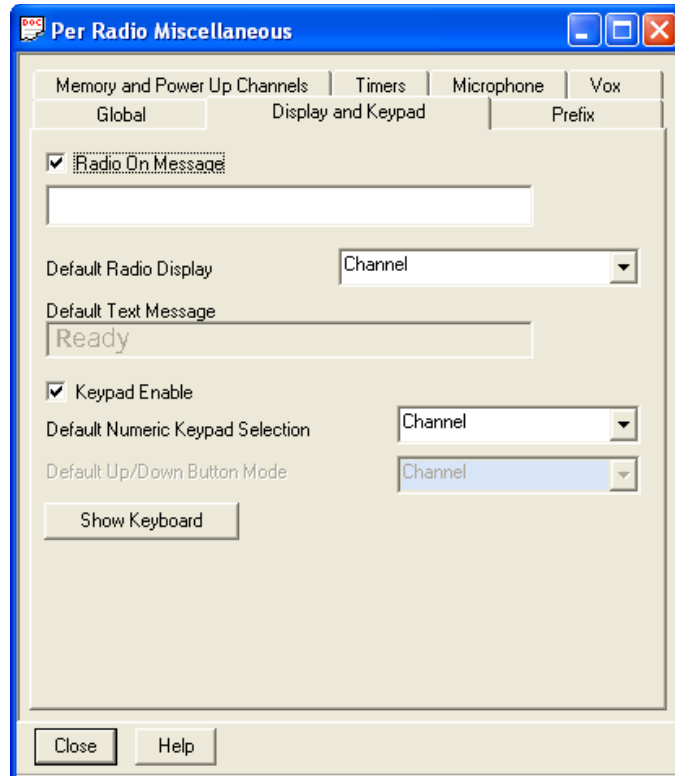
Settings per Channel for Motorola radios working with PL/DPL channels.



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

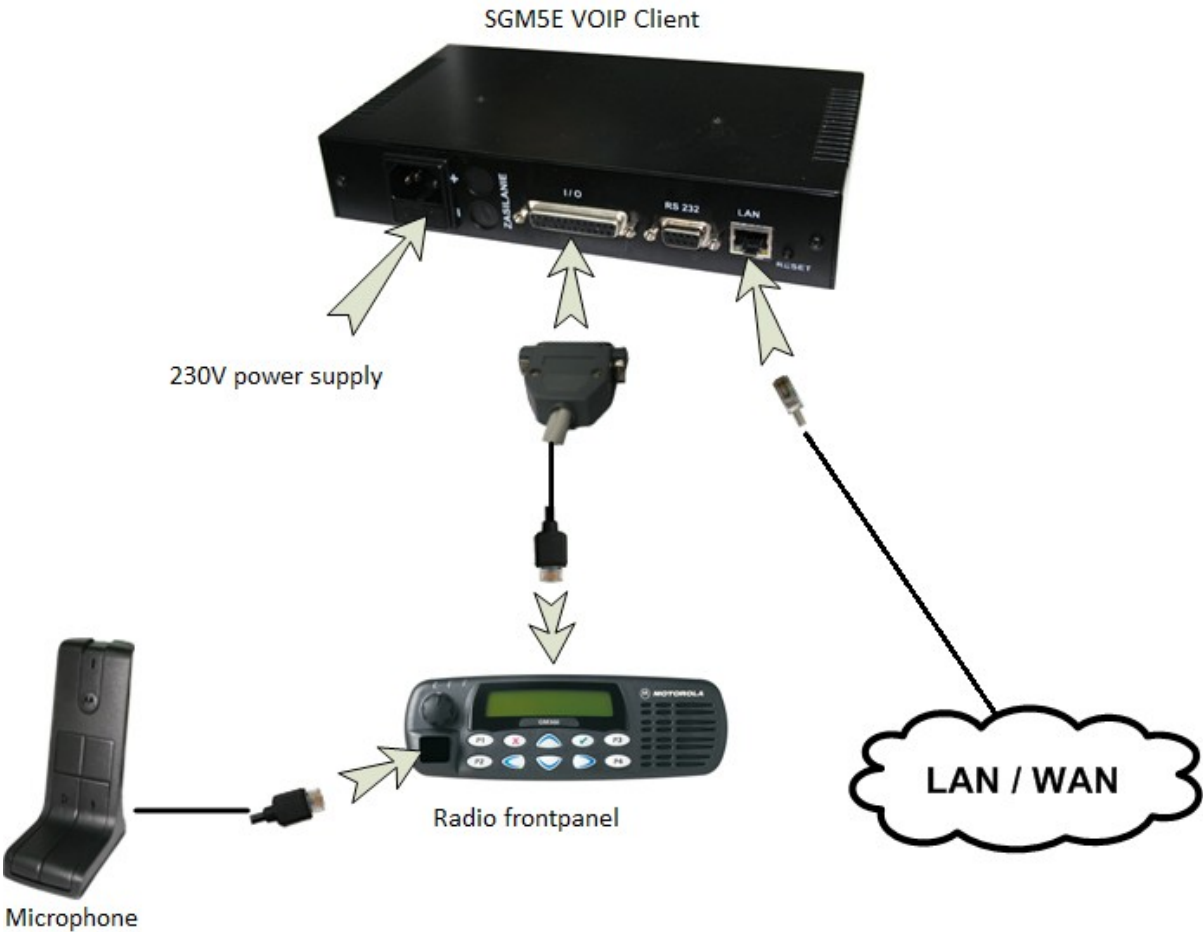


Microphone settings for Motorola radios (Accessory Connector Mic. Enable)



Channel selection from extended keyboard settings for Motorola radios.
(Keypad Enable – Default Numeric Keypad Selection - Channel)

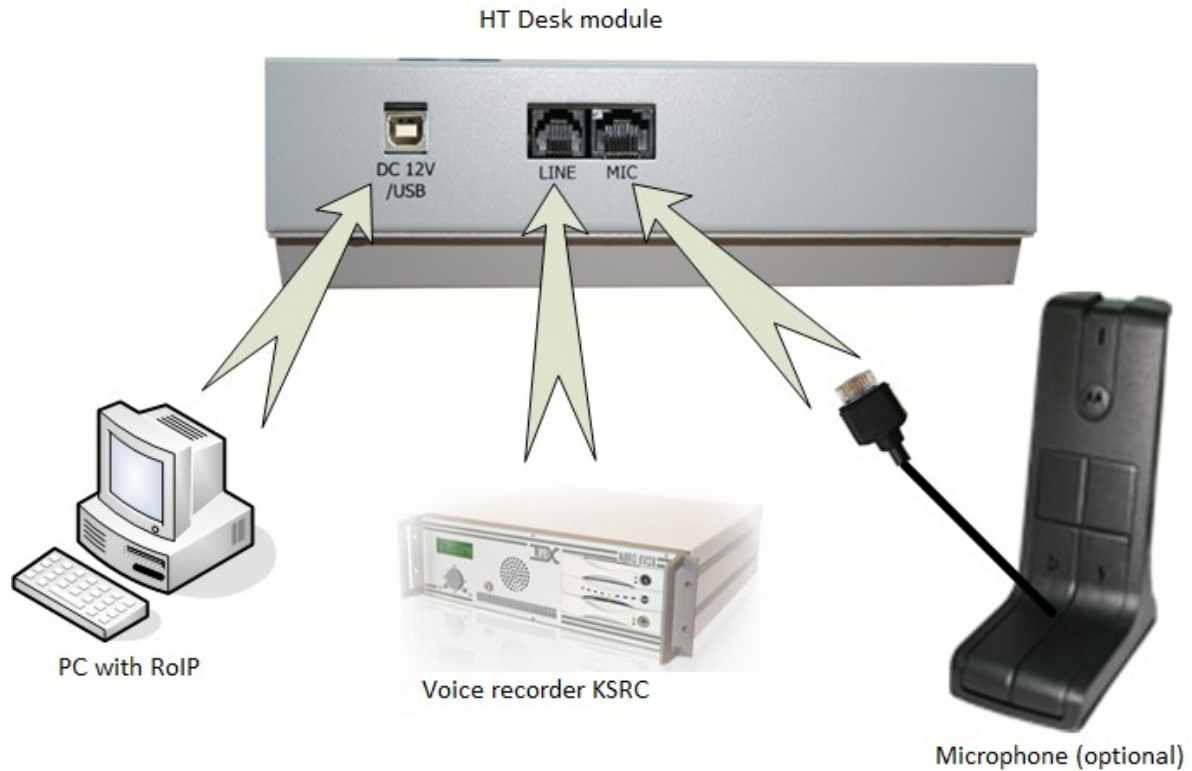
CONNECTING SGM5E CLIENT



CONNECTING VOIP HT DESK MODULE

Attention:

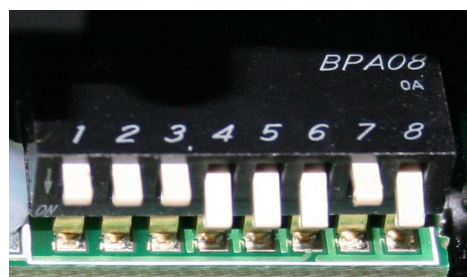
VOIP HT desk module should be connected to computer after starting ROIP application.



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

