

VBRC-5

Radio Communicator



Installer Manual

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1. INTRODUCTION

VBRC5 communicator is ideal solution for installation places where radio communication infrastructure is already built. By means of the device **immediate alarm transmission** is guaranteed **without any additional operation cost**. Other main advantage is that the device is **independent from any service provider**. VBRC5 can be connected to the serial port of the alarm control panel, and additionally 3 inputs status can be transmitted through radio channel. Although the communication is one-way, even so it is **stable and reliable** due to multiple event sending to monitoring station.

To use the highest range of provided functions **please read** carefully the *Installer Manual*.

For the confident programming and secure usage please keep all warnings in *Installer Manual*, with highly focusing to security directions.

2. SYSTEM STRUCTURE

VBRC-5 communicator is based on the RT-68/3 UHF radio transmitter. The VBRC-5 is able to receive communication from some control panel types (SECOLink, Alpha) through serial port. The two-way serial connection between the communicator and the control panel ensures reliable reporting. Additionally it sends 3 inputs status and test events.

As it uses a one-way radio, the VBRC-5 communicator sends every report multiple times, in packages. Each package contains the events more times (3 by default), and also, the packages are sent more times (3 by default). Every event has a unique identifier encoded, which helps the monitoring station to decide, whether it is a new event, or a resend/repeat of a previous one, so that it will receive the event only once.

The System ID of the target monitoring station can be set (1..15) according to the reception pattern of the repeater network. This way the routing of the radio transmissions can be set, and also it can be used to avoid unwanted duplicate receptions at overlapping reception areas, thus decreasing network traffic.



Connectors description

BNC connector – The connection point of control panel housing (where antenna is connected) and radio transmitter.

Input 1 – Input 1 (programmable NO / NC).

Input 2 – Input 2 (programmable NO / NC).

Input 3 – Input 3 (programmable NO / NC).

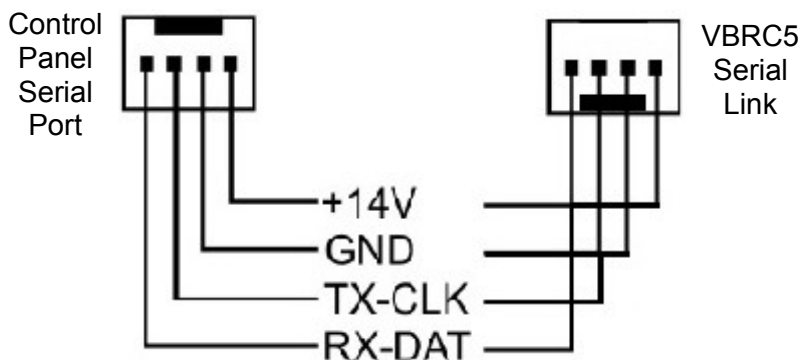
Reset – Radio reset pins (NO).

USB Prog. – VUP programming cable connection for USB programming.

Serial Link – Control panel serial port connection.

LED – Status signal LED (1 flash in each seconds, long flashes during radio transmission).

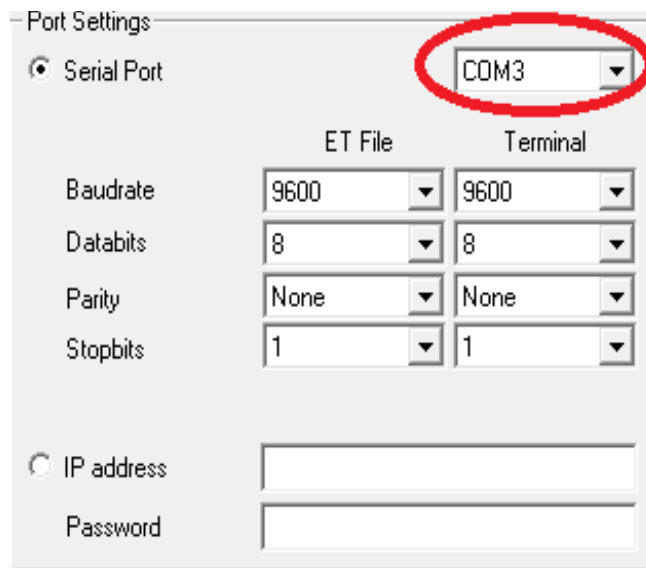
Note: If the radio is mounted outside control panel housing, there might be used cable made by installer between control panel serial port and VBRC5 Serial Link. This cable should be made according to the original cable in the package (at least 0.5 power supply wires, and with shield wire connected to control panel COM only).



3. SYSTEM PROGRAMMING WITH PC SOFTWARE

VBRC-5 module programming is allowed through serial port. Please use *Eni-Term* software for programming. The programming steps are the following:

1. By means of VUP cable and mini USB cable, connect the VBRC-5 module to the programming PC (for serial programming).
2. Please start Eni-Term software.
3. Choose the ET (settings) file for programming:
 - VBRC_5.et – VBRC-5 module programming
4. In Communication / Port Settings menu set the communication port / IP address for programming.



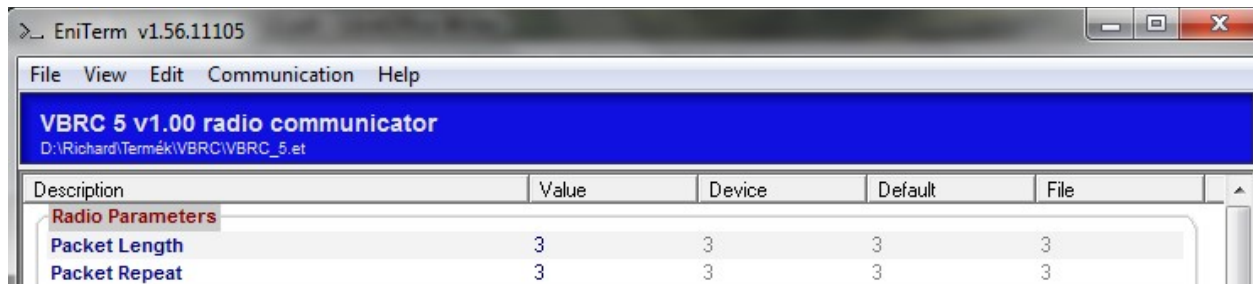
5. By clicking to *Communication / Read Data* menu you can read settings from device.

Note: During data reading (and sending) VBRC-5 firmware version can be checked.



6. Please execute the required settings in *Eni-Term* software.

Note: The software functions are shown in *Eni-Term* help menu.



7. Click to *Communication / Write Data* menu to send the modified settings to device.

Note: During data reading (and sending) VBRC-5 firmware version can be checked.

4. TROUBLESHOOTING

TROUBLE: Any abnormal operation in functions during the usage of the device.

SOLUTION: Firmware upgrade with the newest firmware file usually solve these kind of problems (see *Firmware update* part in manual).

TROUBLE: There is no connection between programming PC and VBRC-5 module.

SOLUTION: Check the cable plugging in PC side. In programming PC *Control Panel / Hardware / Device Manager* application you can check which COM port appears / disappears in device list during plug / unplug programming cable (with connected VBRC-5). Please check whether COM port setting is correct in programming software.

TROUBLE: No event received in serial communication with Secolink control panel.

SOLUTION: Please check that serial communication should be enabled at Secolink control panel (Service Mode / Report Setting / Serial connection).

TROUBLE: Communication between radio transmitter and Enigma receiver is unstable.

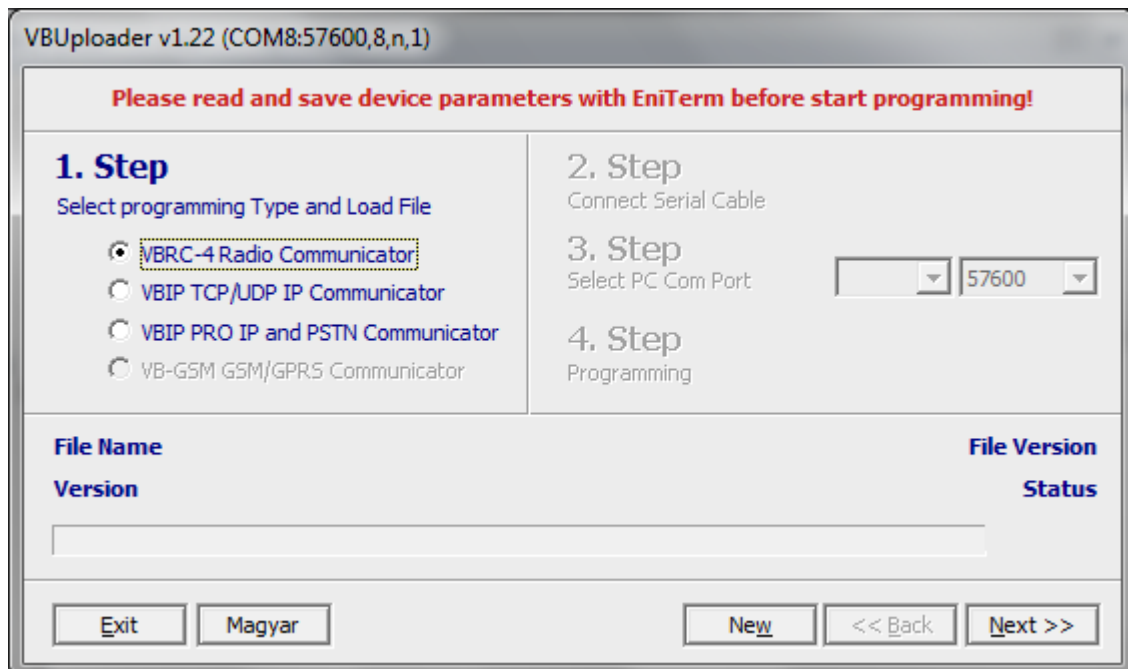
SOLUTION: There should be at least 7 signal level at Enigma receiver side. If the signal level is lower, antenna position or antenna type should be modified. If it doesn't help radio repeater unit might be required.

5. FIRMWARE UPGRADE

It is recommended to upgrade regularly device firmware to use new functions and eliminate possible bugs.

Firmware upgrade can be done by the following steps:

1. Get the latest firmware files from your distributor (VBRC-5).
2. Save settings from the VBRC-5 with Eni-Term software (please check 3. *System programming with PC software* chapter).
3. Start *VB Uploader* program for firmware upgrade.



4. Choose item (VBRC-5) for upgrade (1. STEP), then NEXT.
5. Choose the proper firmware file for upgrade (2. STEP), then NEXT.
6. Choose the COM port where VBRC-5 is connected (3. STEP), then NEXT.
7. Upgrade process can be started with *START* button.
8. Do not forget to send back the saved VBRC-5 settings at the end of the upgrade (please check 3. *System programming with PC software* chapter).
9. To use new functions it might be required to get the latest *Eni-Term* software with the newest ET (setup) files – please download and use newest version.

6. VBRC-5 LED SIGNALS

Red LED flashing (in each seconds) = Communicator is ready to use

Long red LED flashing = During radio transmission

7. TECHNICAL DATA

Product	VBRC-5
Power supply	12 V DC
Maximum current consumption	1.5 A
Operating frequency	UHF 440-450 MHz
Transmission power	2 W
Event receiving (through serial)	Yes
Input	3
Input (reset)	1
Operating temperature	-10 °C / 50 °C
Case protection	IP 53
Sizes (W / L / H)	70 x 100 x 30 mm
Weight	130 g