# VBIP

## IP Communicators

**VBIP, VBIP-S**

## Installer Manual

**Rev. 2016.05.30.**

### 1. INTRODUCTION

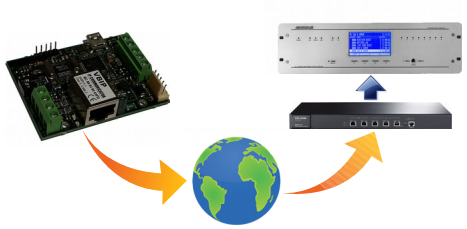
The VBIP Communicators are recommended for security installations, where the reporting to Alarm Monitoring Service must be provided over Ethernet networks. A primary and a secondary IP channel can be specified, where the secondary channel can be used as a backup or for parallel reporting. The VBIP Communicators provide a reliable and secure solution for event reporting over the internet at an unbeatable price/performance ratio.

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

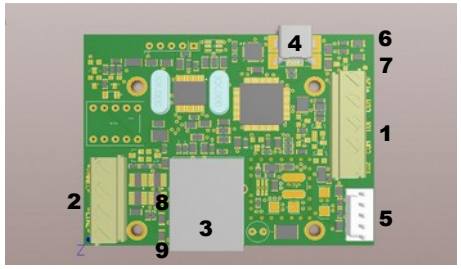
For the confident programming and secure usage please keep all warnings in *Installer Manual*, with highly focusing to security directions.

### 2.SYSTEM STRUCTURE

VBIP communicator receives the Contact ID signals from the PSTN line / serial port of the alarm control panel, or the contacts on its own inputs. These signals are transmitted to the monitoring station through Ethernet network.



### 3. OVERVIEW




1. Terminal of power supply and I/O wiring
2. Terminal for connecting the telephone dialer
3. Ethernet connector
4. Usb connector to programming
5. Serial connector to interface and programming
6. Power LED (LED-1)
7. Error LED (LED-2)
8. Line Bypass mode LED (LED-3)
9. Ethernet status LED (LED-4)

### 4. LED SIGNALS

**LED-1: Power/Signal strength LED**

Proper power supply for 10 seconds lights, than indicate with slow flashing the signal strength:

| | |
|---|---|
| *0, 1 flash* | non/week signal strength |
| *2, 3 flash* | medium/good signal strength |

**LED-2: Error LED**

The device gives a general fault

| | |
|---|---|
| *No lights* | Everything fine |
| *lights* | Used (configurated) transmission channel physically defective (e.g. SIM card is not in the device.) |
| *flashing* | Unsuccessful transmission to the monitoring station one or all event transmission channel. |

If the LED1 and LED2 change flashes quickly, it means there is no communication channels programmed in the device. During the firmware upgrade the two LEDs flash slowly alternately.

**LED-3: Line Bypass LED**

It shown the phone relay status (backup communication)

| | |
|---|---|
| *no light* | The VBIP server-side connection good, the telco interface is active. |
| *lights* | VBIP server-side problem, the control panel is bypassed to external telephone line (backup mode) |

**LED-4: Ethernet commnunication LED**

It shown the phone relay status (backup communication)

| | |
|---|---|
| *lights* | IP connection good |
| *no light* | LAN cable is not connected to the device |
| *flashing* | One of the set IP channel has a fail transmission to the monitoring station |

### 5 GENERAL INFORMATION

The VBIP can send messages over Ethernet network to monitoring centers. Primary and secondary servers you could define for IP communication. Also available email support e.g. email notification function.

The set of communication channels corresponding to their priority number, the smaller number of channels report an advantage over larger number. The channels of communications are the followings:

| | |
|---|---|
| *CH1 & CH2* | IP channels (Ethernet) |
| *CH7* | E-mail notice |

For Ethernet IP based transmission the communicator get internet access through the LAN router. Recommended to use UPS on the LAN router to eliminate the problem.

The operating mode of the communicator determines, how the available communication channels will be actually used for event reporting, so which channels are used as primary and for backup. The available options are as follows:

**1-2 Mode** (default)

In this mode, the communicator sends the event to the first available server, according to the priority of the available channels. Upon success, no further reports will be made.

**1-2 Pass-Through Mode**

This mode is very similar to the first one, but with an important difference. In this mode, the event received over telco interface will be acknowledged to the control panel AFTER the event has been successfully reported to and acknowledged by the server. This method is slower, but provides in most cases more reliable reporting.

**1; 2 Mode**

This mode can be used, when the events has to be reported to two independent AMS. An IP channel can be used for each AMS server.

The VBIP communicators to be connected often the alarm panel's phone communicator output(TIP / RING). In addition, through the serial port serial output of the Secolink alarm panels and IO-84 zone expander can be switched with the communicator. The recommended settings to the alarm panels which is connected to communicators:

- Enabled phone communication on the alarm panel
- DTMF (tone) is selected
- Set to dialer a simple phone number (99999999 recommended)
- Let set customer ID (avoid the '0' digit usage)
- Contact ID (full) format is selected
- It may be necessary to turn off the 'phone line monitoring' option
- It may be necessary to turn off "wait for dial tone 'option

- Some types of alarm panels emergency dialing (dial-force) option must be turned on.

The communicator will automatically receive the alarm panel telephone communicator's signals and transmits them to monitoring center through a set of communication channels.

If the transmission of messages over a single set channel is not possible, the communicator until the error ends suspend events receipt and switch to spare mode. In this case, using built-in relay an external telephone line can be attached to alarm panel through tradition way it can try to report.

If there is a failure in the operation of the communicator, the „Debug" mode can be used to identify the cause of the problems. More information at „Troubleshooting".

## 6. PROGRAMMING THE COMMUNICATOR

The VBIP communicators can be programmed via the USB connector (virtual serial port)For programming, please, use the *EniTerm* software.

It is always recommended to check the latest available software version before programming. The latest version of the EniTerm software can be downloaded at www.villbau.com, for free.

The programming steps are as follows:

1. Connect the VBIP to the programmer PC's USB port with mini USB cable or adapter VUP.
2. Start EniTerm software and then select the appropriate ET file default (VBIP.ET)
3. Set the COM port for programming in the *Communication / Port Settings* menu. (IP programming default password: 1234).
4. Click the Communication / Read menu reads the settings of the device.
5. EniTerm software interface you want to set up the channels of communication. The communication of the channels 1 and 2 are available as a supplement channel 7 is (Email) can be used.
6. After setting the parameters and options, click on the Communications / Writing menu to download them to the device.
7. Commonly used in typical settings should be saved on your computer to start using them as a template for the future, additional communicators programming. For this File / Save or to read back File / Open feature and can be used.

## 7. TROUBLESHOOTING

If there is any problem with the communicators it is always recommended to upgrade their firmware to the latest available version, as this could solve most problems. If there is any problem with the communicators it is always recommended to upgrade their firmware to the latest available version, as this could solve most problems.

**ERROR:** There will be no connection between the PC and programmer VBIP device (over serial programming).
**SOLUTION:** Make sure that you have plugged into your computer the USB cable or adapter VUP. Check the Device Manager in Windows, if the driver for the USB serial port is properly installed, and the virtual serial port (COM) appears in the device list. Check, if the EniTerm software is set to the same COM port.
**ERROR:** Setting the VBIP looks good, but no communication goes to AMS.
**SOLUTION:** Check the AMS IP address and port settings. (See. Section 8)
**ERROR:** From the alarm panel is not going out the communication to the VBIP.
**SOLUTION:** Make sure that the control panel is set to DTMF (tone) enabled communications, is set number (if you can avoid the digit '0' use), customer identification, and Contact ID (full) format.
**TROUBLE:** The alarm panel detects a fault line communication problems.
**SOLUTION:** Some of the alarm panels (the control panel settings) can be the solution 'wait for dial tone' or "telephone line monitoring" options turned off, the option "forced dialing (dial-force)" could be required. On the alarm panel parallel with the TIP / RING connector linked 1K resistor can also help.

The VBIP communicator can provide the following error messages (examples):
1354 012 99 = Ethernet cable is not connected
1354 999 99 = Comm Trouble between the VBIP and the control panel
1354 001 99 = Comm Failure on channel IP #1 (Ethernet)
1354 100 99 = Comm Failure for channels 1. in 1;2 mode
1354 200 99 = Comm Failure for channels 2. in 1;2 mode.

## 8. FIRMWARE UPGRADE

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

Firmware upgrade can be done by VBUploader , this is free you could download from the www.villbau.com website. The software always contains the latest firmwares.

The firmware upgrade steps are the following:
1. Please save the actual settings from the communicator with *EniTerm* software before firmware upgrade (check *System programming with PC software* chapter).
2. Start *VB Uploader* program for firmware upgrade.
3. Choose your unit type (STEP 1. - VBIP), then press NEXT.
4. Choose the new firmware file for the upgrade (STEP 2.), then press NEXT.
5. Choose the COM port, where the VBIP is connected (STEP 3.), then NEXT.
6. The upgrade process can be started by pressing *START* button. The program verifies the current firmware version, then waits for the user to confirm the upgrade.
7. Selecting „Yes" will start the upgrade. The whole process takes about 1 minute. If you select „No", then no change in the firmware will be done.
8. As the upgrade is completed, load back the program data with the *EniTerm* software.(see section *6. Programming the communicator with PC*).

To be able to use the latest features and options, it might be necessary to obtain the latest version of the EniTerm software. The EniTerm software can be downloaded from www.villbau.com for free.

## 10. TECHNICAL DATA

| Product | VBIP |
|---|---|
| Power Supply | 10,5 – 28,0 Vdc |
| Standby Current | 80 mA |
| Maximal Current | 150 mA |
| Inputs / Outputs | 2 |
| Output type / rating | OC / 50 mA |
| Ethernet connection | 10-Base T (10 Mbps) |
| Event buffer | 64 events |
| Operating temperature | -10 °C / 50 °C |
| Size (W / L / H) | 55 x 65 x 12 mm |

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