

BlackBox Installation and Programming manual

Features:

- Expand existing monitoring stations to encrypted TCPIP and GPRS reception.
- Minimal investment to entry level TCPIP and GPRS monitoring
- Easy to Install, no major training needs
- Easy to program by any Web browser
- No need to extra desktop, computer and does not include moving parts such as HDD or fans.
- WEB firmware upgradeable
- Small size
- Low current consumption (100mA)
- One fix IP address needed to operate
- Full continuous 24/7 connection to modules and control panels of customers
- 128 bit high security encryption
- Real time , synchronized clock
- Serial (RS232) communication to monitoring automation softwares
- Heartbeat (test signal) watch at desired interval

General description:

DC12V, Power supply connector:

Use Power supply only supplied with the unit.

2x RJ45 Ethernet connector:

To connect with LAN , WAN network.

One fix IP address required to operate the unit.

RS232 connector:

To be connected to the monitoring automation software.

Specification:

Power supply : 12VDC
Factory default IP address: 192.168.254.252
Max Current consumption: 100mA
Factory default User name: Admin
Factory default password: Admin
Size , LxWxH:14x140x25mm
Power Connector : 2,5mm jack
Max nr of clients : Unlimited
Ethernet csatlakozó: 2 RJ45
Test signal interval: from 10 sec
RS 232 connector: Standard 9 pin
Ethernet communication: 128bit AES encrypted
Serial communication:D6600, D6500 (expandable)

System setup:

Application:

The unit is designed to keep direct constant connection, and logging with Ethernet and GPRS TCP/IP communication devices and transfer encrypted communication to serial RS232 port communication in order to connect it to most usual monitoring softwares.

Minimum HW and SW requirements:

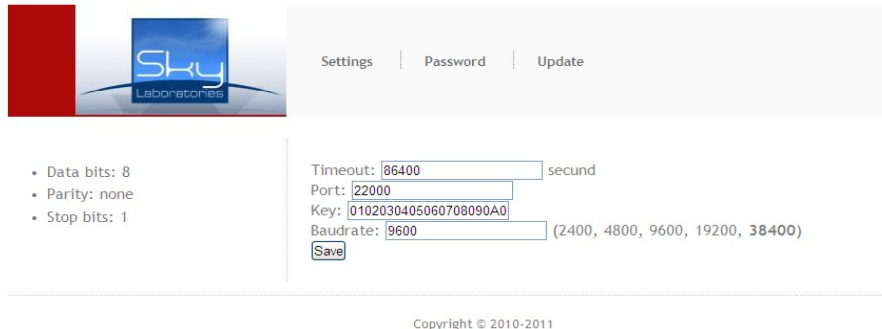
1. The automation software must have one free RS232 port
2. The automation software should be able to handle standard Contact ID communication.
3. Install the router behind firewall or router
4. Need of one free fix public IP address.

Remark:

- The BlackBox programming computer must have connection to the same network and have an Internet browser installed.
- For further BB upgrade could be done by Internet connection if necessary.

Installation:

1. Connect router to the socket provided by your Internet service provider.
2. Program router that giving fix internal IP address within the network by register its MAC address. Set port forwarding to this internal address on the port where you want to handle the incoming IP alarms.
3. Program BlackBox according to the installation manual on its default IP port (192.168.254.252) Set the required port, set your own encryption key and select the speed for the serial port communication to the central station automation software .
4. You may change default password at the password menu.



The screenshot shows the 'Settings' tab of the BlackBox web interface. On the left, there is a logo for Sky Laboratories. Below the logo, the following serial port settings are listed:

- Data bits: 8
- Parity: none
- Stop bits: 1

On the right, there are input fields for the following settings:

- Timeout: 66400 second
- Port: 22000
- Key: 0102030405060708090A0
- Baudrate: 9600 (2400, 4800, 9600, 19200, 38400)

A 'Save' button is located below the Baudrate field. At the bottom of the page, the copyright notice 'Copyright © 2010-2011' is visible.

5. Connect router to the Blackbox.
6. Connect the serial port of the BlackBox to the monitoring station software with standard RS232 serial cable. Set correct serial properties in your monitoring software (D6600 receiver)
7. Apply power router
8. Apply power on BlackBox
9. Enable RS232 port receiving on your automation software, and adjust serial port setting according to your software installation manual.
10. Test system that BlackBox from sending communication from existing control panel, or through Sky Laboratories compatible modems and devices.