

CLH4x2

Cellular communication adapter for the Hunter-Pro system



Installer guide 🌋

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Precautions

These instructions do not replace any other precautions warnings, or instructions on the products!

In order to prevent damage to property and/or life, one must act in accordance with the following safety instructions:

- The control panel has electrical connections that may cause electric shock. Make sure all voltages are disconnected before installation.
- Warning: this equipment has no mains On/Off switch. The plug of the main power supply is intended to serve as the disconnecting device.
- The alarm system should connect to a 230VAC/110VAC, 50/60Hz, Do not connect any other voltage to the system for fear of ignition.
- Connect the electrical connections to the circuit according to the marking, paying attention to the correct polarity.
- Every exposed connection that carries tension must be electrically isolated or connected to ground.
- The connector for an external antenna that transmits at a power higher than 0.5W, should be connected to the system's ground.
- Do not replace the system's battery, except with a battery of the same type, in doing so this could be a risk of fire or explosion.
- Disposal of used batteries must be made in accordance with local waste recovery and recycling regulations.

Overview

The CLH4x2 is designed to connect to the Hunter-Pro intruder alarm system and allows it to communicate to the central monitoring station and the (PIMAink 3.0) app¹ via network and cellular channels. There are two models:

- CLH402 4G CAT-M
- CLH412 4G CAT-1

The unit connects to the serial interface of the Hunter-Pro system. This manual refers to both models.

Operating configuration options



Figure 1: CLH4x2 operating configurations

The channels selection is free, and the system's owner can choose any communication configuration according to his needs, according to the following:

- Cellular communication only
- Network communication only
- Cellular and network, specifying a main channel and a backup channel



Installation

Install the CLH4x2 module inside the alarm system control box. See the following drawing:



Figure 2: CLH4x2 installation inside the alarm system's control box

Make sure that the installation location is suitable to radio transmissions (not inside a metal cabinet, or in a sealed room where signals can be blocked, like on a cellar, etc.).

Insert a SIM into the cellular transmitter (see Figure 3). If needed, insert a second SIM.

Note: If the CLH4x2 is replacing a GSM200 unit, first remove the GSM200 from the alarm system's control box.



Case A - There is no VHF/UHF radio transmitter connected to the system

- Mount the cellular transmitter using the CLH card into the black connector. In addition, make sure the plastic spacer is inserted into the corresponding hole.

- Loosen the two fastening screws secured to the metal adapter and set aside.

- Thread the antenna connector through the hole in the box from the outside in and connect securely to the connector on the cellular transmitter.

- Assemble to the system's box inner top wall and secure with the two screws. See Figure 2.

- Locate the antenna in an optimal position for reception.

- Connect the CLH4x2 to the Hunter-Pro system, to the Serial connector using the connecting wires. See Figure 2.



Case B - A VHF/UHF radio transmitter is connected to the system

- Disconnect the cable from the radio transmitter.

- Assemble the CLH4x2 unit to the box with the two screws without the cellular transmitter mounted on it.

- Reconnect the radio transmitter cable.
- Mount the cellular transmitter CLH4x2 with its SIM card and antenna connected.
- Connect a KLR500 keypad to the appropriate keypad input on the CLH4x2.

CLH4x2 programming

Enter the default code – 5555

Enter a new master user code and a new master installer code. Remember these codes! Enter the installer menu using the new code you just updated.

Enter the system programming menu, and proceed as follows:

Mobile channel programming

System Configuration ⇒ CMS & Communications ⇒ Cellular Settings

- Set the following parameters:
- $\bullet \ Cellular \ Modem-installed$
- Dual SIM select this if you want to use two SIMs. If not leave the rest unmarked.
- Virtual provider select this option if the cellular operator is virtual.
- Address for remote upload/download if you want to program the CLH4x2 remotely using the Force Manager software, program here the IP address of the computer on which the Force Manager software runs.
- Port number enter the port number for remote programming.
- APN name up to 16 characters (this information can be obtained from the service provider).
- User and password according to the specific network.

By entering the number 1 in the APN name this causes the data to be received automatically from the network without the need to manually program the other fields. Return to the *CMS & Communications* menu.



IP cellular channel reporting

Go to the following submenu:

CMS & Communications \Rightarrow CMS \Rightarrow CMS1 \Rightarrow Comm Paths \Rightarrow Cellular Data

• Account ID (Subscriber number) - set the subscriber number for reporting the alarm system's events.

Note: If the Hunter-Pro system is partitioned, you can set different Account ID's (subscriber numbers) for each partition.

• Network address – IP address of the central monitoring station's IP receiver. It can also be set in URL format like: www.mymonitoringstation.com.

• Main channel – set this option if the cellular IP channel is the main reporting channel, meaning this channel will always report to the monitoring center. If this channel is not set as main, it will report events only if there is a fault on other available communication channel (e.g. Ethernet network).

Programming the Network channel

Go to the following submenu:

CMS & Communications ⇒ Network configuration

• Mark the parameter *Connected to the Network*.

• The rest of the parameters are pre-programmed with default values suitable for a standard installation. Change only if there are special requirements such as a fixed IP address without DHCP.

Continue on to the following submenu:

CMS & Communications \Rightarrow CMS \Rightarrow CMS1 \Rightarrow Channels \Rightarrow Network (Ethernet)

• Account ID (Subscriber number) - set the subscriber number for reporting the alarm system's events.

Note: If the Hunter-Pro system is partitioned, you can set different account numbers for each partition. The account numbers used for reporting are set on CLH4x2 and not Hunter-Pro (see Hunter-Pro system programming section down below).

• Main channel – set this option if the cellular IP channel will be a main reporting channel, meaning this channel will always report to the monitoring center. If this channel is not set as main, it will report events only if there is a fault on other available communication channel (e.g. Cellular data).

Additional monitoring stations

You can program the CLH4x2 for reporting to up to 2 different monitoring stations with different account numbers set for each of them.

See the parameters on the sections above for setting each monitoring station.



Using the App with Hunter

In order to connect Hunter to the PIMAlink 3 application, configure CLH4x2- as follows: Make sure that the panel version is 7.02

Go to the following submenu:

CMS & Communications \Rightarrow CMS \Rightarrow CMS3 \Rightarrow Comm Paths \Rightarrow Cellular Data

- Monitoring station address: force.pimalink.com
- Port: 13000

• Main channel – set this option if the cellular IP channel will be a main reporting channel, meaning this channel will always report to the monitoring center. If this channel is not set as main, it will report events only if there is a fault on another communication channel available (e.g. Ethernet network).

• Account ID: 1

Finish programming the CLH4x2

- Exit technician menu.
- Disconnect the keypad from the circuit.
- Close the system's control box.

Hunter-Pro system programming

Enter the Hunter-Pro system's technician code.

Go to the following menu:

Communication \Rightarrow advanced settings \Rightarrow Network settings

- CMS 1 IP: 192.168.0.27
- CMS 2 IP: force.pimalink.com
- In case the Hunter system should use PIMAlink 3 application
- Port CMS1: 1001
- Port CMS2:13000 if PIMAlink3.0 is used
- Set the Account ID partition: 1
- Set the Upload port to 10001

Note:

If the Hunter-Pro system is partitioned it is required for each partition to report with its own Account ID, you must set an account ID to each partition.

The partition numbers that will be reported are the numbers programmed into the CLH4x2 unit.

Go to the following menu:

Communication \Rightarrow Serial output \Rightarrow

Mark "+" under the first letter N.

On the next screen - "Interval between tests", you must configure as:

"0" - For systems 832/8144

"65" – For systems 896 – "65"



App

Exit technician menu.

Application registration

Enter the user menu using Master user code and press

 $ENTR \Rightarrow NEXT \Rightarrow ENTR \Rightarrow Connection type \Rightarrow NET4PRO$

Select the NET4PRO module and press ENTR (note – even though there is no NET4PRO module on the system, this is a necessary parameter for proper functioning with CLH4x2).

- Select Cloud Registration.
- Write down the resulting code.
- In the application, select Add a new system (+).
- Enter the received pairing code.
- Make sure the pairing was successful.
- Exit user menu.

Tests

Test the alarm system for sending events to the monitoring center and the application – Arm your system, trigger alarms by opening the main door or in front of motion detectors, trigger a duress alarm, test faults, etc.

Confirm that the events are received properly and in chronological order at the monitoring center and/or in the application.

If there is more than one communication channel, disconnect the main channel, trigger some events in the alarm system, and make sure they are received at the monitoring center through the backup channel.

Specifications

Cellular communication channel	
Technology	4G (according to the installed cellular module)
SIM	One or two
Network communication channel	
Interface	Ethernet 10/100
Connection	RJ45
Interface with the alarm system	Serial
Input Power:	10VDC to 14VDC
Current Consumption:	50mA – without cellular module
	300mA - with cellular module
Weight:	350 grams
Dimensions:	90x90x40 mm

Ordering information: P/N 8300080