



4G LTE & LANDLINE INTERCOMS

PROGRAMMING GUIDE HY-CAN LINK SOFTWARE



Raising Standards
Safety Assured



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DOWNLOAD LINKS

HY-CAN LINK SOFTWARE	https://www.telguard.co.uk/s-download.html
USB AVIT LEAD DRIVERS	https://www.avitresearch.co.uk/usb2ttl_silab.htm
TELGUARD GSM MODEM DRIVERS	https://www.ftdichip.com/Drivers/VCP.htm

INSTALLATION

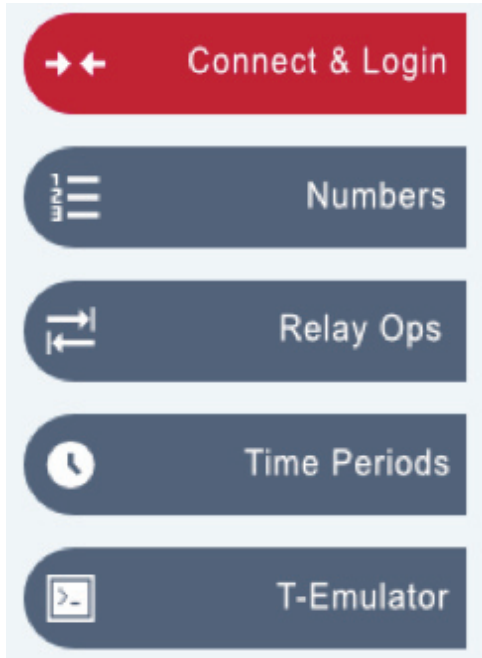
PLEASE NOTE:

- If using an AVIT lead to connect directly to the unit, install the drivers before connecting the lead.
- If you are running 64-bit Windows, the device may not install correctly straight away (*an error will usually display in your task bar*). Please select **'Search for drivers'** on this alert and choose the folder you have downloaded the drivers to. Windows should then find and install them correctly.

- Download HY-CAN-link_setup_TelGuard_Vxxx.exe from the link above.
- Once downloaded, run this and click through the steps until this has finished.
- Once the download is complete, run HY-CAN Link from the desktop icon or from the start menu.

USING THE SOFTWARE

DOWN THE LEFT-HAND SIDE THERE ARE FIVE MAIN TABS:



CONNECT & LOGIN

This tab allows you to connect via USB or modem to Telguard units. From here you can configure connection methods and which panel to connect to.

NUMBERS

This tab controls both the incoming and outgoing dial numbers for the Telguard system.

RELAY OPS

This tab controls all functions which can affect the relay state on the panel. PIN numbers, access tones, external inputs and relay states and timing can all be controlled from here.

TIME PERIODS

The panel has nine configurable time periods which can control most functions on the panel. These periods are configurable by minute, day of the week and can even be date specific.

TERMINAL EMULATOR

This tab takes you to the full programming menu of the Telguard. This menu is laid out in an MS-DOS style and is usually only required to configure advanced features.

CONNECTING TO PANELS

Once the application is launched, head to the '**Communication Methods**' tab. Here you are presented with six options. We are only going to be looking at the top four options here:

The screenshot shows the 'Communication Methods' tab with the following settings:

- Select communication method:**
 - ☒ Avit lead direct to J1
 - Serial communications for J1: Port: COM4, Baud: 9600, Parity: None, Data: 8, Stop: 2, Timeout: 0
 - ☐ Dial up landline modem
 - Serial communications for landline modem: Port: COM8, Baud: 2400, Parity: None, Data: 8, Stop: 1, Timeout: 300
 - ☐ Dial up mobile modem
 - Serial communications for mobile (GSM) modem: Port: COM5, Baud: 9600, Parity: None, Data: 8, Stop: 1, Timeout: 300
 - ☐ TCP/IP server (standard)
 - Settings for Hy-Can-link TCP/IP server (this end of the link) and Hy-Can client (remote end of the link): Local server IP address: 192.168.001.009, TCP port: 8084, Timeout: 180

AVIT LEAD DIRECT TO J1

This tab allows you to connect via USB or modem to Telguard units. From here you can configure connection methods and which panel to connect to.

DIAL UP LANDLINE MODEM

This is used to dial into landline panels.

DIAL UP MOBILE MODEM

This is used to dial into GSM panels. To use this method, the SIM in your modem **AND** the panel you are connecting to must have Fax & Data calls enabled. A call to the SIM network provider should be all that is required to switch this on. This setting is sometimes called Circuit Switched Data by the networks, or CSD for short, however this is no longer supported on some networks (*EE for example*). If this is the case, you will need to use the next method.

TCP/IP SERVER (STANDARD)

This is an alternative to mobile modem for when the system does not have CSD enabled.

When you have selected the method you wish to use, click on the '**Find COM Port**' button.

This will display a list of communication devices connected to your PC underneath all the connection methods.

Choose the correct port by double clicking the one you want to use.

Once selected, choose the '**Login Details**' tab at the top.

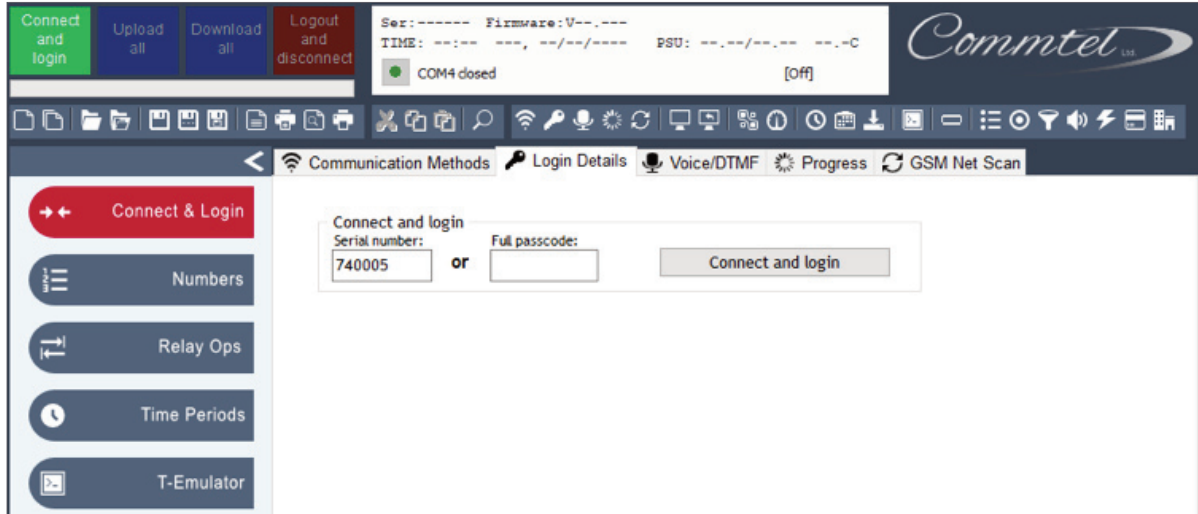
The screenshot shows the 'Find port...' button highlighted in the 'Avit lead direct to J1' section. Below the settings, a list of available COM ports is shown:

COM	Device	Possible lead
COM4:	\\Device\\Silabser0	(Possible Avit lead)
COM15:	\\Device\\Silabser1	(Possible Avit lead)
COM8:	\\Device\\USBSE000	
COM5:	\\Device\\VCP0	(Possible FTDI lead)

AVIT LEAD DIRECT TO J1 CONNECTION

If you are using the USB lead to connect to the panel, you will only have to enter the serial number of the system you wish to connect to.

Enter this into the serial number box and press *'Connect and login'*:



Once connected, the white box at the top will display information regarding the unit.

DIAL UP LANDLINE MODEM | MOBILE MODEM

If you are connecting using a modem, you will have to enter the phone number of the system, as well as the serial number:

The screenshot shows the Commitel web interface. At the top, there are buttons for 'Connect and login', 'Upload all', 'Download all', and 'Logout and disconnect'. Below these, a status bar shows 'COM5 closed'. The main navigation bar includes 'Communication Methods', 'Login Details', 'Voice/DTMF', 'Progress', and 'GSM Net Scan'. On the left, a sidebar contains 'Connect & Login', 'Numbers', 'Relay Ops', 'Time Periods', and 'T-Emulator'. The central area displays the 'Dial-up connect and login' form with fields for 'Telephone number' (07788048854), 'Serial number' (740005), and 'Full passcode'. A 'Connect and login' button is at the bottom right of the form.

Once entered, click '**Connect and login**'. You will see in the white box at the top that dialling will be displayed, followed by logging in. If successful the screen should state connected, and display information regarding the unit.

If you are unsuccessful logging in you may get the message '*No response to machine login*'. If so, check your serial number and unit telephone number.

It is also a good idea to dial the panel number on your phone, wait for it to answer, and press **0#**, causing the panel to hang up without action. This opens the tone channels on the system, and ensures it isn't busy on site.

TCP/IP SERVER (STANDARD) CONNECTION

This method is a recent addition as CSD is now not being offered with some providers.

Always try connecting via mobile modem first and if this fails try TCP/IP.

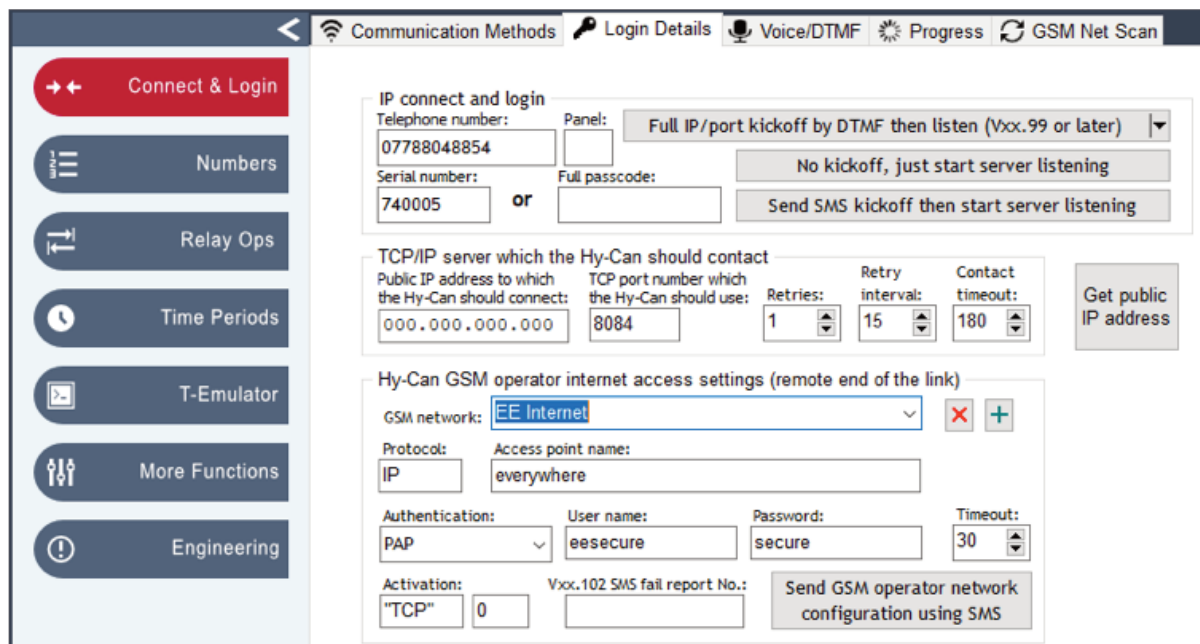
To connect via TCP/IP, you will need the phone number, serial number and what network the SIM in the panel is on (O2, EE etc.). This can be found looking up the number on various websites such as this one:

https://portal.aql.com/telecoms/network_lookup.php

You will also need to configure port forwarding on your router to allow incoming connections to your IP address. This is detailed in the supplementary document, [DOIP Setup Guide.pdf](#).

Once this is all configured, you can start connecting to panels.

First, select the network of the SIM from the drop-down menu under 'GSM Network', and click the 'Send GSM operator network configuration using SMS':



Once this has sent, click the box 'Send SMS kickoff then start server listening'. This will then open your PC's connection up to allow the unit to connect to it.

You will see a countdown at the top while it waits. This generally takes between 30 and 80 seconds to connect, but occasionally it can take longer.

Once connected, the white box at the top will display information regarding the unit.

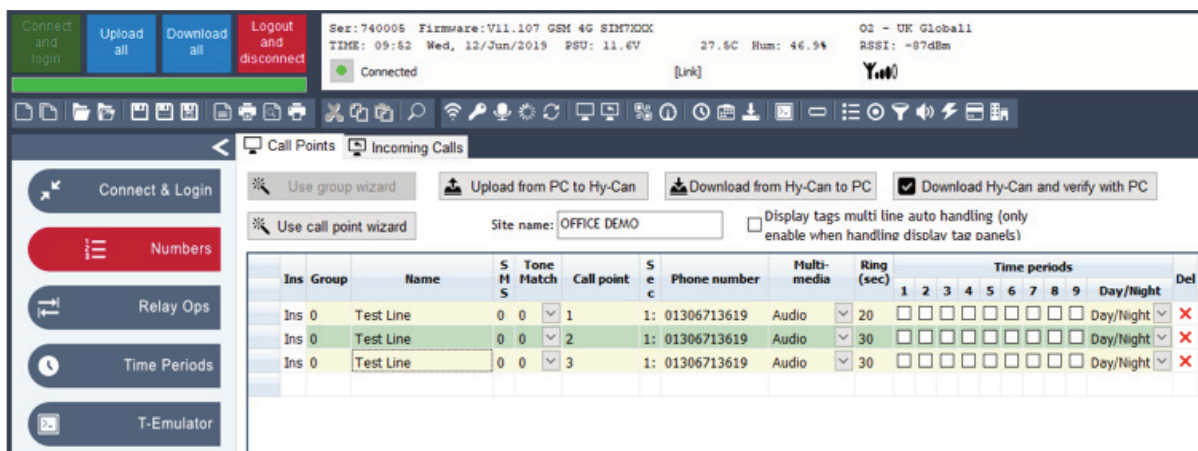
CONFIGURING THE PANEL

Once you are connected to the panel, you can start making changes by choosing a tab down the left-hand side of the screen.

CONFIGURING NUMBERS

To program numbers calling out from the panel, select the **'Call Points'** tab. Click **'Download from Hy-Can to PC'**. This will then download all current programming (*a green progress bar will show you the progress of the download in the top left*). Once complete, **'Use call point wizard'** to add any new numbers.

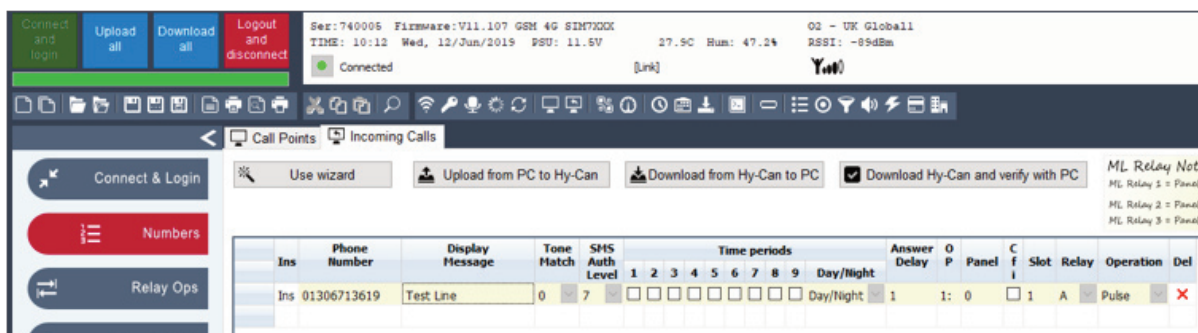
To change an existing number, simply double click on it, and overwrite with desired new number.



You can also apply time periods to numbers being dialled, to do this simply check the box of the time period you want to apply. When finished making changes, click **'Upload from PC to Hy-Can'**. This will then upload the file you have just edited back to the panel itself. Once complete, a message will appear at the top of the screen stating so.

The same process applies to incoming numbers. A list can be created which prohibits non authorized callers from contacting the intercom. Click **'Download from Hy-Can to PC'**, this will then download all current programming. **'Use wizard'** to add incoming numbers or edit any lines you wish to change, then click **'Upload from PC to Hy-Can'**.

Once you've finished making changes, click **'Logout'** and disconnect.



CONFIGURING THE PANEL

CONFIGURING RELAY OPERATIONS

To configure relay operations, select the **'Relay Ops'** tab from the left-hand side. Click **'Download from Hy-Can to PC'** to download all current programming. To overwrite a code, simply select it, type over it with the new code, and hit return.

The screenshot shows the 'Relay Ops' configuration screen in the telguard web interface. The top status bar displays device information: Ser: 740005, Firmware: V11.107 GSM 4G SIM7000, TIME: 10:00 Wed, 12/Jun/2019, PST: 11.5V, 37.9C, Run: 47.1%, Q2 = UK Global, RSSI: -89dBm. The left sidebar has tabs for 'Connect & Login', 'Numbers', 'Relay Ops' (selected), 'Time Periods', 'T-Emulator', 'More Functions', and 'Engineering'. The main area shows the 'Relay state monitoring (experimental)' tab with a table for configuring relay operations.

Ins	Function	Key Sequence	Display Message	Tone Match	Time periods	Day/Night	O P	Panel	C f	Slot	Relay	Operation	Keypads/Panels	Del
					1 2 3 4 5 6 7 8 9								0 1 2 3 4 5 6 7	
Ins	Access tone	#		0			1: 0	1	B		Pulse			X
Ins	Access tone	1#		0			2: 0	2	A		Pulse			X
Ins	Access tone	3#		0			1: 0	1	A		Latch			X
Ins	Access tone	6#		0			1: 0	1	A		Unlatch			X
Ins	Access tone	2#		0			1: 0	2	A		Pulse			X
Ins	Access tone	4#		0			1: 0	2	A		Latch			X
Ins	Access tone	7#		0			1: 0	2	A		Unlatch			X
Ins	Entry code	1066	Steve			Day/Night	1: 0	1	A		Pulse			X
Ins	Entry code	*2222				Day/Night	1: 0	2	A		Pulse			X
Ins	Entry code	*3333				Day/Night	1: 0	1	A		Latch			X
Ins	Entry code	*6666				Day/Night	1: 0	1	A		Unlatch			X
Ins	Exit release					Day/Night	1: 0	1	A		Pulse			X
Ins	Panel in use					Day/Night	1: 0	1	A		Pulse			X
Ins	Timed 1					Day/Night	1: 0	1	A		Latch			X
Ins	SMS open 1	Open	Opened R1A			Day/Night	1: 0	1	A		Pulse			X
Ins	SMS open 2	Pulse				Day/Night	1: 0	2	A		Pulse			X

To add a new function, head to the **'Use wizard'** setting.

This will give you a set of options; Select the code, tone or function you wish to assign, then the relay that you wish it use.

A display message isn't necessary if you don't have a screen, however it can be helpful for future reference. If you wish to use any time periods, please also check them here.

Once all the relay configuration is complete, click **'Upload from PC to Hy-Can'**.

CONFIGURING THE PANEL

CONFIGURING TIME PERIODS

Click on the *'Time Periods'* tab. A table of 9 time periods is displayed. Click *'Download from Hy-Can to PC'* to check which time periods are in the panel already.

The screenshot shows the 'Time Periods' configuration screen. The top status bar displays device information: Ser:740005, Firmware:V11.107 GSM 4G SIM7300X, TIME: 10:10 Wed, 12/Jun/2019, PSU: 11.6V, 28.0C Hum: 47.3%, 02 - UK Global1, RSSI: -89dBm. The left sidebar has buttons for 'Connect and login', 'Upload all', 'Download all', 'Logout and disconnect', 'Numbers', 'Relay Ops', 'Time Periods' (selected), 'T-Emulator', and 'More Functions'. The main area shows a table for configuring 9 time periods.

Period	Start time	End time	Week days							Start date	End date
			Mo	Tu	We	Th	Fr	Sa	Su		
1	06:00	11:00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Fill out the start and end times of time periods you wish to use. Each time period can be configured by *Week days* or by *Start and End date*. Once again click *'Upload from PC to Hy-Can'* when finished.

Once uploaded, click *'Logout'* and disconnect if programming is complete.

BACKUP AND RESTORATION OF INFORMATION

- When you have downloaded a list of numbers, relay ops or time periods from a panel, or have created one to upload, this can be saved by simply clicking **'File'** in the top toolbar, then **'Save As'**. Give the file a reference for the panel you are working on and click **'Save'**.
- This produces a backup notepad file of the information in a format that the system can read. This also gives you a reference file for the information in the system.
- If you ever need to restore this file, simply select the tab from the left that you wish to restore, then click **'File'** and choose **'Open'**. Choose your file and then click **'Upload from PC to Hy-Can'** to push this file to the panel.



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