ENFORCER V11

COMMUNICATIONS GUIDE

Document SAP: 102028846-01

IMPORTANT NOTE

Additional modems must be inserted when the panel is fully powered down. It must be then powered up mains first.

On initial power up, the panel MUST be clean started before any programming is done.

DOCUMENT CONVENTIONS

TERMINOLOGY

INTERCHANGEABLE WORDS	DESCRIPTION
Armed, set	When an area or level is armed, if a zone is triggered, the system will follow the appropriate (programmable) actions.
Disarmed, unset	When an area or level is disarmed, the panel will not react unless specifically programmed to do so.
Siren, sounder, bell	A warning device (usually external) that is generally configured to give audible and visual notification that the system has been activated.
Area, partition	A group of zones assigned to be active when that particular area is armed. This is usually named 'Area A' or renamed to a personal choice such as 'Full Set' or 'Shop'.
Zone, input	This refers to a detector or sensor connected to the system, whether this be wired or wireless.
Output, PGM, PG	An output is a signal from the panel to instruct another device to operate. This is usually a voltage that triggers a wired siren, a garage door, a wireless siren etc.
Bypass, omit	The act of stopping a zone from becoming armed. A wired zone will still detect an intruder or object but the system will not react to it - a wireless zone will become dormant.

ICONS

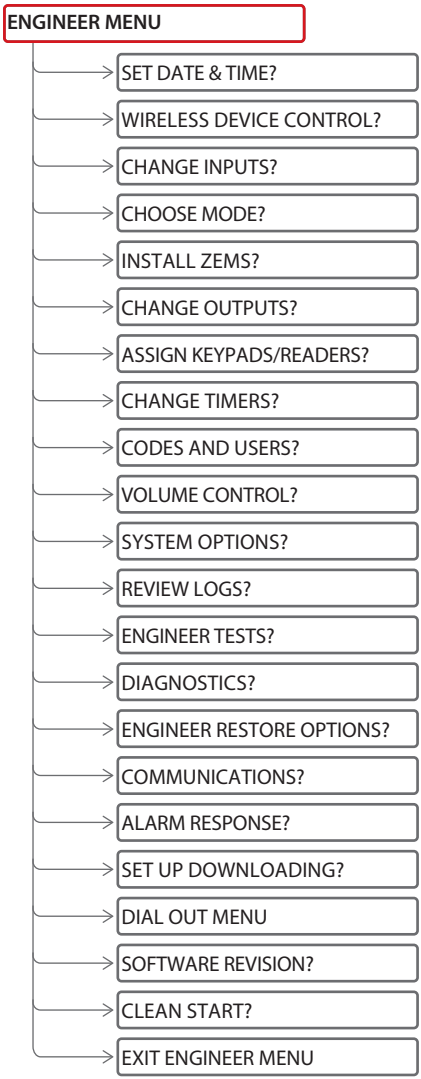
Important information
This information should be read and taken into consideration when installing. Failure to do so may result in faults and unexpected errors with the system and or peripherals.

Notes
Highlights parts of the process where extra care is needed or where sections of the programming may be impacted by other options in the menus.

Hints
Helpful information for a smoother installation of the system.

CONTENTS

COMMUNICATION MENU ITEMS OF INTEREST



Diagnostics

View information about the system communications such as:

- Wi-Fi strength
- IP address
- Subnet mask
- App status
- ARC status

Communications

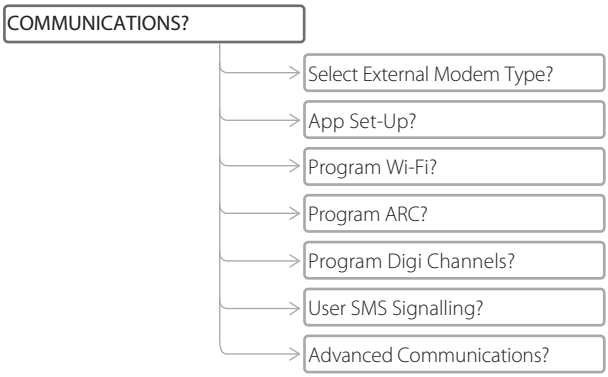
Configures the system communications for the smart phone application and signalling to the ARC.

Set Up Downloading

Configures the system to be accessed via upload/download software.

Dial Out Menu

Used to force the system to dial out to the upload/download software.



APP SET-UP

1. Enter the Engineer Menu.
2. Press [NO] until the option '**COMMUNICATIONS?**' is displayed. Press [YES].
3. Press [NO] to move from the external modem type to '**App Set-Up?**' and press [YES].

Complete each of the following menu stages pressing [YES] to move on to the next.

Use App?

This must be enabled for the system to communicate with the smart device application.

- No [0]
- Yes [1]

System ID

This is unique to the panel and cannot be altered. Note down the System ID exactly as displayed on the LCD as this is needed to add the system to a PyronixCloud account.

Cloud Password

Create a cloud password, this is used to add this system to the PyronixCloud.

Security Level

Changes the difficulty of the app password required when connecting to the control panel via the smart device application.

- Normal [0]
- High [1]

Choosing 'Normal' is sufficient in most cases and allows the app password to be created manually. If 'High' is selected, an app password will be created. This will generate a 32-digit random alphanumeric password which can't be changed.

App Password

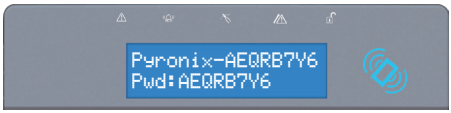
Create a password that must be entered in the smart device application when connecting to the panel.

PROGRAM WI-FI

Connecting to the wireless network using a smart device

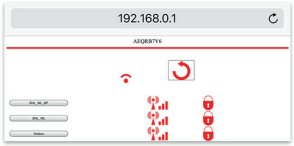
This option is used if the system is to be connected to a wireless network by using a smart device such as a tablet, laptop or mobile phone. The device must be able to connect to wireless networks.

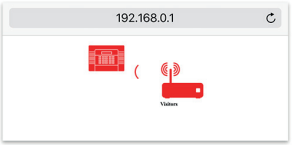
1. Enter the Engineer Menu.
2. Press NO until the option '**COMMUNICATIONS?**' is displayed. Press YES.
3. '**Select External Modem Type?**' will now be displayed, press NO.
4. '**App Set-Up?**' will now be displayed, press NO.
5. '**Program Wi-Fi?**' should be displayed. Press YES.
6. '**Setup with Wi-Fi Device?**' should now be displayed on the LCD screen, press YES.
7. The screen will now be displaying '**Are You Sure?**' Press YES and the panel's hotspot details will be displayed.



Do not press any more buttons on the panel during this phase

8. Using your smart device, connect to the system's hotspot in the network settings.
9. Once connected, open a web browser and in the address bar enter 192.168.0.1
10. The browser should now display a list of all the wireless networks that are visible to the system's Wi-Fi.
11. Select the wireless network that the system is to be connected to and enter the password for this network in the text box provided. Press the tick.
12. The browser will display a panel trying to communicate with a wireless router whilst it tries to connect to the network.
13. When the Enforcer has connected to the wireless network, the LCD will change to '**Connected to Network**.'
14. Press YES and the screen will return to '**Program Wi-Fi?**' and the procedure is complete.
15. Exit the Engineer Menu to save the programming and the system is now connected to the wireless network.





Connecting via WPS

1. Enter the Engineer Menu.
2. Press NO until the option '**COMMUNICATIONS?**' is displayed. Press YES.
3. '**Select External Modem Type?**' will now be displayed, press NO.
4. '**App Set-Up?**' will now be displayed, press NO.
5. '**Program Wi-Fi?**' should be displayed. Press YES.
6. '**Setup with Wi-Fi Device?**' will now be on the LCD screen, press NO.
7. '**Setup with WPS?**' should now be on the LCD screen, press YES.
8. The screen will now be displaying '**Are You Sure?**' Press YES.
9. Whilst the screen is now displaying '**Connecting WPS Please Wait**', press the WPS button on wireless router.

Please refer to the router installation guide for help locating the WPS button.

10. If the pairing to the wireless network has been successful, '**Connected to Network**' will be shown on the LCD.
11. Exit the Engineer Menu to save the programming and the system is now connected to the wireless network.

Manually connecting to the wireless network

1. Enter the Engineer Menu.
2. Press NO until the option '**COMMUNICATIONS?**' is displayed. Press YES.
3. '**Select External Modem Type?**' will now be displayed, press NO.
4. '**App Set-Up?**' will now be displayed, press NO.
5. '**Program Wi-Fi?**' should be displayed. Press YES.
6. '**Setup with Wi-Fi Device?**' will now be on the LCD screen, press NO.
7. '**Setup with WPS?**' should now be on the LCD screen, press NO.
8. '**SSID?**' will now be displayed, press YES.
9. Enter the SSID of the wireless network (this is also referred to a the network name) using the keypad. Once this has been correctly entered, press YES.

Hint: A changes the case of the letter. B and D move the cursor forward and back. C deletes the character, 0 and 1 inserts glyphs.

10. Press NO to change the LCD from '**SSID?**' to '**Password?**' and press YES.
11. Enter the password for the wireless network and press YES.
12. Exit the Engineer Menu to save the programming and the system is now connected to the wireless network.

DIAGNOSTICS

1. Enter the Engineer Menu.
2. Press NO until the option '**DIAGNOSTICS?**' is displayed. Press YES.
3. Press NO until '**Communications?**' is shown on the LCD. Press YES.

Wi-Fi strength

The LCD will now display the Wi-Fi strength between the control panel and the wireless router which is indicated on a scale of 0 - 31. Press YES when finished.

- >20 Strong signal
- 10 - 20 Medium signal
- <10 Weak signal

Please note: This needs to be 11 or above.

Wi-Fi IP address

The system IP address that the router has allocated to it.

Wi-Fi subnet mask

The subnet mask is now shown on the LCD.

Wi-Fi router address

The IP address of the router the system is connected to.

PSTN line status

Present

The PSTN line is being detected by the PSTN module in the panel.

Requires additional PSTN communications module to display this.

Missing

The PSTN line is not being detected by the panel or has an issue.

App status

No network
The system has no data connection.

Initialising
The system is attempting to connect to the network.

Full Network
Panel has local network connection but no external internet connection. Check Internet or Firewall settings.

Polling cloud
The panel is polling the cloud.

ARC status

No ARC/net data
There is no ARC details programmed.

No network
The system has no data connection.

Initialising
The panel is attempting to connect to network.

Polling ARC
The panel is polling the ARC.

Last app contact

The last time the smart device application contacted the panel (in seconds).

Last polled cloud

This is showing the last time (in seconds) the panel polled the cloud.

Last polled ARC

The LCD displays the last time (in seconds) that the panel polled the ARC.

LAN module

To connect this module to the internet, it requires physically connecting to the router with an Ethernet cable.

Partcode - DIGI-LAN
EN 50136-1:2012+A1:2018
EN 50136-2: 2013
CLC/ TS 50136-9: 2013
SP5

GPRS and SIM module

This is supplied with a CSL data SIM which will latch on to, and use, the strongest available 2G signal regardless of network carrier.

Please note: If the module has been purchased with the intention of signalling to an ARC, it must be purchased directly from the ARC or CSL.

Partcode - DIGI-GPRS+SIM
EN 50136-1:2012+A1:2018
EN 50136-2: 2013
CLC/ TS 50136-9: 2013
SP5

GPRS module

Please note: The third party SIM card must be able to utilise a 2G signal.

Partcode - DIGI-GPRS
EN 50136-1:2012+A1:2018
EN 50136-2: 2013
CLC/ TS 50136-9: 2013
SP5

PSTN modem (Digi-1200)

This modem connects directly to the telephone line and can be used to send signals to an Alarm Receiving Centre.

Partcode - DIGI-1200
EN 50136-1:2012+A1:2018
EN 50136-2: 2013
SP2

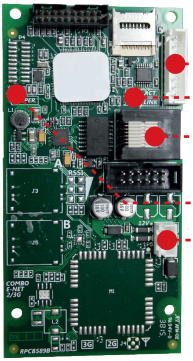
PSTN voice modem

This modem connects directly to the telephone line and has all the functions that the 'Digi-1200' has with the added function of being able to deliver pre-recorded voice messages.

Partcode - DIGI-PSTN/VOICE
EN 50136-1:2012+A1:2018
EN 50136-2: 2013
EC II
SP2

LAN MODULE

Layout



LED indication

Sequence	Indication
	Green OPER. LED Slow blinking indicates power to the module.
	Yellow ACT LED On solid, indicating a data connection to the modem.
	Green LINK LED Blinks whenever the modem is transferring data on the network.

Connecting to a LAN network

1. Connect an Ethernet cable from the router to the Ethernet port on the LAN module.
1. Enter the Engineer Menu.
2. Press [NO] until the option '**COMMUNICATIONS?**' is displayed. Press [YES].
3. '**Select External Modem Type?**' will now be displayed, press [YES].
4. Press [3] for option 'ETHERNET [3]' and press [YES].
5. Press [NO] until the LCD displays '**Program LAN?**'. Press [YES]
6. '**Enable Auto IP**' will now be on the LCD. Make sure this option is set to 'Yes' by pressing [1]. Press [YES].
7. The Enforcer screen will now return to '**Program LAN?**' and the connection is complete.
8. Exit the Engineer Menu to save the programming and the system is now connected to the network.

Please note: To enter the details manually, the Auto IP option needs to be set to 'No' by pressing [0] instead of [1]. The LAN details will now need to be entered by the engineer, pressing [YES] after every data entry to move on to the next section.

For navigation and other communication diagnostic menus, please see "Diagnostics" on page 7

In addition to the Wi-Fi diagnostics for the on-board communications module, this menu will now display the following addition diagnostic data.

LAN IP address

The system IP address that the router has allocated to it.

LAN subnet mask

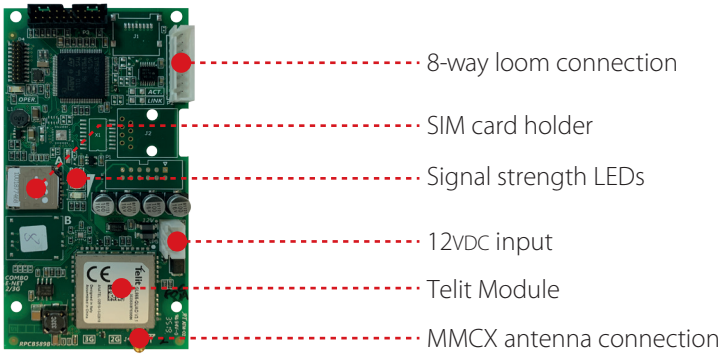
The subnet mask is now shown on the LCD.

LAN gateway

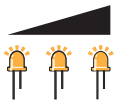
The LAN gateway IP address.

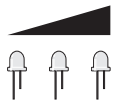
GPRS MODULE

Layout



LED indication

Sequence	Indication
	Yellow solid LED 1-30% signal strength.
	Yellow solid LEDs 31-60% signal strength. Hint: This is the minimum required signal strength for reliable communications.
	Yellow solid LEDs 61-100% signal strength.
	Yellow cycling LEDs Searching for signal.

Sequence	Indication
	No LEDs Check wiring connections.

Connecting to the data network

IMPORTANT NOTE: Before programming the GPRS, make sure that the antenna is connected and located in a place where the module is receiving at least 50% signal strength.

1. Enter the Engineer Menu.
2. Press NO until the option '**COMMUNICATIONS?**' is displayed. Press YES.
3. '**Select External Modem Type?**' will now be displayed, press YES.
4. Press 1 for option 'GPRS [1]' and press YES.
5. Press NO until '**Program GPRS?**' is displayed. Press YES.
6. 'APN' should be displayed on the screen, press YES and the panel will display the APN for the Tele2 CSL SIM card. **This must not be altered**. Press YES.

Hint: If a SIM card that was not purchased with the unit is installed, this information should be deleted and the network's APN should be entered.

7. 'User ID' should now be displayed on the panel. Press YES and the panel will show the user ID for the GPRS network. **This should be blank, and left blank**. Press YES.

Hint: If a SIM card that was not purchased with the unit is installed, the network may have a user ID and should be entered.

8. '**Password**' will now be displayed on the LCD, press YES to reveal a blank screen. **This again, must be left blank**. Press YES.

Hint: If a SIM card that was not purchased with the unit is installed, the network may have a password and should be entered.

9. The panel should now return to '**Program GPRS?**' and the procedure is complete.
10. Exit the Engineer Menu to save the programming and the system is now connected to the network.

Please note: If the SIM card is from another network, the APN details must be acquired and entered in to the relevant fields.

Diagnostics

For navigation and other communication diagnostic menus, please see "Diagnostics" on page 7

In addition to the Wi-Fi diagnostics for the on-board communications module, this menu will now display the following addition diagnostic data.

GPRS signal

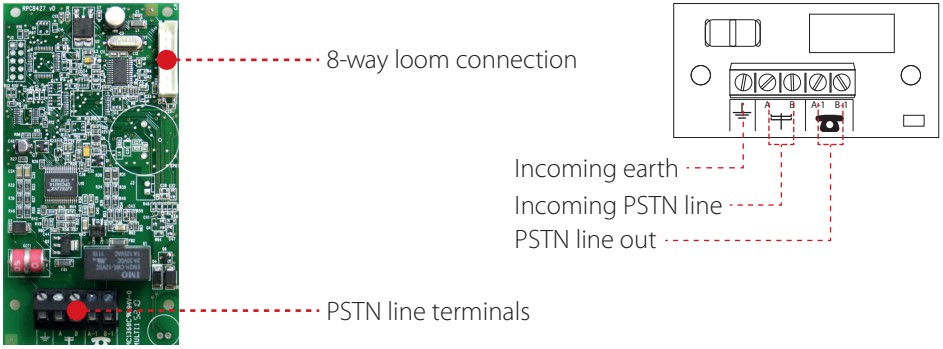
The GPRS signal strength that the module is receiving. This is indicated on a scale of 0 - 31 and the approximate brackets are as follow:

- >20 Strong signal
- 10 - 20 Medium signal
- <10 Weak signal

Standard

IMPORTANT NOTE: Even though both the standard and voice variants of the PSTN modem are compatible with this system, it is recommended other communication methods are used. This is due to the removal of current copper networks on an exchange basis for new IP solutions.

Layout



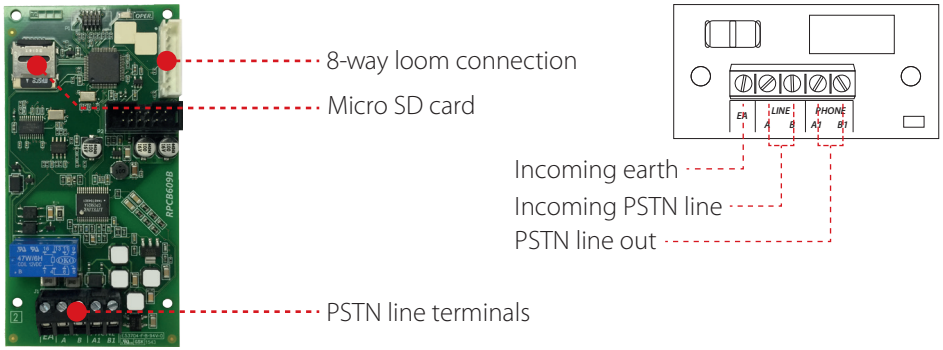
LED indication

There is only one amber LED on the PSTN modem. This will light up when the modem is active.

Voice

IMPORTANT NOTE: Never remove the Micro SD card from the module as it contains the pre-programmed/ pre-recorded voice messages.

Layout



LED indication

There is only one amber LED on the PSTN modem. This will light up when the modem is active.

Diagnostics

For navigation and communication diagnostic menus, please see "Diagnostics" on page 7

SIGNALLING

PROGRAMMING FAST FORMAT AND FAST FORMAT IP

Initial set- up

1. Enter the Engineer Menu.
2. Press [NO] until the option '**COMMUNICATIONS?**' is displayed. Press [YES].
3. '**Select External Modem Type?**' is now be displayed. Press [NO] until '**Program ARC?**' is displayed and press [YES].
4. The LCD should now display '**ARC Details?**'. Press [YES] to move on.
5. The '**ARC Comms Path**' must now be specified.

Hint: Only the PSTN modem can use standard fast format. All the other communication modules will signal via fast format IP.

6. Select which type of fast format is to be sent to the ARC press [YES].

- [000] Fast 4.8.1
- [001] Fast 6.8.1
- [002] Fast 4.16.1
- [003] Fast 6.16.1
- [150] Fast Format IP

PSTN OPTIONS ONLY

7. The ARC telephone number needs to be entered on this screen which should display '**1st Number'** and press [YES]'
8. If the ARC has a secondary or alternative telephone number, this should be entered on this screen displaying '**Second No.'** Once this has been entered, press [YES]'
9. '**ARC Account**' should now be displayed on the screen. Enter the ARC account number and press [YES]
10. The channels which are to be signalled through to the ARC, now need selecting. To do this, press the numbered key of the channel and the digit should appear. For example, press [8] for channel 8.

Hint: Disabled channels will appear as a full stop and enabled channels will displays the channel number. Press [YES] when finished.

If channels 11-16 are required, move the cursor using the [B] and [D] keys to the relevant 'full stop' and press [A] to activate that channel. Press [YES] when finished.

11. This next screen is for the fast format channel restores. Follow the same procedure to select restores and press [YES].

If channels 11-16 are required, move the cursor using the [B] and [D] keys to the relevant 'dot' and press [A] to activate that channel

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12. The LCD will now display '**Redials**'. On this screen, select you number of redials you require and press [YES].

Hint: Redials are the number of attempts up on failing that the panel will retry to send the signal.

13. The panel will now require the 'Time Out' to be set. Enter the information and press [YES]

Hint: This can be set to a maximum of 60 seconds. The default is 45 seconds and can just be left at this value.

14. To send low battery reports to the ARC, change this option to 'Yes' by pressing [1]. If not leave as 'No [0]' and then press [YES].
15. The LCD will now display '**Test Calls**'. If test calls are not required press [YES]. If they are required, change this options to 'Yes' by pressing [1] and then [YES] to continue.
16. The following options need to be set in order for the panel to complete test calls. Enter the appropriate information at each stage, pressing [YES] to move on to the next option.

- Start time hours
- Start time minutes
- Interval days
- Interval hours
- Interval minutes

Programming channels

1. Enter the Engineer Menu.
2. Press NO until '**COMMUNICATIONS?**' is shown on the LCD. Press YES.
3. Press NO until '**Program Digi Channels?**' is displayed and press YES.
4. The screen will now display '**Digi 01**', the first channel for Fast Format. The default for the first channel is '[0001] Fire'. To change this to another output type enter the number of the output type you wish to change it to and press YES.

Please note: A full list of the output type can be found in "Appendix 1 - Output Types" on page 23

5. The screen will now change to '**Digi 02**' which is default set up as '[0009] HU device Any'. As before, if this output type is incorrect, enter the number of the output type that is to be signalled on this channel and press YES.
6. Repeat this through to '**Digi 16**' and change the required output types on the channels. Once completed, the screen should return to '**Program Digi Channels?**'.

Testing

The testing of outputs will trigger the to test Fast Format channels and send a signal to the ARC.

Hint: SMS, Contact ID and SIA 3 cannot be tested this way.

1. Enter the Engineer Menu.
2. Press NO to scroll to '**ENGINEER TESTS?**' and press YES.
3. Keep pressing NO until the LCD displays '**Test Outputs?**' then press YES.
4. Enter the number of the output assigned to the channel you wish to test.

Hint: Refer to the table in "Appendix 1 - Output Types" on page 23 for help. (For example '0018' is 'Unconfirmed Any')

5. Press YES and the channel associated with this output will signal an open to the ARC and the top line of the LCD will change to '**Test in progress**'.
6. After approximately 45 seconds press YES again. This will change the channel back to its restore state and send a close signal through to the ARC
7. Again, leave it 45 seconds again to give the panel enough time to send the close signal before sending the next open signal.
8. Repeat the above steps to send more channels to the ARC.
9. Leave the Engineer Menu when the required signals have been sent.

SIA3, SIA IP, CONTACT ID AND CONTACT ID IP

Initial set-up

1. Enter the Engineer Menu.
2. Press [NO] until the option '**COMMUNICATIONS?**' is displayed. Press [YES].
3. '**Select External Modem Type?**' is displayed. Press [NO] until '**Program ARC?**' is displayed and press [YES].
4. The LCD should now display '**ARC Details?**'. Press [YES] to move on.
5. The '**ARC Comms Path**' must now be specified.

Hint: The PSTN modem can only use standard SIA3 and Contact ID. All the other communication modules will use the IP variants.

6. Select which signal type is to be sent to the ARC press [YES].

- [128] SIA Level 1
- [129] SIA 3
- [130] Contact ID
- [148] SIA IP
- [149] Contact ID IP

PSTN OPTIONS ONLY

7. The ARC telephone number needs to be entered on this screen which should display '**1st Number'** and press [YES]'.
8. If the ARC has a secondary or alternative telephone number, this should be entered on this screen displaying '**Second No.**' Once this has been entered, press [YES]'.
9. '**Valid Areas'** should now be on the screen. Select which areas need have signals sent to the ARC and press [YES].
10. If each individual area has its own ARC account code then '**Area Accounts?**' needs to be changed 'YES' by pressing [1]. If there is one ARC account for the whole installation, leave this option to 'No' and press [YES].

Hint: If this option has been changed to 'Yes.' Each area's code will need entering, pressing [YES] after each area.

11. Enter the ARC account code and press [YES].
12. The LCD will now display '**Redials**'. On this screen, select you number of redials you require and press [YES].

Hint: Redials are the number of attempts up on failing that the panel will retry to send the signal.

13. The panel will now require the 'Time Out' to be set. Enter the information and press [YES]

Hint: This can be set to a maximum of 60 seconds. The default is 45 seconds and can just be left at this value.

14. The LCD will now display '**Test Calls**'. If test calls are not required press [YES]. If they are required, change this options to 'Yes' by pressing [1] and then [YES] to continue.
15. The following options need to be set in order for the panel to complete test calls. Enter the appropriate information at each stage, pressing [YES] to move on to the next option.

- Start time hours
- Start time minutes
- Interval days
- Interval hours
- Interval minutes

16. '**Event Types'** will now be displayed on the LCD. The options to select from are as follows;

- Default [0]
- Simple [1]
- Full [2]
- Custom [3]

Please note: The event types presets can be found in "Appendix 2 - Event Type Presets" on page 26.

17. Once a selection has been made, press [YES].
18. If 'Custom' is selected then each of the 'Event Types' will need to be individually assigned.
19. The screen should now return to '**Program ARC?**' and the procedure is complete.

Testing

Only a simple test can be done through the menus when any Contact ID or SIA signalling method is selected. To send a basic test signal:

1. Enter the Engineer Menu.
2. Scroll to '**ENGINEER TESTS?**' and press YES.
3. Keep pressing NO until the LCD displays '**Test Communications?**' then press YES.
4. The screen will display '**Are You Sure?**' press YES.
5. The LCD will return back to '**Test Communications?**'.
6. The panel will now signal a test signal to an ARC or send through a test text to the mobile phone. If a voice message is programmed, it will call the phone and play a "test message".

If all the signals such as Intruder, set, unset etc. need to be sent to the ARC, they have to be physically done in real time on the panel.

SIGNING UP TO THE ARC

Now the communicator is programmed, the next stage is to sign it up to your ARC.

Please note: This is only required for IP signalling formats

1. Enter the Engineer Menu.
2. Press NO until the option '**COMMUNICATIONS?**' is displayed. Press YES.
3. '**Select External Modem Type?**' is displayed. Press NO until '**Program ARC?**' Press YES.
4. Press NO until '**Sign Up To ARC?**' Press YES.
5. '**ARC Code/IP Addr**' now enter the five digit ARC code and press YES.

Please note: A full list of the ARC codes can be found in "Appendix 3 - CSL ARC Code List" on page 27

6. '**Start Sign Up To ARC?**' Press YES.
7. '**Are You Sure?**' Press YES.
8. '**Connecting…**' wait.
9. '**Registered with ARC successfully**' press YES. If you get a failed message at this point, check your internet connection in the '**DIAGNOSTICS?**' menu and try again.
10. '**Sign Up To ARC?**' Press NO.
11. '**Program ARC?**' Press NO.
12. '**Program Digi Channels?**' Press NO.
13. '**Advanced Communications?**' Press NO.
14. '**COMMUNICATIONS?**' Press A to quit and save changes.

SMS

Set-up

1. Enter the Engineer Menu.
2. Press [NO] until the option '**COMMUNICATIONS?**' is displayed. Press [YES].
3. '**Select External Modem Type?**' is displayed. Press [NO] until '**User SMS Signalling?**' is displayed and press [YES].
4. The screen will now display '**SMS Details [01]**' press [YES] to program the first SMS message.
5. The LCD will now display '**Mobile No.**'. Enter the first mobile number that the panel is to send an SMS to and press [YES].
6. 'Valid Areas' will now be displayed. Enter the areas which you require SMS to be sent for by pressing [A], [B], [C] or [D] and press [YES].
7. The LCD will now display '**Redials**'. On this screen, select you number of redials you require and press [YES].

Hint: Redials are the number of attempts up on failing that the panel will retry to send the signal.

8. The panel will now require the 'Time Out' to be set. Enter the information and press [YES]

Hint: This can be set to a maximum of 60 seconds. The default is 45 seconds and can just be left at this value.

9. The LCD will now display '**Test Calls**'. If test calls are not required press [YES]. If they are required, change this options to 'Yes' by pressing [1] and then [YES] to continue.
10. The following options need to be set in order for the panel to complete test calls. Enter the appropriate information at each stage, pressing [YES] to move on to the next option.

- Start time hours
- Start time minutes
- Interval days
- Interval hours
- Interval minutes

11. '**Event Types'** will now be displayed on the LCD. The options to select from are as follows;

- Default [0]
- Simple [1]
- Full [2]
- Custom [3]

Please note: The event types presets can be found in "Appendix 2 - Event Type Presets" on page 26.

12. Once a selection has been made, press [YES].
13. If 'Custom' is selected then each of the 'Event Types' will need to be individually assigned.
14. The screen will now return to '**SMS Details [01]**'

To add another number use the [B] and [D] keys to scroll to the next allocation and follow the same procedure as before. A maximum of 10 mobile numbers can be entered in to the system.

Please note: The GPRS module is the only module that can send SMS. However, in order for this to work, a third party SIM card has to be used. The Tele2 SIM is a data sim only and is unable to send SMS.

Testing

Only a simple test can be done through the menus to check SMS. To send a basic test signal:

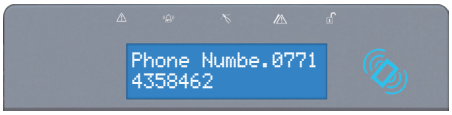
1. Enter the Engineer Menu.
2. Scroll to '**ENGINEER TESTS?**' and press YES.
3. Keep pressing NO until the LCD displays '**Test Communications?**' then press YES.
4. The screen will display '**Are You Sure?**' press YES.
5. The LCD will return back to '**Test Communications?**'.
6. The panel will now send through a test text to the mobile phone.

If other signals such as intruder, need to be tested via SMS, they have to be physically done on the panel.

VOICE MESSAGES

Set-up

1. Enter the Engineer Menu.
2. Press NO until the option '**COMMUNICATIONS?**' is displayed. Press YES.
3. '**Select External Modem Type?**' is displayed. Press NO until '**Voice Signalling?**' is displayed and press YES.
4. '**Voice Details [01]**' will now be displayed on the screen. Press YES.
5. '**Phone Numbe.**' will now be displayed on the LCD. Enter the telephone number that the panel is to dial to deliver the voice message. This should be entered straight after the 'full stop/dot' on the top line of the display and the rest of the number entered on the bottom like shown. Press YES.



6. The LCD will display '**Valid Areas**'. Enter the areas that voice messages are to be sent for. Press YES.
7. '**User Ack Code**' will now be displayed on the LCD, This is the code that is to be entered on the phone to acknowledge the voice call. This is default set to '5' but can be changed. When finished, press YES.

Hint: Use B and D to move the cursor, C to delete any numbers that are already present. Use the numerical keys to enter an acknowledgment code.

8. The LCD will now display '**Redials**'. On this screen, select you number of redials you require and press YES.

Hint: Redials are the number of attempts up on failing that the panel will retry to send the signal.

9. The panel will now require the 'Time Out' to be set. Enter the information and press YES

Hint: This can be set to a maximum of 60 seconds. The default is 45 seconds and can just be left at this value.

10. The LCD will now display '**Test Calls**'. If test calls are not required press YES. If they are required, change this options to 'Yes' by pressing 1 and then YES to continue.
11. The following options need to be set in order for the panel to complete test calls. Enter the appropriate information at each stage, pressing YES to move on to the next option.

- Start time hours
- Start time minutes
- Interval days
- Interval hours
- Interval minutes

12. '**Event Types'** will now be displayed on the LCD. The options to select from are as follows;

- Default [0]
- Simple [1]
- Full [2]
- Custom [3]

Please note: The event types presets can be found in "Appendix 2 - Event Type Presets" on page 26.

13. Once a selection has been made, press YES.
14. If 'Custom' is selected then each of the 'Event Types' will need to be individually assigned. Once a selection has been made, press YES.
15. The screen will now return to '**Voice Details [01]**'

To add another number use the B and D keys to scroll to the next allocation and follow the same procedure as before. A maximum of 10 mobile numbers can be entered in to the system.

Please note: The Digi-PSTN/VOICE modem has all the signalling capabilities of the standard PSTN modem. If required to signal to an ARC, please refer to "Signalling" on page 14.

Testing

Only a simple test can be done through the menus to check voice messages. To send a basic test signal:

1. Enter the Engineer Menu.
2. Scroll to '**ENGINEER TESTS?**' and press YES.
3. Keep pressing NO until the LCD displays '**Test Communications?**' then press YES.
4. The screen will display '**Are You Sure?**' press YES.
5. The LCD will return back to '**Test Communications?**'.
6. The panel will now send through a test message to the mobile phone; it will call the phone and play a "test message".

If other signals such as intruder, need to be tested via voice messaging, they have to be physically done on the panel.

ADVANCED COMMUNICATION OPTIONS

1. Press [NO] until 'COMMUNICATIONS?' is shown on the LCD. Press [YES].
2. Press [NO] until screen shows 'Advanced Communications?' and press [YES].

Prefix telephone number

The screen will now display 'Prefix Tel No.' If the line requires a digit before the number to dial outside lines, this should be entered in here

3 way calling

This should be left at 'No'.

ARM PC tel number

If Automated Remote Maintenance (ARM) is being utilised via PSTN modem, the number of the PC modem should be entered here.

Program PCs

Any PCs that will be communicating with the panel directly via IP (not via the cloud) the IP address etc. of the PC is entered here.

Voice message additional options

Voice strategy

Press [0] for 'Sequential' or [1] for 'Repeat'

Sequential [0]
The panel will call the first number then the second and so forth. Then go back to the start and try again.

Repeat [1]
The panel will keep calling the first number until it has exhausted its redials, then call the second.

Acknowledgements

Using the numerical keys, enter the voice allocation slot which you wish to edit and press [YES]

Voice Restrict Time

The 'Voice Restrict Time' is the "cool off period" of the panel between sending two of the same voice message. For example, if the same detector was triggered more than once.

This is defaulted to 10 minutes. If required, change the default from '10.

CSL PYRONIX CONNECTED QUICK SIGNALLING SETUP

Once connected to the network (whether this be Wi-Fi, LAN or GPRS), to get started quickly follow this guide:

1. 'COMMUNICATIONS?'. Press YES.
2. Press NO until 'Program ARC?' Press YES.
3. 'ARC Details' Press YES.
4. 'Format [254] Not Used'. Type 1 4 8 and press YES.
5. 'Valid Areas [ABCD]'. Press YES.
6. 'Area Accounts No [0]'. Press YES.
7. 'ARC Account'. Type account number and press YES.
8. 'Redials [03]'. Press YES.
9. 'Time Out Seconds [45]'. Press YES.
10. 'Test Calls No [0]'. Type 1 and press YES.
11. 'Start Time Hours [00]' type current hour plus 1 and press YES.
12. 'Start Time Mins [00]' Press YES.
13. 'Interval Days [01]' Press YES.
14. 'Interval Hours [00]' Press YES.
15. 'Interval Minutes [00]' Press YES.
16. 'Event Types Default [0]' Press YES.
17. 'ARC Details?'. Press NO.
18. 'Sign Up To ARC?' Press YES.
19. 'ARC Code/ IP Addr' enter from "Appendix 3 - CSL ARC Code List" on page 27 and press YES.
20. 'Start Sign Up To ARC?'. Press YES.
21. 'Are You Sure?'. Press YES.
22. 'Connecting…' wait.
23. 'Registered with ARC successfully'. Press YES.
24. The programming is now complete. Leave the Engineer Menu to save the configuration.
25. Test the communications.

APPENDIX 1 - OUTPUT TYPES

NO.	TYPE	ACTIVE	RESTORE
0000	Not Used	(Permanently off)	
0001	Fire	At alarm	When a valid code is entered
0002	Hold Up Any	"At a HU or Duress alarm (This includes keypad HU)"	When a valid code is entered
0003	Intruder Any	At alarm, while system is disarmed	At first valid code entry and at end of confirm time.
0005	Misoperation Any (Abort)	When system is silenced after any 'intruder' output is triggered	After 2 minutes
0006	Confirmed Any	After two 'intruder' alarm activations	At next code entry
0007	Tamper Any	Any tamper alarm	At code entry to silence And at end of confirm time.
0008	Duress	At a Duress alarm (i.e. from a keypad)	When a valid code is entered
0009	HU Device Any	At alarm on a HU input only	When a valid code is entered
0010	Gas	At alarm	When a valid code is entered
0011	Set Fail	Pre-set time after start of exit time, if exit procedure is not complete	At code entry to rearm
0012	Entry Deviation	When deviation from entry route occurs, during entry time	At code entry to unset
0013	Secure Intruder Any	At alarm, after exit time started, until unset	At first valid code entry and at end of confirm time.
0014	Siren Any	When alarm live	When alarm silenced or when siren timer expires
0016	Strobe Any	When alarm live	When alarm silenced or when strobe timer expires
0017	Omit Rearm Any	Input omitted if active (or in alarm condition) at the end of confirmation time.	When system disarmed
0018	Unconfirmed Any	Any intruder alarm	At code entry to silence
0021	Exit Starts Any	When exit time starts to set FIRST area	At code entry to unset LAST area
0022	Final Set Any	When FIRST area is set	At code entry to unset LAST area
0023	Strobe Set Fail	Works similar to output 016, but also fires if the set fail timer expires.	
0025	Keyswitch unset	This output turns on for 5 seconds when the system is disarmed via a keyswitch input (pulsed or latched)	
0026	Set with Omit	Activates when inputs are omitted on setting	
0028	Power Fault	Active during low volts and battery faults*. Restores at code entry after fault cleared.	
0029	Confirmed Intruder Any	When more than one intruder alarm activates	At next code entry

NO.	TYPE	ACTIVE	RESTORE
0030	Confirmed Hold Up Any	When more than one confirmed hold up activates	At next code entry
0033	Entry/Exit	Live during any entry or exit time	
0034	Lights	When exit or entry timer starts	20 seconds after set/unset procedure completed
0035	Follow Input	When input triggers	Dependent upon programming
0037	Restore 1	At code entry to set	After 3 seconds
0038	Restore 2	At code entry to set	When unset
0039	PIR Latch 1	When set (and in Walk Test)	At alarm, or when unset
0040	PIR Latch 2	This is the inverse polarity to PIR Latch 1	
0041	Mains Good	Output showing the mains is healthy	
0042	Detr Indn Enable	This output activates during walk test and also when a code is entered to view indications – staying activated for the time for which the indications are viewed.	
0043	Follow Test	New output for alternative bell test by activating SAB	
0044	Off During Test	New output for alternative bell test by activating SAB	
0048	Detr Walk Test	This output is active during walk test, and will only deactivate when all detectors have been tested.	
0049	Detector Masked (Not applicable on grade 2 systems)"	If any detector goes into 'mask' condition the output will trigger	When masking fault clears.
0050	Follow 24 Hour	If any input programmed as "Day alarm" activates	When input restored
0051	Line Fault	When Line Fault signalled by communicator	When fault clears
0052	Mains Fail	After pre-set time without mains power	On restoration of mains
0053	Battery Faults	When battery disconnected or load fail detected	At next valid code entry
0054	Low Volts	When the input voltage from the transformer is too low	When the control panel reads the correct voltage.
0055	"Global Fault 1 (Faults: Modem, Battery, Fuse, Line, Mains)"	At fault	When fault clears
0056	"Global Fault 2 (Faults: as above)"	Activates if fault occurs only when system is armed	When all faults cleared
0058	Guard Code Used	When 'guard' code accepted	After 60 seconds
0059	Engineer Access	When entering Engineer Mode	Leaving Engineer Mode
0060	Initialise Digi	At power up	Live for 45 seconds only
0063	Test ATE/GSM	Test signalling through PSTN and GSM. Activates when a test call is sent.(Only used for specific GSMs)	When test completed

NO.	TYPE	ACTIVE	RESTORE
0064	"Test ATS For use with ATE complying with BSIA Form 175 to initiate test call to ARC by each available path."	Test signalling through PSTN and GSM. Activates when a test call is sent.	When test completed
0066	ATE not used	N/A	N/A
0170-0199	User Defined 1-30	Can be used to trigger outputs via the keyfob. For example, an output can be programmed as type '[0171] User Defined 02' and then wired to a garage door. If a user keyfob button is programmed as '[0171] User Defined 02,' when that button is pressed, the output will trigger opening the garage door.	
0600-0609	Timers 01-10	For future development	
0610-0619	Calendar 01-20	For future development	
0620-0639	Logic Gate 01-20	For future development	
0640-0649	Delay 01-10	For future development	
1xxx	Follow Input xxx	When input is activated	When input clears

APPENDIX 2 - EVENT TYPE PRESETS

EVENT TYPE	CUSTOM	DEFAULT	SIMPLE	FULL
Set	Selectable	✓	✗	✓
Unset	Selectable	✓	✗	✓
Alarm	Selectable	Alarm Once	Alarm Once	All Alarms
Omit	Selectable	✗	✗	✓
Confirmed Alarm	Selectable	✓	✓	✓
Comms Status	Selectable	✗	✗	✓
Technical Fault	Selectable	✓	✗	✓
Abort	Selectable	✗	✗	✓
Information	Selectable	✗	✗	✓
Access Alarm	Selectable	✗	✗	✓
Access Event	Selectable	✗	✗	✓
Omit Restore	Selectable	✗	✗	✗
Special Log	Selectable	✗	✗	✓
Tamper Alarms	Selectable	✗	Tamper Once	Tamper Once
Invalid Access Tag	Selectable	✗	✗	✓
Shunt Ward Set	Selectable	✗	✗	✓
Shunt Ward Unset	Selectable	✗	✗	✓
Shunt Ward Alarm	Selectable	✗	✗	✓
Walk Test	Selectable	✗	✗	✓
Restore	Selectable	✗	✗	✓
Technical Fault Restore	Selectable	✓	✓	✓
Test	Selectable	✗	✗	✗
Mains Fail	Selectable	✓	✓	✓
Mains Fail Restore	Selectable	✓	✓	✓
Set Fail	Selectable	✓	✓	✓
Engineer Entry	Selectable	✓	✗	✓
Engineer Exit	Selectable	✓	✗	✓

APPENDIX 3 - CSL ARC CODE LIST

CODE	ALARM RECEIVING CENTRE	CODE	ALARM RECEIVING CENTRE
44650	4i	62766	National Monitoring Network Limited
22567	Abel Alarm Company Limited (A2)	63668	Netwatch Ireland (N6G5)
25242	Action Alarm Control 24	64455	Nightguard Limited
23624	ADT Fire and Security PLC (M7G5)	67624	OCS Group UK Ltd
23717	Advanced Signal Monitoring	76473	Pointer - Glasgow (P2G5)
24654	AIM Manchester (M6G5)	78447	QVIS Monitoring Ltd UDL
27264	ARC Monitoring Ltd	76676	Romec UDL
22615	Banham S.W. London UDL	72232	Scamp Kingston-upon-Hull (S2G5)
22450	Camwatch Monitoring Ltd	73687	Secom PLC UDL
22722	Caught In The Act Monitoring (XY)	73734	Securi-Guard Fire & Security UDL (S5G5)
23514	Cerberus Security & Monitoring Services (C8)	73596	Securi-Guard South Wales UDL (S7G5)
24708	Chubb (Leeds) UDL	73283	Securitas Pinkerton (P1G5)
25750	Chubb IE UDL	74218	Sharp Group Fire and Security Services
26630	Connelly Glasgow UDL (C4G5)	74744	SitexOrbis UDL
26492	Corps Monitoring Centre-UDL (T2G5)	76720	Smart Monitoring Limited UDL
26500	Cougar Monitoring Ltd (C2G5)	76270	SMC (Custodian) Nottingham UDL
27732	Crime Prevention Services Ltd	76527	Southern / Northern Monitoring Services UDL
27463	Crimewatch Monitoring Services Ltd UDL	77774	SSS Management Services (SDG5)
33510	Delta Security Ltd (D3G5)	78246	Stanley UDL
34294	Diamond Point Ltd UDL	78661	Stopwatch Ireland Ltd UDL
32749	East Midland CS Nottingham	84282	Thales UK UDL
44786	G4S Belfast UDL	74430	The Shield Group
44562	G4S Dublin	85618	UK Monitoring Ltd UDL (U1G5)
62630	MCM Cork UDL (MCG5)	86791	Unipart Security Solutions Ltd
63732	Mercury Security Management UDL	86400	Uniqwin UK Limited
64763	MiTec UDL	93617	Yeomen Monitoring Services UDL

UK CA CE