IRIS-4

Firmware 4.11.0

Table of Contents

1 OVERVIEW

This document details changes from firmware Version 4.10.4 to Version 4.11.0. for Edge VS5000 terminal based products.

2 CHANGES IN THE RELEASE

2.1 Terminals Versions Supported In This Release

- Edge VS5010
- Edge VS5051
- Edge VS5053

2.2 Edge VS5000 Default Path

By default, Edge VS5000 terminals are set to use the Cellular path only rather then Ethernet and Cellular. These Edge terminals are only used for Elevator and other voice related applications where voice connections via SIP is only currently supported via Cellular. This change prevents the terminal indicating an Ethernet connection fault on its status LEDs and misleading installers.

Edge terminals with earlier versions of sofware fitted are defaulted to this setting on reflash.

2.3 Additional Elevator Panel Supported

Kone Elevator panels are also supported in addition to 2N, CPC, P100 and SAR panels. This selection is made via the AddSecure Connect service.

2.4 Intercom Mode

This mode allows an access door intercom terminal to be connected via the terminal Dial Capture interface and AddSecure Connect Service to occupants of the building that the Intercom serves and other third party phones. In order to work with existing intercom units and local phone numbers, the terminal can be configured for the removal or addition of dialled numbers. All configuration is performed via the AddSecure Connect service.

2.5 Dial Capture Voltage Removal

Previous to this release the terminal would remove its dial capture port voltage if no external communications via the cellular network was available. However it was found that this adversely affected some Elevator panels and so an option has been added to the terminal to maintain dial capture voltage even if cellular connection is not available. This option is set by default but can be changed via the AddSecure Connect service.

2.6 Manual Removal of Dial Capture Port Voltage

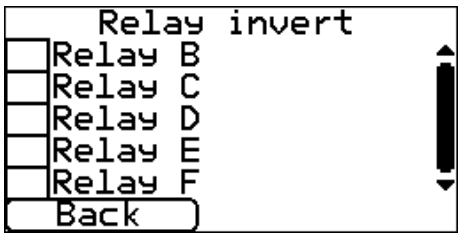
The possibility has been added for the AddSecure Connect service support staff to manually remove the terminal dial capture port voltage. This can be used to reset attached line powered panels if necessary.

2.7 Auto SIM Card Selection

The Edge terminal automatically selects the plstic SIM card at start up if one is fitted to the SIM card holder. Otherwise the on-board ESIM is selected.The ESIM and plastic SIM use different Access Point Names (APNs) and associated User Name and Password. This allows plastic SIM cards to be used in areas where the on-board ESIM has no network coverage.

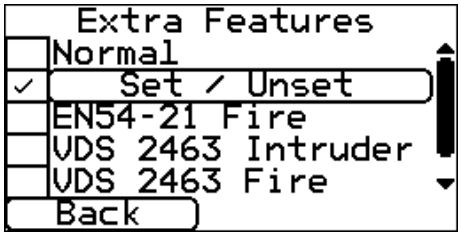
2.8 Revised Touch Screen Layout

The Touch screen and virtual Touch screen layout has been changed and tick boxes that were previously on the right hand side have been moved to the left hand side, as shown below. This has allowed more space to be allocated to the scroll bar (where displayed) to make it easier to use.



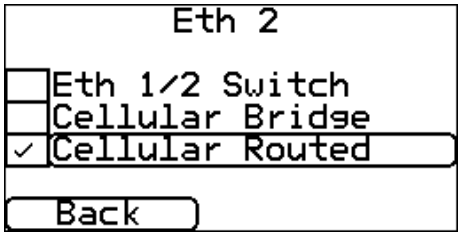
2.9 Changes to EN54-21 Fire Mode

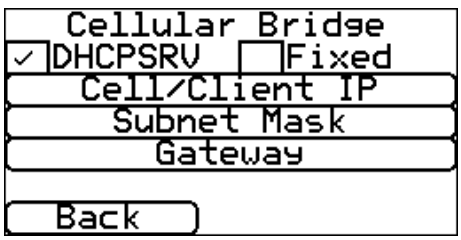
When the existing EN54-21 Fire mode is selected (as below), the settings of Pin inputs 1 and 2 and Relay outputs A and B cannot be changed. This protect the use of these pins and relays. In EN54-21 Fire mode, pin inputs 1 and 2 are set to report Fire Alarm and Fire Fault from the alarm panel and Relay outputs A and B are set to report Fault and Alarm Acknoiwledge back to the Fire panel.

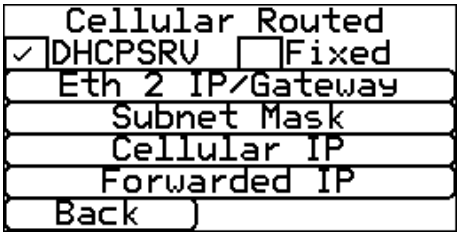


2.10 Changes to Cellular Bridging Mode

The Cellular to Eth2 option has been revised and improved. There are now two options - Cellular Bridge and Cellular Routed. Cellular Bridge maps the device connected to the Eth 2 socket to same IP address as the SIM card. Cellular Routed offers mapping to a configurable device IP address and Eth2 IP address. There is a DHCP server with the terminal that can be enabled in both modes that means that the connected device does not have to be manually configured with an IP address if it supports DHCP.







By default the Cellular Routed mode is selected, with Forwarded IP (i.e. the address of the attached device) set to 192.168.1.1 and the Gateway IP (i.e. the address of the Eth2 connection on the terminal) set to 192.168.1.254. The DHCP server is on by default.

2.11 Full Details

Full details of all changes are shown below.

ID	Details
T10517	Add buffer overflow protection in cellular module interface to avoid possible terminal reset under loaded conditions.
T7447, T10781, T10822	Increased touch screen scrollbar sensitivity area and moved tickboxes to the left side of the corresponding text. This improves the user experience when using the scroll bar.
T9496	New feature: Add support for removing dial port line voltage. This allows line powered terminals to be reset remotely if required.
T9978	New feature: Add support for Intercom mode, with provision for deleting from or adding to dial digit strings sent by an Intercom panel.
T10374	Set default paths to use on Edge VS000 to Cellular only (%I25=10) so fault not shown when Ethernet is not connected. Earlier versions are also defaulted to this on reflash. This is because Ethernet cannot be used with this terminal. Associated with this change the following defaults are removed from AddSecure Connect mode and the correspinding settings on the Touch interface are re-enabled: Paths to use, monitor dial port, monitor serial port, report poll fail on serial port, monitor pin inputs, poll fault relay = relay C, relay C relay follower.
T8334	New feature: Add support for Kone KCE lift alarm panels.
T7863	Improvement: Add changeset (minor) version number to log of old and new version when reflashing.
T7872	Improvement: Change text in log saying 'GPRS/3G', '2G/3G' and 'UMTS' to say 'Cellular'.
T7893	Improvement: Don't report Comms fail to Galaxy panel if no comms paths selected.
T7894	Improvement: Add more detail to USART diagnostics to avoid confusion.
T7878	Fix fault where 'Tamper Reset' button shown when in tamper but Incert mode not selected.
T7888	Fix fault that allows SMS pin alarm text messages entered via touch screen to overflow storage space available. Improve indication that limit has been reached.
T7892	Fix fault that results in dial capture voltage being switched on if all comms paths fail during a voice call or when call ringing.
T7881	Fix fault where status relay state does not get updated if setting changed to report fault but comms status remains unchanged.

T7884	Fix fault where time before next test alarm is not reduced if test alarm interval setting reduced.
T7887	Fix fault where %G99 (tamper input message) read/write via AT command does not work.
T7883	Fix fault where relay followers not updated if relay follower pin selection changed.
T7886	Fix fault where SMS relay activation match phone number starting with '00' does not match to incoming message with source number starting with '+' for International.
T7890	Fix fault where baud rate reported by Result Code on Remote Service call connection is incorrect.
T7889	Fix fault where terminal can erroneously report serial OK if it is reset while serial is in fault. Note as part of this change Connect Service mode selection switches off local reporting of serial fault and Edge terminals with earlier versions of software have serial monitoring turned off when reflashed.
T8338	Fix fault where all relays activate if SMS message with no text, just pulse length, is received.
T8183	Improved after-scan registration, by allowing more time for cellular module's return to normal operation. Added extra diagnostics for cellular network scan.
T7865	Improvement: On serial port access to cellular module add flow control and increase escape sequence to 4 plus's (with Telit escape on 3 plus's).
T3758, T8507, T9921	Improvement: added auto SIM card selection, with AT%G180 to display selected. Added EEPROM storage of bad pin number (protects against pin lockout). Reduced manufacture test time for cellular (making use of the SIM selection process). Added PUK code entry, to the existing PIN code entry process. Set AutoSIM as default and upgraded earlier versions to Auto.
T8330	Fixed relay diagnostic: removed double reporting and added variable status reporting.
T8369	Fix 640ARX manufacture test of Ethernet 2 (now supports isolation mode).
T8639	Added logging of cellular technology and operator.
T8252	Changes to assist Connect provisioning investigation. 1) Only &F9 and &F10 reset parallel diagnostics (%I41) so that key can be defaulted (&F11) without diagnostics being switched off. 2) Add AT command (%G182) to force manual cellular operator selection using either operator name or operator number. Selection goes back to automatic when setting cleared.
T9494	Add AT command %D66 to determine whether dial capture port voltage should be removed on a comms fault (i.e. no path or poll fail). 0 = don't report, 1 = do report. Defaulted to 1 on all but Edge VS550 which is defaulted to 0.
T9501	Added separate ESIM registers for APN, username, password and pin code (%G183, %I14, %I15, %G184). Removed, as well as add, auto-APN when card Sim is changed. Added AT&V39 to display Sim-related registers.

T7728, T7738, T7755, T7781, T7782, T7783, T7784, T7788, T9568	Added Edge expansion board EXP1 functionality for EEPROM, inputs pins relays, serial port and Led.
T7789	Added manufacture test for Edge Expansion board EXP1 improved expansion i2c shutdown. Altered VS project to Full compile, to avoid deprecation warning.
T9486	Added UMTS audio as I2S master DVI interface for new Telit modules on DS2020. Amended inclusion of standard library files, for compiling Touch NG series.
T10514	Altered APN context location to assist 240AP registration onto 4G technology. Added AT%G186 to specify context location (1=first location, 2=2nd location), where model 240AP has default of 1, and other models have default of 2.
T10600	Fix for manufacture testing for saving Product barcode in EEPROM. Reduced manufacture test cellular signal strength lower limit , as new technologies operate at lower signals
T10661	Adjusted inputs on EXP1 expansion board to work with standard tamper resistors. Altered EEPROM device to 24LC64 to align with latest BOM for EXP1.
T9923	Setting service mode to IRIS Standard or Link SIM using AT command %I98 sets the Reflash Server IP address to the UK based IRIS reflash server (195.59.117.168). This is for test purposes only as users are not expected/able to change service mode without defaulting a terminal.
T10282	When EN54-21 Fire mode selected (through any mechanism), the following defaults are applied: A) Pin one set to SIA code FA01/FR01 or CID event 110 Zone 1 (depending on whether SIA or CID codes are selected), tamper enabled, pin enabled, not inverted. B) Pin two set to SIA code FT02/FJ02 or CID event 300 zone 2 (depending on whether SIA or CID codes are selected), tamper enabled, pin enabled, not inverted. C) For Relays A and B, pin followers, invert, use for fault reporting, activation by SMS switched off. D) ISA not able to switch Relays A or B. E) Touch menus for pins and relays that cannot be changed do not allow changes to be made and show how the pins/relays are allocated to Fire. F) Any AT commands that would normally affect these settings have no effect in EN54-21 Fire mode, either rejected with ERROR code or accepted with OK but have no effect (pin tamper, pin enable, relay invert).
T8333, T8444, T10581	Revision of Cellular to Eth2 connectivity options. There are now two options - Cellular Bridge, set via %I76 (5 for Bridge, 6 for Routed). Bridge maps connected device to same IP address as the SIM card, Routed offers mapping to a configurable device IP address and Eth2 IP address. There is a DHCP setting (%I116) DHCP on/off that works in both modes. Another AT command (%I117) is added to allow the IP address of Eth2 that the terminal sets in Bridge mode to be read for a future Toolbox extension.

T10683	Update (virtual) Touch Screen text strings in all languages for new features.
T9282	Add support for SIA format over PSTN (for test purposes only).
T9810	For lift applications, send line restore to monitoring centre on first successful check call. This deals with situations where a line failure had been sent and then the terminal was restarted.
T9739	Improve analogue interface diagnostic to prevent potential terminal restart.
T11549	Fixed manufacture test for correctly selecting serial port 2 or ittp port on appropriate models.

3 HOW TO REFLASH

Reflashing can be instigated remotely via the IRIS Secure Apps system to which the terminal is reporting, thereby saving the need for a site visit. This can be done either by using the Reflasher App within IRIS Secure Apps or within the IRIS Secure Apps Dialler Dialogue App, by instructing the terminal to 'Start Dialler Management' to the reflash server IP address (see below).

Alternatively, for local upgrade, connection to the reflash server can be instigated from the installer menu, Settings->Reflash:

The reflash IP address is set by default to AddSecures's reflash server (195.59.117.164) and does not need to be changed unless another reflash server is to be used.

Reflashing can also be carried out by direct local connection to terminals, using our IRIS USB Reflasher that can be downloaded from our web site www.addsecure.com

Please note – the terminal must be correctly powered during reflashing, in accordance with the installation guide. It should not be powered by just USB connection or by just battery. Failure to do so can result in the terminal losing its software programme and becoming inoperable.

4 PREVIOUS RELEASES

4.1 Release 4.10.5

4.1.1 Terminals Versions Supported In This Release

- IRIS-4 160
- IRIS-4 200, IRIS-4 220, IRIS-4 240, IRIS-4 240AP
- IRIS-4 400, IRIS-4 420, IRIS-4 440
- IRIS-4 620, IRIS-4 640
- IRIS-4 620D, IRIS-4 640D
- HON GT20-4, GT40-4
- IRIS-4 640ARX

4.1.2 Resolution of a manufacturing issue

The manufacturing process has been improved.

4.1.3 Full Details

Full details of all changes are shown below.

ID	Details
T11685	Fix to manufacture ethernet test of mac address (was rejecting addresses ending in "00")

4.2 Release 4.10.4

4.2.1 Terminals Versions Supported In This Release

- IRIS-4 160
- IRIS-4 200, IRIS-4 220, IRIS-4 240, IRIS-4 240AP
- IRIS-4 400, IRIS-4 420, IRIS-4 440
- IRIS-4 620, IRIS-4 640
- IRIS-4 620D, IRIS-4 640D
- HON GT20-4, GT40-4
- IRIS-4 640ARX

4.2.2 Resolution of manufacturing test issues

The manufacturing test has been improved.

4.2.3 Full Details

Full details of all changes are shown below.

ID	Details
T10665	Fix for manufacture testing for saving Product barcode in eeprom Reduced manufacture testing of cellular signal strength lower limit , as new technologies operate at lower signals.

4.3 Release 4.10.3

4.3.1 Terminals Versions Supported In This Release

- IRIS-4 640ARX

4.3.2 Resolution of an account number issue

The IRIS-4 640ARX now defaults to alarm override off, which means that both Master and Child account numbers sent to the terminal via the AADP protocol are transmitted correctly.

4.3.3 Full Details

Full details of all changes are shown below.

ID	Details
T9224	Change to 640ARX so that it defaults to Alarm Override off so that ARX master and child accounts with different account numbers work as required.

4.4 Release 4.10.2

4.4.1 Terminals Versions Supported In This Release

- IRIS-4 160
- IRIS-4 200, IRIS-4 220, IRIS-4 240, IRIS-4 240AP
- IRIS-4 400, IRIS-4 420, IRIS-4 440
- IRIS-4 620, IRIS-4 640
- IRIS-4 620D, IRIS-4 640D
- HON GT20-4, GT40-4
- IRIS-4 640ARX

4.4.2 Resolution of DHCP issue

An occasional issue where the terminal might not obtain an IP address via DHCP has been resolved. It is believed that this issue is related to the reponse from the DHCP server being slower than is expected.

4.4.3 Full Details

Full details of all changes are shown below.

ID	Details
T8886 **T9140**	Fix DHCP to wait for Ethernet to reconnect after a Restart. Retry period lengthened from 1s to 3s and removed elapse timer.

4.5 Release 4.10.1

4.5.1 Terminals Versions Supported In This Release

- IRIS-4 160
- IRIS-4 200, IRIS-4 220, IRIS-4 240, IRIS-4 240AP
- IRIS-4 400, IRIS-4 420, IRIS-4 440
- IRIS-4 620, IRIS-4 640
- IRIS-4 620D, IRIS-4 640D
- HON GT20-4, GT40-4
- IRIS-4 640ARX

4.5.2 Resolution of SMS Text transmission issue when SIM pin set

An issue with SMS transmission from the terminal has been resolved. This issue was introduced in release 4.10.0 and only happens if a PIN code is set on the SIM card.

4.5.3 Full Details

Full details of all changes are shown below.

ID	Details
T8612	Fix sms coding when entering pin code.
T8639	Added logging of cellular technology and operator.

4.6 Release 4.10.0

4.6.1 New Terminal Types

The following new IRIS-4 terminal types are supported:

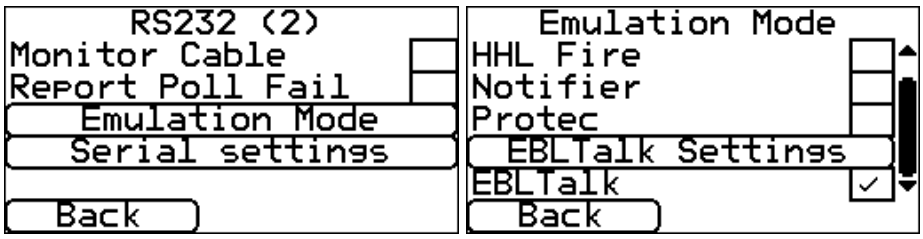
- IRIS-4 240AP - A version of the IRIS-4 240AP that offers 4G support to the Australian market.
- IRIS-4 640ARX – An OEM version of the IRIS-4 640D for ASSA ABLOY market.

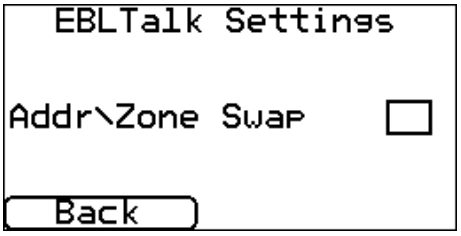
4.6.2 Terminals Versions Supported In This Release

- IRIS-4 160
- IRIS-4 200, IRIS-4 220, IRIS-4 240, IRIS-4 240AP
- IRIS-4 400, IRIS-4 420, IRIS-4 440
- IRIS-4 620, IRIS-4 640
- IRIS-4 620D, IRIS-4 640D
- HON GT20-4, GT40-4
- IRIS-4 640ARX

4.6.3 EBLTalk Fire Panel Support

Support for Fire Panel serial interfaces has been extended to include Panasonic EBLTalk fire panels on the second RS232 port. This allows technical information from the panel serial port to be reported to the monitoring centre alongside the normal Fire and Fault reports.





A special option required by some monitoring centres to swap the message Zone number and address is also provided as shown above. For more information please contact AddSecure Technical Support.

4.6.4 Full Details

Full details of all changes are shown below.

ID	Details
T1655, T6423, T6805, T7286	New feature: Add support for EBL/Panasonic Fire panel serial interface.
T6744	New feature: Add USB flow control so reflashing via local USB connection can be speeded up.
T5784, T6813	New feature: Allow extended SIA message size for ESMI Fire panels.
T7421	New feature: Add read tamper status (%I112?) and reset tamper (%I113=) commands to allow IRIS Toolbox to be upgraded to show tamper status and support tamper reset.
T7419	New feature: Add a 'Key default' AT command (AT&F11) for use by IRIS Toolbox.
T8024	New feature: Add Touch Screen menus to configure EBL Address/Zone swap and ESMI SIA mode settings. Tidy up ESPA and Galaxy configuration menus and headings.
T6706	New feature: Add IRIS-4 240AP (LE910C1-AP) celluar network scan, with or without simcard fitted.
T7577	New feature: Add cellular Firmware Switch (selects Telstra firmware) for IRIS4 240AP with LE910C1-AP module.
T7739, T7740	New feature: Add fetching and display of software package and customer firmware, with AT command %G178/179 for IRIS4 240AP with LE910C1-AP module.

T7544	Manufacture Test: Added manufacture testing of rs232 port 2 on IRIS4 6xxD, 640ARX and HON GTxx-4.
T7387	Manufacture Test: Fix Ethernet manufacture test to avoid occasional timeout failures (issue arose in v4.8.0)
T6973, T6974	AADP Protocol - Add Pin status reporting.
T7727	AADP Protocol: Fix fault where AADP does not report error with Nak if SIA alarm message has DC-09 preamble.
T7682	AADP Protocol: Fix fault where terminal resets if pin input with empty configuration read.
T7876	AADP Protocol: Fix fault where terminal reports pin input 5 configuration when asked for pin input 6.
T6977, T6978	AADP Protocol: Add Cellular Bridge set and read.
T6975, T6976	AADP Protocol: Fix error in Version response.
T8047	AADP Protocol: Fix fault where setting of pin 7 is not rejected with NAK.
T6981, T7393	AADP Protocol: Report plastic SIM card ICC number in Read QR Code response.
T6935	IRIS-4 640ARX: Restrict operation of to only AADP by disabling access to serial port settings via (virtual) touch screen and by AT commands. Disabled RS232 1, RS232 2 and COM ports (except when manufacture testing). Panel interface settings menu for RS232 1, RS232 2 and COM not shown. Panel interface setting menu for Eth 2 does not show emulation mode. AT command %A9 (serial 1 emulation), %A13 (COM emulation), %A14 (serial 2 emulation), %A15 (eth 2 emulation) cannot be set or read. AT command %A10 (RS485 emulation mode) can only be read (will show AADP mode which is the factory default).
T7505	IRIS-4 640ARX: Default cellular bridge parameters to allow out-of-the-box connection to ARX panels via Link.
T7163	Update text strings - add translations for 'Tamper restore' 'Cellular bridge' and 'Destination IP'. Correct three Dutch strings.
T7513, T4449, T6852	Extend documentation to assist with Connect provisioning GUI.
T7407, T7408	Fix SIP errors: remove uninitialized strings, allow full 32bit integer conversion to strings (to avoid negative numbers), lengthen message sizes and other generated strings to cater for worst case content.
T6705, T6745	Fix fault revealed in V4.9.0 where HHL serial configuration is wrong and causes baud rate error.
T7391	Fix error where settings %A6 and %A7 (serial port redial and call clear on idle times) are saved in the wrong parameter.
T7307	Fix fault where routing of serial port data to panel interface task not reset on a terminal default.

T8041	Fix fault where terminal resets if it has been sending SMS messages and the Telit cellular module gets reset.
T6748, T7397	Prevent Galaxy Flex RS485 bus communication problem when spurious packet received by terminal on Galaxy UDL port (10001).
T8369	Fix a problem with manufacturing test on Ethernet 2 connector for terminals defaulted with Ethernet 2 not shared with Ethernet 1,
T6476	Future application (New models): Add support for cellular ME910C1_E2 module.
T6481, T6943, T6815	Future application (Telit upgrade): Add cellular module OTA firmware updating basic support. AT command &V37 to view parameters.
T7021	Future application (TDA 74xx variants): TDA 74xx-4 version to v1.60.3
T7166, T7168, T7170	Future application (Edge VS 5000 terminals only): Correct operation of EN54-21 fire ACK, Fail To Communicate and Fault LEDs and Relays (other products unchanged).

4.7 Release 4.9.0

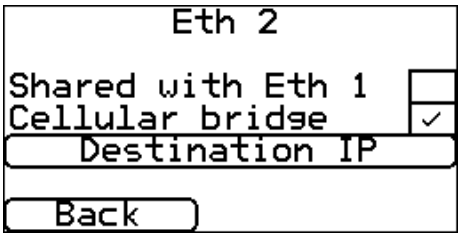
4.7.1 New Terminal Types Supported

The following new IRIS-4 terminal types are supported:

- IRIS-4 620D - A dual Ethernet version of the IRIS-4 620
- IRIS-4 640D - A dual Ethernet version of the IRIS-4 640

4.7.2 Ethernet to Cellular Bridge

IRIS terminals with cellular connection and two Ethernet ports (IRIS-4 440, IRIS-4 640D) offer the posibility of bridging between the cellular connection and the second Ethernet port (Eth 2). In this case a DHCP server is also provided on the Eth 2 port. This mode of operation is enabled when a SIM card is fitted to the terminal and has attached to the SIM provider's cellular data network and when the Ethernet 2 port is set to 'Cellular bridge' mode, as shown below.



Note - only a single Ethernet device is supported.

IP TCP and UDP packets sent to the SIM card IP address are bridged to the terminal Eth2 port and vice-versa. Note that other IP protocol types are not bridged.

When a device attached to Eth 2 makes a DHCP request, the terminal offers the following:

- The IP address that is the IP address associated with the SIM card fitted.
- Subnet mask 255.255.255.0.
- Gateway address within the same subnet as the IP address offered.
- DNS server address(es) from the SIM card provider's cellular data network.
- IP address renewal time of 15 minutes and lease time of 30 minutes.

Alternatively, if the device uses a fixed IP address, this IP address should be be set in the 'Destination IP' on the touch screen menu as shown above. The Gateway IP address set in the device should be set to the same IP address as the device but with the last part of the IP different such that:

- If the last part of the IP address is even, then the same number + 1
    - E.g. 192.168.124.4 IP address, 192.168.124.5 gateway
- If the last part of the IP address is odd, then the same number – 1
    - E.g. 192.168.124.5 IP address and 192.168.124.4 gateway

4.7.3 Modified Support for Vanderbilt SPC Panels via Ethernet

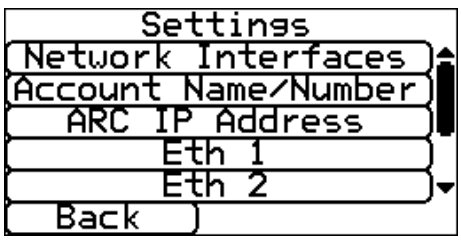
For some time, IRIS 4xx terminals, which have two Ethernet interfaces, have been capable of supporting connections from Vanderbilt (formerly Siemens) SPC panels via Ethernet and forwarding alarms from the panel to ARCs equipped with an IRIS Secure Apps system. This function has been extended to the new IRIS-4 6xxD products as well.

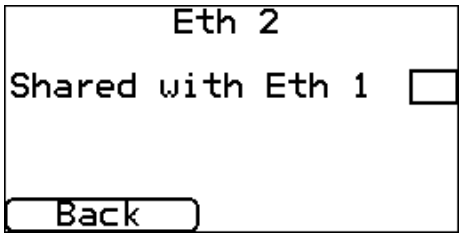
There has been a modification to the way this works, driven by the fact that Microsofts' Dial-up Networking function is no longer supported in Windows 10 in the same was as it was on earlier Windows versions. This means that remote access to the panel from Siemens SPC Pro software is no longer possible using the combination of Dial-up Networking and the IRIS Remote Service App. Therefore, an alternative way of supporting SPC Pro connection via AddSecure 's Link service has been provided. The same can also be done with any SIM card that provides remote connection from an external IP source.

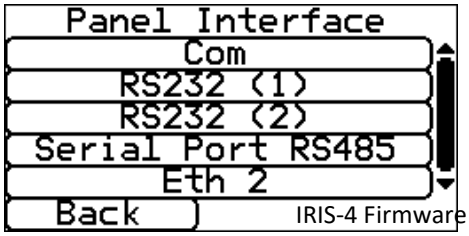
This does mean that remote connection from SPC Pro requires an IRIS terminal which supports cellular connection. However, this should not create practical difficulties as the motivation to use an IRIS terminal with a Vanderbilt panel includes the provision of a cellular interface, either as part of a dual path solution or as part of a single path cellular solution.

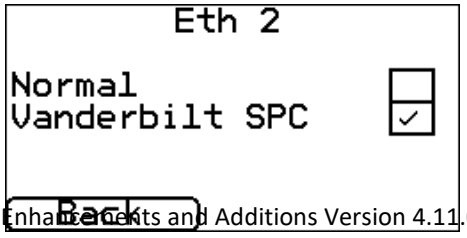
The ways that this affects the installation are as follows:

1) The IRIS terminal now includes a DHCP server on the second Ethernet interface so the panel should be set to use DHCP, rather than a fixed IP address.
2) The monitoring centre IP address (the EDP IP address) set in the panel must be the IP Gateway address given to the panel by the IRIS DHCP server. This IP address can be obtained from the panel (e.g. via the keypad).
3) For remote access to the panel using SPC Pro, the destination IP address for the panel must be the IP address associated with the SIM card fitted to the terminal. Depending on the SIM card provider this may require a connection between the PC running SPC Pro to the SIM card providers own data network. In the case of AddSecure's Link service this uses a connection using OpenVPN with a Certificate provided by AddSecure.
4) The IP Address and Remote Access settings have been removed from the terminal's touch screen menu as they are no longer required. When selecting Siemens mode, the option 'Shared with Eth 1' is automatically deselected.



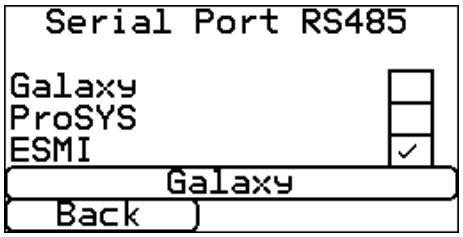






4.7.4 ESMI Fire Panel Support

Support for Fire Panel serial interfaces has been extended to include ESMI fire panels on the RS485 port.



4.7.5 Corrections and Improvements

The following issues have been corrected:

- When using the touch screen or virtual touch screen, selecting Panel Interface->Com-> Emulation Mode 'Texecom' erroneously sets RS232 (1) to baud rate 19200.

4.8 Release 4.8.0

4.8.1 New Terminal Types Supported

- HON GT20-4 - Honeywell OEM module - upgrade of the GT-20 NG with second Ethernet port, 4G and other IRIS-4 features.
- HON GT40-4 -Honeywell OEM module - upgrade of the GT-40 NG with second Ethernet port, 4G and other IRIS-4 features.

4.8.2 Corrections and Improvements

- Prevent terminal resetting if very long SIP user name configured.
- Improve handling of check calls from SAR elevator panels to ensure panel correctly identifies test call acknowledgement.
- Allow incoming SIP voice calls during mains failure when terminal is running off battery.
- Reception of SMS text messages has been made more reliable. It was found that text messages might not be seen by the terminal if sent while the terminal was being reset. This reduces problems encountered during terminal provisioning.
- Correct fault that sometimes caused the selection of the plastic SIM card on Edge terminal as it should always use the eSIM.
- Improve operation of PPP stack in error conditions.
- Additional diagnostic on Ethernet interface to give more information when a bad packet is received.
- Prevent 2N lift alarm panels (e.g. top and bottom of car) sending alarms if they have not been enabled in the terminal configuration.
- Resolve an issue with HHL panel interface baud rate that was introduced in Release 4.6.5.

4.9 Release 4.6.5 (Edge VS5000 only)

4.9.1 New Terminal Types Supported

- Edge VS5010, VS5051, VS5053, for Lift applications.

4.9.2 Corrections and Improvements

- SIP protocol uses actual peer IP address in SIP header fields rather than the configured IP address so that it can work with dual SIP servers.

4.10 Release 4.6.3 (IRIS-4 160 only)

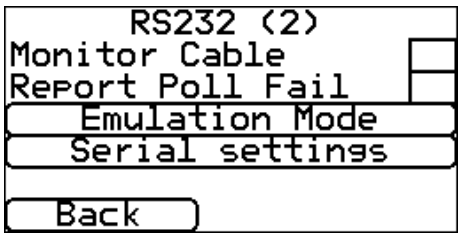
4.10.1 New Terminal Type Supported

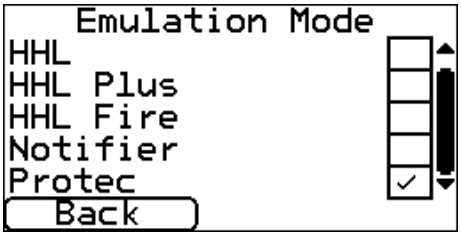
- IRIS-4 160 – plastic case with transmission interfaces Ethernet, WiFi and cellular (2/3/4G)

4.11 Release 4.6.2

4.11.1 Protec Fire Panel Support

Support for Fire Panel serial interfaces has been extended to include Protec panels on serial port 2.

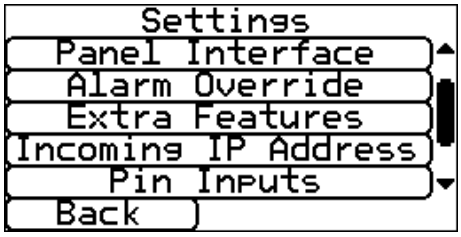


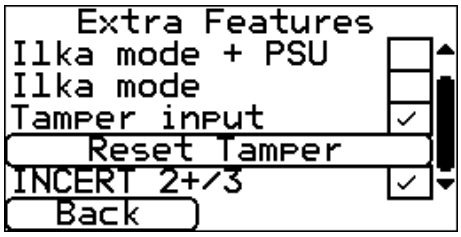


4.11.2 Tamper Restore

This enhancement has been made for compliance to Belgian Incert standards and is only applicable if 'INCERT 2+/3' mode has been selected on the Touch Screen->Extra Features menu.

If a tamper switch activation occurs (including activation of the tamper input on non-cased variants), it does not restore automatically, it must be restored via the Touch Screen->Extra Features menu 'Reset Tamper' button.

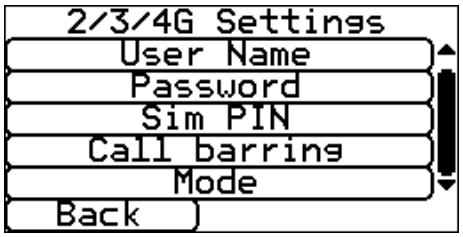


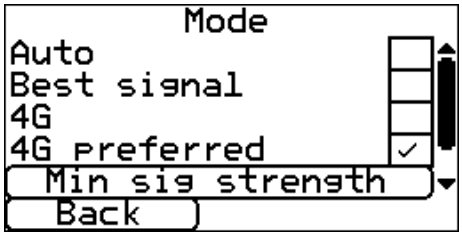


If the tamper physical condition has been restored before 'Reset Tamper' has been selected, the reset button will be removed and the tamper restore message will be sent to the monitoring centre. If not, the button will be removed and the tamper restore will be sent when the condition is restored.

4.11.3 Cellular Mode

A Cellular Mode setting menu has been added to the 2/3/4G settings menu to select the Cellular technology used.



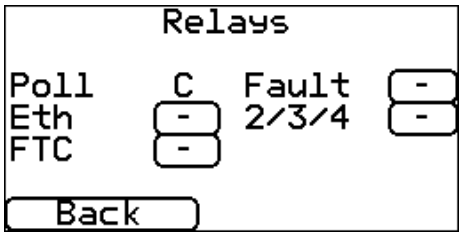


The options available are:

- Auto – the terminal will adopt the technology that is selected by the combination of the SIM card configuration and the network operator.
- Best signal – the terminal will select the technology with the highest signal strength (the default setting in the previous firmware release).
- 4G – fixed to 4G only. Note if there is no 4G available the terminal cannot fall back to 2G or 3G and so cellular communication will not be possible.
- 4G preferred – 4G is selected as long as it is available and above the minimum signal strength selected. Note if there is no 4G available the terminal will fall back to 3G or 2G if available.
- 2G + 3G – the terminal will not use 4G.
- 3G - as '4G' but fixed to 3G.
- 3G preferred – as '4G preferred' but 3G is selected if available and above the minimum signal strength specified.
- 2G - as '4G' but fixed to 2G.
- 2G preferred – as '4G preferred' but 2G is selected if available and above the minimum signal strength specified.
- Enhanced roaming – the same function as available on the previous version of software.

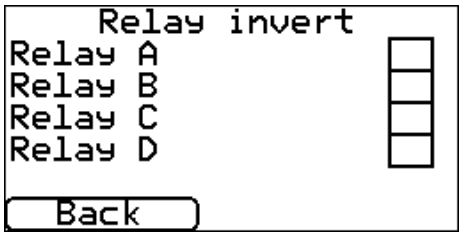
4.11.4 'Fail to Communicate' Relay output

A relay can be selected to indicate 'Fail to Communicate'. This is found in the 'Trouble Reporting' 'Via Relays' menu.



4.11.5 Relay Invert Setting

A relay invert setting is available in the 'Relays' menu.



4.11.6 Support for Contact ID protocol with 10-digit account code

Historically, the Contact ID protocol has been specified only with a four-digit account code, although the IRIS system can support up to 6 digits of account code with Contact ID format. There is now an updated version of the Contact ID protocol that allows 10 digits for the account code and the terminal has been updated to support this. When 'alarm override' is selected, the terminal includes a modified account number in a 10-digit Contact ID message, as follows:

- If the terminal's account number has 7, 8 or 9 digits, it is padded with leading 0s to make it 10 digits long before being included in the Contact ID message.

- If the terminal's account number is more than 10 digits, the leading digits are removed to make it only 10 digits.

4.11.7 'Only Analogue' Dialling via GSM

The 'Only Analogue' option on the 'Panel Interface' 'Dial Port' menu has been replaced by a 'PSTN only' option, as 'GSM only' dialling is no longer available.

4.12 Release 4.2.2

4.12.1 Operation with Galaxy Flex alarm panels

It has been identified that when an IRIS terminal is connected to a Galaxy Flex alarm panel via the RS485 bus, some events can cause it to generate a Tamper alarm within the panel. This release prevents this happening.

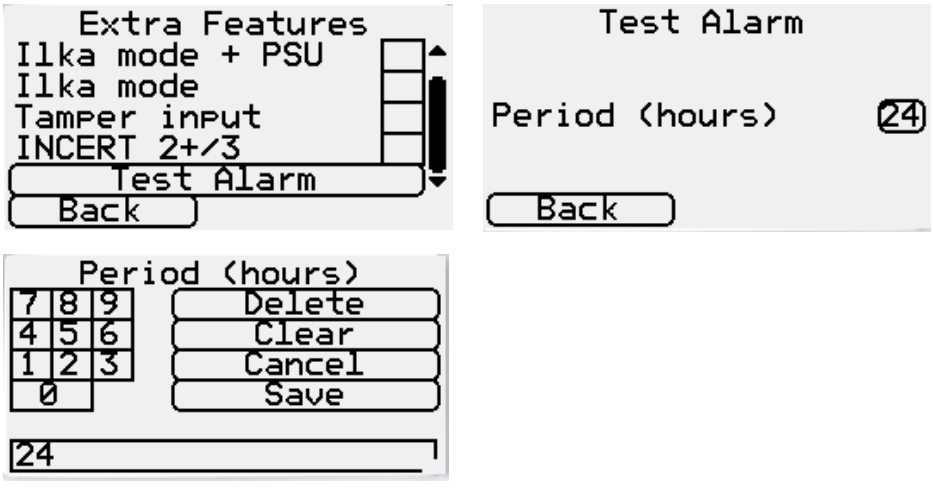
4.12.2 Operation with Galaxy alarm panels with 4-6 digit account code conversion

Some time ago a feature was built in to IRIS 6xx series terminals to automatically convert 6 digit account numbers given to it from the alarm panel, to 4 digit numbers where the number starts with two leading 0's. This prevents confusion between the alarm monitoring centre, the installer and the alarm panel. A situation has been found recently where if the monitoring centre has set up two accounts, one with six digits (e.g. 00abcd) and one with the same four digits (abcd), then the terminal oscillates between the six digit and the four digit version. This situation has been resolved in this release.

4.13 Release 4.2.1

4.13.1 Regular test alarm

In cases where the IRIS terminal is not connected to an alarm panel that can itself generate a regular test alarm (e.g. when inputs are used), it can be convenient for the terminal to generate a regular test alarm. This gives the monitoring centre a consistent way to monitor end-end connectivity across many installations. Previously IRIS-4 4xx terminals have supported test alarms over PSTN only, but not over all paths (i.e. the first path available).



4.13.2 Operation with Vanderbilt SPC panels via Ethernet

IRIS-4 4xx terminals support connection to Vanderbilt SPC panels via the second Ethernet connection on the terminal. Alarms from the panel are sent to the monitoring center using the SIA protocol. The alarm time and data received from the panel is included in the SIA message. It has been noted that the SIA time/date format was not correct and this has been rectified.

4.13.3 Operation with Notifier fire panels

IRIS-4 4xx terminals support a serial connection to Notifier alarms panels and convert the alarm information from the panel to SIA format for transmission to a monitoring center. The terminal has been enhanced so that it supports the maximum message length (105) supported by the panel.

4.13.4 Selection of Cellular Technology

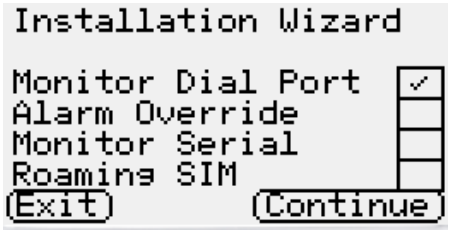
By default, IRIS-4 terminals select the cellular technology (2G, 3G or 4G) with the highest signal strength. It has been found that if one of the technologies is available on the cellular network to which the terminal has local access, but is not able to support data transmission, then this process is not optimum and the terminal may not select the technology with highest signal strength. This situation has been resolved.

4.14 First IRIS-4 release - 4.2.0

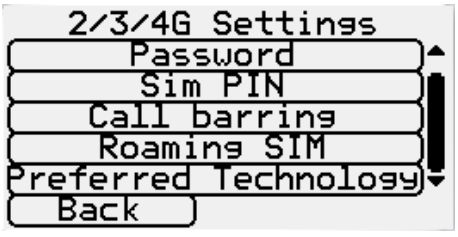
This was the first release of IRIS-4 firmware. This contains the same functions as the previous release of the IRIS Touch NG series which IRIS-4 superseded, with the additions described below.

4.14.1 Enhanced Roaming Selection

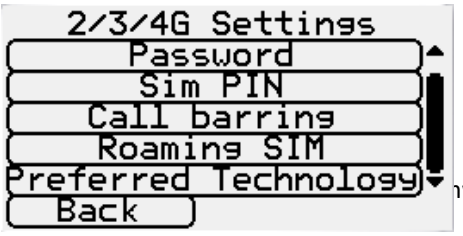
On the IRIS Touch NG series, the installation wizard included a selection tick box for 'Roaming SIM', as below.



This was removed from this menu on the IRIS-4 series because the meaning of the selection was ambiguous. The intention of the setting is 'enhanced' roaming where the terminal monitors the signal strength of the signal from all available cellular service providers and selects the one with the highest signal strength. It was identified that the setting was being selected by some installers if the SIM card in use is a roaming enabled SIM card and where there was no need for the selection of the operator with the strongest signal, as described above. This could result in intermittent trouble being reported by the terminal to the monitoring centre. The selection of this feature, for those who need it, has therefore been moved to the settings menus.



4.14.2 Selection of Preferred Technology



nw 4.11.0

This setting allows the installer to select the preferred technology (Auto, 2G, 3G or 4G) used by the dialler for its cellular connection and the minimum signal strength required for the connection. If the signal strength is not at the required level (default is 10), the terminal will use a different technology that does meet the requirements. A setting of 'Auto', which is the default, instructs the terminal to select the technology with the highest signal strength, as with IRIS Touch NG terminals.