

IRIS Touch Firmware Enhancements and Additions from Version 1.14.3 to Version 1.19.1

Overview

This document details enhancements to the feature set of the IRIS Touch from firmware Version 1.14.3 to Version 1.19.1.

This release (V1.19.1) is available on Chiron’s reflash server with immediate effect. Due to normal manufacturing lead times, it will be introduced into new shipments over the course of the next few months. However, all IRIS Touch diallers can be upgraded by connecting them over IP to our reflash server, so you can be sure of having all the latest facilities, even if you have already taken delivery of the dialler. This can be done prior to install, at install or even after install.

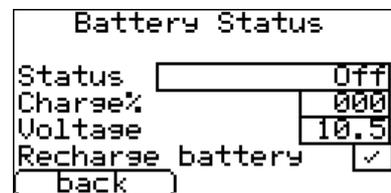
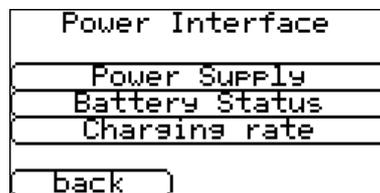
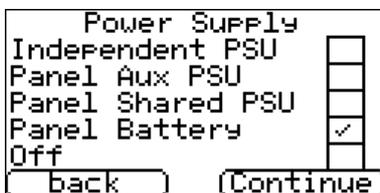
Changes in this Release

New Features

Support for Chiron’s new IRIS Touch Power Pack for the IRIS Touch 2xx range

Chiron has launched a new range of diallers called IRIS Touch Home. The IRIS Touch Home consists of the IRIS Touch dialler in the standard plastic case fitted with a battery pack. The integral battery back-up power supply uses standard off-the shelf NiMH AA sized batteries. Various intelligent powering and battery recharging modes are provided.

The battery pack can be purchased as a separate item and fitted to standard IRIS Touch 2xx range products. This release of firmware provides additional functions to the IRIS Touch to control the features of the IRIS Touch Power Pack whether it is the charge rate or the source of power. This release of firmware will also provide a status report of the connected power pack.



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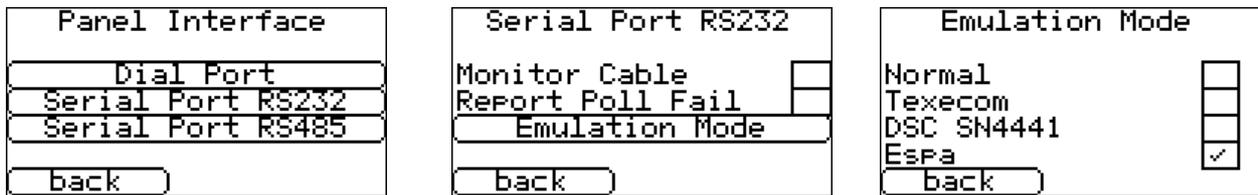
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ESPA serial interface for fire panel communications

Many fire alarm panels support an 'ESPA444' interface on an RS232 serial port that is intended to allow the panel to communicate through a pager system. Through this interface various alarm, fault and status messages can be transmitted.

A set-up option is now provided on IRIS Touch 4xx diallers whereby the RS232 can be set to emulate the pager, and if any messages are received from the panel, these are converted to standard SIA format alarms and sent to the monitoring centre to which the IRIS dialler is reporting.

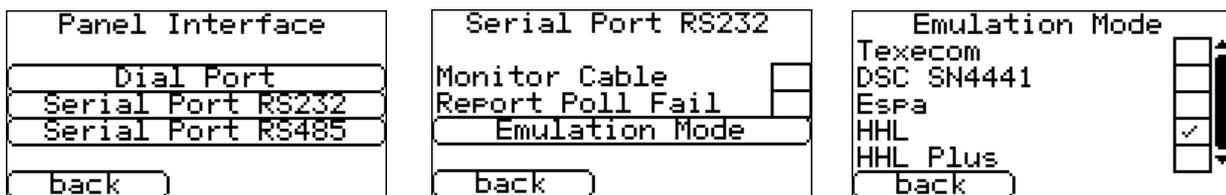


For further technical details please refer to Chiron.

HHL alarm panel serial interface

A serial interface emulation mode has been added for IRIS Touch 400, IRIS Touch 420 and IRIS Touch 440 diallers to allow alarm transmission from HHL alarm panels via a serial interface on the panel. This avoids the need for a PSTN transmission card to be added to the HHL panel.

Both the SNAP and SNAP Plus protocols from the HHL panel are supported and converted to standard SIA format.



For further technical details please refer to Chiron.

Note – the IRIS Touch 440R does not provide this feature.

Visonic Powermax Panel Upload/Download via Dial Capture port

IRIS Touch units with a dial capture port are able to support upload/download to many alarm panels over this port because they have an on-board 300bps modem emulation and can simulate an incoming modem call to the panel. This operates in conjunction with Chiron's IRIS Remote Service App and can be used for connections over Ethernet or GPRS. The IRIS Touch dialler can be set to several different modem modes (e.g. CCITT standard or Bell standard) as appropriate for the panel type and this configuration is set automatically as part of the Remote Service App, so the installer does not have to take any action.

A new feature has been added so that the non-standard call answer mechanism of Visonic Powermax panels is also supported. When the dialler is making the call to the panel, it will ring, then pause, then ring again as required before the panel will answer.

Note – the automatic setting of Visonic mode in the dialler by the Remote Service App requires IRIS Secure Apps release 2.0.11 or later.

For those users who want to set this mode manually, the setting required is %D5 = 6.

Installation aids for IRIS Touch 6xx range

Installation aids have been added to the IRIS Touch 6xx range to help installers overcome a number of initial connection problems that can occur when using the IRIS Touch 6xx with Honeywell Galaxy panels:

- 1) The IRIS account code for connection to the monitoring centre is set up from the Galaxy panel and is entered in the Galaxy communications menu. If the monitoring centre has allocated a four digit account code and the installer enters a four digit code into the panel, in many situations the panel actually sends a six digit code (i.e. the four digit code with two leading '0s') to the IRIS Touch 6xx. This leads to confusion as the IRIS receiver at the monitoring centre does not recognise the six digit code and rejects the connection.

To overcome this issue, intelligence has been added to the IRIS Touch 6xx. If it receives a six digit account code from the panel that has two leading '0s' and it is rejected by the IRIS receiver at the monitoring centre, it will remove the two leading zeros and try again. The four digit account code will be saved in the dialler when the connection is successfully made.

- 2) To help the installer identify the cause of any problems with the initial connection to the IRIS receiver at the monitoring centre, the 'poll' LED on the dialler flashes in a sequence to indicate the connection status:
 - a. Off - connection not enabled. No monitoring centre IP address or no account number is configured in IRIS Touch via the Galaxy communications menus.
 - b. Flash once (in a 2s cycle) – connection failed because there is no IRIS receiver at the IP address entered.

- c. Flash twice (in 2s cycle) – the connection was rejected by the IRIS receiver, typically because the account number was not recognised.
- d. Flash 3 times (in 2s cycle) – the connection was rejected by the IRIS receiver because of an authentication failure. This is normally because the dialler has been previously used on another site and needs to be defaulted or because the account number is being used at another site as well and an alternative number should be allocated by the monitoring centre.
- e. On - connection OK.

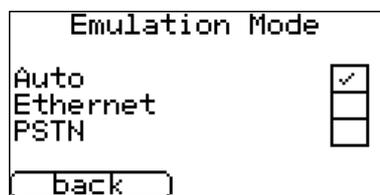
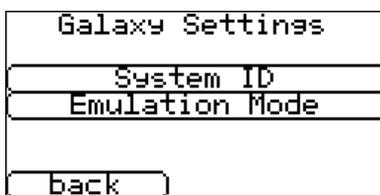
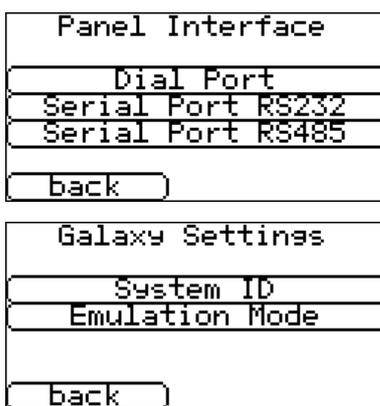
3) The IRIS Touch 6xx dialler can be defaulted by shorting the 'SIGNAL' header pins while the IRIS Touch is not powered and then keeping the short applied for at least 2 seconds after the IRIS Touch is powered.

Galaxy module emulation menu

IRIS Touch 4xx and IRIS Touch 6xx diallers can be connected to a Honeywell Galaxy panel via the panel's RS485 bus by emulating a Galaxy communications module. By default the dialler automatically identifies which type of Galaxy module the panel can support and will adapt accordingly in the following order of priority:

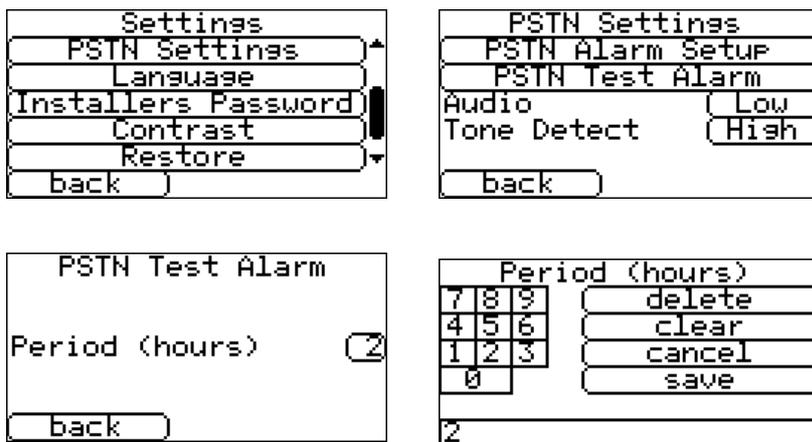
- Galaxy Ethernet module for the latest panel types.
- Galaxy Telecom (PSTN module for earlier panel versions).
- Galaxy Serial module (for very old panels that do not support a Telecom module).

A menu is provided in case an installer wants to fix the module type emulated. For example there may be another device on the bus that is or emulates an Ethernet module and the installer wants to force the IRIS Touch to emulate a Telecom module.



PSTN test calls on IRIS Touch 440R and pin input tamper alarm messages over PSTN

The IRIS Touch range is intended to be used primarily for IP based communications (via Ethernet or GPRS) and the regular polling over IP provides a continuous confirmation to the monitoring centre that the communication path from the remote site is available. This means that the need for the traditional regular 'test alarm' used on PSTN based systems is avoided. However, the IRIS Touch 440R that has a PSTN network interface as well as IP can be used in a PSTN-only system where polling over IP is not possible. For this scenario, PSTN test call support has been added to the IRIS Touch 440R and this can be configured via the touch screen menus.



Please note:

- a) A test period set to 0 (which is the default) disables the test alarm. The period can also be set with USB interface command AT!P20.
- b) The test alarm is only sent over PSTN, never Ethernet or GPRS.
- c) By default the test alarm message is in Contact ID format, event code = 602, group = 0, zone = 95. This can be changed with USB interface command AT!P21, either to a different Contact ID message or to Fast Format.

As part of this feature, the reporting of pin input tampers over PSTN has also been added for PSTN-only systems. By default the message is in Contact ID format with event code = 330, group = 0 and zone = zone number defined in the Contact ID message for this pin input. The event code can be changed with USB interface command AT%G108.

Improvements

Advanced GPRS roaming enhancement

The advanced roaming option, where the IRIS Touch will automatically switch to the GPRS provider with the best signal, providing it is fitted with a SIM card with roaming enabled, has been improved:

- 1) The IRIS Touch will not swap between networks unless the signal strength difference between them is 2 or more. In situations where there are two networks available with comparable signal strength, this prevents the IRIS Touch 'hopping' between networks unnecessarily, which can cause short duration connection problems while the transfer is taking place.
- 2) A 'preferred' network operator name can be set through the USB interface. If set, the IRIS Touch will use this operator's network providing that it has a signal strength of 10 or more, irrespective of the signal strength of other providers.

The command format is: AT%G111="operator name"<Enter>.

Please note that the text 'operator name' must match exactly the operator name held on the SIM card. Please refer to Chiron for more information if necessary.

Alarm triggered Remote Service App connection

An improvement has been made to the process of triggering a Remote Service App call for alarm panel upload/download by triggering an alarm transmission from the panel.

It has been found that the Remote Service App connection may not complete in the following circumstances:

- a) The connection between the alarm panel and the IRIS Touch is dial capture.
- b) When the alarm panel sends an alarm it keeps the dial capture port off hook at the end of the call, while the Remote Service App is trying to connect.

The improvement in this version of software avoids this possibility by triggering the Remote Service App call only when the alarm panel has gone back on hook after the alarm transmission.

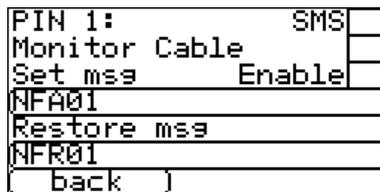
Prompt for SIM PIN on Installation Wizard

The installation wizard now prompts for SIM PIN entry if the SIM requires one. An error message is displayed if the PIN entered is not valid for the SIM.

Input pin disabling without deletion of message text

In previous releases, disabling of pin input alarms was achieved by deleting the associated alarm message. This meant that it was not possible to preconfigure units with pin alarm messages and then disable them, so that an installer could enable those required without having to re-enter the alarm message.

With this release, when pin input alarms are enabled/disabled via the IRIS Touch screen the underlying message is not cleared.



The other method, clearing the message, is still valid.

Disabling inputs using Chiron’s Dialler Configuration software still clears the alarm message. This will be changed in a future release of the software.

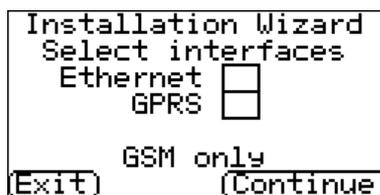
Alarm Override with Robofon Protocol

The IRIS Touch Alarm Override feature makes it possible to connect the PSTN line interface of any alarm panel that uses SIA, Contact ID or Fast Format protocol to an IRIS Touch Dialler without the need to modify the account number or the dialled number within the alarm panel. This means installations can be performed without the need to have any configuration access or any knowledge of the alarm panel.

This function has been extended to work with alarm panels that are set to use the Robofon alarm transmission protocol.

Simplification of setup for GSM-only operation

If GSM-only operation is selected in the installation wizard (which is already possible on previous IRIS Touch software), dial port monitoring and input pin is switched off, as their status cannot be reported to the monitoring centre with no IP path, and the alarm-override setting is ignored so whatever number is dialled is passed transparently to the GSM network.



Pin Input 'Fail to Communicate' indication

If an alarm is generated from an input pin and this cannot be communicated to the monitoring centre because of a network issue (e.g. all communications paths in fault), then this is reported as Status – Trouble (FTC) on the touch screen.

The alarm will continue to be held by the IRIS Touch dialler and transmissions retried until successful and an acknowledgement has been received. At this point the FTC trouble report is cleared.

Test poll generation from USB or serial connection

Test polls can be started via the USB or serial interface using an 'AT' command. The format is:

AT&T86<Enter> - test poll over Ethernet.

AT&T87<Enter> - test poll over GPRS.

AT&T88<Enter> - test poll over PSTN.

IP 'Ping' test generation from USB or serial connection

IP test pings can be generated via the USB or serial interfaces using an 'AT' command. The format is:

AT&T84pxxxxxxxxxxxx<Enter> where:

p = E for Ethernet path, G for GPRS path

xxxxxxxxxxxx is the IP address of the destination in 12 digit format

How to Reflash

Connection to the reflash server can be instigated from the installer menu, Settings->Reflash:



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