

IRIS Serial Port Interface Functionality

for use with DSC 4441 Alarm Transmission Interface

IRIS Alarm over IP diallers IRIS 800/10/40 (Version 2.25 onwards) support serial interface connection from a DSC SN4441 High Security Serial Transmitter module for the transmission of alarms over IP. This is completely compatible with the standard IRIS Management Suite.

This allows a single IRIS unit to be used for IP alarm communications from large installations where several DSC SN4030 panels are connected together using the DSC Backbone bus and a single SN4441. As the communications with the alarm system is over a serial data link, this also gives significantly faster alarm transmission than using the IRIS 2-wire POTS port.

Functionality

The functionality is as follows:

- SIA format alarms from the SN4441 are transmitted to an IRIS Polling Engine at the Central Station and when receipt has been confirmed are acknowledged back to the SN4441.
- The IRIS Dialler uses the SN4441 keep-alive time request for the following:
 1. To indicate to the SN4441 that the dialler is in communications (polling) with the Central Station. If polling is OK then a time response is sent to the SN4441 (note that as the IRIS Dialler has no real-time clock – this will always be coded as data/time 0). Otherwise no response is sent to indicate to the SN4441 that there is a communications problem.
 2. To indicate to the Central Station if the SN4441 stops communicating with the IRIS Dialler. The SN4441 sends a time request every 10 minutes so if the dialler does not see a request within 11 minutes from the last one, it sends a 'Panel Interface' trouble report to the IRIS Polling Engine, which will be forwarded to the Central Station.
- The serial interface operates at 2400 bps.

Connection

A serial crossover cable is required – 25way male for the SN4441 to 9 way male for the IRIS. Note the SN4441 needs to see the DTR and RTS signals which are indicated by LEDs on the SN4441.

Configuration

The IRIS serial port operates either in standard mode (e.g. for connection to the IRIS Dialler Configuration software) or in SN4441 interface mode. The default is standard mode.

To select SN4441 mode:

1. Issue Hayes command AT%A10=1<CR> to the IRIS on the serial port (e.g. from the Dialler Configuration software or from Hyperterminal).
2. Repower the IRIS Dialler.

To select standard mode:

1. Issue the configuration default command to the IRIS Dialler via the POTS port command *9**1234567890#.
2. Repower the IRIS Dialler.

The account number and Polling Engine IP address used by the IRIS dialler is:

1. As already set up in the standard way, e.g. via POTS port from panel or via local configuration software, or:
2. If no account number and ARC IP address have already been loaded these will be taken from the first alarm communication from the SN4441:

Account number is as set in the SIA alarm message

IP address is the 12 digits set in the Infranet address in the header of the message from the SN4441.