

Chiron Technology

IRIS Alarm over IP System

Dialler Configuration User Guide

Chiron Technology
Wyvols Court
Swallowfield
Reading
UK

Tel: +44 (0)118 988 0228
E-mail: sales@chiron.uk.com
support@chiron.uk.com

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1. **Document Change History**

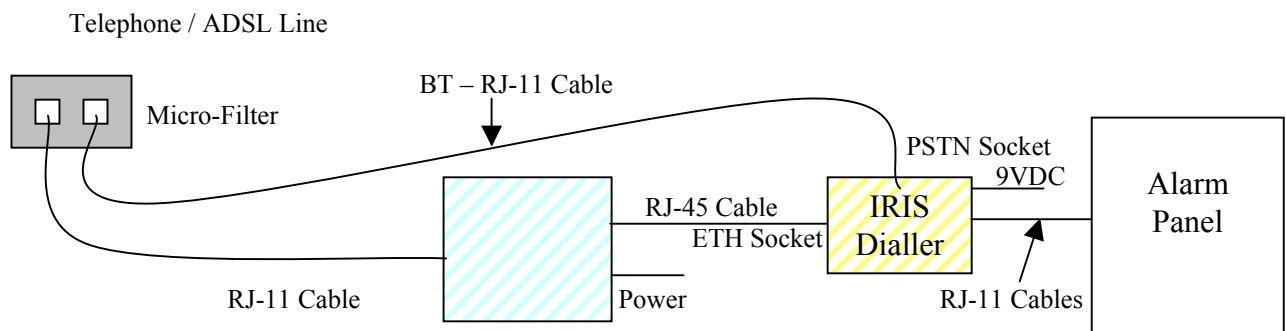
Version	Date	Changes
0.1	08/01/07	First release

DIALLER CONFIGURATION SOFTWARE USER GUIDE:

2. INTRODUCTION:

The Dialler Configuration Software is designed to allow the user full control over the configuration of the IRIS products, and also allows some diagnostics and installations tools.

The IRIS Dialler has been designed for the implementation of Alarm Panel to communicate over different medium like IP, ISDN, and GSM / GPRS and many others. It has been designed to be as simple to install as possible but in certain circumstances the customer wants to be able to do that little bit extra. This is where the IRIS excels and allows a number of additional features that can be implemented and this is where the Dialler Configuration software comes in to allow these features to be configured.



With in this document we are hoping to discuss and show the use of these tools / configuration for the successful installation of the IRIS unit on sites, and how this can be used to diagnose problems.

3. WELCOME PAGE:

Once the software has been loaded onto the PC and run you will be presented with the following screen:

IRIS Dialler Configuration: Welcome

File Welcome Networks Alarms Messages Terminal

CHIRON TECHNOLOGY

IRIS DIALLER CONFIGURATION: WELCOME



Access
Provide information to enable connection and access to Iris Dialler

Entry Procedure	Information Required
Step 1:	Select Local direct or Remote dial-up connection Connection Local Serial
Step 2:	Select computer serial port (connects to local Iris Dialler or to external modem for remote dial-up access) Serial Port ComPort 1
Step 3:	Enter telephone number to dial and modem initialisation commands for remote access Tel No. <input type="text"/> Modem Initialisation <input type="text"/>
Step 4:	Enter password for access to specific Iris Dialler Password factory default
Step 5:	Press button to start communications <input type="button" value="Connect"/>

Iris Dialler Configuration version 1.7
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STATUS:

The Next Screen is as followed and it allows the user to confirm the IRIS type and version connecting to.

Once this has been confirmed and noted please click the “Continue” button to proceed to the next screen.



4. NETWORKS PAGE:

You now in the Main configuration screen where you can start to configure the IRIS Dialler.

CHIRON TECHNOLOGY
IRIS DIALLER CONFIGURATION: NETWORKS

File Welcome Networks Alarms Messages Terminal

Uses these buttons to retrieve current setting or set factory defaults, as required

Retrieve Current Settings

Update with Shown Settings

Restore Defaults
Resets All settings

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Next

Status and Relays

Alarm Panel	Status	Relay
DIAL	not detected	Select relay activated by network failure
Network	Status	Relay
ETHERNET	unsynchronised	NONE
ISDN	deactivated	NONE
PSTN	unavailable	NONE
GSM / GPRS	signal strength	NONE

Connections

ALARM PANEL

Identification Enter information, up to 32 characters
Name/Account

Monitoring Center Enter IP information in format xxx.xxx.xxx.xxx
IP Address

ETHERNET

Configuration Select config
 Automatic (DHCP)
 Manual (Fixed)

TCP/IP Enter IP information in format xxx.xxx.xxx.xxx
IP Address
SubNet Mask
Gateway

MAC Address

ISDN Enter ISDN telephone number (MSN) to which the unit will exclusively answer. If blank, answer any number.
Operation Select operating mode
Mode: Point to Multipoint
MSN Tel No.

GSM / GPRS Enter GPRS information
GPRS User ID
GPRS Password
Access Point Name

STATUS: Scanning network status


Click the “Retrieve Current Settings” to view the current configuration of the unit and you will get the following screen, which we will break down and go into the settings available.

IRIS Dialler Configuration: Networks

File Welcome Networks Alarms Messages Terminal

CHIRON TECHNOLOGY

IRIS DIALLER CONFIGURATION: NETWORKS



Retrieve Current Settings

Update with Shown Settings

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Next

Restore Defaults

Resets All settings

Connections

ALARM PANEL

Identification Enter information, up to 32 characters
Name/Account

Monitoring Center Enter IP information in format xxx.xxx.xxx.xxx
IP Address

ETHERNET

Configuration Select config **TCP/IP** Enter IP information in format xxx.xxx.xxx.xxx

Automatic (DHCP) IP Address

Manual (Fixed) SubNet Mask

MAC Address Gateway

ISDN Enter ISDN telephone number (MSN) to which the unit will exclusively answer. If blank, answer any number.

Operation Select operating mode **MSN**

Mode Tel No.

GSM / GPRS Enter GPRS information

GPRS User ID

GPRS Password

Access Point Name

Status and Relays

Alarm Panel	Status	
DIAL	not detected	<input checked="" type="radio"/> <small>Select relay activated by network failure</small>

Network	Status	Relay
ETHERNET	unsynchronised	<input checked="" type="radio"/> NONE
ISDN	deactivated	<input checked="" type="radio"/> NONE
PSTN	unavailable	<input checked="" type="radio"/> NONE
GSM / GPRS	<input type="radio"/>	<input type="radio"/> NONE

signal strength

STATUS: Retrieved network settings. Scanning network status

We will break this down into 2 modules being the "Connections" and the "Status and Relays".

4.1. Connections:

As you can see below we have cut down the screen to the relevant setting we are going to discuss here.

These are the connection settings that set up all the Communication setting needed for the IRIS unit to be able to communicate to the Polling Engine.

Connections

ALARM PANEL

Identification Enter information, up to 32 characters
Name/Account

Monitoring Center Enter IP information in format xxx.xxx.xxx.xxx
IP Address

ETHERNET

Configuration Select config
 Automatic (DHCP)
 Manual (Fixed)

TCP/IP Enter IP information in format xxx.xxx.xxx.xxx
 IP Address
 SubNet Mask
 Gateway

MAC Address

ISDN Enter ISDN telephone number (MSN) to which the unit will exclusively answer. If blank, answer any number.
Operation Select operating mode
 Mode **MSN** Tel No.

GSM / GPRS Enter GPRS information
 GPRS User ID
 GPRS Password
 Access Point Name

This field indicates the MAC address for the IRIS unit and is preset at manufacture. Every unit will have a unique MAC address.

This would be the Account / PIN number for this site, allocated from ARC.

Enter the External Ethernet / IP address of the Polling Engine

If Set to DHCP these options will be pre-configured once the Network / Ethernet is plugged in and synchronised.
 If set to Manual then the IP Address, Subnet Mask and Gateway would need to be configured to the Network requirements, normally allocated by the IT Department.

Select the ISDN Mode "Point to Multipoint" or "Point to Point", and you can enter the MSN number the unit will answer to if the ISDN line is configured for MSN.

If the Unit has GSM/GPRS you may need to set these values again dependent on the Network provider. Normally just the Access Point Name (APN) is needed and we have listed a few common Network providers below.

Vodafone	=	internet
Orange	=	orangeinternet
O2	=	mobile.o2.co.uk

Once you have entered the relevant information then click the Update with Shown Settings button.

4.2. Status and Relays:

The following Setting allows the user to see current states of the Communications paths, and configure the Relay outputs for this Communication path for alarm purposes.

Status and Relays

Alarm Panel	Status	Relay
DIAL	not detected (Red LED)	NONE
ETHERNET	unsynchronised (Red LED)	NONE
ISDN	deactivated (Red LED)	NONE
PSTN	unavailable (Red LED)	NONE
GSM / GPRS	unregistered (Red LED)	NONE

signal strength: [Progress bar]

STATUS: Retrieved network settings. Scanning network status

These show the status of the Dial port and Network paths via a brief status message and a red / green LED indication. Normally you would be looking for Green on the Network paths that you have connected. See Screen Shot below for reference.

Here you can enable / disable the Relays that are assigned to the different Network Paths, for activating when network failures.

This shows the signal Strength for the GSM / GPRS network paths

Status and Relays

Alarm Panel	Status	Relay
DIAL	detected (Green LED)	NONE
ETHERNET	synchronised (Green LED)	Relay D
ISDN	activated (Green LED)	Relay A
PSTN	available (Green LED)	Relay B
GSM / GPRS	registered (Green LED)	Relay C

signal strength: [Progress bar]

This screen shows the different status you can receive here and the Relay setting for each network path (The relays are fixed to each network path and can only be disabled and enabled).

Dial: Shows if the Panel / Phone has gone Off Hook (detected / Green) or On Hook (not detected / Red).

Ethernet: Shows if the Ethernet Physical Connection is made.

ISDN: Shows if the ISDN Layer2 is available

PSTN: Shows if the PSTN line Voltage (40VDC) is present.

GSM / GPRS: Shows if the SIM card has registered with the Network.

5. ALARMS PAGE:

These Configurations are only needed for IRIS Units that have Pin Alarms and relays fitted (820, 840, and 850).

Now if you click the “NEXT” Button you will be presented with the following screen, all fields at first will be blank but if you do a “Retrieve Current Settings” you will have the following SIA Messages set as default:

IRIS Dialler Configuration: Alarms

File Welcome Networks Alarms Messages Terminal

CHIRON TECHNOLOGY
IRIS DIALLER CONFIGURATION: ALARMS

Retrieve Current Settings

Update with Shown Settings

Iris Dialler Configuration version 1.7
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Next

Back

Alarm Inputs
For selected inputs, enter telephone number to be called with message to be sent when its input goes to its active level

Active Low Inputs	Telephone Number To Call	Message Sent When Activated	Current Status
Input 1:	<input type="text"/>	NBA01_NBR01	ignored <input type="radio"/>
Input 2:	<input type="text"/>	NFA01_NFR01	ignored <input type="radio"/>
Input 3:	<input type="text"/>	NQA01_NQR01	ignored <input type="radio"/>
Input 4:	<input type="text"/>	NCL01_NCP01	ignored <input type="radio"/>
Active High Inputs Input ignored if its telephone number or sms message is blank			
Input 5:	<input type="text"/>	NPA01_NPR01	ignored <input type="radio"/>
Input 6:	<input type="text"/>	NUA01_NUR01	ignored <input type="radio"/>
Input 7:	<input type="text"/>	NAT01_NAR01	ignored <input type="radio"/>
Input 8:	<input type="text"/>	NTA01_NTR01	ignored <input type="radio"/>

Alarm Relays

Contact Active Open	Calling Telephone Number	Message To Activate Relay	Message To Deactivate Relay	Current Status
Relay A:	<input type="text"/>	<input type="text"/>	<input type="text"/>	ignored <input type="radio"/>
Relay B:	<input type="text"/>	<input type="text"/>	<input type="text"/>	ignored <input type="radio"/>
Contact Active Close Relay ignored (and deactivated) if its sms messages are blank				
Relay C:	<input type="text"/>	<input type="text"/>	<input type="text"/>	ignored <input type="radio"/>
Relay D:	<input type="text"/>	<input type="text"/>	<input type="text"/>	ignored <input type="radio"/>

STATUS: Retrieved alarm settings. Scanning alarm status

Again we will break this down into 2 modules, “Alarm Inputs” and “Alarm Relays”.

5.1. Alarm Inputs:

This section is designed to allow the end user to use the Alarm Input to generate Alarm messages to the Polling Engine or a SMS receiver (Mobile), and also allow a view of the Current status of these alarm input. By default the Alarm input are set to send a Default SIA message on activation of these inputs but these can be change by the Installer.

Alarm Inputs For selected inputs, enter telephone number to be called with message to be sent when its input goes to its active level

Active Low Inputs	Telephone Number To Call	Message Sent When Activated	Current Status
Input 1:	<input type="text"/>	<input type="text" value="NBA01_NBR01"/>	ignored <input type="radio"/>
Input 2:	<input type="text"/>	<input type="text" value="NFA01_NFR01"/>	ignored <input type="radio"/>
Input 3:	<input type="text"/>	<input type="text" value="NQA01_NQR01"/>	ignored <input type="radio"/>
Input 4:	<input type="text"/>	<input type="text" value="NCL01_NDP01"/>	ignored <input type="radio"/>
Active High Inputs	Input ignored if its telephone number or sms message is blank		
Input 5:	<input type="text"/>	<input type="text" value="NPA01_NPR01"/>	ignored <input type="radio"/>
Input 6:	<input type="text"/>	<input type="text" value="NJA01_NUR01"/>	ignored <input type="radio"/>
Input 7:	<input type="text"/>	<input type="text" value="NAT01_NAR01"/>	ignored <input type="radio"/>
Input 8:	<input type="text"/>	<input type="text" value="NTA01_NTR01"/>	ignored <input type="radio"/>

Alarm Inputs For selected inputs, enter telephone number to be called with message to be sent when its input goes to its active level

Active Low Inputs	Telephone Number To Call	Message Sent When Activated	Current Status
Input 1:	<input type="text" value="01189880228"/>	<input type="text" value="NBA01_NBR01"/>	inactive <input checked="" type="radio"/>
Input 2:	<input type="text" value="01189880228"/>	<input type="text" value="NFA01_NFR01"/>	inactive <input checked="" type="radio"/>
Input 3:	<input type="text" value="01189880228"/>	<input type="text" value="NQA01_NQR01"/>	inactive <input checked="" type="radio"/>
Input 4:	<input type="text" value="01189880228"/>	<input type="text" value="NCL01_NDP01"/>	inactive <input checked="" type="radio"/>
Active High Inputs	Input ignored if its telephone number or sms message is blank		
Input 5:	<input type="text" value="01189880228"/>	<input type="text" value="NPA01_NPR01"/>	active <input checked="" type="radio"/>
Input 6:	<input type="text" value="01189880228"/>	<input type="text" value="NJA01_NUR01"/>	active <input checked="" type="radio"/>
Input 7:	<input type="text" value="01189880228"/>	<input type="text" value="NAT01_NAR01"/>	active <input checked="" type="radio"/>
Input 8:	<input type="text" value="01189880228"/>	<input type="text" value="NTA01_NTR01"/>	active <input checked="" type="radio"/>

As you can see the Telephone number is enter in the relevant field for the alarm input you want to use (Normally a mobile number). If left blank the Message would be sent to the Polling Engine in the SIA Format.

The format is show as NBA01_NBR01 these are the Alarm for the open and closed states and are separated by the “_”.

As seen in the second screen the Current status will show Blue for inactive and Red for Active and will change on the input being open or closed.

5.2. Alarm Relays:

The section is where you can configure the Alarm Relays Function and what SMS messages can be received to cause the Activation / Deactivation of the Relays.

Alarm Relays				
Contact Active Open	Calling Telephone Number	Message To Activate Relay	Message To Deactivate Relay	Current Status
Relay A:	<input type="text" value="011899880228"/>	<input type="text" value="open front gate"/>	<input type="text" value="close front gate"/>	inactive <input type="radio"/>
Relay B:	<input type="text" value="011899880228"/>	<input type="text" value="open back gate"/>	<input type="text" value="close back gate"/>	inactive <input type="radio"/>
Relay ignored (and deactivated) if its sms messages are blank				
Contact Active Close				
Relay C:	<input type="text" value="011899880228"/>	<input type="text" value="activate alarm"/>	<input type="text" value="disable alarm"/>	inactive <input type="radio"/>
Relay D:	<input type="text" value="011899880228"/>	<input type="text" value="turn on lights"/>	<input type="text" value="turn off lights"/>	inactive <input type="radio"/>

This column is where you would enter the Telephone number of the SMS/mobile device sending the message to the IRIS unit. This allows the use of CLI to confirm / restrict which SMS / Mobile device can set the Relays.

Here you will enter the SMS message that would activate the relevant relays. Case sensitive.

Enter the SMS messages that would deactivate the relevant relays. Case sensitive.

This Column shows the current status of the relays.

6. MESSAGES PAGE:

Now if you click the “NEXT” Button you will be presented with the following screen:

The screenshot shows a web browser window titled "IRIS Dialler Configuration: Messages". The browser's address bar shows "File Welcome Networks Alarms Messages Terminal". The page header features the "CHIRON TECHNOLOGY" logo and the "CHIRON" logo with a horse and bow. The main content area is divided into several sections:

- Retrieve Current Settings**: A button to refresh the configuration.
- Update with Shown Settings**: A button to save the current configuration.
- Version Information**: Text indicating "Iris Dialler Configuration version 1.7", "Copyright Chiron Technology Ltd. 2005", and "Web site: www.chiron.uk.com".
- Next** and **Back**: Navigation buttons.
- SMS for Line Fail**: A section with four "Tel No." input fields, two message input fields (one for "Line Fail is detected" and one for "Line OK is restored"), and a note: "Messages will be prefixed with associated network, eg ISDN, PSTN or ETHERNET".
- SMS for Alarm Call**: A section with four "Tel No." input fields and one message input field for "Alarm Call is activated".
- Access Control**: A section with a "Password" input field (with a strength indicator), a "Select Remote Access capability" label, and a "Remote Access" dropdown menu.

At the bottom of the page, a status bar reads "STATUS: Retrieved message settings."

We will break this down into 3 modules being the “SMS for Line Fail”, “SMS for Alarm Call” and “Access Control”.

6.1. SMS for Line Fail:

SMS for Line Fail is where you can setup the IRIS dialler to alert a number of SMS receivers of a line failure.

The IRIS unit monitors the communication paths that are available (i.e. ISDN, PSTN and Ethernet), and if any of these paths go into a fail state then the unit will generate Line Fail for that communication path.

The screenshot shows the 'SMS for Line Fail' configuration interface. It includes a title 'SMS for Line Fail', a section for entering telephone numbers, two message input fields, and a note about message prefixes. Callout boxes provide instructions for each field.

SMS for Line Fail

Enter telephone numbers where message to be sent

Tel No.

Tel No.

Tel No.

Tel No.

Enter message to be sent when Line Fail is detected

Enter message to be sent when Line OK is restored

Messages will be prefixed with associated network, eg ISDN, PSTN or ETHERNET

Enter the Telephone numbers of the Mobile / SMS receivers that you want to have the SMS messages sent to on the Line Failure / restored.

Here you enter the message to be sent when the Line Fail is detected.

Here you enter the message to be sent when the Line OK is restored.

6.2. SMS for Alarm Call:

SMS for Alarm Call is where you can setup the IRIS dialler to alert a number of SMS receivers of an Alarm being generated, for either the Alarm panel or the Pin alarm input on the IRIS dialler.

The screenshot shows the 'SMS for Alarm Call' configuration interface. It includes a title 'SMS for Alarm Call', a section for entering telephone numbers, and a message input field. Callout boxes provide instructions for each field.

SMS for Alarm Call

Enter telephone numbers where message to be sent

Tel No.

Tel No.

Tel No.

Tel No.

Enter message to be sent when Alarm Call is activated

Enter the Telephone numbers of the Mobile / SMS receivers that you want to have the SMS messages sent to, when a Alarm has been generated.

Here you enter the message to be sent when an Alarm call is detected.

6.3. Access Control:

The Access Control settings are where the end user can change the default Password (factory default) for configuration access (local or remote).

Also you have the option to disable the remote access function but we would advised never to do this, as this will disable Remote diagnostics.

The screenshot shows the 'Access Control' configuration interface. It includes a title 'Access Control', a password input field, and a dropdown menu for remote access capability.

Access Control

Enter new password, if alteration required, from 6 to 30 characters.

Password

Select Remote Access capability

Remote Access

7. TERMINAL PAGE:

Now if you click the “NEXT” Button you will be presented with the last screen:

The Terminal Screen allows the user to have a Terminal session to the IRIS dialler where you can enter AT commands to perform various functions (i.e. Diagnostic, traces, and configuration).

You can find a list of some of these commands on the following pages.

IRIS Dialler Configuration: Terminal

File Welcome Networks Alarms Messages Terminal

CHIRON TECHNOLOGY

IRIS DIALLER CONFIGURATION: TERMINAL



Display

Enter command and view responses

Responses: Continue Pause

```
OK
at&v

ACTIVE/STORED PROFILE:
E1 Q0 V1 X3 &C1 &D2 &K3
S0:000 S37:000 %A2:002 %A3:000 %A6:000
%I0:003 %I1:000 %I2: %I3:
%I4: %I5: %I6: %I7:
%I8: %I9: %I10:001
%I12: %I13: %I15: %I17:Chiron Adapter
%E8:000 %M0:000 %M3:CHIRON
IC4:004 IC5:004 IC6: IC7:064 IC8:001 IC9:001
IC10: IC11:001 IC12:000 IC13:000 IC14:000
IP0:001
TELEPHONE NUMBER: &Z0 =
TELEPHONE NUMBER: &Z1 =
TELEPHONE NUMBER: &Z2 =
TELEPHONE NUMBER: &Z3 =

OK
ati3

Chiron IRIS 850 Version 2.13

OK
```

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Back

STATUS:

7.1. Hayes AT Commands:

AT & V	View current settings.
ATI3	Display Version information.
AT&F9	Default IRIS to Factory Default.
AT&K	Turns flow control off (required by the Galaxy RS232 module).
AT%A2=12	Tells the IRIS to communicate Serial to TCP/IP.
AT%G8=1	GSM Diagnostics.
AT%G10="*****"	Set APN name for provider example "orangeinternet".
AT%I1= 0	Disable Alarm and polling diagnostics.
AT%I1= 9	Enable Alarm diagnostics.
AT%I1=10	Enable polling diagnostics.
AT%I4=192168001001	Set the IRIS local Ethernet / IP address example 192.168.001.001.
AT%I6=11111	Sets TCP port number in IRIS for serial communications to 11111 – note any number can be used as long as the equivalent is set at the calling end – see below
AT%I7=11111	Sets the IRIS to call TCP port number to 11111 – note any number can be used as long as the equivalent is set at the remote end – see above
AT%I8=255255255000	Set the Local Ethernet / IP local subnet example 255.255.255.000.
AT%I9=192168001002	Set the local Ethernet / IP gateway example 192.168.001.002.
AT%I12=193168000001	Set the Ethernet / IP address of the Polling engine example 193.168.000.001.
AT%I13="name"	Set the Account name / PIN for this IRIS dialler.
AT%I22?	View DHCP IP address settings.
AT%L4=1	Set the Character Forwarding Ideal Timer to 50mS
ATS0=1	sets the IRIS unit to Auto Answer.
ATS37= 5 6 7 9 12 13 18 31	(1200 bps) (2400 bps) (4800 bps) (9600 bps) (19200 bps) (38400 bps) (57600 bps) (115200 bps)
	Instructs the IRIS to set the Baud rate "bps" on serial port for incoming calls

For IRIS software 2.15B and above.

AT%G29=0	Disables the PIN 7 & 8 short to 0V default and GSM Signal strength functions.
AT%G29=64	Enables the use of the PIN 7 to 0V to activate a default on the IRIS unit.
AT%G29=128	Enables the use of the PIN 8 to 0V to activate the GSM signal strength indication on the front LEDS.
AT%G29=192	Enables both PIN 7 & PIN 8 default and GSM signal strength test.