IQVIEW SCD for IQ4 Manual

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ABOUT THIS MANUAL

This manual applies to the IQVIEW Single Controller Display (SCD) for IQ4. It is designed to help you become familiar with the principles of how to set up and use the IQVIEW SCD for IQ4. It is assumed that the user has a basic understanding of the Trend system as well as building control.

It is arranged both for instruction and reference. In some areas it is best to read through once in order to obtain an overview, and then again in order to understand specific details. It contains the following sections:

Part 1 - Provides a general overview of the IQVIEW SCD for IQ4.
Part 2 - Describes how to install and configure the IQVIEW SCD for IQ4.
Part 3 - Describes how to use IQVIEW SCD for IQ4.
Appendices - Describes additional procedures.

Part 1

What is the Single Controller Display for IQ4?

This section provides a brief description of the IQVIEW SCD for IQ4.

Securing the Single Controller Display for IQ4

This section provides guidance on security issues to be considered when installing and using the IQVIEW SCD for IQ4.

Part 2

Engineering Procedure

This section describes the procedure required to install and configure the IQVIEW SCD for IQ4. The following sections describe the individual steps:

Setup the IQ4
Install the Display
Set up the Display

Part 3

Using the Single Controller Display for IQ4 Application

This section describes the general procedures for day-to-day use of the IQVIEW SCD for IQ4 application.

Basic Use

Appendices

Various additional procedures and information that may occasionally be required.

IQVIEW-4-S User Interface Overview
System Settings
Download and View Log Files
Backup and Restore
Forgotten Passwords
Diagnostics

Related Documentation

The following documents are referenced in this manual and may be required for additional information when installing and configuring the IQVIEW SCD for IQ4:

- IQVIEW SCD for IQ4 Data Sheet (TA201475)
- IQVIEW-4-S Display Installation Instructions (TG201477)
- General Security Best Practice for Trend IP Based Products Information Sheet (TP201331)

These documents can be downloaded from the Trend e-library on the PNet support web site (**https://partners.trendcontrols.com**).

Conventions Used in this Manual

The conventions below are designed to make it both quick and easy to find and understand the information.

- Menu commands are in **bold** type.
- Buttons, and options in dialogue box boxes that you need to select are in **bold** type.
- The names of text boxes and dialogue box boxes are in **bold** type.
- Key combinations that you should press appear in normal type. If joined with a plus sign (+), press and hold the first key while you press the remaining one(s). For example, CTRL+P indicates holding down the control key while pressing P.
- Text you should enter is in *Italic* type.

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PART 1

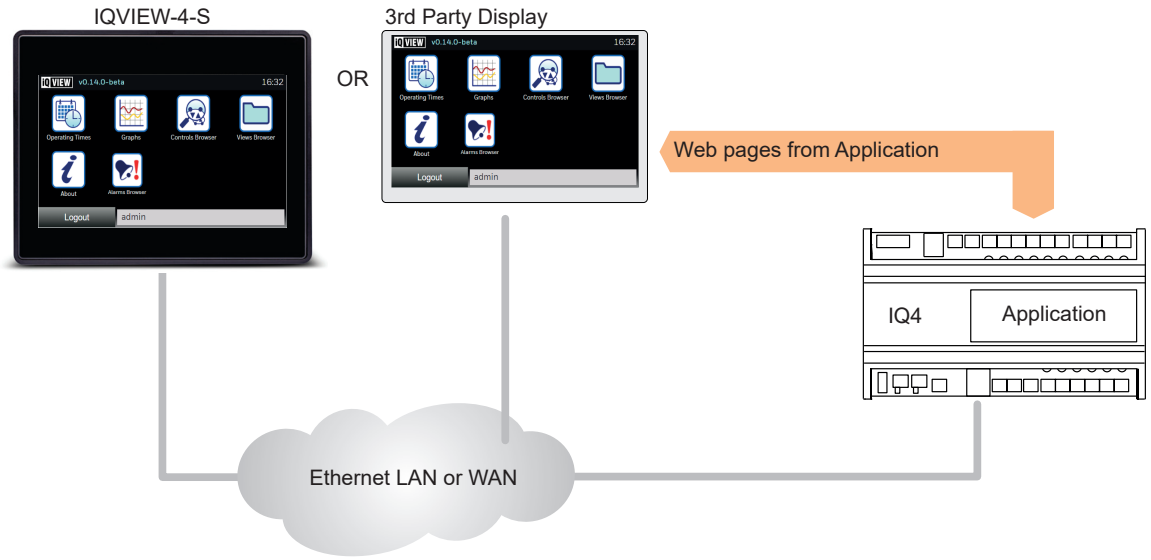
Provides a general overview of the IQVIEW SCD for IQ4.

1 WHAT IS THE SINGLE CONTROLLER DISPLAY FOR IQ4?

The IQVIEW SCD for IQ4 provides an interface to an IQ4 controller. It enables the user to view and adjust operating times, monitor alarms, adjust controller parameters, and display graphs of logged data. It is a combination of an application hosted in an IQ4 controller and an HTML display which accesses the application using a web client over an Ethernet connection.

The IQVIEW-4-S Display is a 4.3" TFT colour touchscreen display running a web browser. This can either be panel or wall mounted (in a wall cavity) enabling it to be mounted in a way suitable for its environment and use.

1.1 IQVIEW SCD for IQ4 Architecture



The IQVIEW SCD for IQ4 comprises two parts:

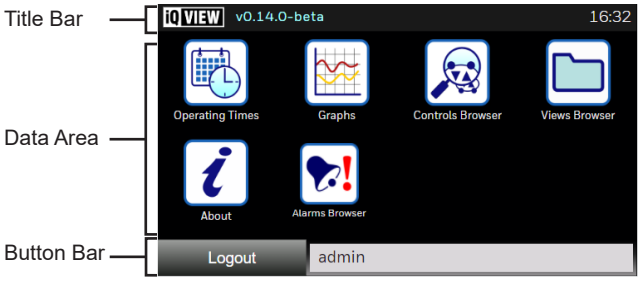
IQVIEW SCD for IQ4 Application
IQVIEW-4-S HTML Display

1.1.1 IQVIEW SCD for IQ4 Application

The application for IQVIEW SCD for IQ4 (application) provides the display's functionality. It is hosted in the IQ4 controller that it is to provide an interface to, and provides information in the form of web pages accessed over an Ethernet connection using either a IQVIEW-4-S HTML Display or a 3rd party display.

1.1.1.1 User Interface

The application's user interface uses easy to understand icons to provide easy of navigation, and feature selection. Most screens are divided into three areas:



Title Bar
The **Title Bar** displays the screen title, and the current time.

Data Area
The **Data Area** is located in the middle of the screen contains the requested information, and contains icons which provide access to the main features available from the screen.

Button Bar
The **Button Bar** along the bottom contains buttons that provide access to ancillary items available from the current screen. The buttons vary from screen to screen.

1.1.2 IQVIEW-4-S HTML Display

The IQVIEW-4-S Display (display) is a 4.3" TFT colour touchscreen display running an embedded web browser which can be used to access the web pages generated by the **IQVIEW SCD for IQ4 Application**.

The display is designed to be mounted in a lockable panel or enclosure that provides a degree of protection not less than IP54 in accordance with IEC/EN 60079-15. A suitable aperture must be cut in the panel, the display is then inserted from the front and secured from behind using the screw clips supplied.

When correctly installed the display provides a protection rating of IP66 from the front.

1.1.3 3rd Party Displays

Any 3rd party display can be used to access the application providing it meets the requirements specified in the IQVIEW-4-S Single Controller Display for IQ4 Data Sheet (TA201475).

Note: If a 3rd party display is to be used, application license (IQVIEW-SC-V) must be purchased for every IQ4 controller where a display needs to be connected.

2 SECURING THE SINGLE CONTROLLER DISPLAY FOR IQ4

The IQVIEW SCD for IQ4 is a networked product and as such must have its security correctly configured to reduce the risk of unauthorised access.

The purpose of this section is to provide the information necessary for those involved in the installation and maintenance of the IQVIEW SCD for IQ4 to understand the requirements for configuring and managing the its security.

Additional information may be obtained from:

General Security Best Practice for Trend IP Based Products Information Sheet (TP201331)

This document is available from the Trend PNet web site (**https://partners.trendcontrols.com**).

2.1 Security Check List

- Physical access to IQ4 controller hosting the application is restricted
- Physical access to display configured to access the application is restricted
- The IQ4 hosting the application is running latest release of firmware
- The latest version of the application is used
- Physical access to the Ethernet network is restricted

2.2 Disaster Recovery Planning

When developing the disaster recovery plan ensure that it includes ALL data required to restore system operation.

2.3 Physical and Environmental Considerations

The display should, where possible, be secured against unauthorised physical access.

2.4 Security Updates and Service Packs

Ensure the IQ4 is running the latest release of firmware and the latest version of the application is being used.

2.5 Virus Protection

Not applicable.

2.6 Network Planning and Security

Ethernet Network

It is recommended that the Ethernet network used by the BEMS system is separated from the normal office network using an air gap, or virtual private network. Physical access to the Ethernet network infrastructure must be restricted. You must also ensure that the installation complies with your company's IT policy.

2.7 Virtual Environments

Not applicable.

2.8 Securing Wireless Devices

If a wireless network is being used it must be secured according to your company's IT policy.

2.9 System Monitoring

Not applicable.

2.10 Windows Domains

Not applicable.

2.11 Securing Access to the Operating System

If using the IQVIEW-4-S display you should ensure that the default admin password is changed, and anyone who requires access to the application has their own login.

2.12 General Data Protection Regulation (GDPR)

The General Data Protection Regulation (EU) 2016/679 (GDPR) is a regulation in EU law on data protection and privacy for all individual citizens of the European Union (EU) and the European Economic Area (EEA). It also addresses the transfer of personal data outside the EU and EEA areas. The GDPR contains provisions and requirements related to the processing of personal data of individuals (data subjects) inside the EEA, and applies to any enterprise established in the EEA or (regardless of its location and the data subjects' citizenship) that is processing the personal information of data subjects inside the EEA.

Under the terms of the GDPR personal data includes any information that may be used to identify an individual. This includes (but is not limited to):

- user names,
- passwords,
- phone numbers,
- email addresses,
- work or residential addresses.

Any such information entered into IQVIEW SCD for IQ4 is stored on the IQVIEW SCD for IQ4 installed on a customer's premises. Neither Honeywell or Trend have any involvement with the storage and/or processing of personal data within IQVIEW SCD for IQ4.

Responsibility for compliance with the requirements of the GDPR lies fully with the system integrator or system administrator and, as such, they must ensure that adequate technical and organisational systems are in place to:

- obtain explicit consent from each data subject for personal data to be stored, used and/or processed,
- allow individuals to have access to their personal data in order to verify accuracy,
- allow individuals to withdraw their consent at any time and to have their personal data to be permanently erased,
- maintain the security and integrity of data storage and access at all times,
- report any breaches of data security (that may affect user privacy) to the relevant authority within 72 hours of the breach occurring.

PART 2

This part of the manual describes how to install and configure the IQVIEW SCD for IQ4.

1 ENGINEERING PROCEDURE

Before the IQVIEW SCD for IQ4 can be used it must be engineered. The following steps are recommended:

2 SETUP THE IQ4

This section describes the steps that must be followed to set up the IQ4 to host the application. The following steps are required to setup the IQ4:

Install and Configure the IQ4
Upgrade the IQ4's Licence
Deploy the Application to the IQ4

Once the IQ4 has been setup proceed to **Install the Display**.

2.1 Install and Configure the IQ4

The IQ4 that is to host the application must be installed and configured as required.

Configure IQ4 Users
Enable XML Web Services
Configure Controller Language
Configure Controller's Timezone
Configure Controller's IP Address

For details of installing an IQ4 controller see the appropriate installation instructions:

IQ4E, IQ4NC/16, IQ4NC/32 Controller Installation Instructions - Mounting (TG201338)
IQ41x Series Controllers Installation Instructions - Mounting (TG201250)
IQ422, IQ4NC/00, IQ4NC/12 Controllers Installation Instructions - Mounting (TG201264)

For details of configuring the IQ4 strategy an IQ4 controller see the IQ4 Configuration Manual (TE201263) and the IQSET Manual (TE200147).

These documents are available from the Trend PNet web site (**https://partners.trendcontrols.com**).

Once the IQ4 has been installed and configured proceed to **'Upgrade the IQ4's Licence' on page 20**.

2.1.1 Configure IQ4 Users

The IQVIEW SCD for IQ4 application uses the IQ4's users to prevent unauthorised access therefore it is necessary to add users to the IQ4's strategy that are to be used for logging into the application.

It is recommend that you create a separate user for each person that is to access the application and that these users are only used for access to the application.

When setting up the users consider the following:

- PIN level to allow them to make the appropriate changes
- Set the timeout as required so the user will timeout after the specified period of inactivity

Once the users have been configured in the IQ4 proceed to **'Upgrade the IQ4's Licence' on page 20**.

2.1.2 Enable XML Web Services

The XML Web Services parameter in the Ethernet IP network module must be set to 'Write Authentication'.

2.1.3 Configure Controller Language

The application will use the controller's language therefore it is necessary to configure the controller to use the required language.

2.1.4 Configure Controller's Timezone

The application requires that the controller's Time Zone parameter in the Time module is set to correctly specify the timezone the controller is located in.

2.1.5 Configure Controller's IP Address

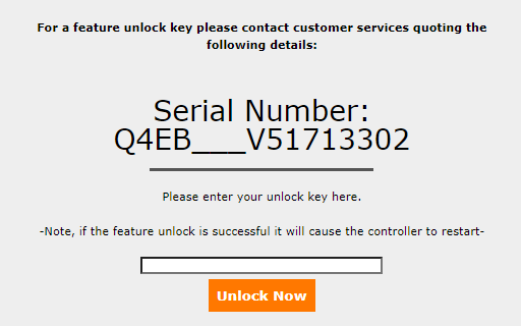
If making a direct Ethernet connection between the IQ4 and the display it is recommended that the controller is set to have a fixed IP address.

2.2 Upgrade the IQ4's Licence

To use the IQVIEW SCD for IQ4 application the IQ4's licence must be upgraded to include the IQVIEW SCD for IQ4 functionality.

To upgrade the licence:

1. Obtain an unlock key from Trend. This will normally be chargeable.
2. Login to the IQ4 using a web browser - see the IQ4 Web User Guide (TC201256).
3. Select **Modules**>**Options**.
4. Click **Add New Feature**.



5. Enter the unlock key.
6. Click **Unlock Now**.
7. Proceed to **'Deploy the Application to the IQ4' on page 20**.

2.3 Deploy the Application to the IQ4

The IQVIEW SCD for IQ4 application must be downloaded to the IQ4 that is to host it using IQSET. For details of deploying the application see the 'Deploy the Single Controller Display Application' section of the IQSET Manual (TE200147). Once the application has been deployed proceed to **'Install the Display' on page 21**.

Note: At this point you may want to use a web browser to connect to the IQVIEW SCD for IQ4 application to check that it is working correctly.

3 INSTALL THE DISPLAY

If the IQVIEW-4-S Display is being used to access the application it must be installed and connected to the same Ethernet network as the IQ4 - see the IQVIEW-4-S Display Installation Instructions (TG201477).

If a 3rd party display it must be installed and connected to the same Ethernet network as the IQ4 according to the manufacturer's instructions.

Proceed to **'Set up the Display' on page 23**.

4 SET UP THE DISPLAY

Once installed the display must be configured to connect to the Ethernet network and display the IQVIEW SCD for IQ4. If using the IQVIEW-4-S Display see **'Setup the IQVIEW-4-S Display' on page 23**. If using a 3rd party display see **'Setup a 3rd Party Display or Web Browser' on page 32**.

4.1 Setup the IQVIEW-4-S Display

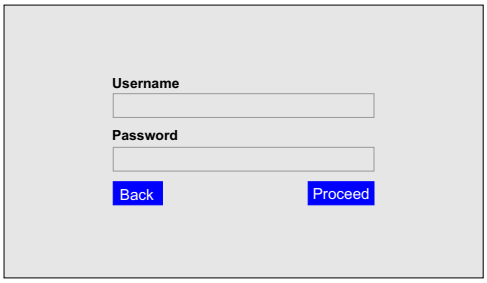
This section describes the steps that must be followed to set up the IQVIEW-4-S Display. The following steps are required:

4.1.1 Power up IQVIEW-4-S Display for the First Time

To power up the display for the first time:

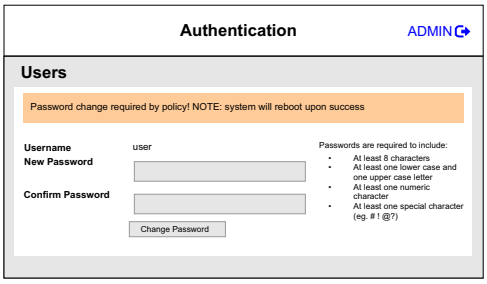
1. Install the IQVIEW-4-S Display as described in the IQVIEW-4-S Installation Instructions (TG201455).
2. Power up the IQVIEW-4-S Display.

   After the boot up sequence the **Login** screen is displayed:



   Note: Touching any input box (e.g. Username) will display a virtual keyboard on the lower half of the screen.

3. Enter '*admin'* in the **Username** box.
4. Enter '*admin*' in the **Password** box.
5. Select **Proceed**. The **Authentication** screen is displayed, and you will be forced to change the password for the 'admin' user.



6. Specify the new password in the **New Password** box. The password must be at least 8 characters long, contain at least one lowercase and one uppercase character, at least one numeric character and at least one special character (e.g. # ! @ ?).
7. Confirm the new password in the **Confirm Password** box.

8. Select **Change Password**. The 'admin' password will be changed and the IQVIEW SCD for IQ4 will now reboot.

   The new password will be required to change the configuration of the device.

   ***IMPORTANT**: DO NOT FORGET THE NEW PASSWORD. A forgotten password cannot be cleared or reset. If you forget the 'admin' password, contact Trend Technical Support.*

9. Wait for the display to reboot and display the **Login** screen again.
10. Enter '*admin*' in the **Username** box.
11. Enter the new password in the **Password** box. The **System Settings** screen is displayed with the **Web Browser display settings** selected:

   Note: Selecting an item from the menu takes you to a second page showing the associated settings. To return to the menu page select **MENU** *at the top left of the settings page. See* **'System Settings Appearance' on page 84** *for further details.*

   Hint: If required, you can change the language used for the text in the System Settings screen - select **Localisation** *and choose the required option.*

12. Proceed to **'Configure the Web Browser Settings' on page 25**.

Note: Once you leave the web browser settings it will be necessary to access the **System Settings** *screen (see* **page 83***). to display them again.*

4.1.2 Configure the Web Browser Settings

The IQVIEW-4-S Display must be configured to access the application when it is powered up. The Homepage must be set to the URL of the application and the display configured to display this page on startup.

To configure the web browser settings:

1. Access the **System Settings** screen (see page 83).
2. Select **Web Browser**. The **Web Browser** settings are displayed:

Note: This menu option is not accessible when viewing System Settings via the 'tap-tap' method and is only displayed when you enter the initially enter the Settings menu as described in **'Accessing the System Settings Screen' on page 83**.

3. Select . The display changes to allow editing.
4. Enter the required URL required to access the application in the **Homepage** box in the form:

   https://<Address>/iqview/index.html

   <Address> specifies the IP Address or Hostname of the IQ4 hosting the application.

   Note: It is recommended that for secure (https) connections the controller's hostname rather than the controller's IP address. Host name resolution requires access to a DNS sever.

   Note: When direct connecting to an IQ4 for best performance use HTTP.

5. In the **On Startup** section select **Open homepage**.

   IMPORTANT: *Once the display is rebooted with this option selected, you will only be able to change the Web Browser settings using the methods described in* **'Accessing the System Settings Screen' on page 83**.

   Hint: While you are commissioning it is recommended that you select the **Enable toolbar** *option. This will allow you to navigate to another web address or access the System Settings screen easily.*

6. Configure the other settings as required. It is recommended that the toolbar is disabled.
7. Select ✓.
8. Proceed to **'Configure the Network Interface' on page 26**.

4.1.3 Configure the Network Interface

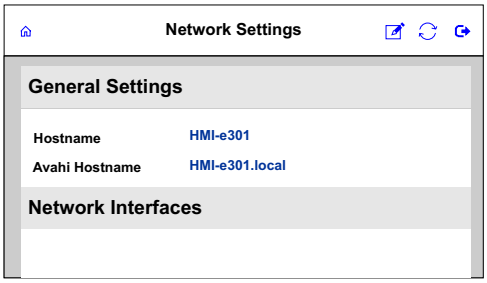
By default, network interface is configured for DHCP. The Ethernet port is configured as a WAN port and should be used to provide the connection to the required web server.

Note: The display has an internal firewall which blocks all incoming network traffic. However, ICMP 'ping' requests are permitted in order to test the network connectivity.

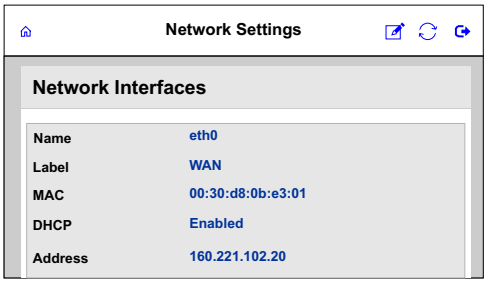
Once connected to the network, as long as a DHCP server is running, an IP Address, Subnet Mask and Default Gateway will automatically be assigned by the DHCP server. If the network does not support DHCP, or you wish to configure a static IP Address, follow the procedure below.

To configure the network interface:

1. Access the **System Settings** screen (see page 83).
2. Select **Network**. The **Network Settings** are displayed:

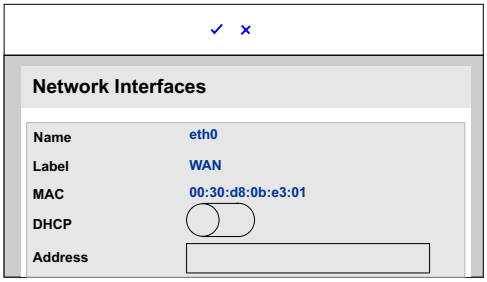


3. Select **Network Interfaces** to view the current settings.



4. Select ✎. The display changes to allow editing.
5. Change the IP settings as required:

   To disable DHCP use the DHCP switch. This will allow you to manually enter the required IP address (**Address**) subnet mask (**Netmask**) and default router (**Gateway**) as required.



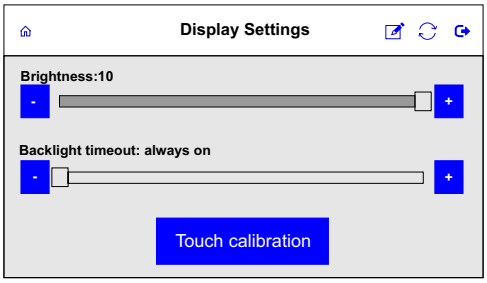
6. Select ✓.
7. Proceed to 'Configure Display Settings' on page 27.

4.1.4 Configure Display Settings

You can adjust the brightness of the display backlight, and set a timeout period for the backlight to turn off when the panel is not being used. In addition, you can change the orientation of the display content to suit different mounting positions.

To configure display settings:

1. Access the **System Settings** screen (see page 83).
2. Select **Display**.



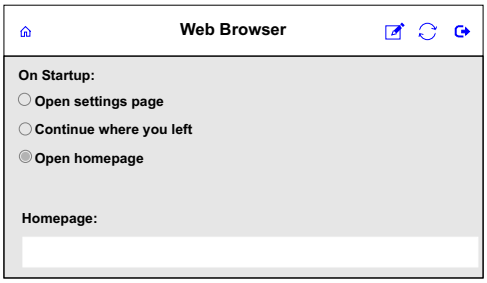
3. Adjust the backlight level between '0' (minimum) and '10' (maximum) by touching a position along the **Brightness** bar or by using the + or - buttons.
4. Adjust the backlight timeout period between 'always on' and '60 minutes' (in 1 minute intervals) by touching a position along the **Backlight timeout** bar or by using the **+** or **-** buttons.
5. Proceed to 'Configure the IQVIEW-4-S to Trust the IQ4' on page 29.

4.1.5 Turn off Navigation Gestures

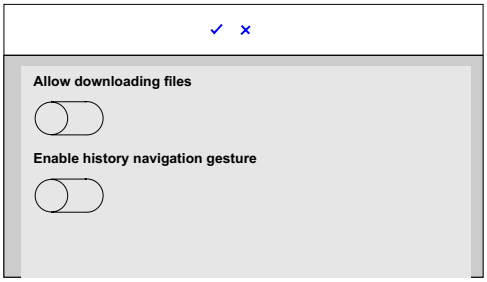
The navigation gestures should be turned off by default, but you should check to ensure that this is the case.

To configure the web browser settings:

1. Access the **System Settings** screen (see page 83).
2. Select **Web Browser**. The **Web Browser** settings are displayed:



3. Select . The display changes to allow editing.
4. Scroll down to display the **Enable history navigation gesture** option.



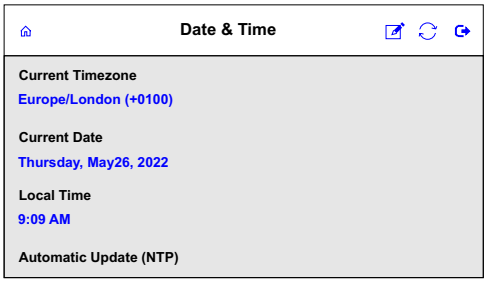
5. Ensure the **Enable history navigation gesture** option is disabled.
6. If you made any changes select ✓.

4.1.6 Configure IQVIEW-4-S's Timezone

The timezone of the IQVIEW-4-S must be set to match the timezone of the controller it is connected to.

To configure the IQVIEW-4-S's timezone:

1. Access the **System Settings** screen (see page 83).
2. Select **Date & Time**. The **Date & Time** settings are displayed:



3. Select . The display changes to allow editing
4. Set the **Current Timezone** to be the same as the timezone of the controller.
5. Select ✓.

4.1.7 Configure the IQVIEW-4-S to Trust the IQ4

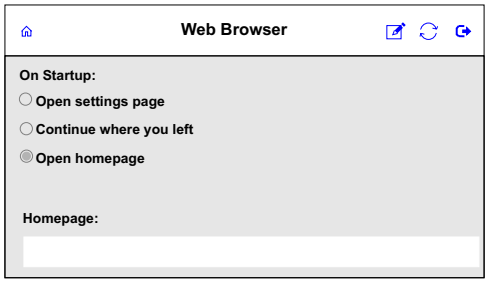
When connecting to the controller over https the IQVIEW-4-S must be configured to trust the IQ4. This not only provides the user with more confidence in the security of the connection but improves the performance. For the IQVIEW-4-S to trust the IQ4 the controller's self-signed root certificate must be added to the IQVIEW-4-S.

Extract the Controller's Self-signed Root Certificate (page 35)
Add the Controller's Self-signed Root Certificate to the IQVIEW-4-S

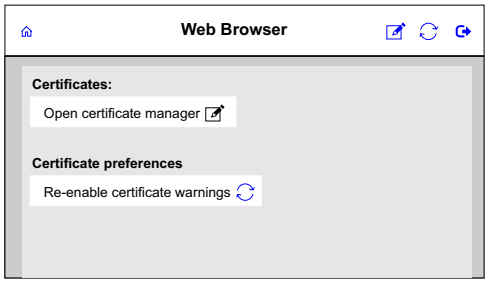
4.1.7.1 Add the Controller's Self-signed Root Certificate to the IQVIEW-4-S

To add the controller's self-signed root certificate to the IQVIEW-4-S:

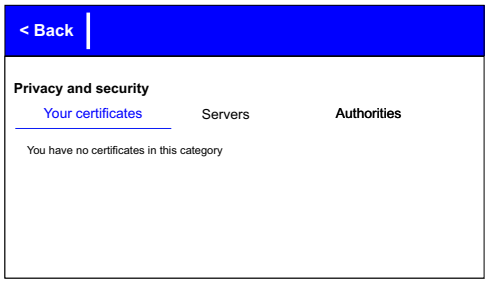
1. Insert the USB stick containing the certificate file into the IQVIEW-4-S display.
2. Access the **System Settings** screen (see page 83).
3. Select **Web Browser**. The **Web Browser** settings are displayed:



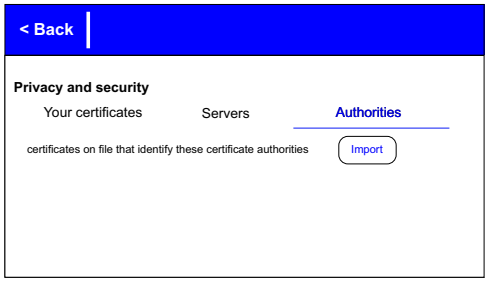
4. Scroll down to display the **Certificate** option.



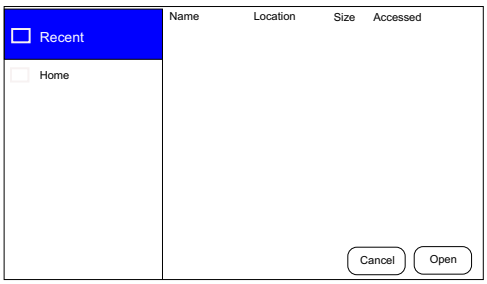
5. Select **Open certificate manager** . The display changes.



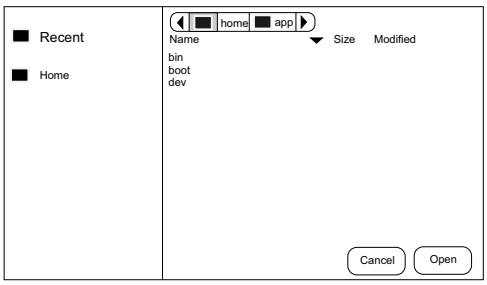
6. Select **Authorities**. The display changes.



7. Select **Import**. The display changes.

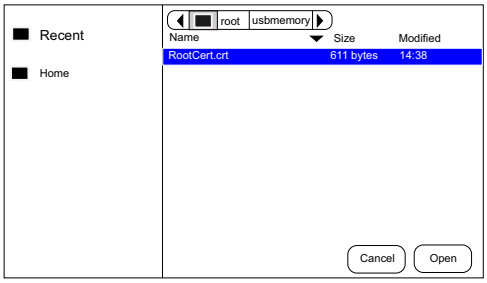


8. Select **Home** on the left. The display changes.

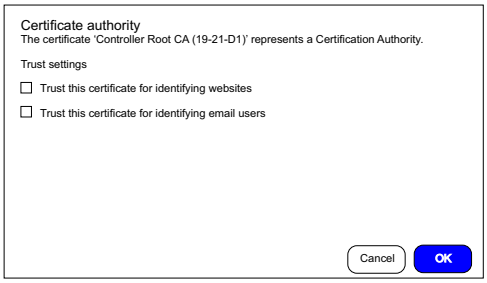


9. Click the left arrow until you see the root level icon (one level below Home) 

.
10. In the list of folders on the right navigate to the **usbmemory** folder located in the **mnt** folder.

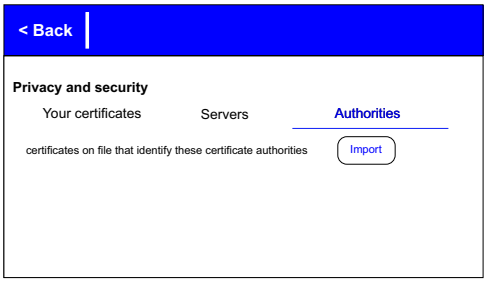


11. Select **RootCert.crt**.
12. Select **Open**. The certificate will be imported.

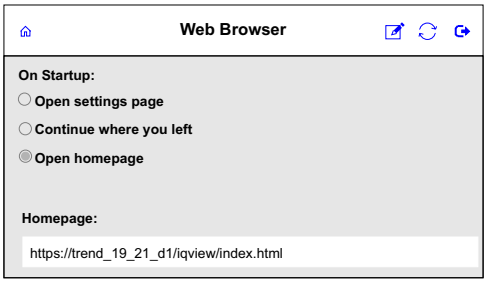


13. Select the **Trust this certificate for identifying websites** option.

14. Click **OK**. After a while the following screen is displayed:



15. Confirm the certificate has been imported, by scrolling down the list of Authority certificates to find the IQ4's root certificate 'org-Controller Root CA (xx-xx-xx)' where xx-xx-xx is the controllers MAC address.
16. Select **Back** to return to the **Web Browser** settings.
17. Ensure that the 'Home Page' is configured to use the controller's hostname and not the IP address, e.g. in this example 'https://trend_19_21_d1/iqview/index.html'.



4.1.8 Complete the Configuration and Restart

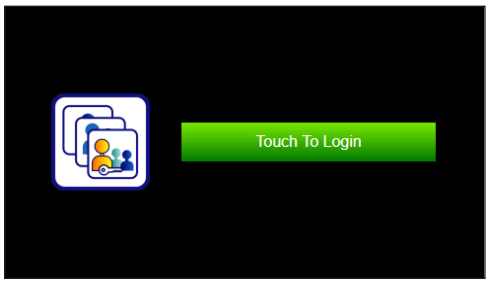
The display is now configured, to complete the configuration it is necessary to restart it.

Note: Using **EXIT** *to leave the* **System Settings** *returns to the* **Login** *screen and ignore the 'On Startup' configuration.*

To complete the configuration and restart:

1. Access the **System Settings** screen (see page 83).
2. Select **Restart**.
3. Select **Main OS**.
4. When prompted to confirm, select **OK**. The display will restart.

   After the boot up sequence (see 'IQVIEW-4-S User Interface Overview' on page 81) the **Touch To Login** screen is displayed.



Note: If this screen is not displayed it may be because the display has not been configured to display the homepage on start up and the IQVIEW-4-S display's **Login** *screen is displayed. To display the homepage from the IQVIEW-4-S display's* **Login** *screen select* **Load Homepage**.

4.2 Setup a 3rd Party Display or Web Browser

This section describes the steps that must be followed to set up a 3rd Party Display or web browser. The following steps are required:

4.2.1 Install the 3rd Party Display or Web Browser

To install the Install the 3rd Party Display or Web Browser:

1. Install the 3rd party display according to the manufacturer's instruction, ensuring it can connect to the IQ4 hosting the application over Ethernet.

4.2.2 Configure the Startup URL

The 3rd party display or web browser must be configured to access the application when it is powered up. The homepage must be set to the URL of the application and the display or web browser configured to display this page on startup.

To Configure the Startup URL:

1. Configure the 3rd party display or web browser with the URL required to access the application. This is in the form:

   https://<Address>/iqview/index.html

   <Address> specifies the IP Address or Hostname of the IQ4 hosting the application.

   Note: It is recommended that for secure (https) connections the controller's hostname rather than the controller's IP address. Host name resolution requires access to a DNS sever.

   Note: When direct connecting to an IQ4 for best performance use HTTP.

   Note: If possible the 3rd party display should be configured to access the application automatically when it is started.

4.2.3 Configure the 3rd Party Display or Web Browser to Trust the IQ4

When connecting to the controller over https the 3rd party display or web browser must be configured to trust the IQ4. This not only provides the user with more confidence in the security of the connection but improves the performance. For the 3rd party display or web browser to trust the IQ4 the controller's self-signed root certificate must be added to the 3rd party display or web browser.

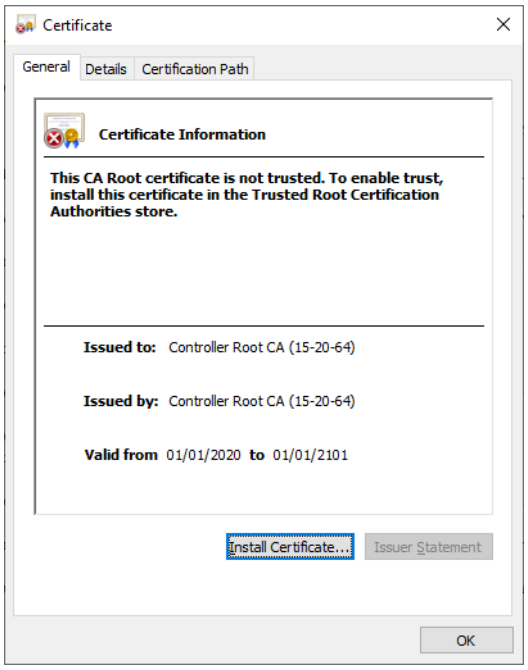
Extract the Controller's Self-signed Root Certificate (page 35)
Add the Controller's Self-signed Root Certificate to the 3rd Party Display or Web Browser

4.2.3.1 Add the Controller's Self-signed Root Certificate to the 3rd Party Display or Web Browser

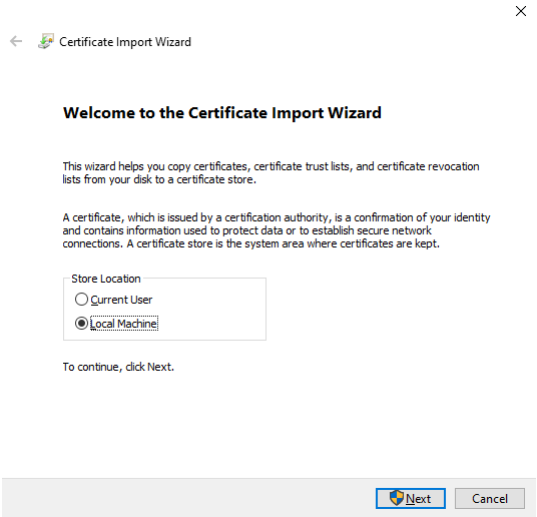
If a 3rd party display is being used follow the display's instructions to add the controller's self-signed root certificate. If a web browser running on a PC is being used the controller's self-signed root certificate must be added to the PC.

To add the controller's self-signed root certificate to the PC:

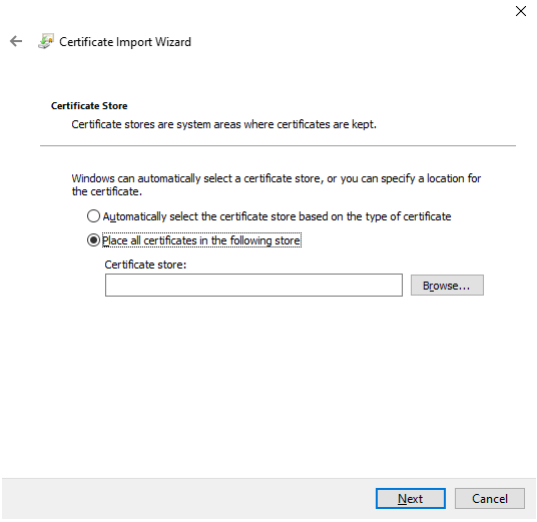
1. Extract the Controller's Self-signed Root Certificate (page 35) on to the PC.
2. Double click on the certificate file 'RootCert.cer'. The **Certificate** dialogue box is displayed.



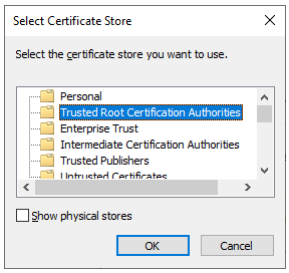
3. Click **Install Certificate**. The **Certificate Import Wizard** is displayed.



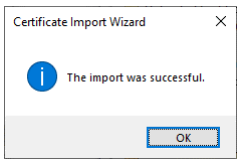
4. Select the **Local Machine** option. Click **Next**. The wizard changes.



5. Select the **Place all certificates in the following store** option.
6. Click **Browse**. The **Select Certificate Store** dialogue box is displayed.



7. Select **Trusted Root certificate Authorities**.
8. Click **OK**. The a dialogue box is displayed.

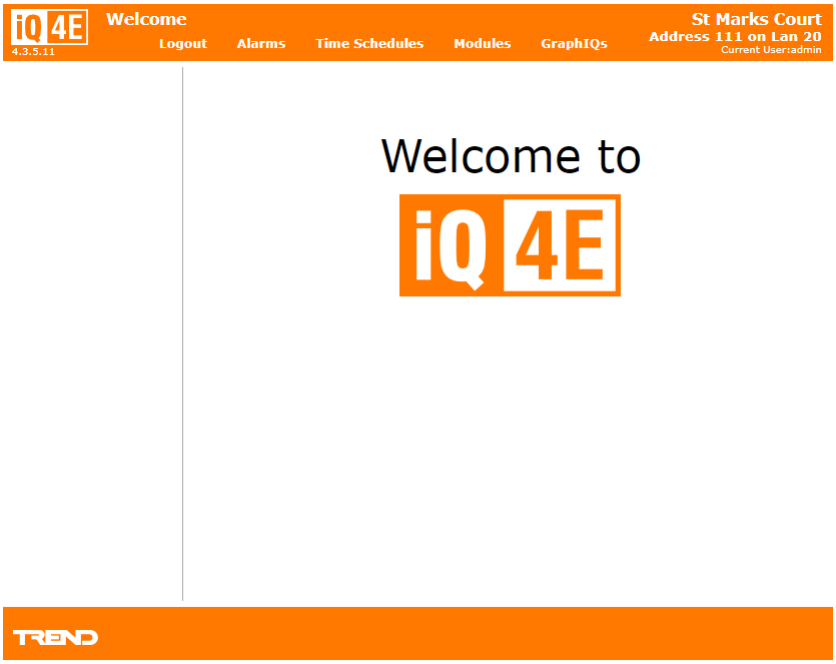


9. Click **OK**.

4.3 Extract the Controller's Self-signed Root Certificate

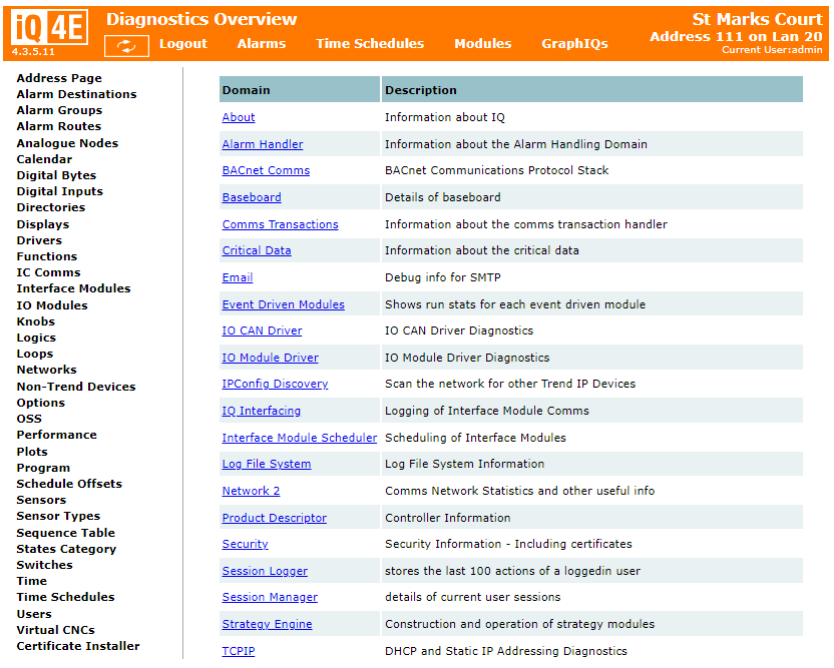
To extract the controller's self-signed root certificate:

1. Login in to the IQ4 web pages and login - see IQ4 Web User Guide (TC201256).

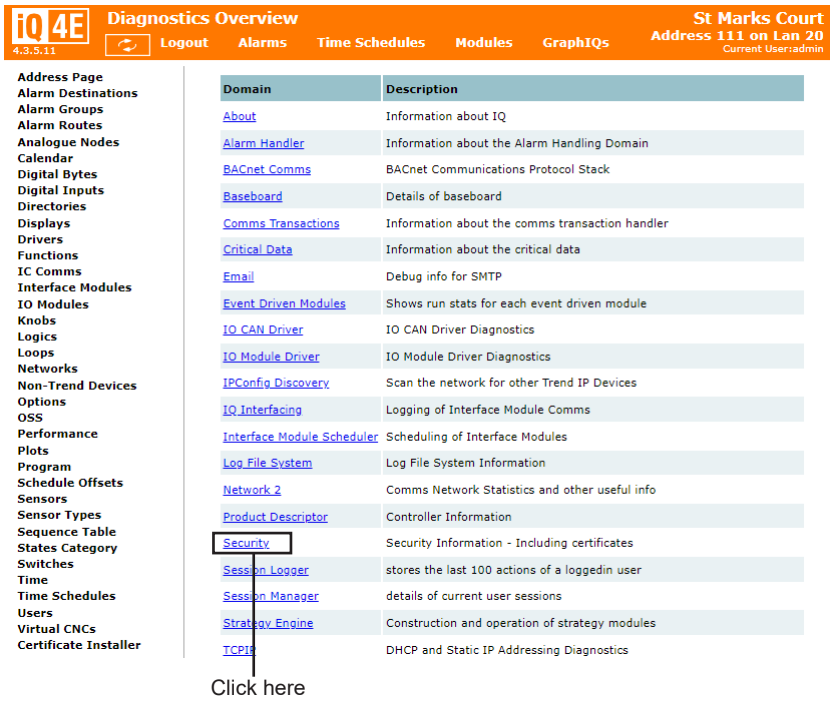


2. Click on the 'D' of the TREND logo.

The controller's diagnostic pages are displayed:

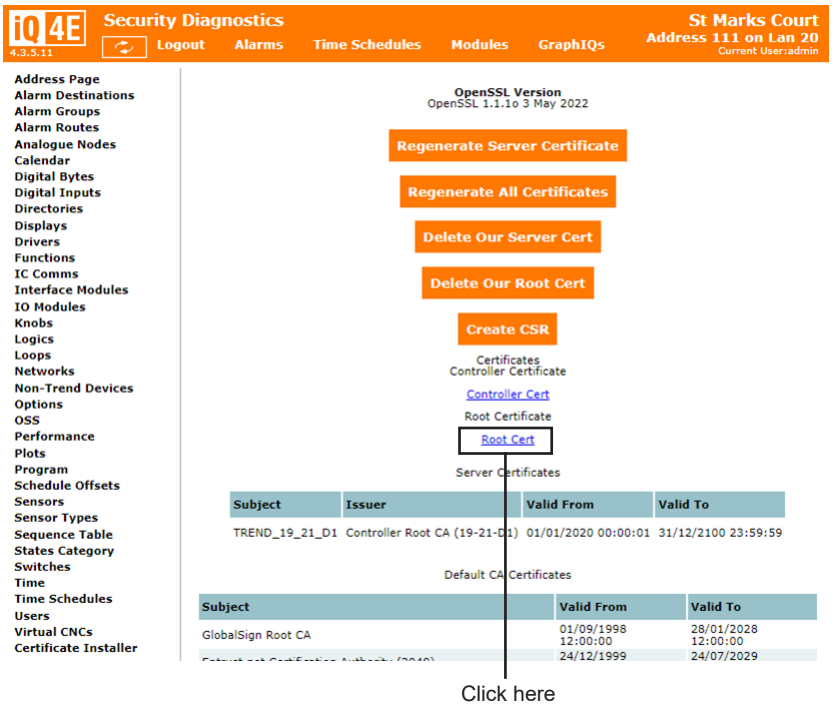


3. Click **Security**.



The ‘Security’ options are displayed:

4. Click **Root Cert** to download the controller's self-signed root certificate:



A certificate file 'RootCert.cer' will be downloaded to the PC.

5. Rename the downloaded certificate file to change the file extension to '.crt' - 'RootCert.crt.
6. Copy the file to a USB stick for transfer to the IQVIEW-4-S display.
7. **Add the Controller's Self-signed Root Certificate to the IQVIEW-4-S**.

PART 3

This part of the manual describes how to use IQVIEW SCD for IQ4 It is divided into the following sections:

5 CONNECT TO THE APPLICATION FOR SINGLE CONTROLLER DISPLAY FOR IQ4

Connection to the IQVIEW SCD for IQ4 application can be made using IQVIEW-4-S or a 3rd party display:

5.1 Connect Using IQVIEW-4-S

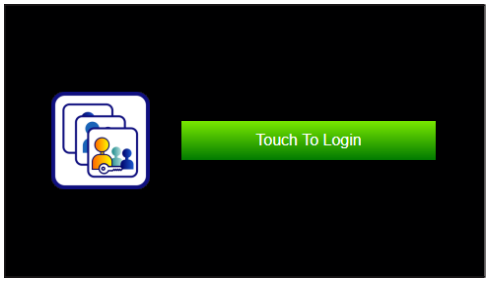
To connect using IQVIEW-4-S:

1. Power up the IQVIEW-4-S.

   When using an HTTPS connection a warning will be displayed the first time the connection is established:
   - Select **Advanced**.
   - Select **Proceed to XXX (unsafe)**.

   Note: This warning is only displayed once unless "reset certificate warnings" is selected in the panel's web browser settings.

   The **Select To Login** screen is displayed.



2. Log in - see **'Log in' on page 44** for more details.

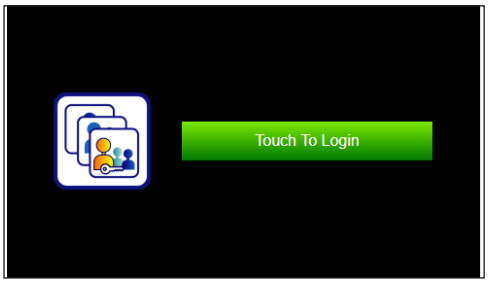
5.2 Connect Using a 3rd Party Display

To connect using a 3rd party display:

1. Connect the 3rd party display to the same Ethernet network as the IQ4 hosting the application. If you have configured it to automatically open the application

   Note: When using an HTTPS connection a warning will be displayed the first time the connection is established you should folow the appropriate steps for that display to accept the insecure connection:

   The **Select To Login** screen is displayed.



   If the **Select To Login** screen is not displayed it will be necessary to open the web browser on the 3rd party display and navigate to the URL of the application:

   https://<Address>/iqview/index.html

   <Address> specifies the IP Address or Hostname of the IQ4 hosting the application.

2. Log in - see **'Log in' on page 44** for more details.

6 USING THE SINGLE CONTROLLER DISPLAY FOR IQ4 APPLICATION

The following section cover the general procedures for day-to-day use of the IQVIEW SCD for IQ4 application:

Basic Use

For a more detailed description of the different tasks see the following sections:

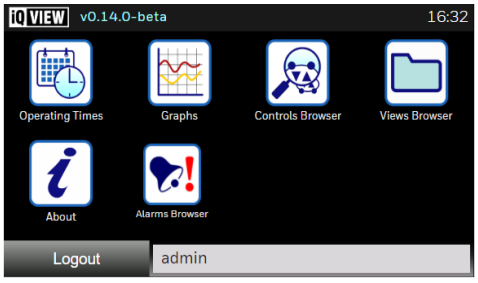
View Data in the Controller
View Graphs
Adjust Values
Adjust Operating Times
View Alarms
Display Information About the Application
Display Information About the Application

Note: The application must always be running on the IQ4 to enable it to be accessed.

6.1 Basic Use

To start using IQVIEW SCD for IQ4:

1. If necessary connect to the application - see **'Connect to the Application for Single Controller Display for IQ4'**.
2. Log in - see **'Log in'**.
3. If necessary select **Back** until the **Features** screen is displayed.



4. Select the icon for the required feature.

Icon	*Description*
	Provides access to the controller's operating times.
	Provides access to graphs of data in the controller.
	Provides access to the controller's presentation modules (i.e. sensors, digital inputs, knobs, switches, time schedules, and drivers) and control loops. The values can be viewed, adjusted, or graphed.
	Provides access to the controller's display and directory modules, the values can be viewed as a list.
	Displays the **About** screen which provides information about the application.
	Provides access to the controller's alarms.

Note that some features can be restricted if the icon is not displayed you do not have access to that feature.

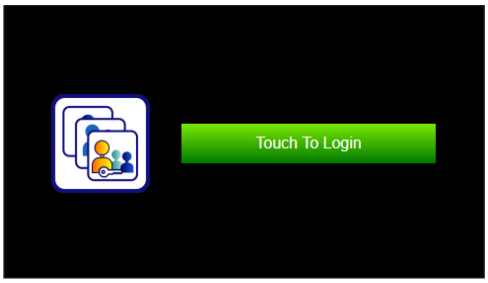
5. To make a selection select the appropriate part of the screen. The displays, buttons, and icons are easy to understand, and lead you through the required task. For details of performing specific tasks see the appropriate. Selecting Back will return you to the previous screen in the hierarchy.

6.1.1 Log in

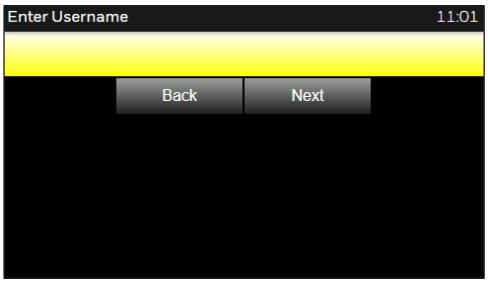
It is necessary to log in before you can use it. When nobody is logged in the Screen Saver screen is displayed.

To log in:

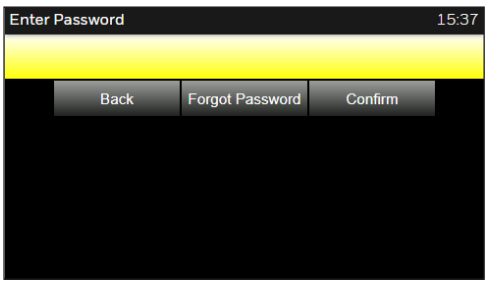
1. Select the screen. The **Login** screen is displayed.



2. Select **Touch to Login**. The **Enter Username** screen is displayed.



3. Enter the user name.
4. Select **Next**. The **Enter Password** screen is displayed.



5. Enter the password.
6. Select **Confirm** you will be logged and your home page be displayed.

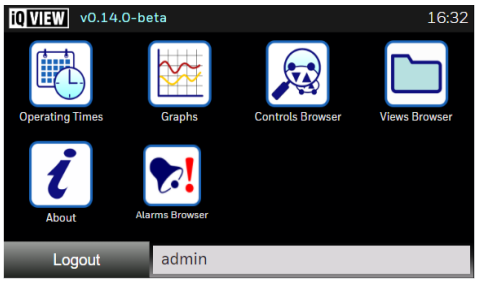
If you have forgotten your password it is possible to get an unlock code - see **'Application Password' on page 93.**

6.1.2 Log out

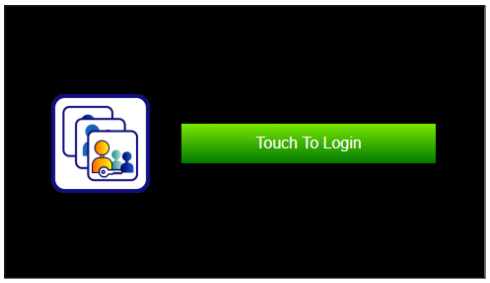
The application will automatically log any user off after the idle timeout time has passed. If required you can log out manually.

To log out:

1. Select **Back** until the **Features** screen is displayed.



2. Select **Logout**. The **Login** screen is displayed.



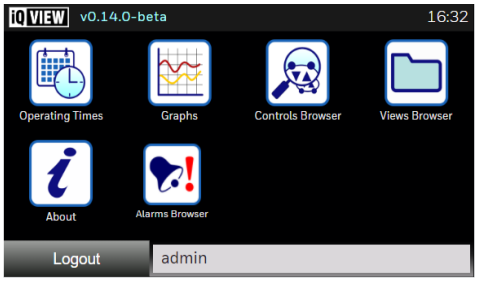
6.2 View Data in the Controller

Information from modules in the controller can be viewed using either the **Controls Browser**, or the **Views Browser**. The **Controls Browser** displays a list of sensor, digital input, knob, switch, time schedule, and driver modules in the controller. The **Views Browser** enables the display and directory modules in the controller to be browsed.

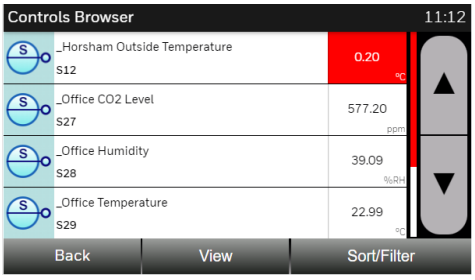
6.2.1 View Data in the Controller Using the Controls Browser

To view data in the controller using the Controls Browser:

1. Log in - see **'Log in'**.
2. Display the **Features** screen.



3. Select **Controls Browser**. The **Controls Browser** screen is displayed.



The screen contains the list of sensor, digital input, knob, switch, driver, and time schedule modules in the controller. For each module the label, current value and units are displayed if appropriate. Icons on the left of the list indicate the module type.

Icon	*Module Type*	*Icon*	*Module Type*
	Sensor		Switch
	Digital Input		Time Schedule
	Knob		Driver

An icon that flashes red indicates that the module is in an alarm state.

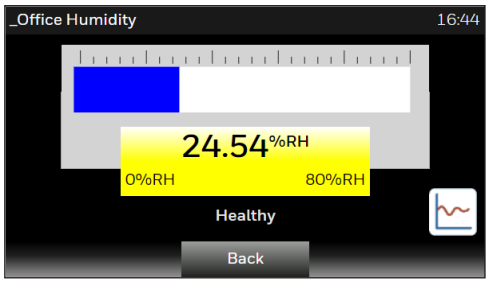
A on the icon indicates that you do not have access to change the value.

Use or to scroll to the required module.

Select **View** to zoom in/out. This reduces the information on the screen making more modules visible.

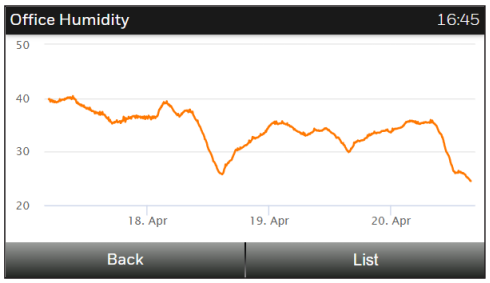
Select **Sort/Filter** to change the order of the modules in the list, or to specify the modules in the list. See the 'Sort/Filter the List of Modules' section of this manual.

To view a module in more detail, select it.



The information on this screen is dependant on the module type. If the module is in alarm the alarm information is displayed. Selecting a time schedule displays a screen that enables you to choose to view times for this week, every week, and exceptions. See the **'View Operating Times'**. Knobs, switches and time schedules can be adjusted, see the **'Adjust a Knob'**, and **'Adjust a Switch'**.

Selecting displays a graph of the module's value.

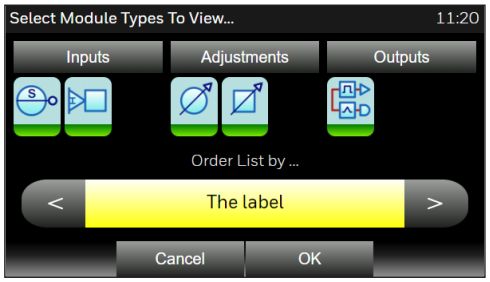


To zoom in drag your finger over the area of the graph that is to be viewed. Select **Reset zoom** to zoom back out and view the graph at normal size. Select **List** to view a list of points for the visible trace.

6.2.1.1 Sort/Filter the List of Modules

To sort the list of modules:

1. In the **Controls Browser** screen select **Sort/Filter**. The screen shown below is displayed.



2. Touch the module's icon to specify the types of module for which data is to be displayed. indicates the selected module types. To select/deselect a group of modules touch the group label (**Inputs**, **Adjustments**, **Outputs**, and **Other**).

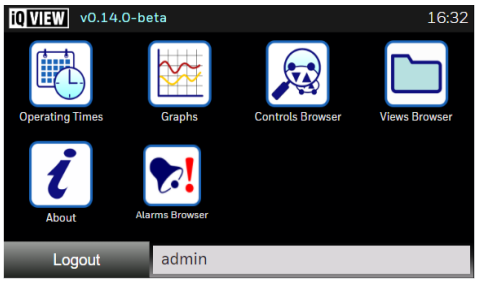
Icon	*Module Type*	*Icon*	*Module Type*
	Sensor		Switch
	Digital Input		Timezone
	Knob		Driver

3. Touch < or > to specify how the list is sorted. > scrolls through the options in the following order 'The label', or 'Module reference'.
4. Touch **OK**.

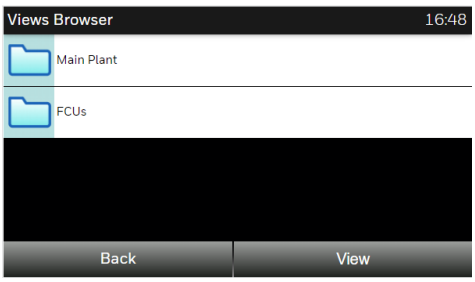
6.2.2 View Data in the Controller Using the Views Browser

To view data in the controller using the Views Browser:

1. Log in - see **'Log in'**.
2. Display the **Features** screen.



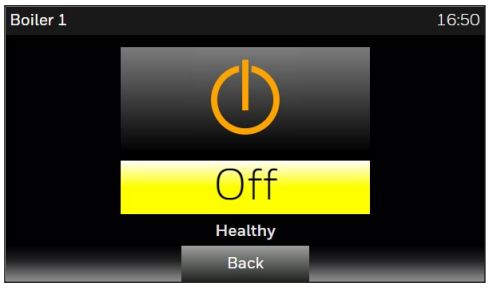
3. Select **Views Browser**. The **Views Browser** screen is displayed.



4. Select the directory that contains the information that is to be viewed. Use or to scroll to the required one.

5. Use or to scroll to the required module. If there are other directories select the required directory. Select **View** to zoom in/out. This reduces the information on the screen allowing more modules to be visible. To return to the previous level select .

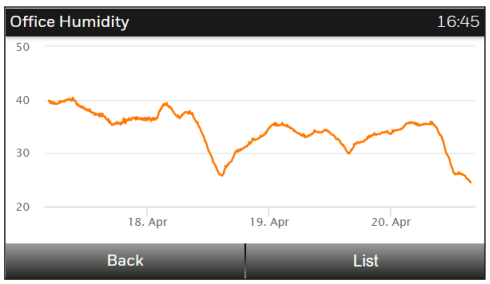
   To view a module in more detail, select it. A screen is displayed for the module. The information on this screen is dependant on the module type, an example is shown below.



   Selecting a time schedule displays a screen that enables you to choose to view times for this week, every week, and exceptions - see the **'View Operating Times'**.

   Knobs, switches and time schedules can be adjusted, see the **'Adjust a Knob'**, and **'Adjust a Switch'**.

   Selecting displays a graph of the module's value.



   To zoom in drag your finger over the area of the graph that is to be viewed. Select **Reset zoom** to zoom back out and view the graph at normal size. Select **List** to view a list of points for the visible trace.

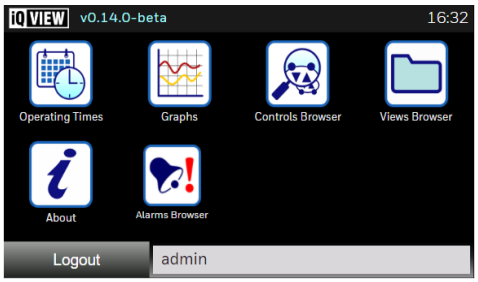
6.2.3 View Operating Times

6.2.3.1 View this Week's Operating Times

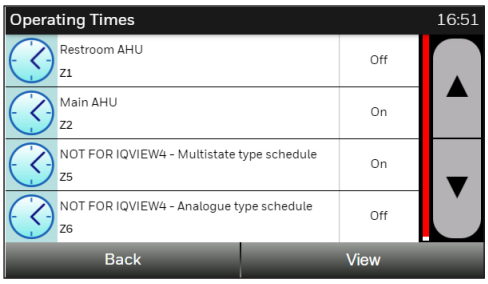
Controller operating times for this week (today and the next 6 days) can be viewed.

To view operating times for this week:

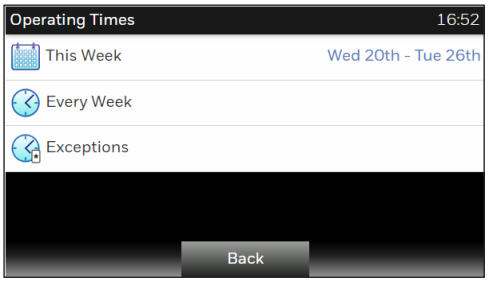
1. Log in - see **'Log in'**.
2. Display the **Features** screen.



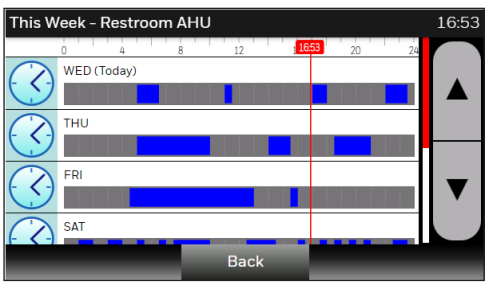
3. Select **Operating Times**. The **Operating Times** screen is displayed.



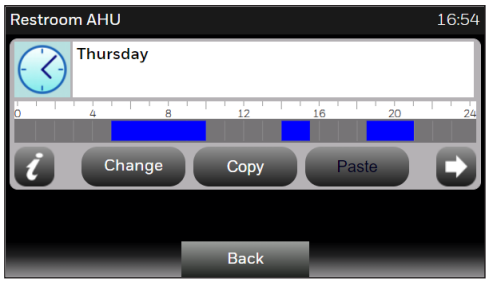
4. Select the time schedule for which times are to be viewed. Select ▲ or ▼ to scroll up/down the list. Select **View** to reduce the information on the screen allowing more modules to be visible. A screen is displayed indicting data is being collected, and then a screen similar to the one below is displayed.



5. Select **This Week**. The **This Week** screen is displayed. This provides a basic overview of the current operating times for today and the next six days. Select ▲ or ▼ to scroll up/down the list. A red line down the screen indicates the current time. If the day is currently in an operating period the period is green.



6. To view the times for a day in more detail select the day. A screen showing more detail for that day is displayed.



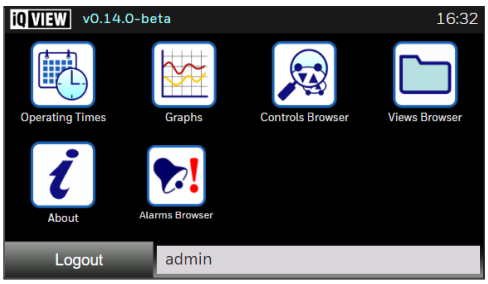
7. To view the actual operating times for the selected day in more detail select . A screen showing the operating times for that day is displayed.

6.2.3.2 View Every Week's Operating Times

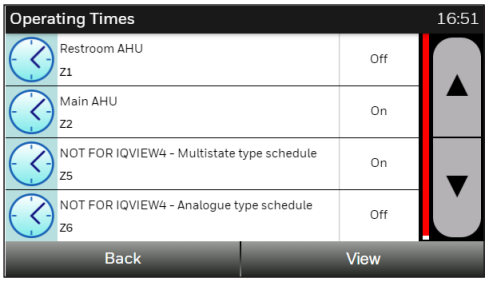
Controller operating times for each day of every week can be viewed. These times are the normal weekly operating pattern.

To view the operating times for every week:

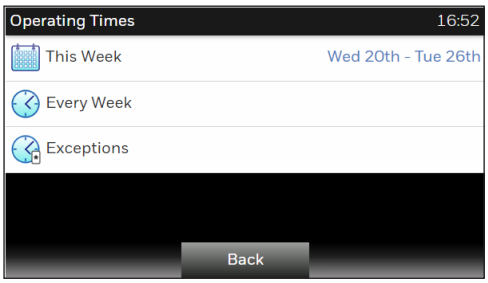
1. Log in - see **'Log in'**.
2. Display the **Features** screen.



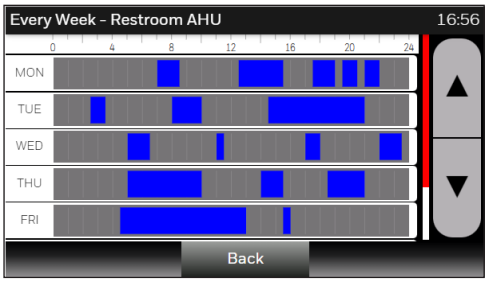
3. Select **Operating Times**. The **Operating Times** screen is displayed.



4. Select the time schedule for which times are to be viewed. Select ▲ or ▼ to scroll up/down the list. Select **View** to reduce the information on the screen allowing more modules to be visible. A screen similar to the one below is displayed.

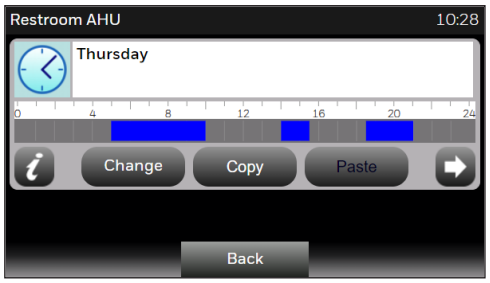


5. Select **Every Week**. The **Every Week** screen is displayed. This provides a basic overview of the operating times used for every day of the week. Select ▲ or ▼ to scroll up/down the list.



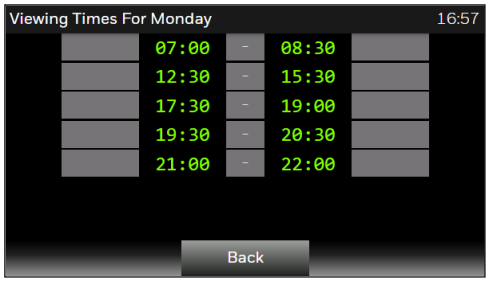
To view the times for a day in more detail:

- Select the day. A screen showing more detail for that day is displayed.



To view the actual operating times for the selected day in more detail:

- Select . A screen showing the operating times for that day is displayed.

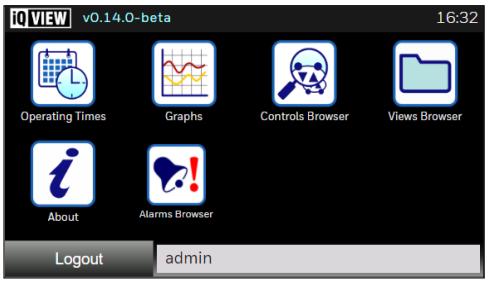


6.2.3.3 View Exceptions to the Normal Operating Times

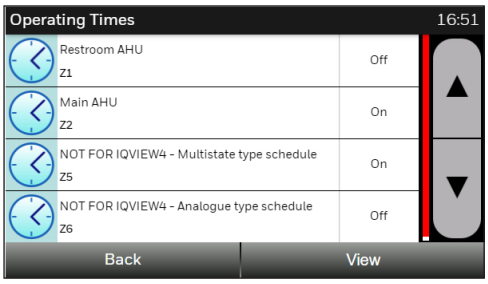
Days that have different operating times to the normal (e.g. a bank holiday) are set up with an exception. The exception defines the times that are to be operated and the days that are to use the exception. It is possible to view the exceptions set up in the controller.

To view exceptions to the normal operating times:

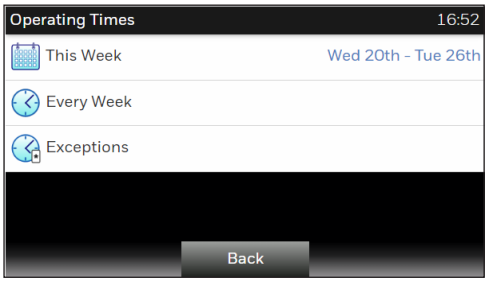
1. Log in - see **'Log in'**.
2. Display the **Features** screen.



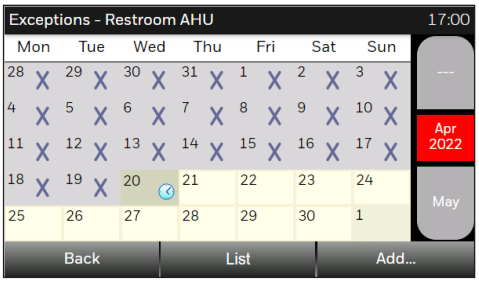
3. Select **Operating Times**. The **Operating Times** screen is displayed.



4. Select the time schedule for which times are to be viewed. Select or to scroll up/down the list. Select **View** to zoom in/out. This reduces the information on the screen allowing more modules to be visible. A screen similar to the one below is displayed.



5. Select **Exceptions**. The **Exceptions** screen is displayed showing the exceptions for the current month.

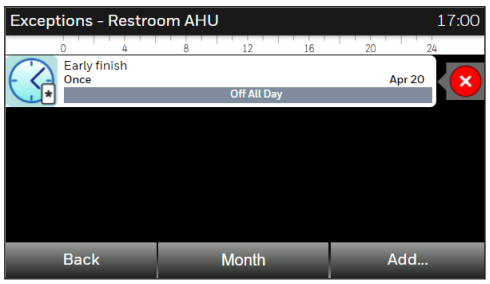


Exceptions are indicated in grey with a ( ) on the start and end date.

6. Select or to select the required month.

To display a list of the exceptions for the selected month:

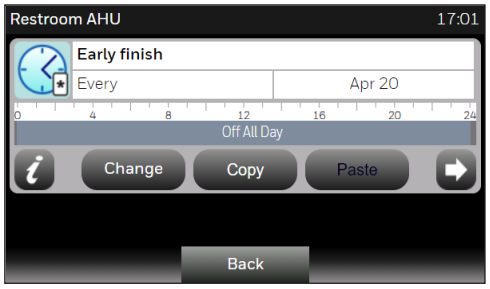
- Select **List**. The list shows the name of the exception, whether it occurs only once, or every year, the date it occurs, and indicates the operating times.



Select ▲ or ▼ to scroll up/down the list.
Select **Month** to return to the month view.

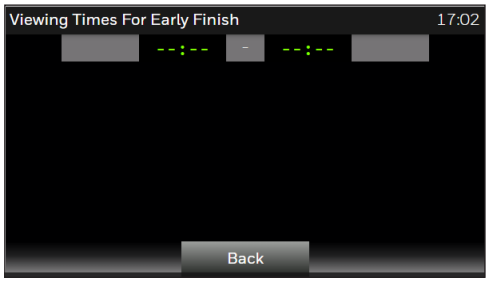
To view the times for a day in more detail:

- Select the exception. A screen showing more detail for that exception is displayed.



To view the actual operating times for the exception in more detail:

- Select ℹ. A screen showing the operating times for that day is displayed.



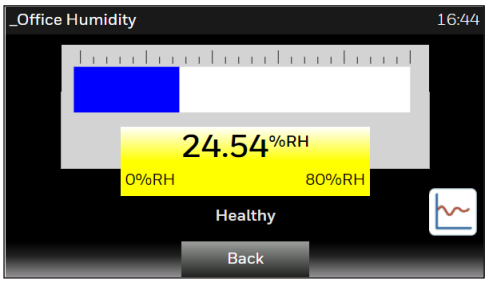
6.3 View Graphs

The data logged in the controller can be viewed as a graph providing it is being logged in the controller.

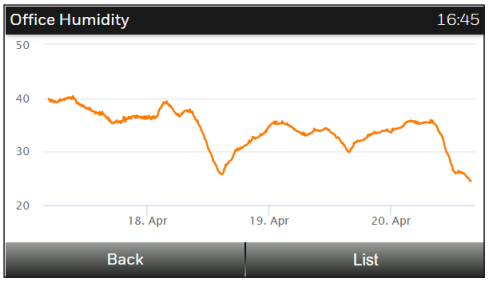
6.3.1 View a Graph from the Controls Browser or Views Browser

To view a graph from the Controls Browser or Views Browser:

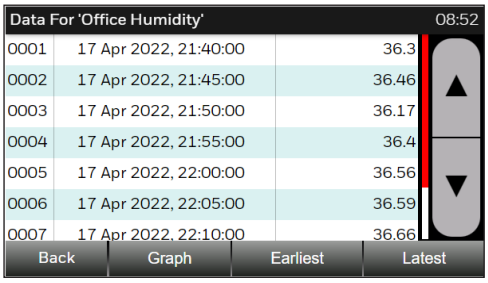
1. Display the value that is to be graphed in the **Controls Browser** screen, or **Views Browser** screen as described in the **'View Data in the Controller'**.
2. Select the value that is to be graphed. A screen similar to the one shown below is displayed.



3. Select  . A graph of the module's value is displayed. If the icon is greyed the value is not being logged in the controller, and therefore a graph is not available. If the module is being logged at more that one interval the **Select plot interval** screen is displayed. Select < or > to select the required interval and select **OK**.



To zoom in drag your finger over the area of the graph that is to be viewed. Select **Reset zoom** to zoom out. To display a list of points for the selected trace select **List**. The screen shown below is displayed.

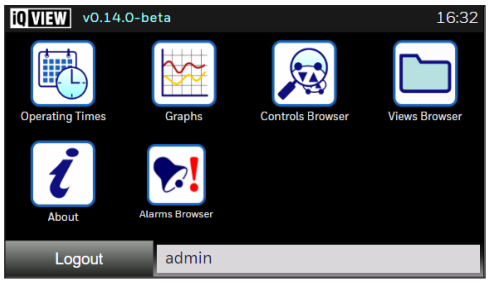


Select **Graph** to return to the graph. Select **Earliest** to goto the first value or **Latest** to goto the last value.

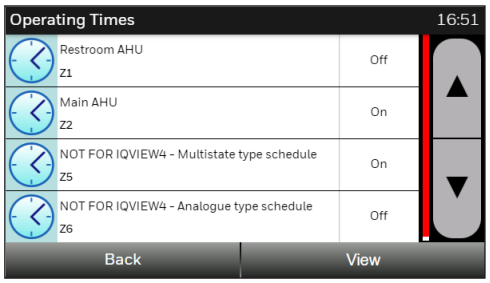
6.3.2 View a Graph from the Graphs View

To view a graph from the Graphs View:

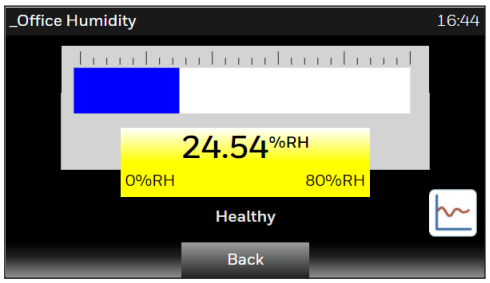
1. Log in - see **'Log in'**.
2. Display the **Features** screen.



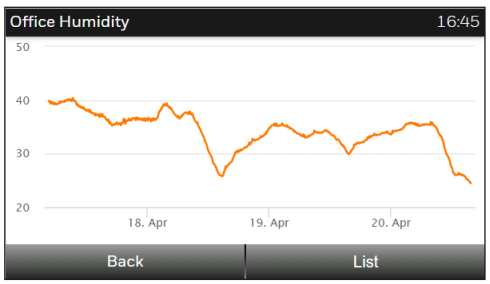
3. Select **Graphs**. If necessary select or to scroll up/down the list. This feature maybe restricted you must have enabled in the feature filter. The **Graphs** screen is displayed.



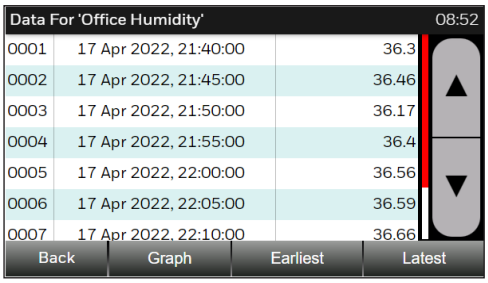
4. Select the value that is to be graphed. A screen similar to the one shown below is displayed.



5. Select . A graph of the module's value is displayed. If the icon is greyed the value is not being logged in the controller, and therefore a graph is not available. If the module is being logged at more that one interval the **Select plot interval** screen is displayed. Select < or > to select the required interval and select **OK**.



To zoom in drag your finger over the area of the graph that is to be viewed. Select **Reset zoom** to zoom out. To display a list of points for the selected trace select **List**. The screen shown below is displayed.



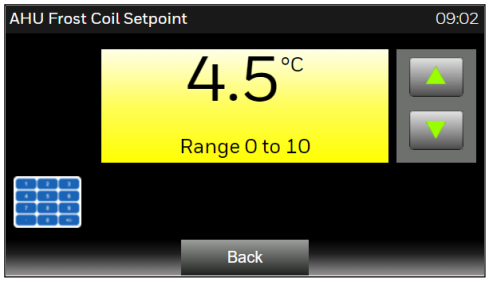
Select **Graph** to return to the graph. Select **Earliest** to goto the first value or **Latest** to goto the last value.

6.4 Adjust Values

6.4.1 Adjust a Knob

To adjust a knob:

1. Display the knob that is to be adjusted as described in the **'View Data in the Controller'**. If the knob has a 🔒 over the knob icon you do not have the authority to adjust it.
2. Select the knob that is to be adjusted. A screen similar to the one shown below is displayed.



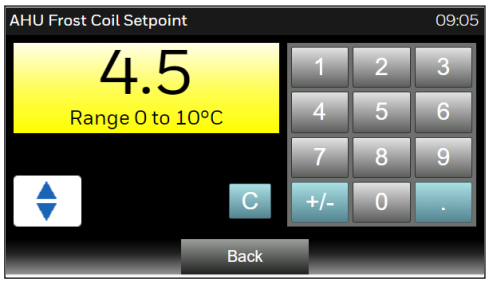
3. Adjust the value as required.

Adjust using 0.1 increment/decrements:

- Select ▼ to decrement the value by 0.1. Select ▲ to increment the by value by 0.1.

Adjust by typing the required value:

- Select ▦ the screen changes as shown below.



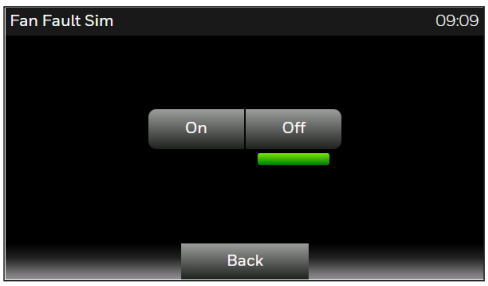
- Select the numbers to enter the required value. Selecting ▲▼ returns to the previous screen.

4. When you stop making the adjustment the value is automatically updated.
5. When the adjustment is complete select **Back**.

6.4.2 Adjust a Switch

To adjust a switch:

1. Display the switch that is to be adjusted as described in the **'View Data in the Controller'**. If the switch has a 🔒 over the switch icon you do not have the authority to adjust it.
2. Select the switch that is to be adjusted. A screen similar to the one shown below is displayed. The current state is indicated by ▬ underneath.



3. Select the required state. The ▬ moves under the newly selected state. The state is automatically updated.
4. When the adjustment is complete select **Back**.

6.5 Adjust Operating Times

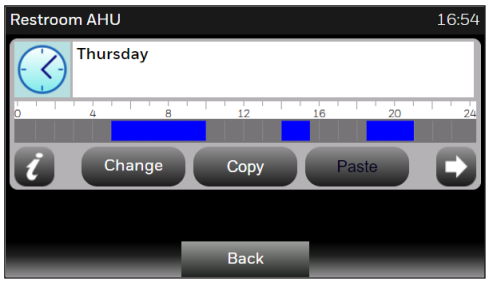
Operating times in controllers can be adjusted by adjusting the times for this week to use times different to the normal operating pattern up to a week ahead, or for every week to change the normal operating pattern. Exceptions can be added which enable operating times different to normal to be specified more than a week ahead.

6.5.1 Adjust this Week's Operating Times

Controller operating times for this week (today and the next 6 days) can be adjusted. This is useful when adding changes to the normal operating times for the next week that have not been set up in advance using exceptions.

To adjust the operating times for this week:

1. View the operating times for the day in the current week for which the operating times are to be adjusted - see **'View this Week's Operating Times'**. 🔒 over the time schedule indicates you cannot adjust it.



2. Adjust the day's operating times as described below.

To copy and paste times:

- Select **Copy**. The current times are copied.
- Select **Back**.
- Select the day to which times are to be pasted.
- Select **Paste**. The application prompts for confirmation of the action.
- Select **Yes**.
- Select **Save**.

To set the operating times ON or OFF all day:

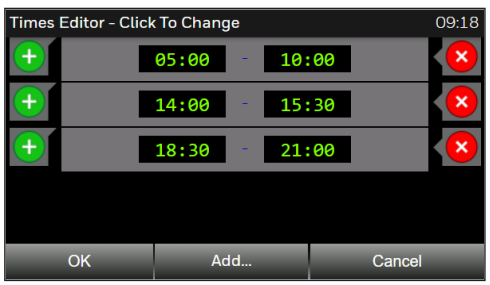
- Select ➡.
- Select **On All Day** or **Off All Day** as required. The application prompts for confirmation of the change.
- Select **Yes**.
- Select **Save**.

To delete an exception from the day (return the day to normal operating times):

- Select ➡.
- Select ➡ again.
- Select **Delete**. The application prompts for confirmation of the deletion.
- Select **Yes**.
- Select **Save**.

To specify operating times:

- Select **Change**. The **Times Editor** screen is displayed.



- Adjust the times by editing a time period, adding a time period, or deleting a time period.

To edit a time period:

- Select the time period for which the times are to be changed. A screen is displayed that allows the period's start and end times to be set up.

- Select **Start**.
- Select the buttons to set the start time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **End**.
- Select the buttons to set the end time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **OK** to return to the **Times Editor** screen.

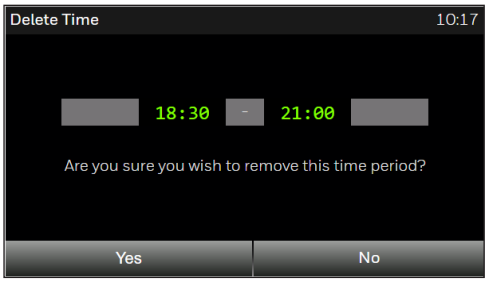
To add a time period:

- Select **Add** or select  pointing to where the period is to be added. A screen is displayed that allows the period's start and end times to be set up.

- Select **Start**.
- Select the buttons to set the start time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **End**.
- Select the buttons to set the end time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **OK** to return to the **Times Editor** screen.

To delete a time period:

- Select  next to the period that is to be deleted. A confirmation screen is displayed.



- Select **Yes**. The period is delete and the **Times Editor** screen displayed.

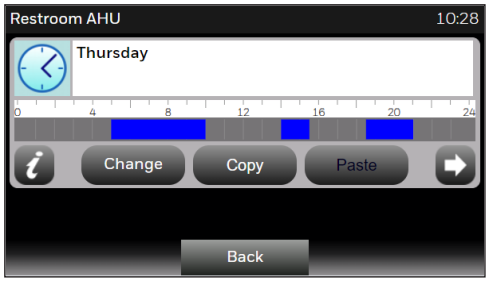
- Select **OK**. Overlapping time periods are highlighted in red and will be resolved when OK is selected by using the earliest start time and latest end time.
- Select **Save**.

6.5.2 Adjust Every Week's Operating Times

Controller operating times for each day of every week can be adjusted. Each day of the week can have different operating times. The times defined here determine the normal weekly operating pattern.

To adjust the operating times for every week:

1. View the every weeks operating times for the day in the current week for which the operating times are to be adjusted - see **'View Every Week's Operating Times'**. 🔒 over the time schedule indicates you cannot adjust it.



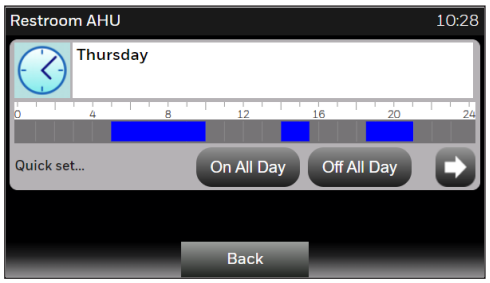
2. Adjust the day's operating times as required.

To copy and paste times:

- Select **Copy**. The current times are copied.
- Select **Back**.
- Select the day to which times are to be pasted.
- Select **Paste**. The application prompts for confirmation of the action.
- Select **Yes**.

To set the operating times ON or OFF all day:

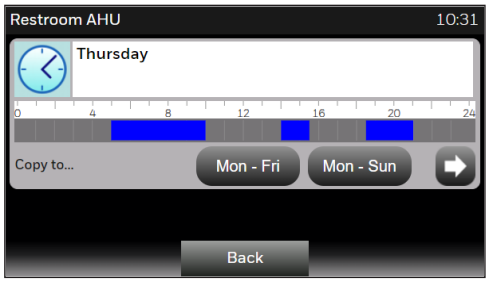
- Select ➡. The screen changes.



- Select **On all Day** or **Off all Day** as required. The application prompts for confirmation of the change.
- Select **Yes**.

To copy times to Monday to Friday, or Monday to Sunday:

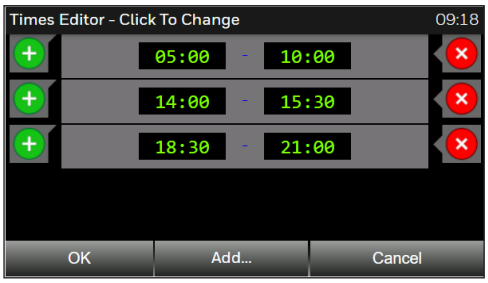
- Select ➡. The screen changes.
- Select ➡.



- Select **Mon - Fri** or **Mon - Sun**. The application prompts for confirmation of the action.
- Select **Yes**.

To specify operating times:

- Select **Change**. The **Times Editor** screen is displayed.



- Adjust the times as required by editing a time period, adding a time period, or deleting a time period.

To edit a time period:

- Select the time period for which the times are to be changed. A screen is displayed that allows the period's start and end times to be set up.

- Select **Start**.
- Select the buttons to set the start time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **End**.
- Select the buttons to set the end time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **OK** to return to the **Times Editor** screen.

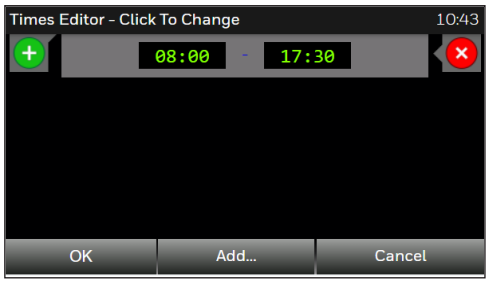
To add a time period:

- Select **Add** or select  pointing to where the period is to be added. A screen is displayed that allows the period's start and end times to be set up.

- Select **Start**.
- Select the buttons to set the start time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **End**.
- Select the buttons to set the end time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **OK** to return to the **Times Editor** screen.

To delete a time period:

- Select next to the period that is to be deleted. A confirmation screen is displayed.



- Select **Yes**. The period is deleted and the **Times Editor** screen displayed.

Overlapping time periods are highlighted in red and will be resolved when **OK** is selected by using the earliest start time and latest end time.

- Select **OK**.
- Select **Save**.

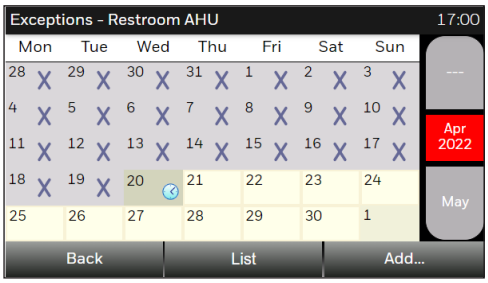
6.5.3 Set Exceptions to Normal Operating Times

If a day requires different operating times (e.g. bank holidays) an exception should be added.

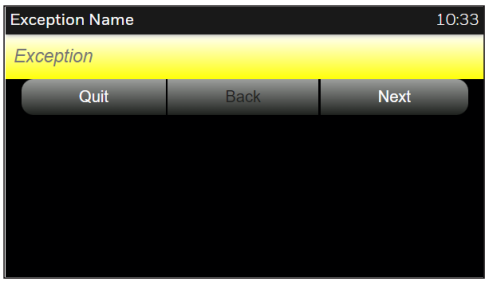
6.5.3.1 Add an Exception

To add an exception:

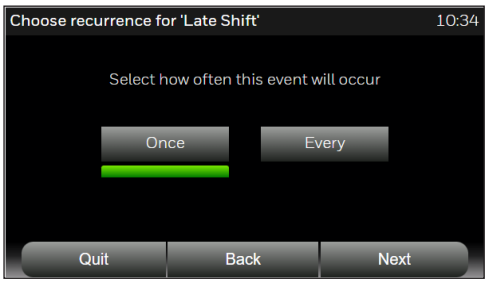
1. View the time schedule to which the exception is to be added as described in the **'View Exceptions to the Normal Operating Times'**.



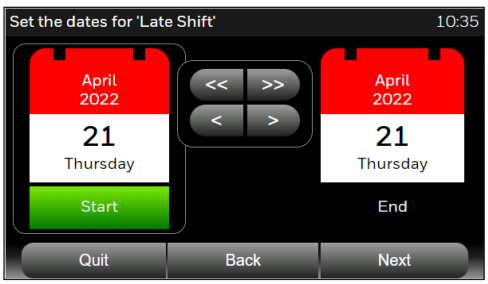
2. Select **Add**. The **Exception Name** screen is displayed.



3. Enter the exception's name. Do not use \ / < > { } ; : , space = [ ] ' " ? ( ) or %.
4. Select **Next**. The **Choose reoccurrence for** screen is displayed.

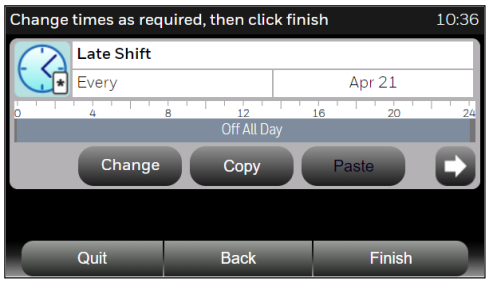


5. Select **Every** if the exception is to occur at the same time every year. Select **Once** if it is to occur once. The selected option is indicated by ▬.
6. Select **Next**. The **Set the dates for** screen is displayed.



7. Select **Start**.

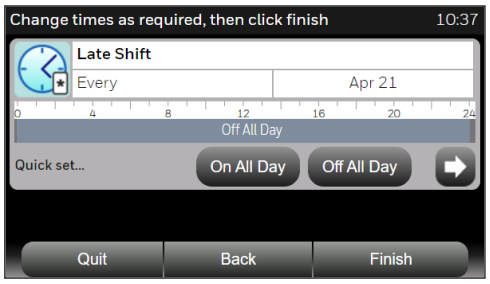
8. Select the buttons to set the exception's start date. << decrement one month, >> increment one month. < decrement one day, > increment one day.
9. Select **End**.
10. Select the buttons to set the exception's end date. << decrement one month, >> increment one month. < decrement one day, > increment one day.
11. Select **Next**. The **Change times** screen is displayed.



12. Specify the exception's operating times as required.

To set the operating times ON or OFF all day:

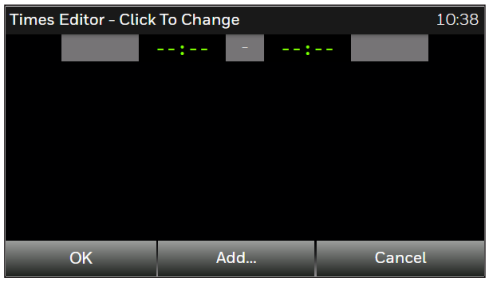
- Select . The screen changes.



- Select **On all Day** or **Off all Day** as required.

To specify operating times:

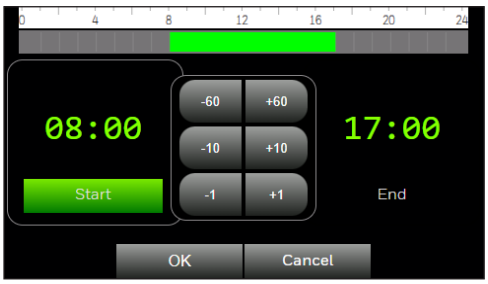
- Select **Change**. The **Times Editor** screen is displayed.



- Adjust the times as required by editing a time period, adding a time period, or deleting a time period.

To edit a time period:

- Select the time period for which the times are to be changed. A screen is displayed that allows the period's start and end times to be set up.



- Select **Start**.
- Select the buttons to set the start time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **End**.
- Select the buttons to set the end time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **OK** to return to the **Times Editor** screen.

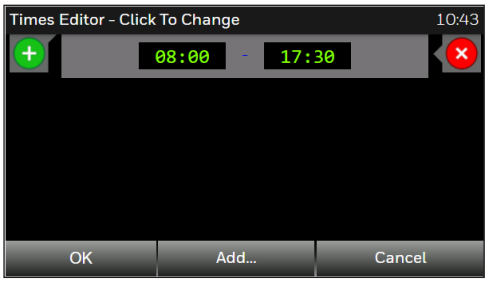
To add a time period:

- Select **Add** or select pointing to where the period is to be added. A screen is displayed that allows the period's start and end times to be set up.

- Select **Start**.
- Select the buttons to set the start time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **End**.
- Select the buttons to set the end time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **OK** to return to the **Times Editor** screen.

To delete a time period:

- Select next to the period that is to be deleted. A confirmation screen is displayed.



- Select **Yes**. The period is deleted and the **Times Editor** screen displayed.

- Select **OK** to return to the **Change times** screen. Overlapping time periods are highlighted in red and will be resolved when OK is selected by using the earliest start time and latest end time.

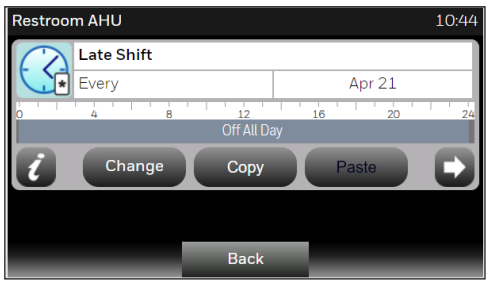
13. Select **Finish**. The exception is sent to the controller.

6.5.3.2 Add an Exception by Copying

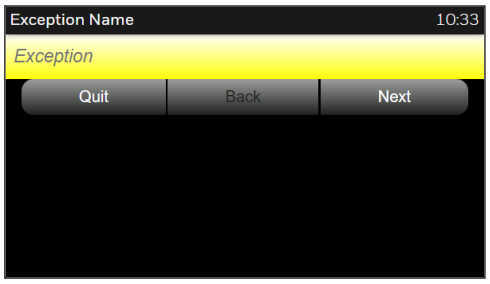
An exception can be added by copying another.

To add an exception by copying:

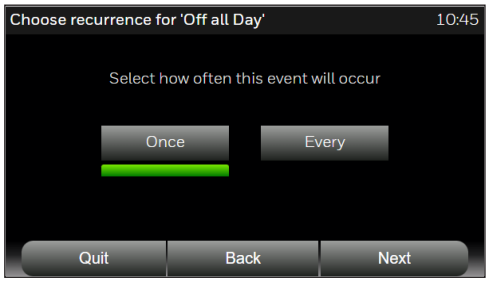
1. View the exception that is to be copied as described in the **'View Exceptions to the Normal Operating Times'**. 🔒 over the time schedule indicates you cannot adjust it.



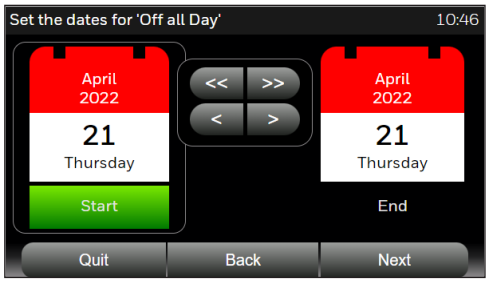
2. Select **Copy**.
3. Select **Back**.
4. Select **Add**. The **Exception Name** screen is displayed. The name defaults to the name of the copied exception.



5. Enter the exception's name.
6. Select **Next**. The keyboard disappears.
7. Select **Next**. The **Choose recurrence for** screen is displayed.

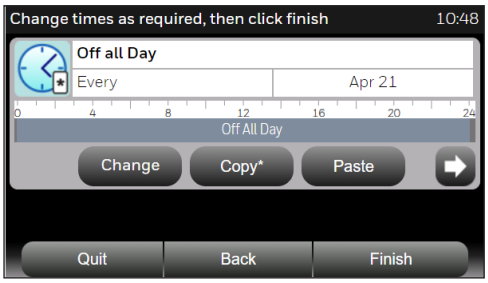


8. Select **Every** if the exception is to occur at the same time every year. Select **Once** if it is to occur once. The selected option is indicated by ▬.
9. Select **Next**. The **Set the dates for** screen is displayed.



10. Select **Start**.

11. Select the buttons to set the start time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
12. Select **End**.
13. Select the buttons to set the end time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
14. Select **Next**. The **Change times** screen is displayed using the times copied from the other exception.



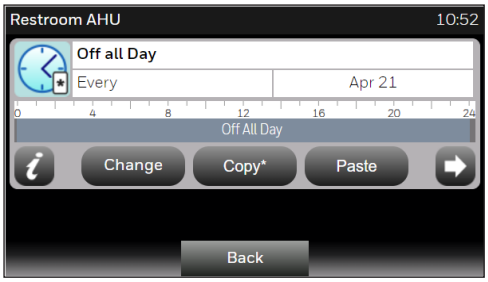
15. If required edit the times. See the **'Add an Exception'** for details.
16. Select **Finish**.

6.5.3.3 Delete an Exception

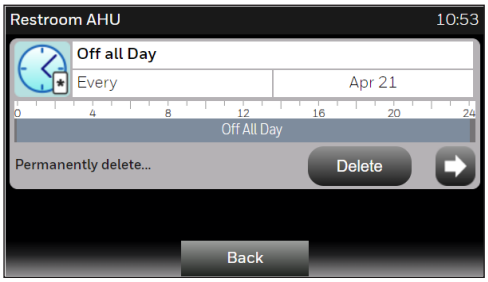
If the day(s) to which an exception applies is to work the normal operation times the exception can be deleted to return the day(s) operating times to the times for every week.

To delete an exception:

1. View the exception is to be deleted as described in the **'View Exceptions to the Normal Operating Times'**. over the time schedule indicates you cannot adjust it.



2. Select . The screen changes.
3. Select .The screen changes.

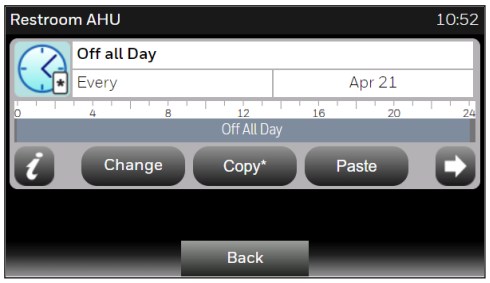


4. Select **Delete**. The application prompts for confirmation of the deletion.
5. Select **Yes**.

6.5.3.4 Edit an Exception

To edit an exception's times:

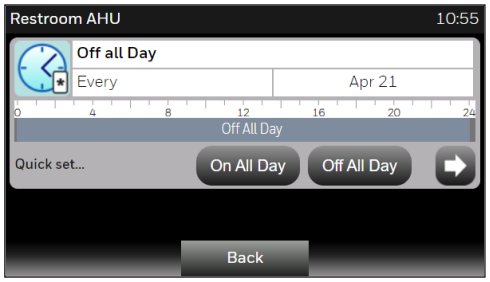
1. View the exception is to be edited as described in the **'View Exceptions to the Normal Operating Times'**. over the time schedule indicates you cannot adjust it.



2. Specify the exception's operating times as required.

To set the operating times ON or OFF all day:

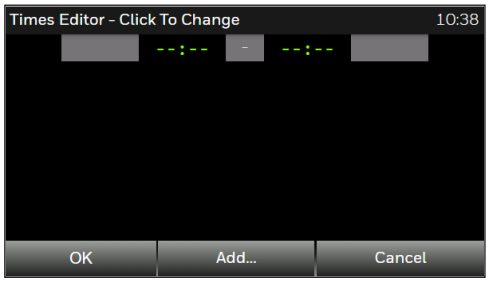
- Select . The screen changes.



- Select **On All Day** or **Off All Day** as required. The application prompts for confirmation of the change.
- Select **Yes**.
- Select **Save**.

To specify operating times:

- Select **Change**. The **Times Editor** screen is displayed.



- Adjust the times as required by editing a time period, adding a time period, or deleting a time period.

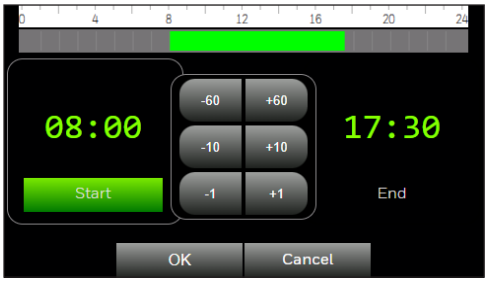
To edit a time period:

- Select the time period for which the times are to be changed. A screen is displayed that allows the period's start and end times to be set up.

- Select **Start**.
- Select the buttons to set the start time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **End**.
- Select the buttons to set the end time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **OK** to return to the **Times Editor** screen.

To add a time period:

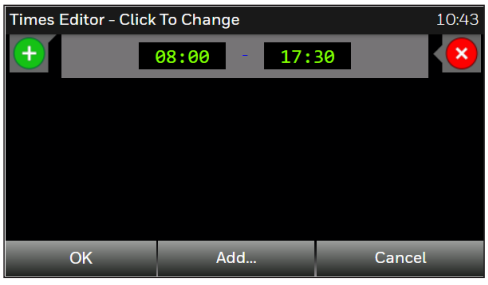
- Select **Add** or select  pointing to where the period is to be added. A screen is displayed that allows the period's start and end times to be set up.



- Select **Start**.
- Select the buttons to set the start time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **End**.
- Select the buttons to set the end time. **-60** decrements 1 hour, **+60** increments 1 hour. **-10** decrements 10 minutes, **+10** increments 10 minutes. **-1** decrements 1 minute, **+1** increments 1 minute.
- Select **OK** to return to the **Times Editor** screen.

To delete a time period:

- Select  next to the period that is to be deleted. A confirmation screen is displayed.



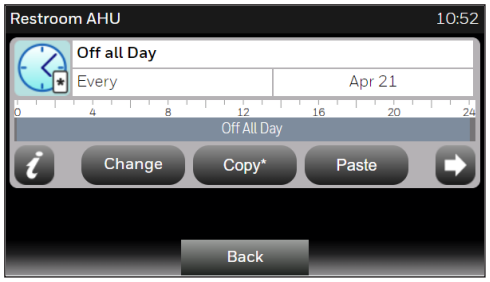
- Select **Yes**. The period is deleted and the **Times Editor** screen displayed.

Overlapping time periods are highlighted in red and will be resolved when **OK** is selected by using the earliest start time and latest end time.

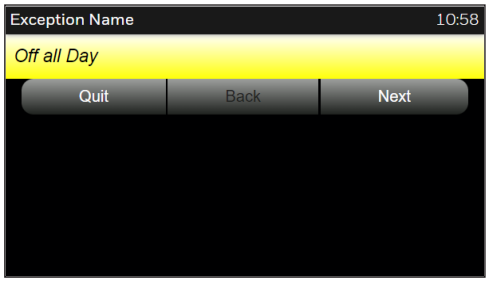
- Select **OK**.
- Select **Save**.

To edit an exception's name and when it occurs:

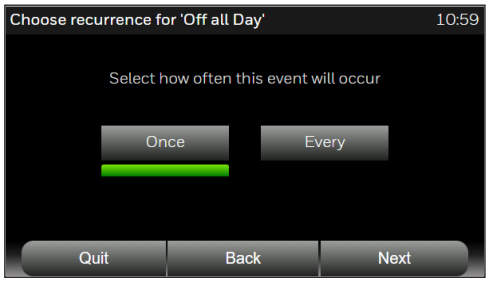
1. View the exception is to be edited as described in the **'View Exceptions to the Normal Operating Times'**. 🔒 over the time schedule indicates you cannot adjust it.



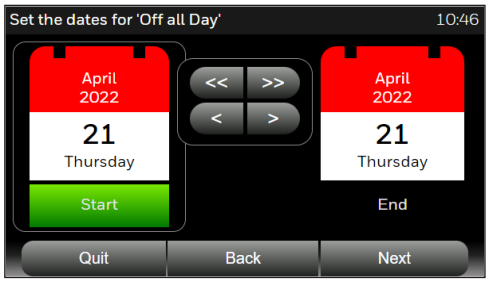
2. Select the exception's name. The **Exception Name** screen is displayed.



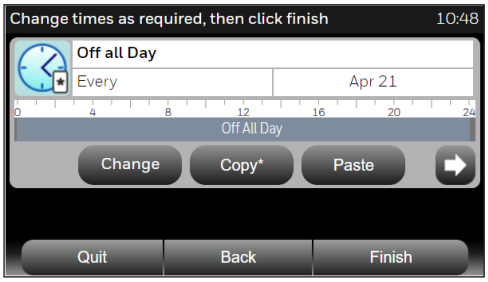
3. Enter the exception's name. Do not use \ / < > { } ; : , space = [ ] ' " ? ( ) or %.
4. Select **Next**. The **Choose reoccurrence for** screen is displayed.



5. Select **Every** if the exception is to occur at the same time every year. Select **Once** if it is to occur once. The selected option is indicated by ▬.
6. Select **Next**. The **Set the dates for** screen is displayed.



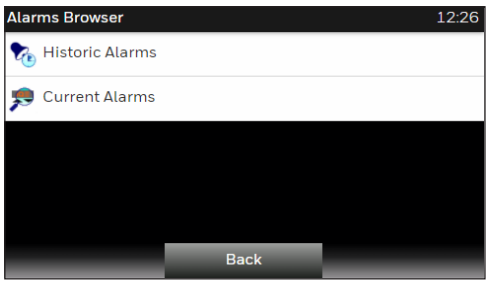
7. Select **Start**.
8. Select the buttons to set the exception's start date. << decrement one month, >> increment one month. < decrement one day, > increment one day.
9. Select **End**.
10. Select the buttons to set the exception's end date. << decrement one month, >> increment one month. < decrement one day, > increment one day.
11. Select **Next**. The **Change times** screen is displayed using the times copied from the other exception.



12. If required edit the times. See the **'Add an Exception'** for details.
13. Select **Finish**.

6.6 View Alarms

The **Alarms Browser** gives access to the controller's historic or current alarms.

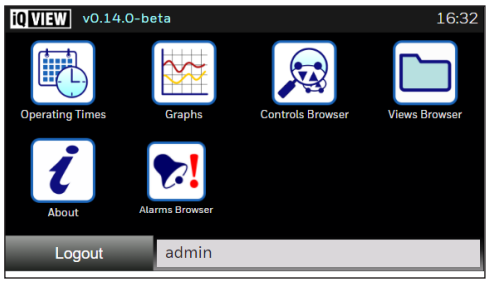


The historic alarms come from the controller's alarm log. The current alarms show all the current item alarms for loop, driver, sensor, and digital input modules.

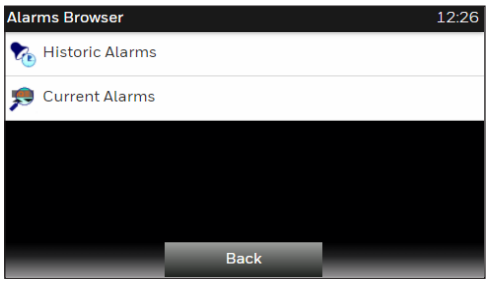
6.6.1 View Historic Alarms

To view historic alarms:

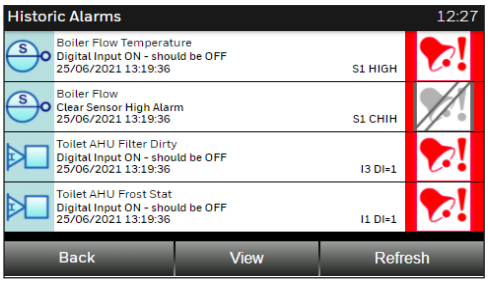
1. Log in - see **'Log in'**.
2. Display the **Features** screen.



3. Select **Alarms Browser**. The **Alarms Browser** screen is displayed.



4. Select Historic Alarms. The Historic Alarms screen is displayed.



The screen contains a list of the alarms in the controller's alarm log. The length of this list will depend on the controller type. Use or to scroll to the required module. Select View to zoom in/out. This reduces the information on the screen making more modules visible. If more than 20 alarms are in the log the text 'Load More' is displayed at the bottom of the list. Select Load More to load the next 20 alarms. Select Refresh to refresh the alarms is the list.

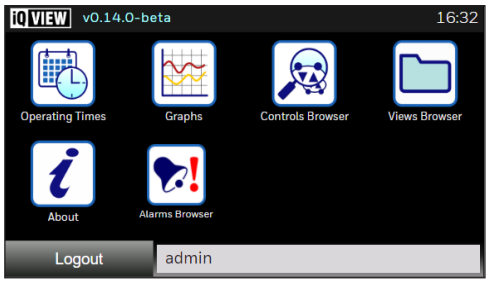
Icons indicate the source of the alarm, and whether it is a set alarm, or a clear alarm.

Icon	*Location*	*Description*
	Left column	Controller alarm
	Left column	Alarm from a loop module
	Left column	Alarm from a driver module
	Left column	Alarm from a sensor module
	Left column	Alarm from a digital input module
	Right column	Set alarm
	Right column	Clear alarm

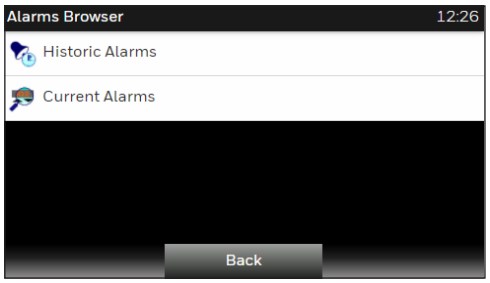
6.6.2 View Current Alarms

To view current alarms:

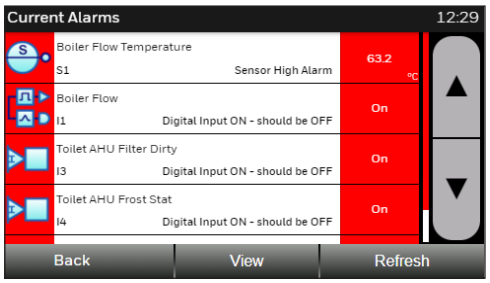
1. Log in - see **'Log in'**.
2. Display the **Features** screen.



3. Select Alarms Browser. If necessary select or to scroll up/down the list. This feature maybe restricted you must have enabled in the feature filter. The **Alarms Browser** screen is displayed.



4. Select **Current Alarms**. The **Current Alarms** screen is displayed.



The screen contains a list of all the current alarms for loop, driver, sensor, and digital input modules. Use or to scroll to the required module. Select View to zoom in/out. This reduces the information on the screen making more modules visible. The list is live, and if an alarm clears while the list is displayed it changes to green and displays 'Alarm has Cleared'. Cleared alarms are removed from the list if it is refreshed. Icons indicate the source of the alarm. Select Refresh to refresh the alarms is the list.

Icon	*Description*
	Controller alarm
	Alarm from a loop module
	Alarm from a driver module
	Alarm from a sensor module
	Alarm from a digital input module

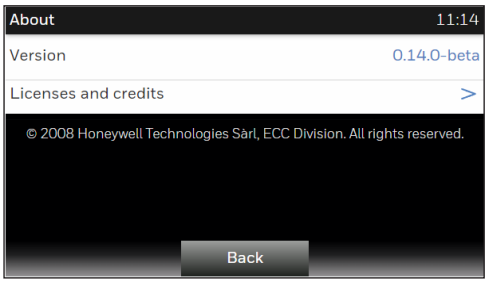
To view detailed information of the module in alarm, select it. The information on this screen is dependant on the module type.

6.7 Display Information About the Application

Information about the application is available. Basic information about the application is available on the **About** screen.

To display the About screen:

1. Log in - see **'Log in'**.
2. Display the **Features** screen.
3. Select **About**. The **About** screen is displayed.



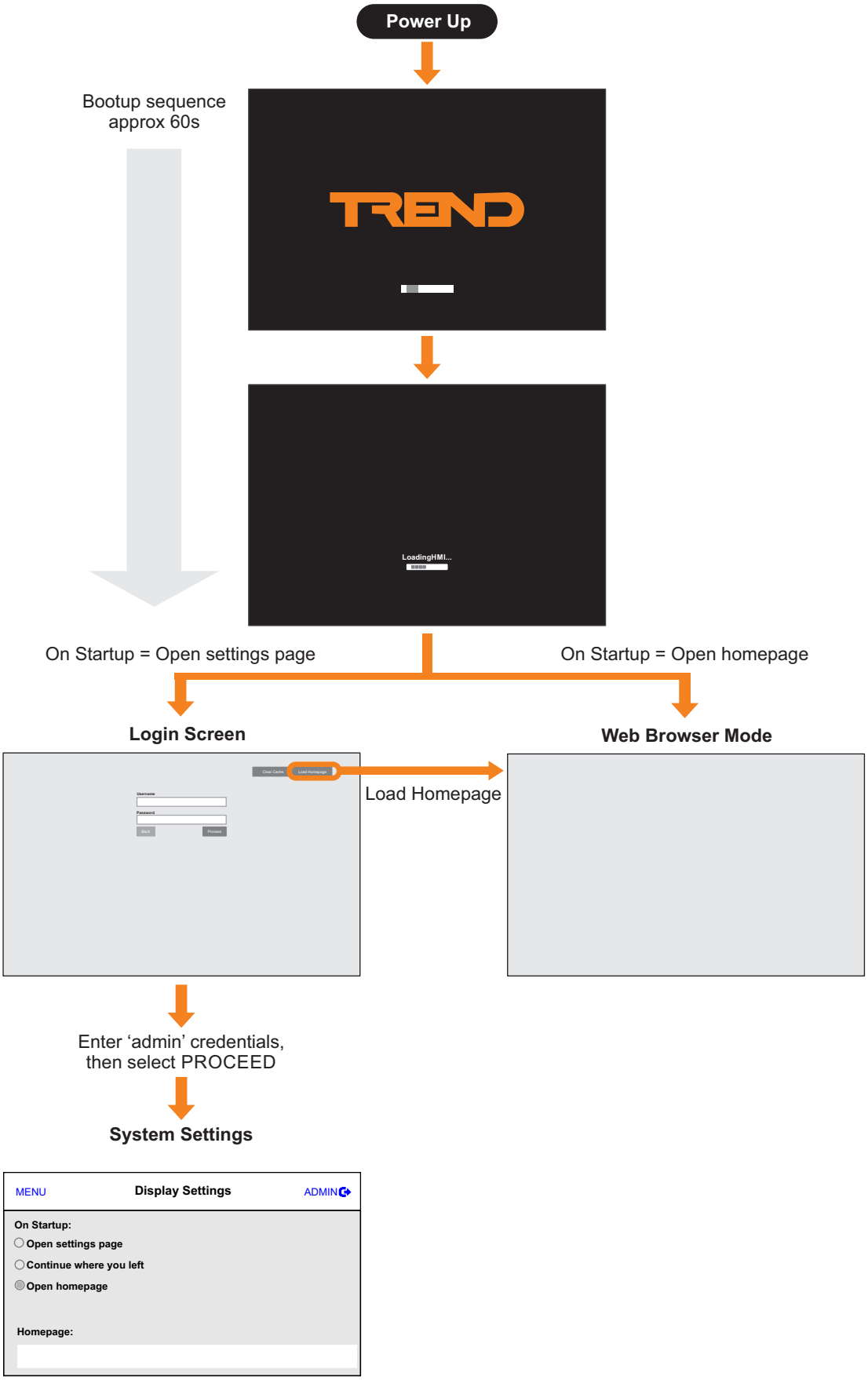
APPENDICES

Appendix 1 Appendices

A1 IQVIEW-4-S USER INTERFACE OVERVIEW

This section describes of the IQVIEW-4-S display's user interface and virtual keyboard used for data entry.

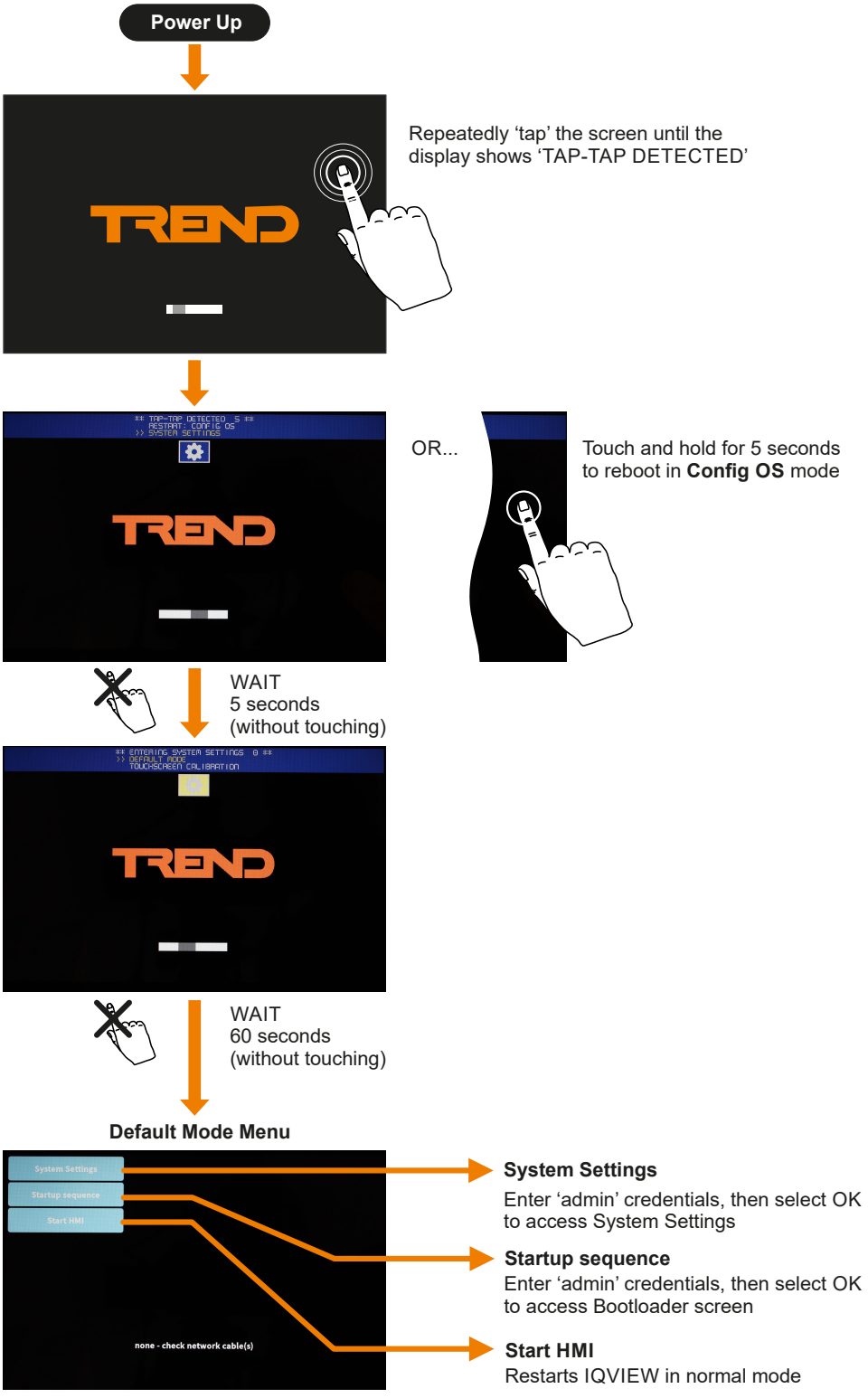
A1.1 Normal Behaviour



A1.1.1 Tap-Tap Access Mode

In the event that IQVIEW-4-S display fails to start in the normal way (e.g. due to an installation/configuration error) the following procedure can be used to navigate to:

- System Settings screen
- Runtime Loader screen
- Config OS mode



A2 IQVIEW-4-S SYSTEM SETTINGS

Basic set up of the IQVIEW-4-S display is achieved using the **System Settings** screen.

A2.1 Accessing the System Settings Screen

This screen can be accessed in various ways, depending on how the IQVIEW-4-S display is configured.

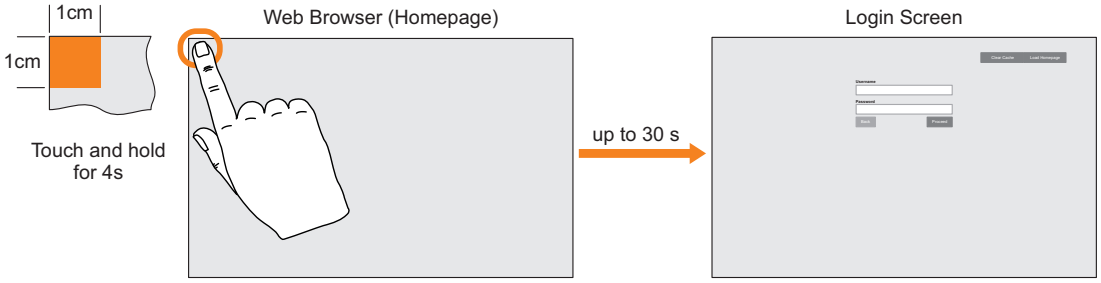
To access System Settings from the Login Screen:
1. Enter your 'admin' credentials.
2. Select **Proceed**. The **System Settings** (Web Browser) screen will be displayed.

To access System Settings from the Web Browser (homepage) mode:
If the toolbar is enabled...

1. Select the toolbar tab  at the top of the screen.
2. Select the  icon. The **Login** screen will be displayed.
3. Enter your 'admin' credentials.
4. Select **Proceed**. The **System Settings** (Web Browser) screen will be displayed.

If the toolbar is not enabled...

1. Touch and hold the top left corner of the screen for at least 4 seconds. The login screen will be displayed:



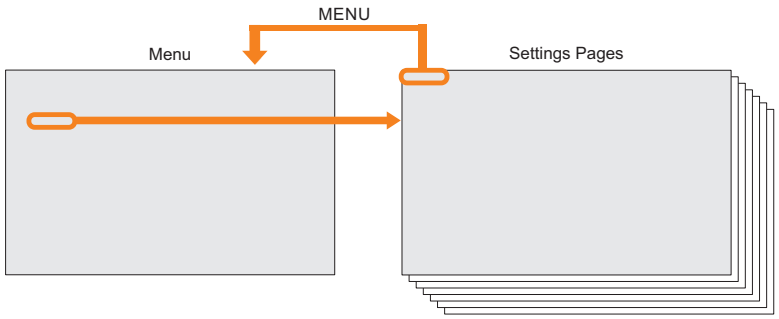
Note: The login screen may take up to 30 seconds to appear. The duration of the touch and hold required can be set to a different time using the 'Options press-and-hold time' parameter (see **'Web Browser' on page 87***).*

2. Enter your 'admin' credentials.
3. Select **Proceed**. The **System Settings** (Web Browser) screen will be displayed.

Note: System Settings can also be accessed from the Default Mode Menu (see **'Tap-Tap Access Mode' on page 82***).*

A2.1.1 System Settings Appearance

The **System Settings** screen comprises a menu with each menu option displaying a settings page. The menu is displayed separately - selecting a menu option then shows the settings page:



Selecting **MENU** on a settings page returns to the menu.

A2.1.1.1 EDIT Button

To make changes on some settings pages you must first select the **EDIT** button located in the top right corner of the screen. You will then be able to make changes to the various parameters. To save the new settings select the **SAVE** button at the top of screen or **CANCEL** to exit edit mode without saving any changes.

A2.1.1.2 ADMIN Button

Pressing the **ADMIN** button (located in the top right corner of the screen) will leave System Settings and return to the Login Screen.

A2.2 Menu Options

The **System Settings** menu provides access to the following:

Localisation
System
Logs
Date & Time
Network
Services
Management
Display
Fonts
Authentication
Restart
Web Browser
EXIT

Note: By default, the text within System Settings displays in English. To switch to another language, select **Localisation** *and choose the required option.*

A2.2.1 Localisation

Use this to change the language used for the text in the **System Settings** screen only; it does not affect the language of any web browser content. Select the required language from the listed options.

- **County Code:** Select from the listed options. Required for WLAN regulatory domain.
- **System keyboard layout**: Use this option to change the layout of the virtual keyboard according to the required language.

A2.2.2 System

Displays general information about the IQVIEW-4-S display, memory and processor status, plus device timers.

Info

- **Name**
- **Kernal version**
- **Build date**
- **Hardware code**
- **Total available RAM**

Status

- **Free RAM**
- **Uptime**
- **Average CPU Usage**

Timers

- **System on:** Shows how many hours the IQVIEW-4-S display has been powered.
- **Backlight on:** Shows how many hours the IQVIEW-4-S display backlight has been powered.

A2.2.3 Logs

The IQVIEW-4-S display maintains a log file of bootup operations which can be useful during troubleshooting. This page defines how the log file is managed and enables the file to be saved and exported.

- **Persistent log:** When OFF the log file is cleared after a power reset. When ON the log file is saved after a power reset.

  Note: The log file manager cyclically fills 3 files of 4Mb.

- **Save**: Enables the log file(s) to be saved, e.g. to an external USB device. For further details please refer to **'Download and View Log Files' on page 89**.

Note: Log file entries are timestamped with the IQVIEW-4-S display's date and time settings. See **'Date & Time' on page 85**.

A2.2.4 Date & Time

Provides access to the IQVIEW-4-S display's date and time and to setup NTP operation if required. Currently, it only makes use of date and time settings to provide an accurate timestamp to entries in the log files.

- **Current Timezone**: Choose the required country/timezone from the displayed options.
- **Current Date**: Set the onboard date.
- **Local Time**: Sets the onboard clock (24-hour).
- **Automatic Update (NTP)**: When enabled, use to specify the address of an NTP server.
- **Accept NTP requests**: When enabled the date and time will be synchronised to the remote NTP server.

A2.2.5 Network

Enables the network settings for IQVIEW-4-S display to be viewed and changed.

General Settings

- **Hostname**
- **Avahi Hostname**

Network Interfaces

Displays the network parameters of the available interfaces:

- **Name** (eth0)
- **Label** (WAN)
- **MAC** Address
- **DHCP** (enabled or disabled)
- **Address** - current IP address
- **Netmask** - current subnet mask
- **Gateway** - network gateway IP address
- **Bridged** - network bridge address

See **'Configure the Network Interface' on page 26** for further details.

DNS

Specifies the DNS serves and search domains

- **DNS Servers:** Displays a list of DNS server addresses. These will be provided automatically when DHCP is enabled, but can be added or removed manually when DHCP is disabled.
- **Search Domains:** Optional domain(s) that will be used in conjunction with a provided hostname to create an FQDN (fully qualified domain name).

A2.2.6 Services

Not used.

A2.2.7 Management

Enables the IQVIEW-4-S display's system components to be viewed, downloaded and updated. Certain operations will require the display to be booted into Config OS mode first.

CAUTION: Do not change any settings on this screen unless you have been specifically asked to do so by Trend Technical Support. Incorrect configuration in this area may result in failure of the IQVIEW-4-S display to operate properly.

A2.2.8 Display

Enables various characteristics of the display to be changed:

- **Brightness:** Sets the relative brightness level of the display (10 maximum, 0 minimum).
- **Backlight timeout:** Sets the length of inactivity before the backlight is switched off (1 to 60 minutes or always on).
- **Touch Calibration:** Enables the screen to be calibrated.

A2.2.9 Fonts

Lists the fonts installed on the IQVIEW-4-S display and allows other fonts to be installed.

System Fonts

This area lists all fonts that are included as standard - these cannot be removed.

Custom Fonts

Shows any user-installed fonts. You can install/remove new fonts from here.

A2.2.10 Authentication

Enables login passwords to be changed and to manage x.509 security certificates.

Users
In display mode this shows the currently logged in user. In edit mode it allows a new password to be setup for each user.

x.509 Certificate
Allows a security certificate to be imported or exported.

A2.2.11 Restart

Enables theIQVIEW-4-S display to be restarted in either of the following modes:

- **Config OS**: Select to restart the IQVIEW-4-S display in special configuration mode. Do not use this mode unless requested by Trend Technical Support.
- **Main OS**: Select to restart the IQVIEW-4-S display as it would normally behave on power up.

A2.2.12 Web Browser

Configures the behaviour and display options for the IQVIEW-4-S display.

Note: This menu option is not accessible when viewing System Settings via the 'tap-tap' method and is only displayed when you enter the initially enter the Settings menu as described in **'Accessing the System Settings Screen' on page 83**.

- **On Startup:** Defines the behaviour of the IQVIEW-4-S display on power up or following a restart. This can be set one of the following:
  - **Open settings page:** The login page is displayed. After a successful login the **System Settings** screen is displayed.
  - **Continue where you left:** Option not supported.
  - **Open homepage:** The specified Homepage is displayed. The IQVIEW-4-S display login page does not appear.

- **Homepage**: The primary web page to be displayed when On Startup - Open Homepage is selected, or when Load Homepage is selected from the login screen. For example: https://192.168.0.85
- **Fallback page**: If enabled, this allows a secondary webpage to be specified which will be displayed if the Homepage is unavailable.
- **Enable toolbar**: If enabled, this displays a toolbar along the top edge of the display, providing access to the login screen or allowing a different web page to be entered. The following options are also available when the toolbar is enabled:
  - **Show toolbar only on error**: If enabled, the toolbar will only be displayed if there is a problem displaying the specified Homepage or Fallback page.
  - **Show history buttons**: Not supported.
  - **Show loading controls**: Not supported.
- **Allow downloading files**: Not supported.
- **Options press-and-hold time (s)**: Sets how long you need to touch and hold the top left corner of the screen to access the System Settings from the Web Browser (see **'Accessing the System Settings Screen' on page 83**).
- **Change UserAgent**: If enabled, a user agent can be specified (e.g. Android) to ensure the Homepage is displayed correctly.
- **Enable password management**: When enabled, the web browser will prompt the user to save any passwords entered for the connected site. The next time that the user accesses the site IQVIEW will auto fill the saved password. Changing this setting requires a restart.

A2.2.13 EXIT

Leaves the **System Settings** screen and returns to the **Login** screen.

A3 DOWNLOAD AND VIEW LOG FILES

The IQVIEW-4-S display maintains a log file of bootup operations which can be useful during troubleshooting. These files can be downloaded to a USB memory device and then viewed on a separate PC.

The files are downloaded in a compressed format and will require a decompression tool (e.g. 7-Zip) in order to view the files.

Note: Log file entries are timestamped with the IQVIEW-4-S display's date and time settings. See **'Date & Time' on page 85**.

To download the log files:

1. Access the **System Settings** screen - see **'Accessing the System Settings Screen' on page 83**.
2. Select **Logs**.
3. Select **Save**. The file system screen is displayed.
4. Insert a USB memory stick into one of the USB ports on the rear of the IQVIEW-4-S display.
5. Select the USB device (e.g. **usbmemory**).
6. Select **Save**. This will save a file called 'logs.tar.gz' to the USB device.

To view the log files:

1. Access the USB device on a PC and navigate to the 'logs.tar.gz' file.
2. Using a suitable tool (e.g. 7-Zip) open the file to reveal a file called 'logs.tar'.
3. Open the 'logs.tar' file to view its contents.

A4 BACKUP AND RESTORE

The IQVIEW SCD for IQ4 Application’s configuration is stored in the IQ4 controller hosting it and is included in the upload of the controller performed by IQSET.

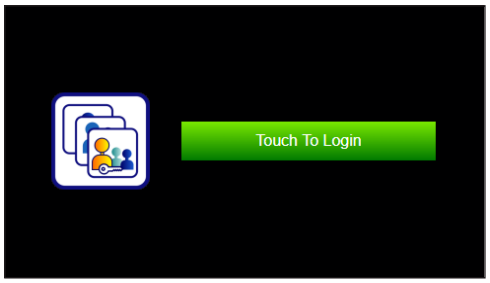
The application’s configuration can be restored by performing a download to the controller using IQSET.

A5 FORGOTTEN PASSWORDS

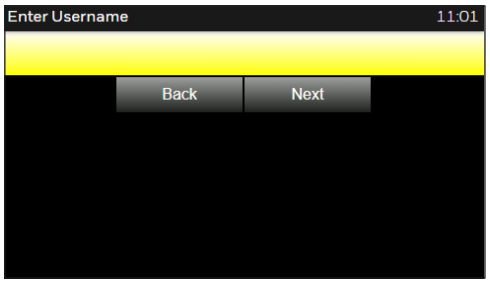
A5.1 Application Password

To reset your Application Password:

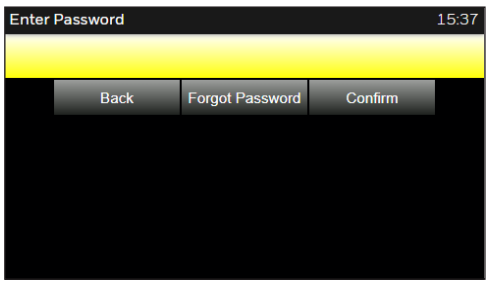
1. Select the screen. The **Login** screen is displayed.



2. Select **Touch to Login**. The **Enter Username** screen is displayed.



3. Enter the user name.
4. Select **Next**. The **Enter Password** screen is displayed.



5. Select **Forgot Password**.
6. Follow the instruction on the screen.

A5.2 IQVIEW-4-S Display Password

IQVIEW-4-S Display passwords cannot be cleared or reset. If you forget the ‘admin’ password, contact Trend Technical Support.

Appendix 5 Forgotten Passwords

A6 IQVIEW SCD FOR IQ4 DIAGNOSTICS

IQVIEW SCD for IQ4 Application has a number of diagnostic features which are available from the **Settings** screen when logged in an 'Administrator' user, other users do not have access to the diagnostic features. You should only enable these features if asked to do so a Trend technical support.