

**IQVIEW8** Touch Screen Display

# Data Sheet IQVIEW8 Touch Screen Display



Description

The  $IQ^{\otimes}VIEW8$  is a touch screen display that provides an interactive user interface to the Trend system. It enables the user to view/adjust operating times, monitor alarms, make adjustments to controller parameters (e.g. setpoints), and display graphs of logged data (e.g. energy usage).

Schematic displays provide the ability to view, change and graph data using customised colour graphics pages. Alarms can be sent directly to the IQVIEW8 where they can be logged, viewed and actioned. IQVIEW8 can be configured give an audible or visual notification of received alarms.

IQVIEW8 is designed for panel mounting, with surface and inwall mounting options available.

# Features

- Colour graphics pages (schematics)
- · Viewing of inputs, outputs, directories, alarms, and plots
- Adjustment of knobs, switches, and time zones.
- Graphing of logged data
- · Configurable users to ensure system security
- Communicates with all controllers on network (not autodialled networks)
- Ethernet, current loop LAN, or RS232 network connection
- DHCP enabled
- Panel, surface, or embedded mounting options
- 8" 16:9 colour touch screen LCD display
- 24 Vac/dc input power supply
- Relay output (for use with an external alarm sounder)
- IP40 (when panel mounted).

# Physical



# Physical (continued)



D = Cable gland drill outs 22 mm  $\emptyset$  (0.86")

# FUNCTIONALITY

The functionality of the IQVIEW8 can be split into System Control, User Interface, Trend Network Connection, Ethernet Addressing, and Hardware sections.

# SYSTEM CONTROL

The IQVIEW8's touchscreen interface allows authorised users to view and adjust parameters for the connected Trend system.

Available functionality depends on the user's access rights and what features they have access to.

#### **Operating Times**

IQVIEW8 enables the operating times in controllers to be viewed and adjusted. Adjustments can be made for every week (standard operating times) and the current week (today and next six days). You can create exceptions; these are used to override standard operating times for specific days (e.g. public holidays).



The system date, time and daylight saving dates can also be configured using IQVIEW8.

#### Graphs

IQVIEW8 is able to display logged data from controllers in multitrace graphs. A single graph can contain up to six individual traces from different controllers enabling easy comparison of data. A graph can be displayed for any point that is logged in a controller.

The configuration of a graph can be saved as a graph view. Graph views allow quick access to regularly used graphs; each graph view can have multiple traces, and can be set up to look as required.



It is possible to zoom in on selected parts of the graph so that it can be seen in more detail, display spot values or to view the underlying data from the graph.

#### **Device Parameters**

IQVIEW8 can be used to view and adjust values of parameters from presentation modules (i.e. sensors, digital inputs, critical alarms (IQ1 and IQ2 only), knobs, switches, time schedules, loops, and drivers) from devices on the system. IQVIEW8 has two browsers – the Controls Browser and Views Browser – which allow navigation to any device by LAN and Device name. The Controls Browser displays a list of sensors, digital inputs, critical alarms, knobs, switches, loops, time schedules and drivers for any chosen device.

Administrator	N +++ _	09:55
Back Controls Browser - Office Heat	ting	Ŕ
Sensors (2)		
Solution Office Temperature	20.00 °C	26
So Outside Air	-12 15.00 °C	20
Digital Inputs (1)		
Manual Overide	Off	
Knobs (3)		
Cocupied Setpoint	₀ 22.00 °C	25 >
Unoccupied Setpoint	₀ 15.00 °C	15 >
Manual Level		
1-10 of 10 ltems		٩

The Views Browser provides access to the display and directory modules in the selected device enabling you to access information defined using the display and directory module structure (GraphIQs).

Administrator	Back	View	s Browser	- Office H	eating	16	***	♀ 09:55 ☆
	You are he	re: Views Brov	vser > Abery I Kno	House > 4th Fle	oor Floor >	4th Floor	Floor	
	ied Setpoir	t			0	22.	.00 °C	25 >
	upied Setp	pint	<i>c</i> 1		<u>e</u>	15	.00 °C	15 >
	nabled		Switc	nes (1)			0	]
	river		Drive	ers (1)	0	10	.00 %	100
1-4 of 4 Items								٩

# **Schematics**

IQVIEW8 can be operated using one or more specially designed screens, called Schematics. Schematics have the benefit of being fully customisable, using a variety of text and graphical controls, to suit both the system design and end user needs. They can be engineered to display information from the Trend system and enable parameters to be adjusted and graphed.

The pages may contain a backdrop, graphic images, animations. multi state graphics (ON, OFF, waiting, error, alarm, overridden ON, and overridden OFF), and static text.



Schematic pages are typically displayed full screen, i.e. without any navigational features of the standard interface being visible; navigation between Schematic pages can be provided by buttons/controls built-in to the pages. Schematics are created using Trend's 963 Supervisor and exported for use with IQVIEW8 using the 963 Schematic Export Utility. See the 963 Schematic Export Utility Manual (TE201242) for details.

Schematics are used in the creation of Kiosk Mode operation (see page 5).

# Alarm Handling

IQVIEW8 is able to receive alarms sent by other devices on the Trend system.

#### **Alarm Notification**

When an alarm is received by IQVIEW8 it is categorised according to its type (e.g. Communication Failure). The user interface displays an icon indicating that an alarm has been received. The number of unacknowledged alarms is also shown.

In addition, for each type of alarm, IQVIEW8 can be configured to perform one or more of the following actions:

- Record receipt in the IQVIEW8 alarm log,
- Sound a 'beep',
- · Flash the front panel LED,
- Flash the screen,
- Activate the internal relay (see page 9).

IQView8 provides a rolling alarm log of 200 entries. The alarm log is not maintained through a power cycle.

In addition, an alarm icon in the Title Bar indicates that an alarm has been received, and the alarm icon on the Task Launcher Screen indicates the number of unacknowledged alarms.

An alarm notification will continue until all the alarms have been actioned by the user. The user can snooze the alarms which will temporarily stop all alarm notifications.

#### Alarm Viewing/Actioning

IQVIEW8 offers a variety of ways of viewing alarms in the alarm log (and actioning them if required) and also has the ability to view the alarm logs of individual controllers on the Trend network.

The received alarms can be viewed in two different ways:

- as a list (Alarm Log Screen),
- grouped by category (Alarms Summary Screen).

Alarm Log Screen

Administr	ator	<del>4</del> 1	🔟 ++++ 🖵 09:55
$\frown$	Back	Alarm Log	
	R&D IQ System		08/01/2011 17:39:18
<b>U</b> .	Local LAN Reported By	0 All Maps Built	R&D IQ System / R&D IQ System
	R&D IQ System		08/01/2011 17:38:54
<b>U</b> .	Local LAN Reported By	0 Caused Re-Map	R&D IQ System / R&D IQ System
	R&D IQ System		08/01/2011 17:31:12
<b>U</b> .	Local LAN Reported By	0 All Maps Built	R&D IQ System / R&D IQ System
	R&D IQ System		08/01/2011 17:30:54
<b>U</b> .	Local LAN Reported By	0 Caused Re-Map	R&D IQ System / R&D IQ System
	R&D IQ System		08/01/2011 15:36:50
<b>U</b> .	Local LAN Reported By	0 All Maps Built	R&D IQ System / R&D IQ System
	R&D IQ System		08/01/2011 15:36:32
<b>C</b> .	Local LAN Reported By	0 Caused Re-Map	R&D IQ System / R&D IQ System
	R&D IQ System		08/01/2011 15:36:15
<b>U</b> .	Local LAN Reported By	0 All Maps Built	R&D 10 System / R&D 10 System
			Snooze 🗘

#### Alarms Summary Screen

Administra	tor		<b>7</b>		*	ų.	09:	55
$\square$	Back	A	larm Summary				Ŕ	1
Ø	Point State General plant alarm	ıs, e.g. high or low v	Awaiting Action: 0 alues, dirty filters, flow failures, etc.		^	ctioned	1: 0	>
*	Point Failure Failure of control p	oints can indicate wi	Awaiting Action: 0 ring problems or out-of-range sensors	3	^	ctioned	1: 0	>
	Control Failure Events raised when	the controlled plant	Awaiting Action: 0 does not respond as expected		^	ctioned	l: 0	>
	Control Event User-defined events	s raised by your cont	Awaiting Action: 0 rol system		^	ctioned	1: 0	>
-	Device State Controller problems	s and events, e.g. re:	Awaiting Action: 0 starts, clock failures		^	ctioned	1: 0	>
84	Network State Changes and break	ages to your controlle	Awaiting Action: 39 er network(s)		^	ctioned	1: 0	>
∞	Communication Communications fai	Failure Iures	Awaiting Action: 0		^	ctioned	1: 0	>
You hav	e 39 alarms requirin	g action			Snoc	ze	\$	1

Unactioned alarms can be viewed, and actioned, or snoozed from the Unactioned Alarms Screen.

Unactioned Alarms Screen

Mministrator			5		~~ <u>L</u>	09:55
	Back		Unactioned Alarms			ਸ਼
Select A						
	R&D IQ Sys	tem			08/01/2011	17:39:18
	Local LAN	Reported By	0 All Maps Built	R&D IQ	System / R&D	IQ System
	R&D IQ Sys	tem			08/01/2011	17:38:54
	Local LAN	Reported By	0 Caused Re-Map	R&D IQ	System / R&D	IQ System
	R&D IQ Sys	tem			08/01/2011	17:31:12
	Local LAN	Reported By	0 All Maps Built	R&D IQ	System / R&D	IQ System
	R&D IQ Sys	tem			08/01/2011	17:30:54
	Local LAN	Reported By	0 Caused Re-Map	R&D IQ	System / R&D	IQ System
	R&D IQ Sys	tem			08/01/2011	15:36:50
	Local LAN	Reported By	0 All Maps Built	R&D IQ	System / R&D	IQ System
	R&D IQ Sys	tem			08/01/2011	15:36:32
	Local LAN	Reported By	0 Caused Re-Map	R&D IQ	System / R&D	IQ System
Action Selec	ted			_	Snooze	\$

#### Alarm Browsing

Alarm browsing enables the user to view the current alarms, or the alarm log in a controller on the network.

Controller Current Alarms Screen

Administra	Back	₩ Current Alarms	10 ·<- U 09:55
<u> </u>	High Alarm S6 Sensor High Alarm		2 11.50 °F
₽	Office AHU Supply Fa	in Alarm	On
₽	Office AHU Extract Fa	arm	On
	Required is ON I3 DI=0		Off
	Internal DI Required	is OFF	On
			\$

#### Controller Alarm Log Screen

Administrator Back	Controller Alarm Log	lã ↔ 및 09:55
Albery Demo Boilers Controller Online		30/06/2011 08:35:26 Local LAN / Albery Demo Boilers
Albery Demo Boilers		29/06/2011 08:16:38 Local LAN / Albery Demo Boilers
Albery Demo Boilers		01/04/2000 00:00:21 Local LAN / Albery Demo Boilers
Albery Demo Boilers		01/04/2000 00:00:22 Local LAN / Albery Demo Boilers
Albery Demo Boilers		01/04/2000 00:00:23 Local LAN / Albery Demo Boilers
Albery Demo Boilers Controller Online		01/04/2000 00:00:22 Local LAN / Albery Demo Boilers
Albery Demo Boilers Controller Online		01/04/2000 00:00:22 Local LAN / Albery Demo Boilers
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#### System Maintenance & Diagnostics

Various tools and diagnostic features are included in the IQVIEW8.

#### **Backup and Restore**

The IQVIEW8's configuration can be saved to a USB memory stick. The memory stick may be removed and stored in a safe location as a back up, or used to configure another IQVIEW8.

#### Software Upgrade

The IQVIEW8 includes an upgrade feature allowing the software to be upgraded from a USB memory stick.

#### Diagnostics

Various diagnostic screens are included in the IQVIEW8 interface which can be used to examine different aspects of the IQVIEW8 and its interaction with the wider Trend system.

In addition, it is possible to take a screen shot of the current screen and save it as a '.PNG' file to a USB memory stick. This may be useful for capturing system information, e.g. if requested by technical support.

# **USER INTERFACE**

When the IQVIEW8 is first installed (or following a factory reset) it displays a default user interface which provides unrestricted access to all features and functions.



The IQVIEW8 user interface can, **and should**, be configured to present end users with only the functionality they need, with any irrelevant features or information hidden from view.

#### Users

IQVIEW8 has the facility to define different users. Each user has a user name and an optional password. Users can be added manually using the IQVIEW8, or imported from another IQVIEW8.

Requiring users to log-in provides security by only allowing access to authorised personnel and also enables the user interface to be customised to suit the needs of each user, e.g. by hiding any unnecessary or irrelevant information. Each user can have their own designated 'home' page.

There are two user types:

User Type	Level of Authority
Administrator	Able to access to all key IQVIEW8 features and screens. Able to add or delete other users (of any type) and modify the access rights of standard users.
Standard	Able to access a pre-defined set of IQVIEW8 features and screens suitable to their job function or responsibility. Not able to add, amend or delete other users.

In order that IQVIEW8 can be easily accessed following a power interruption there is an option to allow IQVIEW8 to automatically log-in using a particular user when it restarts.

## Security

IQVIEW8 offers various features that can be used to keep the Trend system secure from unwanted or accidental changes.

The key security feature is through the use of controlled access by user name and password (see 'Users').

The Trend system uses PIN codes to ensure that only authorised sources can make changes to certain devices or modules. IQVIEW8 can be programmed to send a single PIN code for an entire site, and/or separate codes for individual LANs and devices.

The idle timeout feature can be used to automatically return the IQVIEW8 to its log-in screen after a specified period of inactivity.

# **Screen Dim/Saver Options**

The IQVIEW8 has a number of options for changing the displayed content after a period of inactivity. These include dimming the display backlight, which reduces power consumption, and displaying a screen saver, which can prevent the LCD screen from being impaired by 'memory effects' or 'burn-in' that can occur as a result of displaying the same static image for a long period of time.

#### **Favourites**

Most screens or views in IQVIEW8 can be saved as a favourite (or shortcut). This enables a user to display a particular screen (e.g. a graph view) quickly without having to navigate to it through the interface menu system. This speeds up access to commonly required features and information.

Up to 10 favourites can be saved for each user and can be copied between different users if required.

# Language

By default the standard user interface displays all text and information in English. IQVIEW8 has a library of alternative languages that can be selected if required.

The language can be set globally (all users) and can be set on a per user basis.

# **Kiosk Mode Operation**

IQVIEW8 can be configured to operate in Kiosk Mode, which 'locks-down' the display interface such that it will only show a subset of Trend system information relevant to the end user. This also prevents accidental or unauthorised access to system configuration and engineering functions.

Specially created schematic pages are typically used to create the views that are accessible while in Kiosk Mode. The standard IQVIEW8 navigation buttons and caption bars are hidden, presenting an uncluttered full screen interface, with all navigation between pages being designed into the schematics.

The IQVIEW8 can be configured to automatically resume Kiosk Mode operation following a power interruption and display a specific home page without the need for a user to login.

# TREND NETWORK CONNECTION

The IQVIEW8 can connect to a Trend network in one of three ways – Ethernet, RS232 or Trend current loop.



The IQVIEW8 is not designed for multi-site operation, although more than one IQVIEW8 can be connected to the same site. It cannot access autodialed sites (e.g using a TMN), and it cannot receive alarms from sites using autodialing or TCP/IP dial up.

#### Ethernet

When connected via Ethernet the IQVIEW8 can communicate using either its own vCNC or a vCNC in another device.

When connecting using its own vCNC IQVIEW8 exists on the Trend network with its own device address and LAN number. It is able to build LANs and internetworks with other devices, and to receive alarms from other Trend devices sent to that address.



When connecting using a vCNC in another device IQVIEW8 takes the network address of that vCNC. Alarms sent to the vCNC will be received by the IQVIEW8.



The IQVIEW8 supports either static or dynamic (DHCP) IP addressing. DHCP is enabled by default.

# RS232

The IQVIEW8 can connect to the Trend network by connecting to the RS232 local supervisor port (sCNC) of an IQ controller or to a CNC (e.g. NBOX/CNC2).

IQVIEW8 takes the network address of the sCNC or CNC to which it is connected, enabling it to receive alarms from Trend devices sent to that address.



The supervisor port (sCNC) must be configured to allow network access to the Trend network.

Note: The local supervisor port on IQ1xx and IQ21x controllers will only give access to that controller.

#### **Physical connection**

Connection of IQVIEW8 via RS232 requires the use of an appropriate cable as shown below:

Connecting to	Cable(s) Required
IQ4 IQ3 IQ2xx	RD/SDU-IQ2COMMSCABLE 3M or 10M (RJ11 to RJ11 adapter cable with
IQ1XX with RJ11 connector	a twist).
CNCs	CABLE/EJ105651
IQ1xx with 25 Way D type connector	(RJ11 to 25 Way D type male adapter cable).
IQ1xx with 5 way in-line connector	CABLE/EJ105651 (RJ11 to 25 Way D type male adapter cable) in conjunction with CABLE/78-1172 (25 way socket to 5 in-line socket adapter cable).

# **Current Loop**

The IQVIEW8 can connect to the Trend network by connecting directly to a Trend current loop. The IQVIEW8 will form a Trend LAN with other devices on the current loop.



In order to join an internetwork, an INC type device (e.g. IQ4NC) will be required elsewhere on the current loop LAN.

The current loop may be wired in either a 2-wire or 4-wire configuration.

**Network Bypass Relay:** If the IQVIEW8 loses power a set of bypass relays will close to maintain the integrity of the current loop network. If the relays close it will be recognised by a downstream device, and reported as a LAN Changed alarm.

# **Network Discovery**

During the installation and setup process, IQVIEW8 'discovers' information about the structure, devices and modules on the Trend network which it uses to enable the viewing and adjustment of system parameters. Two discovery options are possible - Full and Partial.

Full discovery collects all available details about the Trend network, including LANs, devices and strategy modules.

Partial discovery collects LAN and device labels only (i.e. no module data).

On small sites you may choose to perform a full discovery straight away. However, in larger systems, or systems which are split into a number of functionally separate areas (e.g. a multiple occupancy building), it is recommended to use partial discovery to quickly build the structure of the entire site.

IQVIEW8 then gives the option to perform a (full) rediscovery of selected LANs, or remove LANs or devices from its memory that the unit is not required to control.

# HARDWARE

## Mounting

The IQVIEW8 can be installed in a panel or (with additional hardware), surface mounted or in-wall mounted (embedded).

Surface Mounting

Panel Mounting

In-wall Mounting



#### **Panel Mounting**

This method of mounting is suitable for panels up to 5 mm (0.2") thick. A rectangular cut-out is made in the panel, the IQVIEW8 is then inserted from the front and secured from the rear by two mounting brackets (supplied). The unit has an IP40 rating from the front when the panel is closed.

Note: Integral clips allow the unit to be self-retaining on panels up to 2 mm (0.08") thick, enabling it to be easily installed by one person. For thicker panels it is not self-retaining and will require support while the mounting brackets are fitted.

Power and networking cables can be run into the panel and then directly to the IQVIEW8.

Note: Access to the USB connector and memory card slot will require the panel to be opened.

Sufficient clearance must be allowed on the front of the panel to accommodate the display bezel, and also inside the panel to allow for the mounting brackets and cable connections. Refer to the IQVIEW8 Installation Instructions (TG201232) for dimensions.

#### **Surface Mounting**

The optional IQVIEW8 SURFACE MOUNTING BOX enables the IQVIEW8 to be mounted on any suitable flat surface such as a wall or on a panel (without the need to cut a mounting hole). The mounting box is secured to the wall and the IQVIEW8 is then clipped in from the front. When mounted in this way the unit has an IP rating of IP30.

The mounting box has fixing centres that enable it to be mounted on a standard UK or USA double-gang back box. It also enables mounting on any suitable flat surface using a 4 hole fixing.

Cable entry can be made through the cut-out at the rear of the box (e.g. from a back box) or via the 22 mm drill-outs along the top edge. The drill outs have a drill centre to aid drilling and are suitable for standard 20 mm cable glands (not supplied).

Sufficient clearance must be allowed for cable glands and cables (if used) above the unit. Refer to the IQVIEW8 Installation Instructions (TG201232) for dimensions.

A removable cover on the lower edge of the mounting box provides access to the various connectors.

#### In-Wall Mounting

The optional IQVIEW8 DRY PARTITION WALL BOX enables the IQVIEW8 to be embedded in a dry partition wall with panels of between 9.5 mm (0.35") and 25 mm (0.98") thick. The wall must be deep enough (at least 55 mm (2.17")) to accommodate the wall box.

A rectangular cut-out is made in the wall panel and the wall box is then secured in place with four retaining brackets (supplied). IQVIEW8 is then clipped into the box from the front. When mounted in this way the unit has an IP rating of IP30.

Cable entry from inside the wall can be made through the cutout at the rear of the wall box, or through the open bottom edge of the box.

Sufficient clearance must be allowed on the front of the wall to accommodate the display bezel, and also inside the wall to allow for the wall box, retaining brackets and cable connections. Refer to the IQVIEW8 Installation Instructions (TG201232) for dimensions.

#### **Input Power Supply**

The IQVIEW8 requires a 24 Vac  $\pm 15\%$ , 50/60 Hz, 20 VA (minimum) supply or a 24 Vdc 440 mA, 10.5 W (minimum) supply. For dc operation a supply with a minimum output of 600 mA is recommended.

Note: This power level cannot be provided from an IQ controller's auxiliary supply output; a separate supply is required.

A 230 V/24 Vac, 36 VA, transformer is available (ACC/24VAC). This is a sealed unit with two mounting lugs; it has an isolated 24 Vac output and an additional earth (ground) lead connected through from its input power supply earth (ground) to the 24 Vac output earth (ground) for earthing (grounding) the IQVIEW8.

A general purpose 24 Vac transformer may be used to supply the IQVIEW8, but if one side of its output is earthed (grounded), this side must be connected to the IQVIEW8's central power inlet pin 2.



For USA/Canada use a UL Listed, Class 2, 24 Vac transformer.

**WARNING:** This apparatus must be earthed (grounded) via input supply earth (ground) terminal. The earth (ground) on this unit is NOT a protective earth (ground), but it is essential that an earth is fitted for functional reasons.

The 24V supply must include a suitably rated switch in close proximity and be clearly marked as the disconnecting device for the unit. Do not position the equipment so that the disconnecting device is difficult to operate.

**CAUTION:** Do not attempt to supply power through the RS232 connector. This will cause damage to the unit.

#### Fusing

The input supply is protected by a 3.15 A fast-blow fuse; this protects the IQVIEW8 from drawing excessive current from the supply. If it blows the unit should be returned to the supplier for repair.

# **Power Failure Protection**

All configuration data is stored on the memory card (see "Memory Card"). Stored Trend network information, including the presentation modules discovered in the controller(s) (i.e. sensors, drivers, etc.) is also retained. Received alarms are not restored after a power failure.

# **Memory Card**

A 2GB memory card is supplied and fitted, and is used for storing configuration and system data in the event of a power failure.

#### Display

The IQVIEW8 has an 8" 800 x 480 pixel high colour (16 bit) LCD transmissive colour display. The backlight is LED with autodim. The autodim function enables the screen brightness to be dropped to 50% brightness after a user definable delay time (auto dim off, or 1, 2, 3, 4 or 5 minutes).

The touch screen should only be tapped using a finger; sharp objects (e.g. screwdrivers) or pointers must not be used as they may damage the unit.

#### Indicators

The following indicators are provided on IQVIEW8 giving feedback on its operational status:

Indicator	Colour	Function
System Status	Orange	Normal operation.
	Green	Unit in power save mode.
	Red	Alarm(s) received requiring action.
Ethernet LINK	Green	Status of Ethernet connection.
Ethernet DATA	Yellow	Presence of data reception.

#### Sounder

The IQVIEW8 has an internal sounder which can be configured to emit a 'beep' when the screen is touched (in Schematics) or when an alarm is received. By default, the sounder is disabled.

#### **USB** Connector

A standard USB A connector is provided for the connection of a memory stick (not included). This can be used for:

- Backing up or restoring the current configuration,
- Loading images for a screen saver slideshow,
- Importing schematic files,
- Importing or exporting users,
- Upgrading the IQVIEW8 software,
- Taking screen shots.

Note: Only USB memory sticks fully formatted FAT/FAT32 up to 2GB are supported.

# **Relay Output**

An internal relay is provided, featuring single pole changeover contacts. The relay can be configured to operate when alarms are received and thus be used to activate an external alarm sounder/indicator. Acknowledging the alarm will de-activate the relay.

Wiring examples

Load on when alarm present (relay activated)



Load on when alarm not present (relay de-activated)



**Caution:** The relay contacts **must not** be used to switch to mains voltage; see page 11 for details of contact ratings.

#### **Service Button**

The service button can be used to restore the unit's factory default configuration settings. This feature should only be accessed when instructed by Trend Technical Support.

# FIELD MAINTENANCE

The screen should be cleaned regularly to remove dust and grease by wiping gently with a soft cloth such as that used for spectacles. A special screen cleaning mode can be selected to disable the touch screen during cleaning.

# DISPOSAL

COSHH (Control of Substances Hazardous to Health - UK Government Regulations 2002) ASSESSMENT FOR DISPOSAL OF IQVIEW8.

#### RECYCLING 🏶.

All plastic and metal parts are recyclable. The printed circuit board may be sent to any PCB recovery contractor to recover some of the components for any metals such as gold and silver.

# COMPATIBILITY

The IQVIEW8 can connect to a single Trend site. It will show any device, and identify those who respond to W comms. Autodialled LANs and remote Ethernet sites cannot be accessed.

**Controllers:** IQVIEW8 is compatible with IQ1xx controllers version 6.5 and above and all IQ2xx, IQ3, IQ4, IQeco, and IQL controllers. FNC/FC controllers are not supported.

**Alarms:** IQVIEW8 supports general, item, critical, and network alarms from devices on the network. It supports alarms retransmitted from 962/963, however alarms retransmitted from earlier supervisors (e.g. 945) are not supported. IP alarms from IQ3 and IQ4 controllers are not supported.

NKSV and BBUF notifications are ignored.

**Time Schedules:** IQVIEW8 can view and adjust the operating times in IQ1, IQ2, IQ3 and IQ4 controllers. For IQ1 and IQ2 controllers it can adjust the standard and current weeks, and when supported by the controller set up and adjust the Holiday Calendar times. For IQ3 and IQ4 controllers it can adjust the normal week, and set up and adjust the exception times.

IQVIEW8 will not discover modules without labels.

# INSTALLATION

The IQVIEW8 is designed for rear panel mounting. A rectangular cutout needs to be made in the panel then the unit can be inserted into the hole and fixed into place using the two mounting brackets. Use of the surface mounting or in wall mounting kit enables the unit to be either surface or in wall mounted.

All units are UL rated as 'UL916, listed open energy management equipment'.



WARNING: Contains no serviceable parts. Do not attempt to open the unit. Failure to comply may cause damage to the unit.

#### WEEE Directive:

At the end of their useful life the packaging, and product should be disposed of by a suitable recycling centre. Do not dispose of with normal household waste.

Do not burn.

**Plots:** IQVIEW8 supports synchronised, triggered, and periodic plots.

**Supervisors/Tools:** IQVIEW8 will be learnt by SET, and 963 and appear in the navigation tree.

**Network connection:** IQVIEW8 supports connection to the Trend network using Ethernet, current loop LAN, or RS232 to suitable a network node.

**Schematics:** IQVIEW8 supports schematic pages exported from 963 using the 96x Schematic Export Utility. See the 96x Schematic Export Utility Manual (TE201242) for a full list of supported 963 actions.

**GraphIQs:** It supports the display of GraphIQs from IQ3 and IQ4 controllers. The 'clickable' action available on GraphIQs is not supported by IQVIEW8. This means that links to module detail pages, module type pages, web pages, other GraphIQs and email will not work.

The procedure involves:

Mounting the unit Running necessary power, communications, and relay (optional) connections Connecting power (do not power up), communications, and relay wiring Reading 'End User Licence Agreement' Powering up Configuring the unit Testing the unit's configuration.

A full description of installing the unit is given in the IQVIEW8 Installation Instructions (TG201232). Details on configuring and using the IQVIEW8 is given in the IQVIEW8 Configuration Manual (TE201233).

# **ORDER CODES**

IQVIEW8/24	IQVIEW8 including 2GB memory card.
IQVIEW8 SURFACE MOUNTING BOX	Kit for mounting IQVIEW8 on a flat surface, or UK or USA double-gang back
	DOX.
IQVIEW8 DRY PARTITION WALL BOX	Kit for mounting IQVIEW8 embedded in an dry partition wall.
RD/SDU-IQ2COMMSCABLE3M	CABLE/EJ105046 - 3m RJ11 plug to RJ11 plug with crossover to connect
	to IQ4, IQ3, IQ2xx, and IQ1xx controller's with RJ11 local supervisor port connector.
RD/SDU-IQ2COMMSCABLE10M	CABLE/EJ105047 - 10m RJ11 plug to RJ11 plug with crossover to connect to IQ4, IQ3, IQ2xx, and IQ1xx controller's with RJ11 local supervisor port connector.
CABLE/EJ105651	RJ11 to 25 way D type male to connect to IQ1xx controller's with RJ11 local supervisor port connector and to a CNC.
ACC/24VAC	230/24 Vac, 36 VA, transformer for IQVIEW8 with surface mounting lugs, and through earth (ground) connection.

# **SPECIFICATION**

# ELECTRICAL

		Current Loop	)					
Power Input	:24 Vac ±15%, 50/60 Hz or 24 Vdc ±10%	Transmission	:2	20 mA, tw	/o wii	re current	loop, opto-	
Power Consumption			is	olated, po	larity	independe	nt receiver,	
24 Vac	:20 VA max.		ba	alanced tra	ansm	itter.		
24 Vdc	:440 mA, 10.5W	Baud Rate: 1K2, 4K8, 9K6, 19K2, settable in u						
Power Failure Protectio		interface.						
Configuration data	:SD/MMC flash memory card.	Distance (node	e to node) :d	ependent	on ca	ble type an	d baud rate	
Display			(s	ee table b	elow)	):		
Type:	:LCD transmissive colour touch screen.		1			Devel Dete		
Size / Resolution	:8" / 800 x 480 pixel.	Cable	Type	- I - I	E	saud Rate		
Colour depth	:High colour (16 bit).		- 76-	1k2	4k8	9k6	19k2	
Backlight	:LED WITH AUTOCIM.	Trend	Shielded					
Sounder	.Plezo electric - SPL 65 dBA (@ 1 m	TP/1/1/22/	twisted pa	ir		700 m	350 m	
Alarm Relay	Cingle note change over	HF/200	1 pair (2			(765 yds)	(380 yds)	
Type Contact rating		Belden 8761	conductor	s)				
Contact rating	$(20)$ $(ac)$ max at $2 \land 24$ $(ac)$ at $2 \land 4$	Trend	Shielded					
	(50 Vac max at 2 A, 24 Vac at 2.5 A).	TP/2/2/22/	twisted pa	ir 1000	) m	500 m	250 m	
	(40) //dc max at 1.54, 24 //dc at 2.5 A)	HF/200	2 pairs (4	(1090	vds)	(545 yds)	(270 yds)	
	Note: III rating applies up to 20 V	Belden 8723	conductor	s)	, ,	,		
	maximum $\bigcirc 24$	Belden 9182	Twinaxial	(2			700 m	
			conductor	s)		1000 m	(765 vds)	
Ethernet Network		Belden 9207	Twinavial	$\frac{7}{(2)}$		(1090 vds)	500 m	
Transmission	10/100 BASE-T (IEE 802 3)	Deldell 5207	conductor	( <u>~</u> s)		(1000 Juo)	(545 vds)	
Connection	·R.145 auto MDI-X		Conductor	•/		I	(040 yuo)	
Cable Type	Cat 5e UTP (unshielded twisted pair)	Note <sup>.</sup> Adiacen	nt devices i	nav speci	ifv dif	ferent maxi	mum cable	
Distance (to hub)	100 m (109 vds) maximum	lengths and ba	ud rates Th	ne shortes	t cabl	e lenath (for	the chosen	
( )		baud rate) app	lies when co	onnectina	to the	IQVIFW8 c	urrent loop	
RS232 Port								
Transmission	:RS232. EIA/TIA.232E. V28	Indicators						
Distance	:10 m (11 yards) maximum.	System Status	s :C	Green/Red	I LED	(shows ar	een. red or	
Baud Rate	:1k2, 4k8, 9k6 (default), 19k2, 38k4,	5	01	orange depending on status)				
	settable in user interface.	Ethernet LINK		:Green LED.				
		Ethernet DATA	Α :Y	:Yellow LED.				
MECHANICAL								
IQVIEW8		Connectors						
Dimensions (WxHxD)	:255 mm (10.02") x 175 mm (6.9")	Power						
	x 48 mm (1.88") including brackets.	Connector	rtype :3	-way 2 pa	rt con	nector with	rising cage	
Weight	: 1.07 kg (2.36 lb)		cl	amp screv	<i>w</i> tern	ninals.		
Material	: Mainly PCABS FR	Cable size	e :0	.5 to 2.5 n	nm² (2	20 to 14 AW	/G)	
		Current Loop						
<b>IQVIEW8 SURFACE M</b>	IOUNTING BOX	Connector	rtype :4	-way 2 pa	rt con	nector with	rising cage	
Dimensions (WxHxD)	:244 mm (9.6") x 203 mm (8")		cl	amp screv	<i>w</i> tern	ninals.		
	x 46.5 mm (1.83")	Cable size	e :0	.5 to 2.5 n	nm² (2	20 to 14 AW	/G)	
Weight	: 0.53 kg(1.17 lb)	Relay Output						
Material	: Mainly PCABS FR	Connector	rtype :3	-way 2 pa	rt con	nector with	rising cage	
			cl	amp screv	<i>w</i> tern	ninals.		
IQVIEW8 DRY PARTIT		Cable size	e :0	1.5 to 2.5 n	nm² (2	20 to 14 AW	/G)	
Dimensions (WxHxD)	:234 mm (9.21") x 170 mm (6.7")	RS232 Port	:F	KJ11 (FCC	68).			
	x 60 mm (2.36")	Ethernet Port	:F	J45 socke	et			
Weight	: 0.265 kg (0.58 lb)	USB Port	:L	ISB Type	A soc	ket.		
material	Chassis 1.2 mm ROSH compliant							
	black zinc plated mild steel.							

# SPECIFICATION (continued)

# ENVIRONMENTAL

	Storage	:-20 °C (-4 °F) to 70 °C (158°F)
:EN61326 -1: 2006	Operating	:-10 °C (14 °F) to 60 °C (140 °F)
:Table 2 For equipment used in industrial locations	Humidity	:0 to 85 %RH non-condensing up to 40 °C (104 °F)
:Class B	Altitude	:<2000 m (6562')
:EN60950-1:2006	Protection	
:NO68111	Panel mounting	:IP40 (from front if correctly mounted
:UL rated as 'UL916 listed open energy		with panel closed)
management equipment' (E219709).	Surface mounting	:IP30
:CSA22.2 No. 205-M1983 - Signal Equipment	In-wall mounting	:IP30
	<ul> <li>EN61326 -1: 2006</li> <li>:Table 2 For equipment used in industrial locations</li> <li>:Class B</li> <li>:EN60950-1:2006</li> <li>:NO68111</li> <li>:UL rated as 'UL916 listed open energy management equipment' (E219709).</li> <li>:CSA22.2 No. 205-M1983 - Signal Equipment</li> </ul>	C       Ambient Limits         Storage       Storage         Storage       Operating         Table 2 For equipment used in industrial locations       Humidity         Iccations       Altitude         :Class B       Altitude         :EN60950-1:2006       Protection         :NO68111       Panel mounting         :UL rated as 'UL916 listed open energy management equipment' (E219709).       Surface mounting         :CSA22.2       No. 205-M1983 - Signal       In-wall mounting

Ambient Limits

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# **Trend Control Systems Limited**

St. Mark's Court, North Street, Horsham, West Sussex, RH12 1BW, UK. Tel: +44 (0)1403 211888, www.trendcontrols.com