Important: Retain these instructions

These instructions shall be used by trained service personnel only. If the equipment is used in a manner not specified by these instructions, the protection provided by the equipment may be impaired.
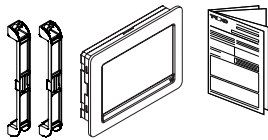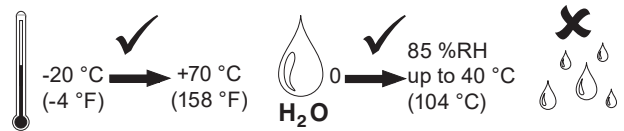
https://partners.trendcontrols.com

CONTENTS

1 BOX CONTENTS

IQ®View8 Installation Instructions (TG201232)

2 STORING (Altitude: <2000 m (6562'))

-20 °C (-4 °F) ➜ +70 °C (158 °F)

H_2O 0 ➜ 85 %RH up to 40 °C (104 °C)

3 INSTALLATION

> **WARNING** Do not attempt to open the unit. Failure to comply may cause damage to the unit.

> It is recommended that the installation should comply with the local electrical safety installation practices (e.g. HSE Memorandum of Guidance on Electricity at Work Regulations 1989, USA National Electric Code).

Labels used on IQVIEW8

Service button	Service button
RX+ RX- TX+ TX- 10 9 8 7	Connector for Trend current loop network
C NO NC 6 5 4	Connector for relay output
Memory card slot	Memory card slot

A	USB A connector
RS232	RJ11 (FCC68) connector for RS232 connection
Ethernet	Ethernet connector
24 Vac/dc ⊥	Connector for 24 Vac/dc input power. ⊥ AC power line return

3.1 Installation - Mounting

① Dimensions

IQVIEW8 (with mounting brackets)

255 mm (10.02")
239 mm (9.42")
230.0 mm (9.05")
48 mm (1.88")
37.7 mm (1.48")
30 mm (1.19")
90 mm (3.54")
175 mm (6.9")

IQVIEW8 SURFACE MOUNTING BOX (Surface Mounting)

243.5 mm (9.6")
46.5 mm (1.83")
202.5 mm (8")

IQVIEW8 Installation Instructions TG201232 Issue 9, 30-May-2017. Applies to v1.30.

1

3.1 Installation- Mounting (continued)

1   **Dimensions** (continued)

IQVIEW8 DRY PARTITION WALL BOX (In Wall Mounting)

220 mm (8.66")

60 mm (2.36")

170 mm (6.7")

Operating Altitude: <2000 m (6562')

-10 °C (+14 °F) → +60 °C (+140 °F) ✓

H_2O 0 %RH → 85 %RH up to 40 °C (104 °C) ✓

2   **Mounting Requirements**

Unit is UL rated as 'UL916 listed open energy management equipment'.

3   **Remove Connectors**

Important: Keep connectors

4   **Check Gasket is in Position**

5   **Select Mounting Method**

IQVIEW8, when configured as recommended, is designed to increase the security of files present or transferred on the removable media (SD card and USB stick). However, for additional security if the unit is in an area of unrestricted access, the panel mount option must be used and the panel door must be locked. Surface mount and in wall mount options give easy access to the removable media and cables and therefore must not be used.
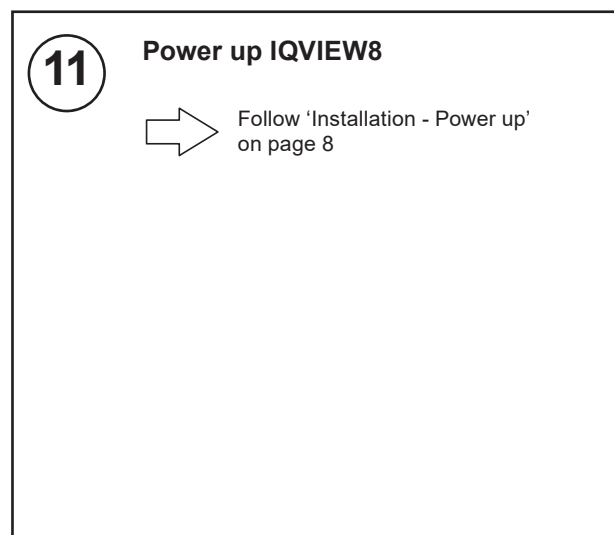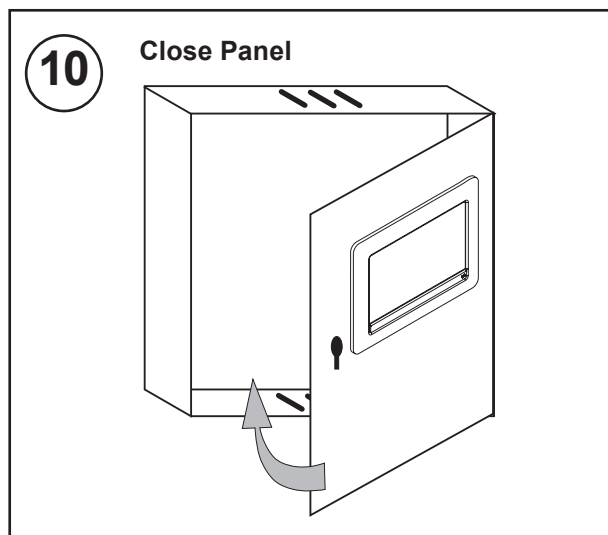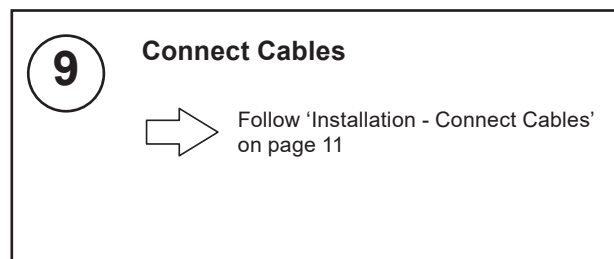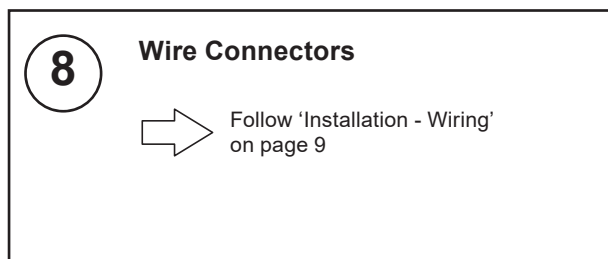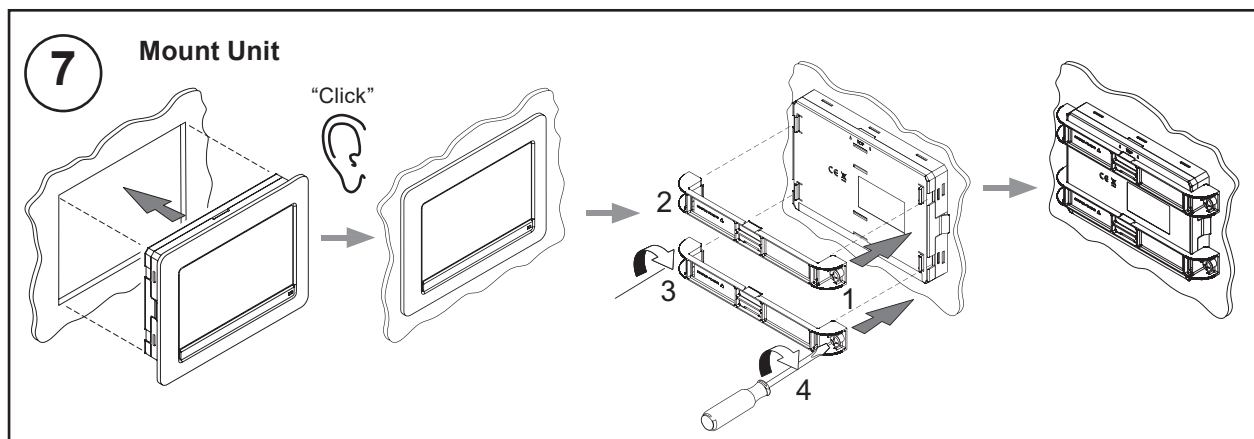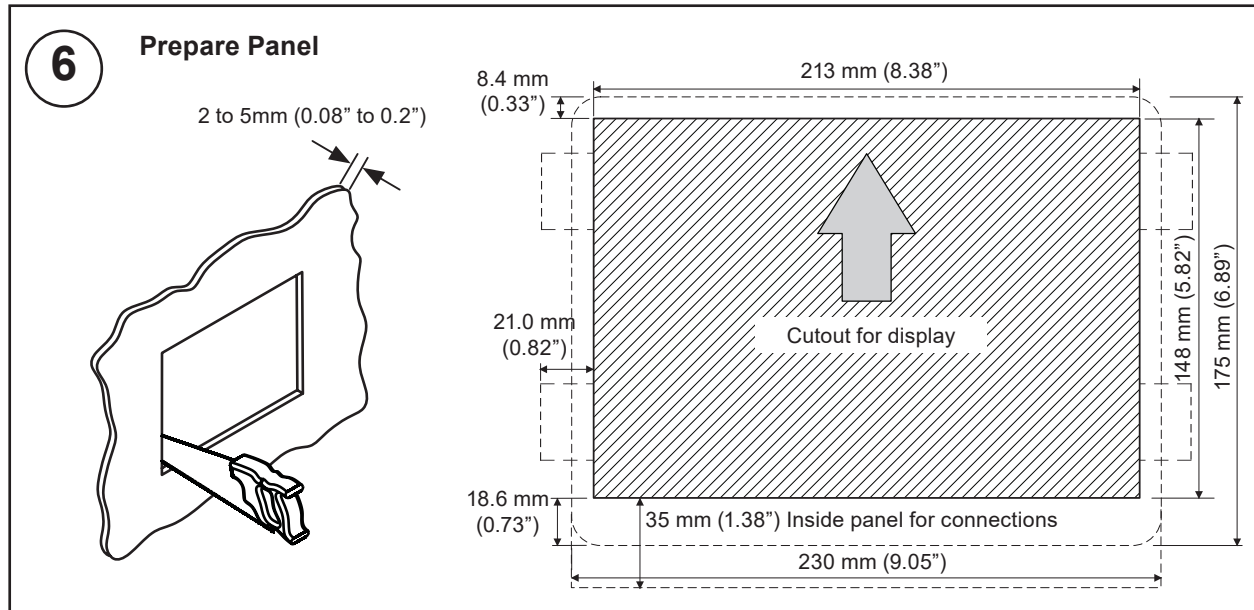
Panel Mounting

Go to step 6 on page 3

Surface Mounting

Go to section 3.2 page 4

In Wall Mounting

Go to section 3.3 page 6

3.1   Installation- Mounting (continued)

6 **Prepare Panel**

2 to 5mm (0.08" to 0.2")

8.4 mm (0.33")

213 mm (8.38")

21.0 mm (0.82")

Cutout for display

148 mm (5.82")

175 mm (6.89")

18.6 mm (0.73")

35 mm (1.38") Inside panel for connections

230 mm (9.05")

7 **Mount Unit**

"Click"

2

3

1

4

8 **Wire Connectors**

⇨ Follow 'Installation - Wiring'
on page 9

9 **Connect Cables**

⇨ Follow 'Installation - Connect Cables'
on page 11

10 **Close Panel**

11 **Power up IQVIEW8**

⇨ Follow 'Installation - Power up'
on page 8

3.2   Installation - On a Wall (Requires IQVIEW8 SURFACE MOUNTING BOX sold separately)

1   **Remove Gasket**

2   **Remove Drill Outs** (if required)

Ø = 22 mm (0.87")

3   **Fit UK or US Double Pattress Box** (if required)

Either: UK Double Pattress Box

243.5 mm (9.6")

202.5 mm (8")

Or: US Double Pattress Box

243.5 mm (9.6")

202.5 mm (8")

4   **Prepare Mounting Holes** (for flat surface, and UK/US double pattress mounting)

Mark hole positions

243.5 mm (9.6")

160 mm (6.3")

150 mm (5.9")

202.5 mm (8")

160 mm (6.3")

Drill holes and insert plugs

4 holes Ø = 5 mm (0.20")
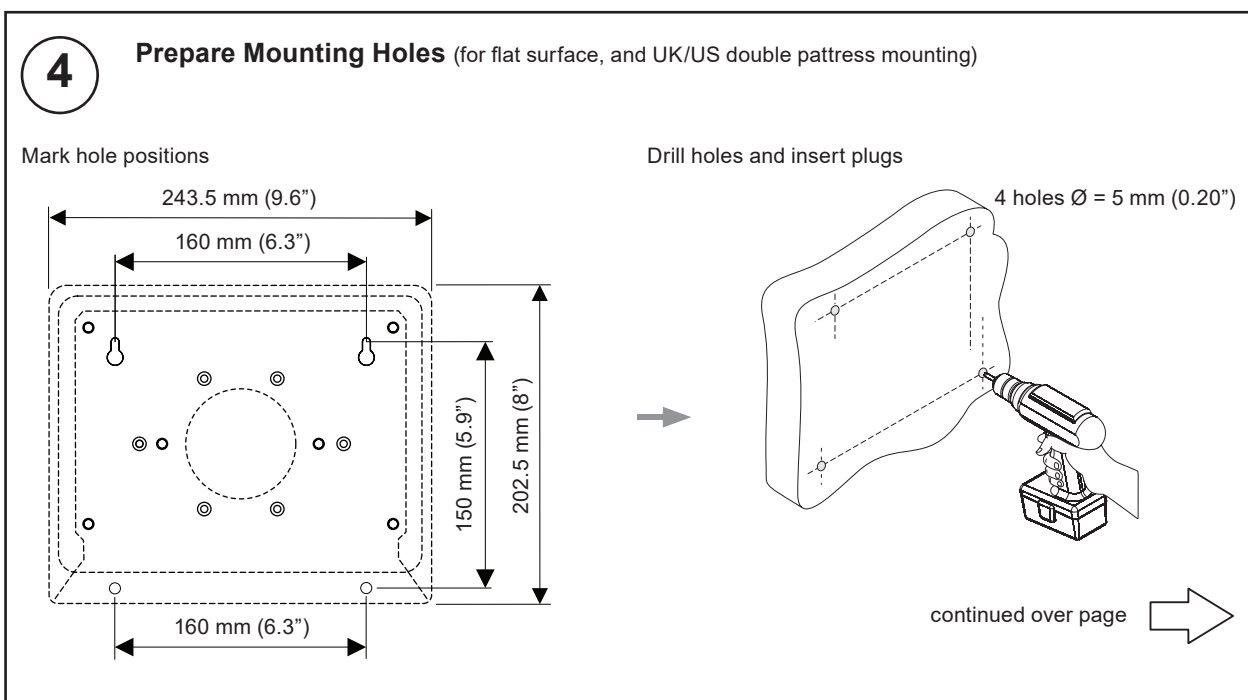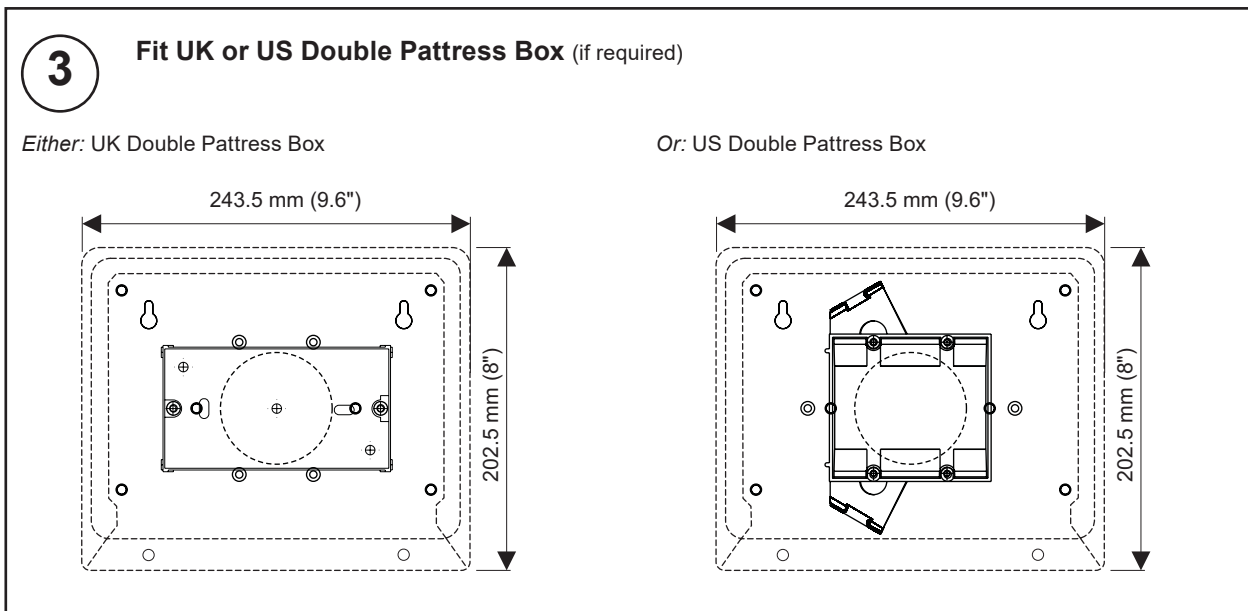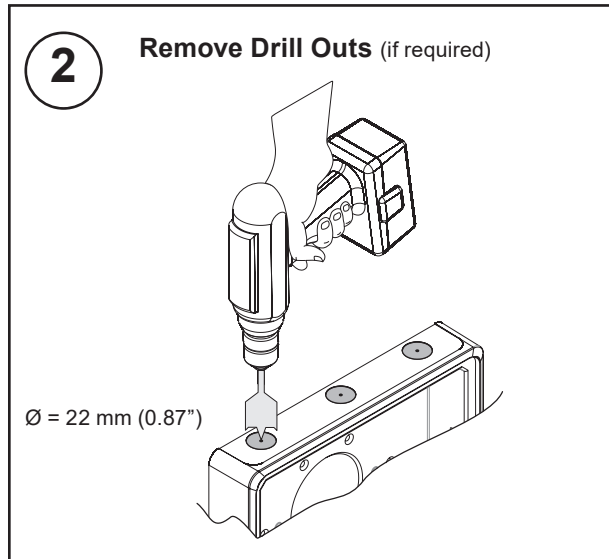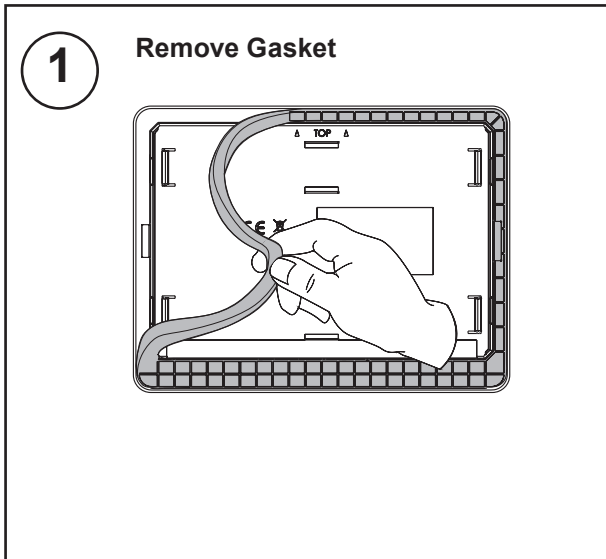
3.2 Installation - On a Wall (continued)

4 **Prepare Mounting Holes** (for flat surface, and UK/US double pattress mounting) (continued)

Insert top 2 screws

3 mm (0.12")

5 **Mount Enclosure**

Either: UK Double Pattress Box

Or: US Double Pattress Box

Then: (for flat surface and UK/US double pattress box)

6 **Route Cables**

Either: Using Drill outs

If routing cables through the drill outs run the cables to into the enclosure using 20 mm gable glands (not supplied).

Or: into rear of enclosure

If routing cables from a pattress box run the cable to the pattress box as required, and then into the rear of the enclosure.
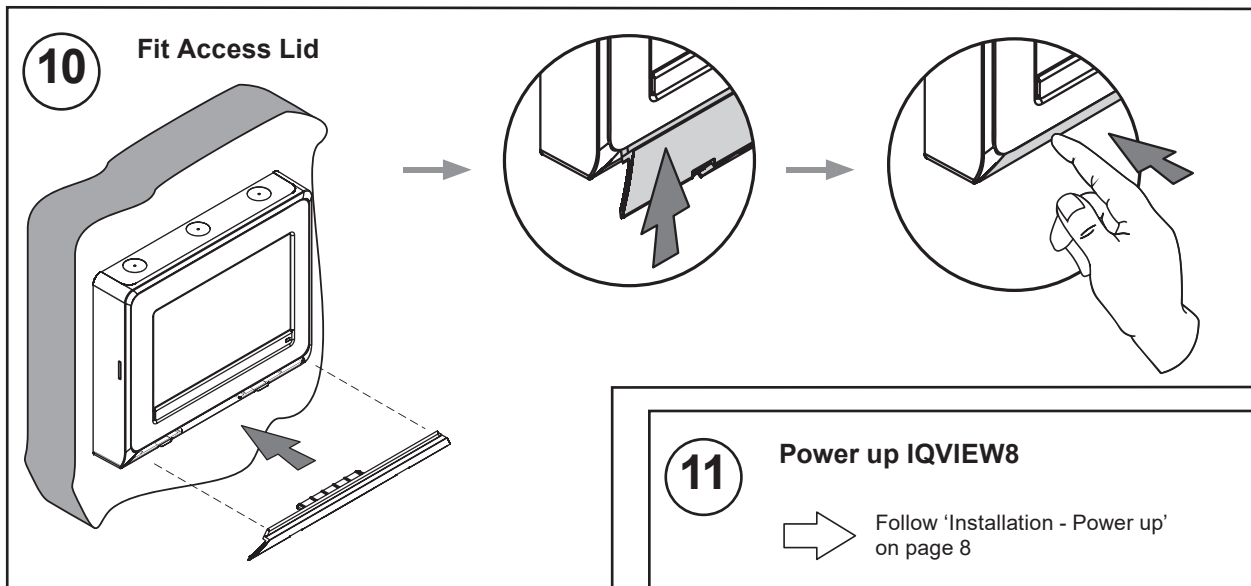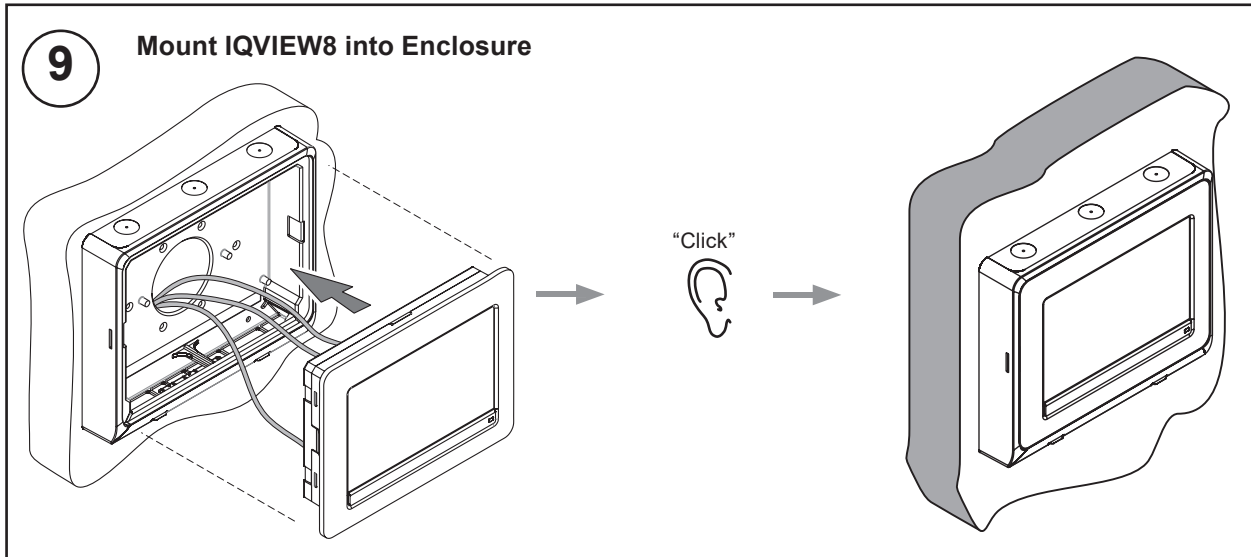

7 **Wire Connectors**
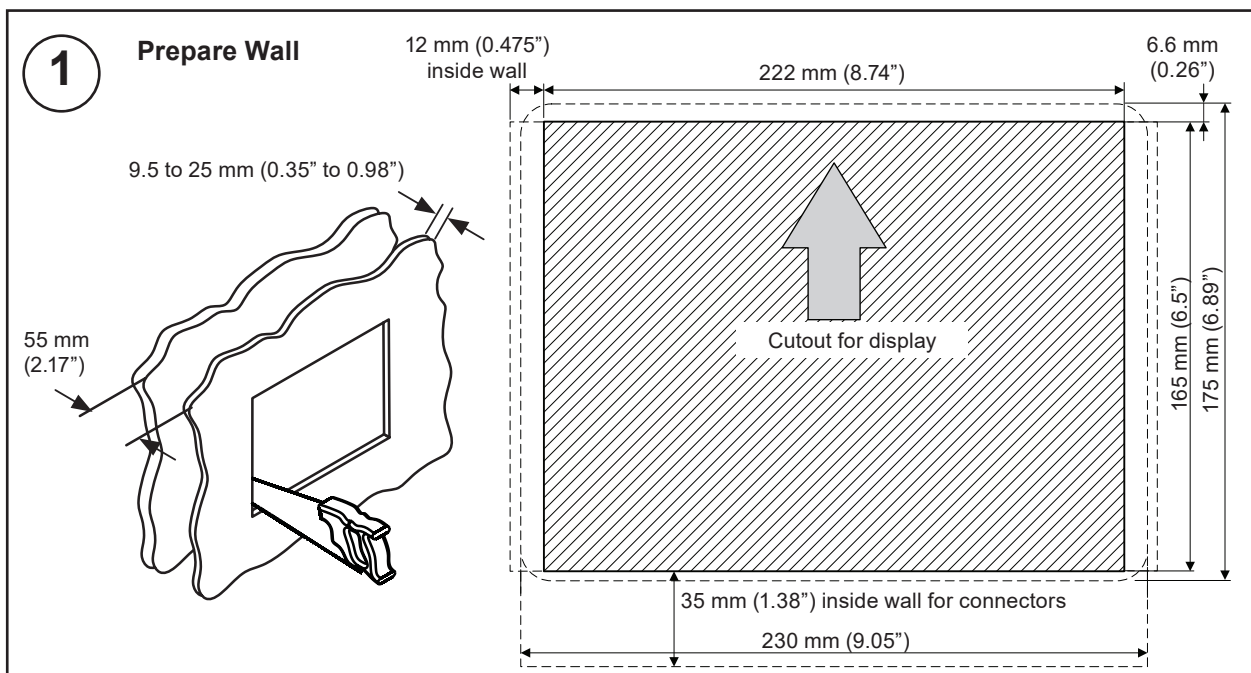
Follow 'Installation - Wiring' on page 9

8 **Connect Cables**

Follow 'Installation - Connect Cables' on page 11

3.2   Installation- On a Wall (continued)

9   **Mount IQVIEW8 into Enclosure**

"Click"

10   **Fit Access Lid**

11   **Power up IQVIEW8**

Follow 'Installation - Power up'
on page 8

3.3   Installation - In a Dry Partition Wall (Requires IQVIEW8 DRY PARTITION WALL BOX sold separately)

1   **Prepare Wall**

12 mm (0.475")
inside wall

6.6 mm
(0.26")

222 mm (8.74")

9.5 to 25 mm (0.35" to 0.98")

55 mm
(2.17")

Cutout for display

165 mm (6.5")

175 mm (6.89")

35 mm (1.38") inside wall for connectors

230 mm (9.05")

3.3 Installation - In a Dry Partition Wall (continued)

2   **Remove Gasket**

3   Mount Chassis

Loosen locking screws

4 places

Insert chassis in hole

Adjust brackets

4 places

Tighten adjustment screws

4 places

Tighten locking fixing screws

4 places

4   **Route Cables**

Either: into Rear of Chassis

Cables can be routed inside the wall and into the rear of the chassis.

Or: Bottom Edge

Cables can be routed inside the wall and through the bottom edge of the chassis.

Or: Top Edge

3.3   Installation - In a Dry Partition Wall (continued)

5 **Wire Connectors**

Follow 'Installation - Wiring' on page 9

6 **Connect Cables**

Follow 'Installation - Connect Cables' on page 11

7 **Mount IQVIEW8 into Chassis**

"Click"

8 **Power up IQVIEW8**

Follow 'Installation - Power up' on page 8

3.4   Installation - Power up

1 **Read Licence**

Read and agree to the end user licence agreement, see section 4.
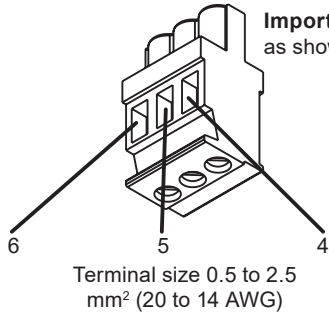
2 **Switch On**

O

I

3 **Check Indicators**

	Normal Operation ✓	Fault ✗
Power	☼ Orange	♡ Check power supply

4 **Configure**

IQVIEW8 Configuration Manual (TE201233). Refer to the 'Securing IQVIEW8' section of the manual for details on how to secure IQVIEW8.
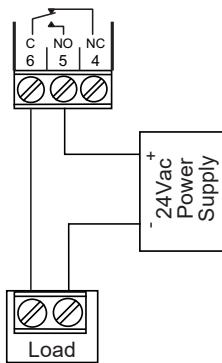
i

3.5   Installation - Wiring

1 **Wire Relay Connector** (if required for alarm notification)

Important: Orientate connector as shown.

AC rating: 60 VA. e.g 30 Vac max @ 2 A, 24 Vac @2.5 A

DC rating: 60 W. e.g. 40 Vdc max @ 1.5 A, 24 Vdc @ 2.5 A

### Do not connect 230V input power to this connector.

6   5   4

Terminal size 0.5 to 2.5 mm^2 (20 to 14 AWG)

Arc suppression recommended.

Note: For UL rating CU only cable must be used.

Relay Output Arc Suppression Installation Instructions (TG200208)

On when Alarm present (Relay energised)

C   NO   NC
6   5   4

+ 24Vac Power Supply −

Load

On when Alarm not present (Relay off)

C   NO   NC
6   5   4

+ 24Vac Power Supply −

Load
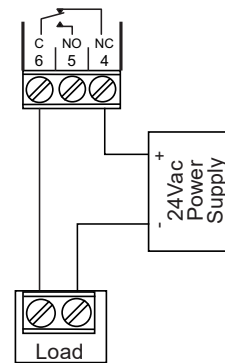
2 **Wire Current Loop** (if required for network connection)

Important: Orientate connector as shown.

10   9   8   7

Polarity independent
Terminal size 0.5 to 2.5 mm^2 (20 to 14 AWG)
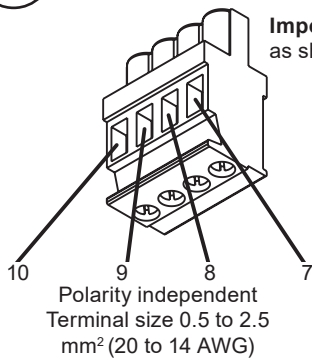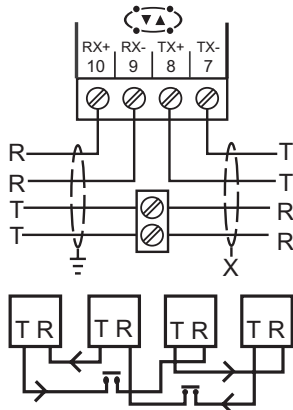
Cable	1k2 baud	4k8 baud	9k6 baud	19k2 baud	No. of Wires
Belden 9182	1000 m (1090 yds)	1000 m (1090 yds)	1000 m (1090 yds)	700 m (765 yds)	2
Belden 9207	1000 m (1090 yds)	1000 m (1090 yds)	1000 m (1090 yds)	500 m (545 yds)	2
Trend TP/1/1/22/ HF/200 (Belden 8761)	1000 m (1090 yds)	1000 m (1090 yds)	700 m (765 yds)	350 m (380 yds)	2
Trend TP/2/2/22/ HF/200 (Belden 8723)	1000 m (1090 yds)	1000 m (1090 yds)	500 m (545 yds)	250 m (270 yds)	4

4 wire

RX+   RX-   TX+   TX-
10   9   8   7

R ───── T
R ───── T
T ───── R
T ───── R

T R   T R   T R   T R

2 wire

RX+   RX-   TX+   TX-
10   9   8   7

R ───── T
R ───── T

T R   T R   T R   T R
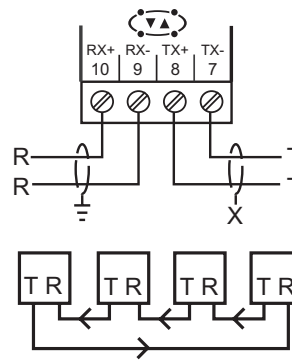
3.5   Installation - Wiring (continued)

3   **Wire Power Connector** ⚠️

Important: Orientate connector as shown.

3   2   1

Terminal size 0.5 to 2.5 mm² (20 to 14 AWG)
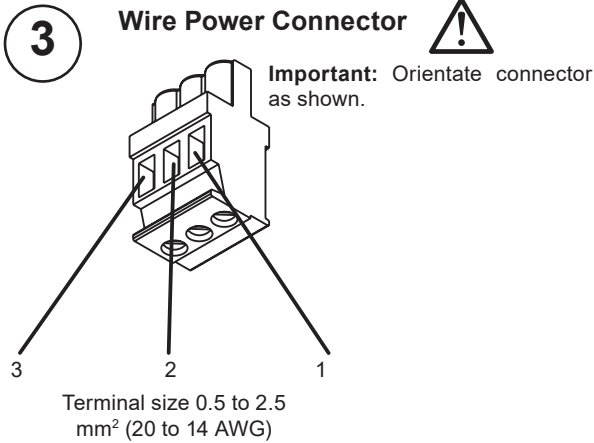
Note: For UL rating the input power connections must be made using 18 AWG or larger wire rated at least 90°C.

General Connections
24 Vac

24 Vac/dc
⏚ ⊥ ∿
3 | 2 | 1

⏚ 24 Vac

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

24 Vdc

24 Vac/dc
⏚ ⊥ ∿
3 | 2 | 1

0 V
⏚ 24 Vdc

230 Vac/24Vac transformer with isolated output (e.g. ACC/24VAC)

24 Vac/dc
⏚ ⊥ ∿
3 | 2 | 1

24 Vac

E   N   L
230 Vac

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

24 Vac ±15% 50/60 Hz at 20 VA minimum or 24 Vdc 440 mA, 10.5 W. For dc a dc supply with a minimum output of 600 mA is recommended.
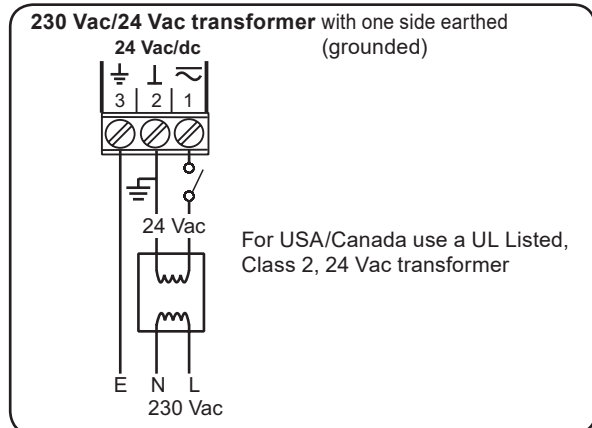

🚫 **DO NOT SWITCH ON POWER**

Do not connect 230V input power to this connector.

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.

Input power supply: 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.
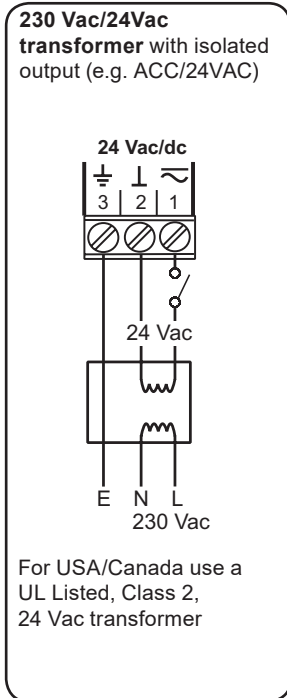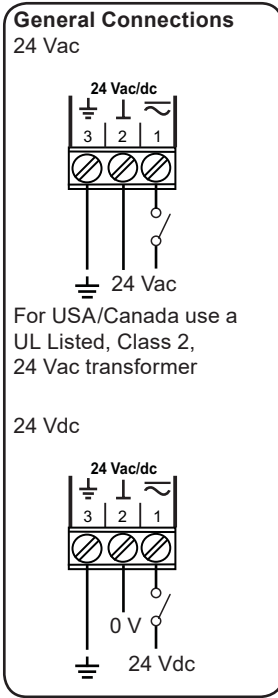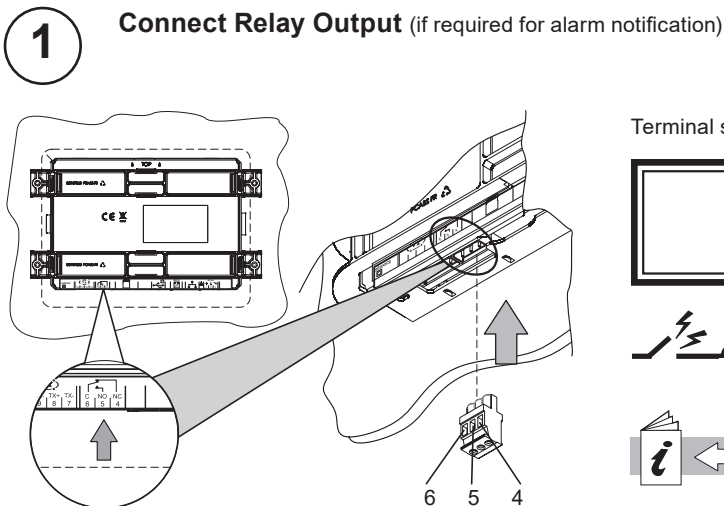

Note; The required power cannot be provided by a controller's auxiliary supply output; a separate supply is required.

230 Vac/24 Vac transformer with one side earthed (grounded)

24 Vac/dc
⏚ ⊥ ∿
3 | 2 | 1

24 Vac

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

E   N   L
230 Vac

Some transformers are earthed (grounded) on one side of the secondary. If so ensure the earthed (grounded) side is connected to the central terminal of the power connector. If the polarity of the connection is incorrect the unit will not power up. If this happens swap the connections to the right (∿) and central (⊥) terminals.

3.6   Installation - Connect Cables

1   **Connect Relay Output** (if required for alarm notification)

6   5   4

Terminal size 0.5 to 2.5 mm² (20 to 14 AWG)

Do not connect 230V input power to this connector.

Arc suppression recommended.

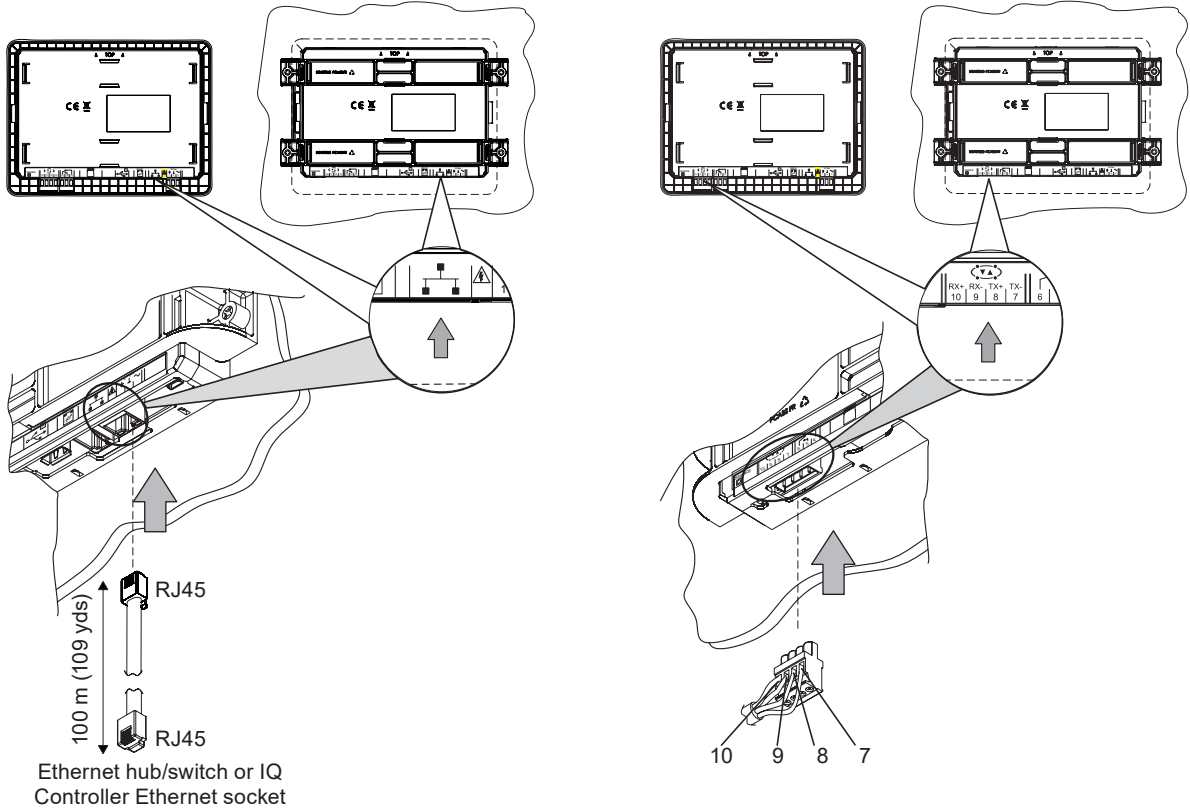ℹ️ Relay Output Arc Suppression Installation Instructions (TG200208)

3.6   Installation - Connect Cables (continued)

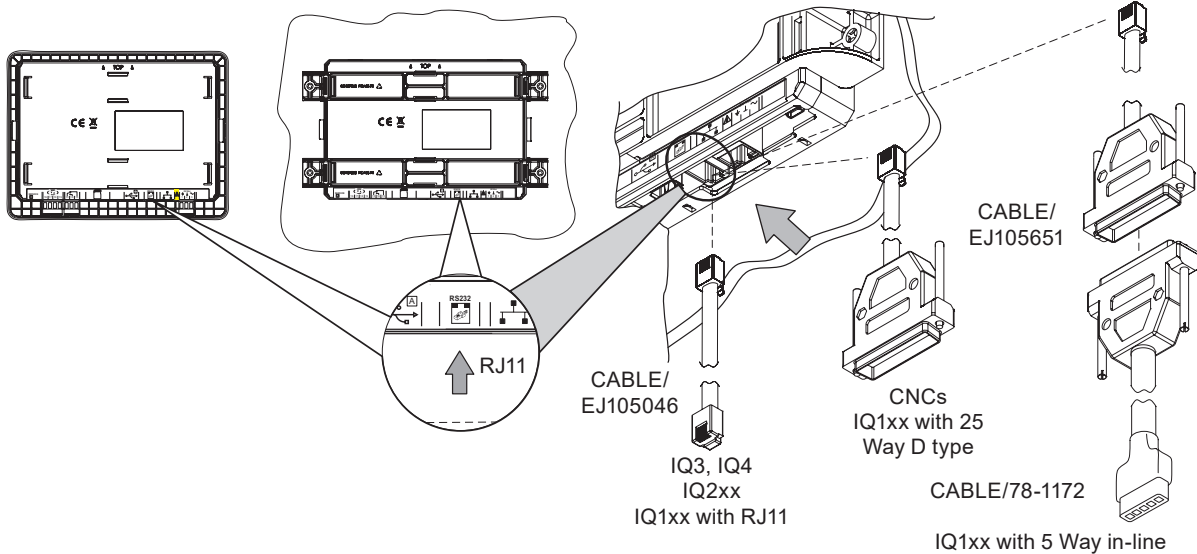**2**   **Connect Network Cable**

Either: Ethernet   *Or:* Current Loop

Note: When connected to an IQ controller's Ethernet socket the controller's vCNC must be set up.

RJ45

100 m (109 yds)

RJ45

Ethernet hub/switch or IQ Controller Ethernet socket

RX+	RX-	TX+	TX-		
10	9	8	7		6

10   9   8   7

Or: RS232

RS232

RJ11

CABLE/
EJ105046

IQ3, IQ4
IQ2xx
IQ1xx with RJ11

CABLE/
EJ105651

CNCs
IQ1xx with 25
Way D type

CABLE/78-1172

IQ1xx with 5 Way in-line

Connecting to	Cable Required
IQ4, IQ3, IQ2xx, or IQ1xx with RJ11 connector	RJ11 to RJ11 cable with a twist (CABLE/EJ105046).
CNCs, or IQ1xx with 25 Way D type connector	RJ11 to 25 way D type cable (CABLE/EJ105651).
IQ1xx with 5 way in-line connector	RJ11 to 25 Way D type cable (CABLE/EJ105651) and 25 way D type socket to 5 in-line adapter cable (CABLE/78-1172).

3.6 Installation - Connect Cables (continued)

③ Connect Power Cable

DO NOT TURN ON POWER

Do not connect 230V input power to this connector.

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.

Input power supply: The 24V supply must include a suitably rated switch in close proximity and be clearly marked as the disconnecting device for the unit.

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5 CLEANING AND MAINTENANCE

There are no serviceable parts inside the unit. Cleaning of the unit should be carried out in order to avoid buildup of dust or other containments. **Disconnect power before carrying out any cleaning**. Clean surfaces with a cloth moistened with water.

6 DISPOSAL

Remove all personal data from the unit before disposal.

WEEE Directive:
At the end of their 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.

TR CU Certification

Trend Control Systems Limited