ECx-Display

Product Description

The ECx-Display is a full-color backlit display accessory for the ECB and ECL 203 / 300 / 400 / 600 Series controllers as well as the ECLYPSE™ Connected Controller.

Through its user-friendly interface, the ECx-Display allows quick and easy real-time access to view and modify many controller options such as PID loops, schedules and calendars, favorites, alarms, and overrides (refer to controller datasheet for complete compatibility).

General Installation Requirements

For proper installation and subsequent operation of the device, pay special attention to the following recommendations:

☐ It is recommended that the controller(s) be kept at room temperature for at least 24 hours before installation to allow any condensation that may have accumulated due to low temperature during shipping/storage to evaporate.

☐ Upon unpacking, inspect the contents of the carton for shipping damages. **Do not install a damaged device.**

☐ The device is designed to operate under environmental conditions that are specified in its datasheet.

☐ Ensure proper ventilation of the device and avoid areas where corroding, deteriorating or explosive vapors, fumes or gases may be present.

☐ Allow for proper clearance around the device's enclosure and wiring terminals to provide easy access for hardware configuration and maintenance.

☐ When installing in an enclosure, select one that provides sufficient surface area to dissipate any heat generated by the device and by any other devices installed in the enclosure. A metal enclosure is preferred. If necessary, provide active cooling for the enclosure.

☐ The device's datasheet specifies the power consumption (amount of heat generated), the operating temperature range, and other environmental conditions the device is designed to operate under.

☐ Ensure that all equipment is installed according to local, regional, and national regulations.

☐ Do not drop the device or subject it to physical shock.

☐ If the device is used and/or installed in a manner not specified by Distech Controls, the functionality and the protection provided by the device may be impaired.

⚠ Make wiring connections to the device last. Pulling the cable while it is connected can damage the connector.

⚠ Any type of modification to any Distech Controls product will void the product's warranty
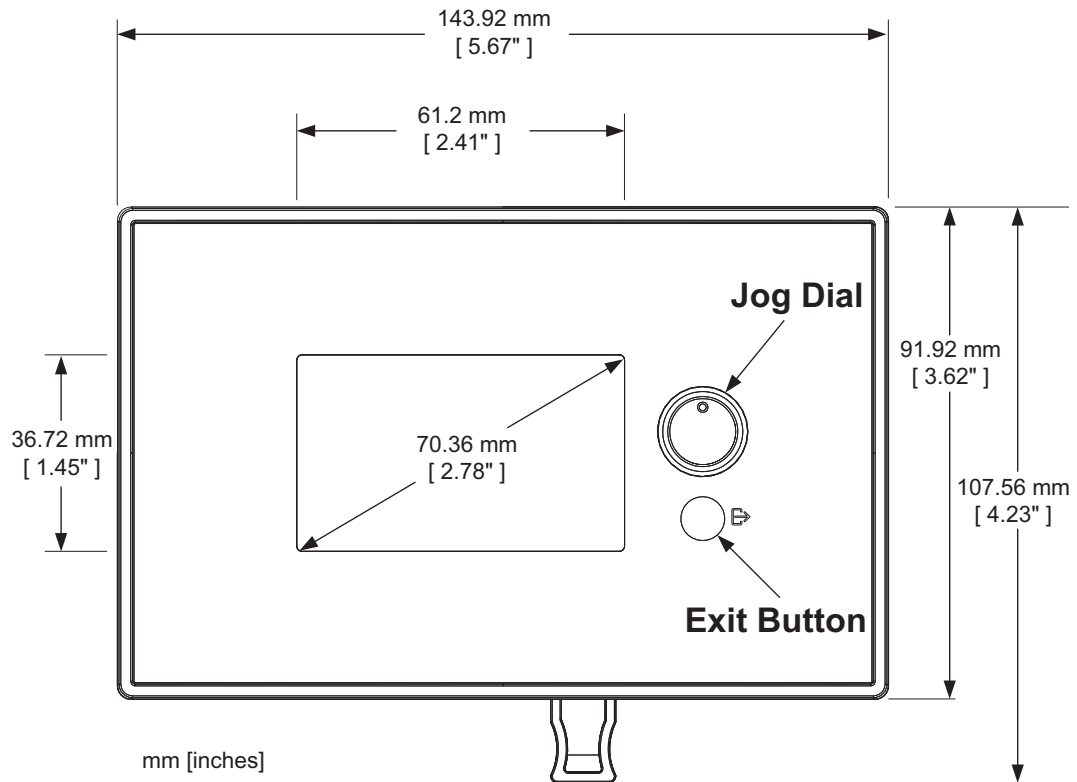
♻ Take reasonable precautions to prevent electrostatic discharge to the device when installing, servicing or during operation. Discharge accumulated static electricity by touching one's hand to a well-grounded object before working with the device.
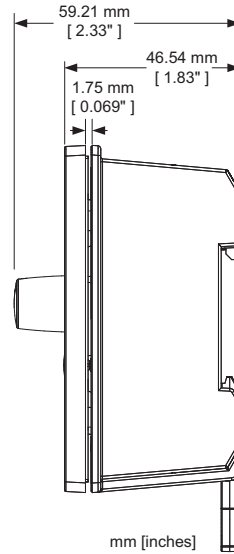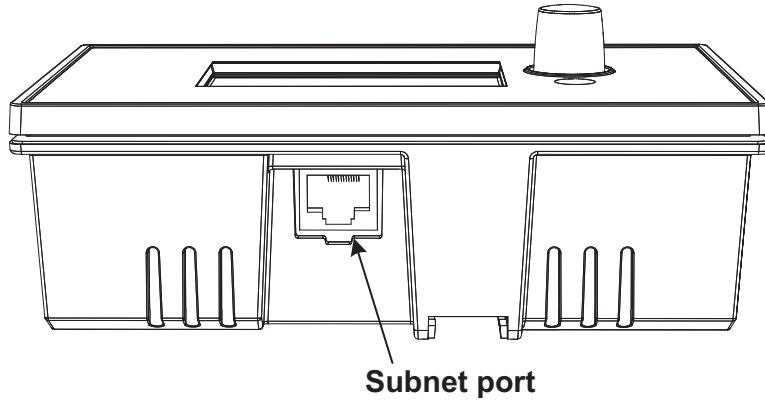
DISTECH CONTROLS™

Device Markings

Certain markings (symbols) can be found on the device and are defined as follows:

Symbol	Description
CE	CE marking: the device conforms to the requirements of applicable EC directives.
UKCA	UKCA marking: the device conforms to the requirements of applicable Great Britain regulations.
	Products must be disposed of at the end of their useful life according to local regulations.
UL	UL marking: conforms to the requirements of the UL certification.
⚠	Warning Symbol: Significant information required. Refer to the Hardware Installation Guide.

Device Characteristics

143.92 mm
[5.67"]

61.2 mm
[2.41"]

36.72 mm
[1.45"]

70.36 mm
[2.78"]

Jog Dial

Exit Button

91.92 mm
[3.62"]

107.56 mm
[4.23"]

mm [inches]

Subnet port

59.21 mm
[2.33"]

46.54 mm
[1.83"]

1.75 mm
[0.069"]

mm [inches]
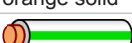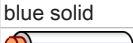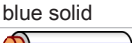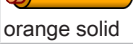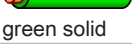
Connection Cable

Connect the device to the controller's Subnet Port with a standard Cat 5e Ethernet patch cable fitted with RJ-45 connectors.

⚠️ If you make your own patch cable, use Cat 5e cable and crimp the RJ-45 connectors at both ends of the cable either as T568A or T568B.

Pin	T568A (at both cable ends)		T568B (at both cable ends)	
	Pair	Color	Pair	Color
1	3	white/green stripe	2	white/orange stripe
2	3	green solid	2	orange solid
3	2	white/orange stripe	3	white/green stripe
4	1	blue solid	1	blue solid
5	1	white/blue stripe	1	white/blue stripe
6	2	orange solid	3	green solid
7	4	white/brown stripe	4	white/brown stripe
8	4	brown solid	4	brown solid

T568A

Pin Position 1 2 3 4 5 6 7 8

Pair 3 Pair 1 Pair 2 Pair 4

Key:

Stripe Solid

T568B

Pin Position 1 2 3 4 5 6 7 8

Pair 2 Pair 1 Pair 3 Pair 4

Pin Position
8
7
6
5
4
3
2
1
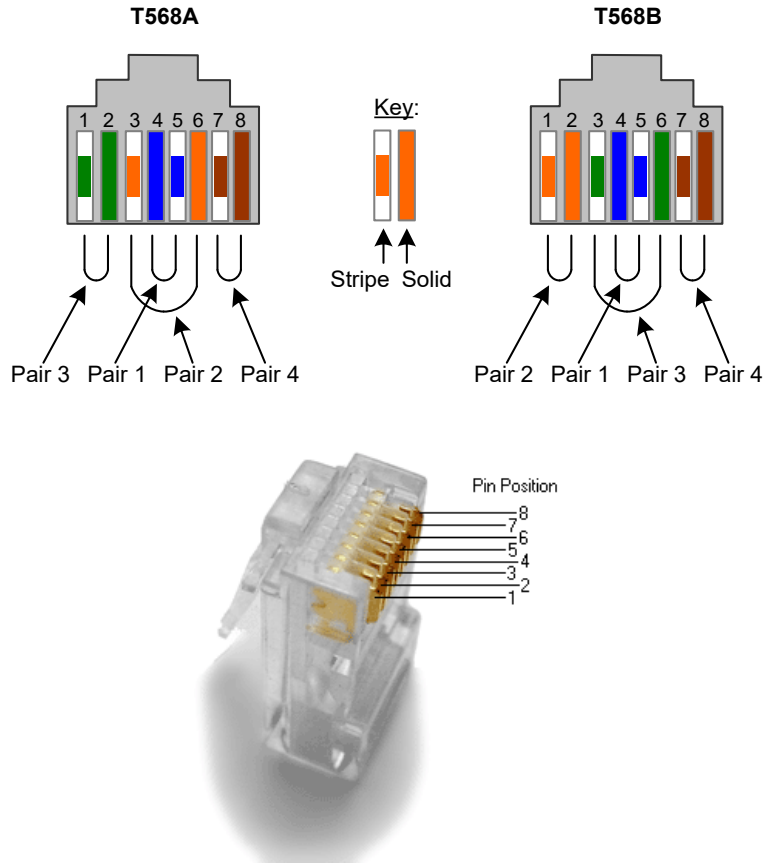
Patch cables fitted with connectors supplied by Distech Controls are wired as T568B.

Mounting Instructions

The ECx-Display can be mounted on a DIN rail to speed up the installation procedure. The ECx-Display can also be mounted on a panel door by cutting an appropriately sized hole using the included template as a guide.

DIN Rail-Mounted Installation

1. Ensure the DIN rail is properly mounted on the wall.
2. Simply clip the ECx-Display onto the DIN rail.
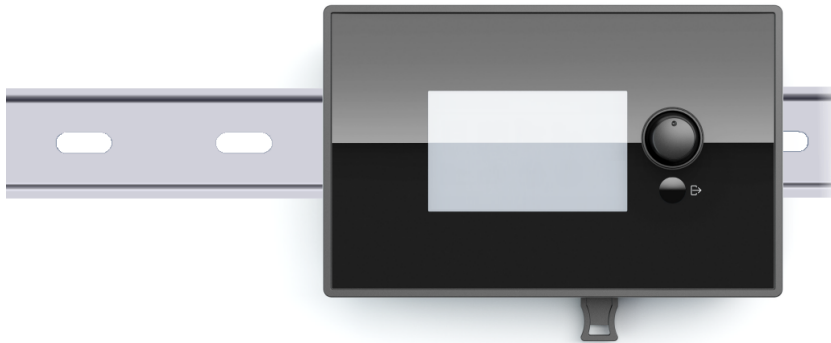
Panel-Mounted Installation

1. Before mounting the ECx-Display, separate the front assembly by removing the screws from the back enclosure.
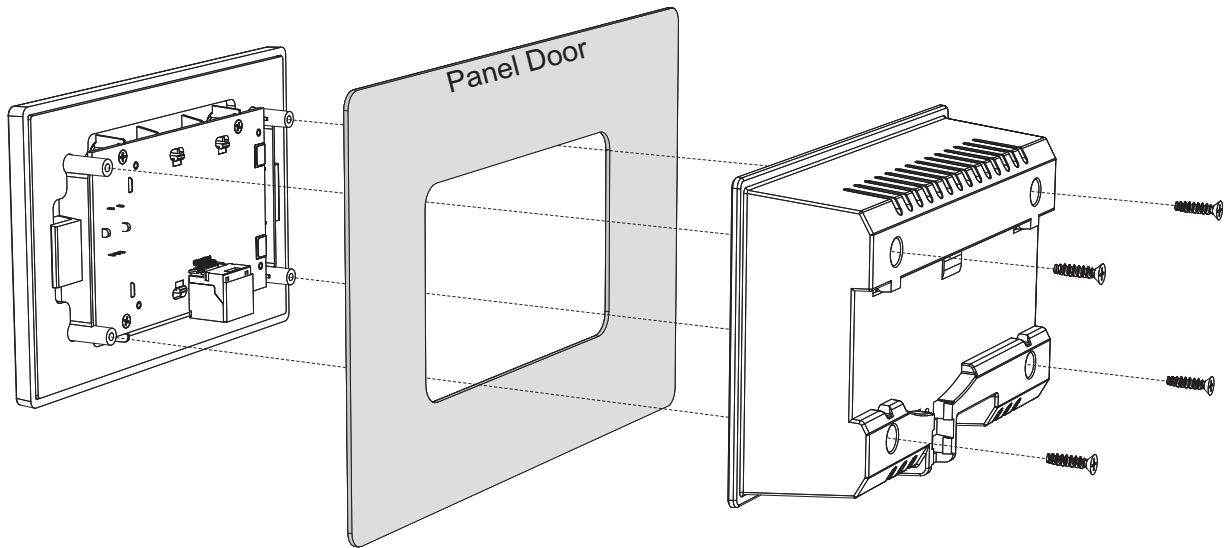
Panel Door

2. Using the provided template, trace and cut an opening in the panel door.

3. Place the front portion of the ECx-Display over the new opening and insert the longer rear tab over the edge of the opening first, followed by the shorter tab on the other side.

Panel Door

Long Tab

Short Tab
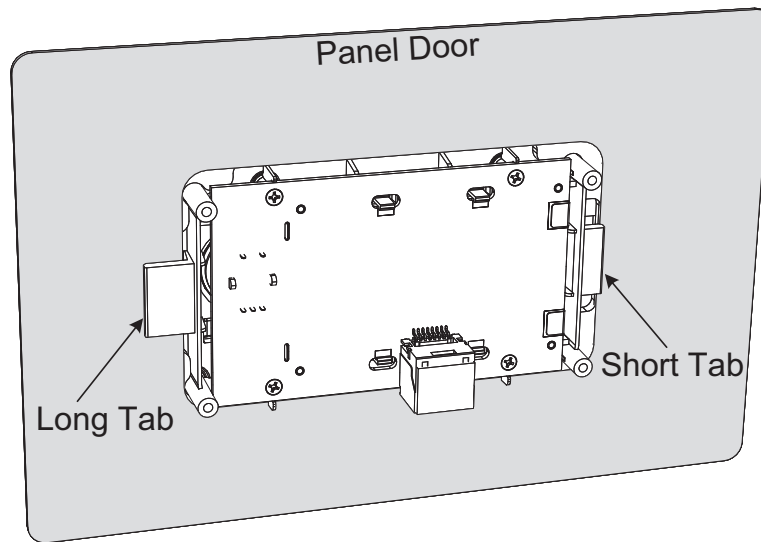
4. Align the front portion of the ECx-Display over the opening, making sure the gasket lies flush all the way around on the front of the panel door.

5. Place the back enclosure of the ECx-Display on the rear of the panel door aligning it with the screw holes.

Panel Door
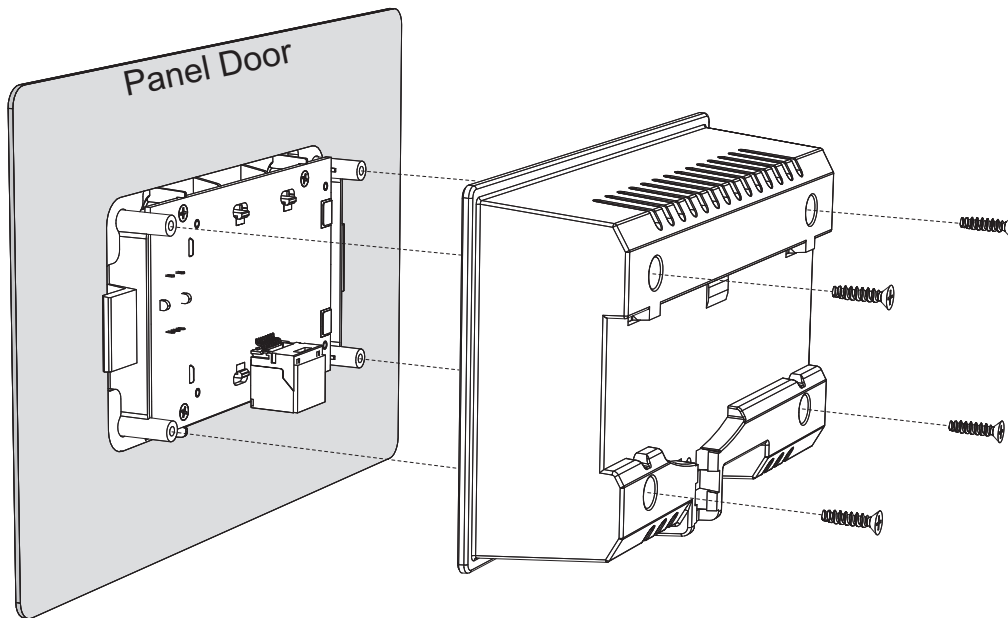
6. Fasten screws securely.

Wiring Instructions

The ECx-Display receives both power and communications from a single Category 5e cable. If other subnet devices such as a Allure™ Series Communi-cating Sensor are on the subnet, the ECx-Display must be daisy-chained using the optional ECx-Subnet Adapter. The display is **NOT** equipped with an End Of Line (EOL) resistor and therefore should never be the last device on the subnet otherwise it must be within 6.5 ft (2 m) from a controller as shown below.
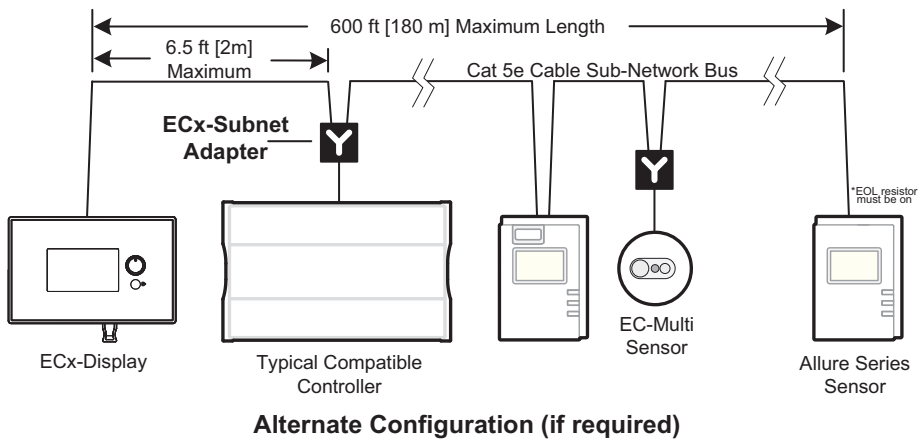
Connect the ECx-Display (or the ECx-Subnet Adapter if used) to the controller's **Subnet Port** with a standard Category 5e Ethernet patch cable fitted with RJ-45 connectors. Refer to the Network Guide for extensive information and requirements for the connection of the Allure Series. It contains information about network topology and length, cable type, setting the Subnet ID, etc. It can be downloaded from the *www.distech-controls.com* website. See also the Hardware Installation Guide supplied with the Allure Series.

600 ft [180 m] Maximum Length

Cat 5e Cable Sub-Network Bus

ECx-Subnet Adapter

*EOL resistor must be on

Typical Compatible Controller

ECx-Display

EC-Multi Sensor

Allure Series Sensor

Preferred Configuration

600 ft [180 m] Maximum Length

6.5 ft [2m] Maximum

Cat 5e Cable Sub-Network Bus

ECx-Subnet Adapter

*EOL resistor must be on

ECx-Display

Typical Compatible Controller

EC-Multi Sensor

Allure Series Sensor

Alternate Configuration (if required)

Weather Menu Configuration

The weather menu allows the user to view the current weather conditions. The units can be set to either Metric or US Units in EC-*gfx*Program.

This menu may be greyed-out (is inaccessible) on your controller's LCD screen when the weather menu feature has not been configured. Refer to the EC-*gfx*Program User Guide for more information on how to make weather information available on a controller.

Commissioning with Controllers

For the ECx-Display to be fully operational, the controller's program must include an LCD Screen block and it must be synchronized with the controller. See the EC-*gfx*Program User Guide for more detailed information.

When using the ECx-Display as a hand-held portable device, all controllers being used must include an LCD Screen block in their program for the ECx-Display to function correctly.

If an ECB or ECL controller does not contain an LCD Screen block in its programming, the ECx-Display will fail to update values until the controller is correctly programmed.

If an ECLYPSE Connected Controller does not contain an LCD Screen block in its programming, a loading screen, depicted below, will appear on the ECx-Display until the controller is correctly programmed.
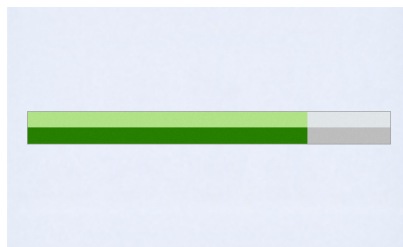
Maintenance

⚠ Unplug device before any kind of servicing.

The device requires minimal maintenance, but it is important to take note of the following:
- ☐ If it is necessary to clean the outside of the device, use a dry cloth.
- ☐ Retighten enclosure screws annually to ensure the ECx-Display remains securely attached when panel mounted.

Disposal

The Waste Electrical and Electronic Equipment (WEEE) Directive set out regulations for the recycling and disposal of products. The WEEE2002/96/EG Directive applies to standalone products, for example, products that can function entirely on their own and are not a part of another system or piece of equipment.

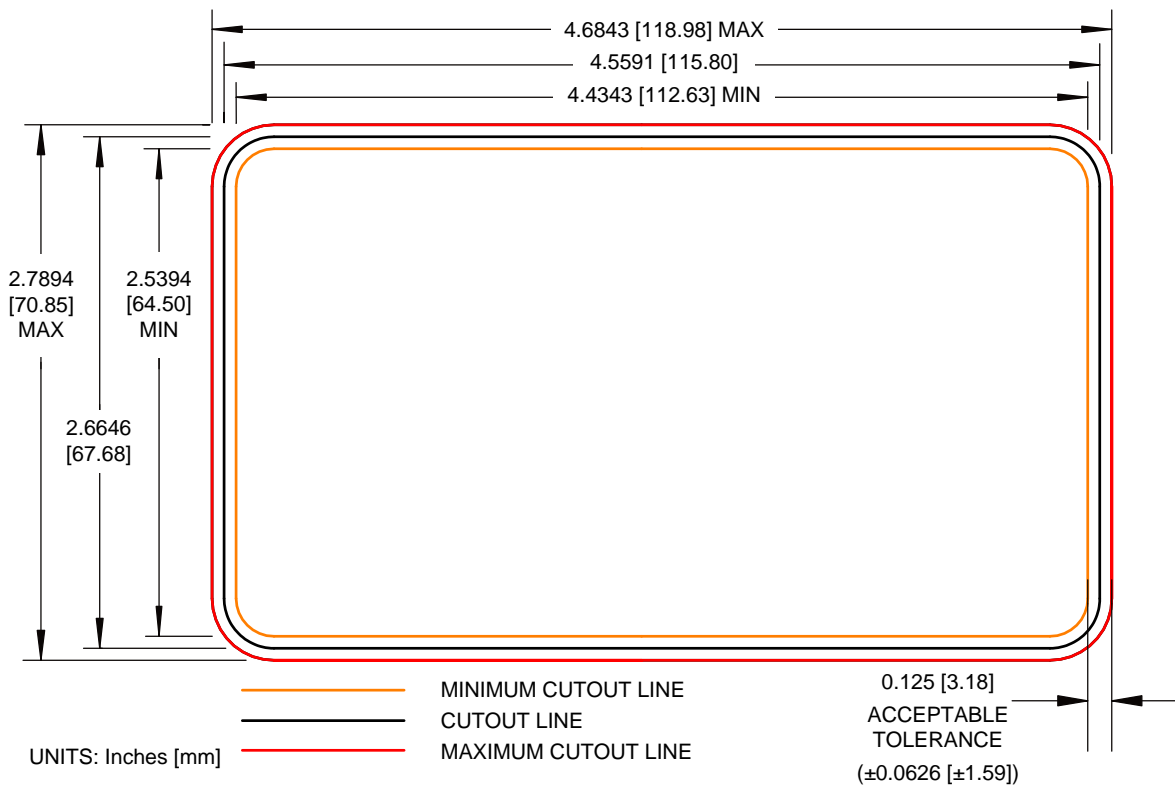For this reason Distech Controls products are exempt from the WEEE Directive. Nevertheless, Distech Controls products are marked with the WEEE symbol ⌷, indicating devices are not to be thrown away in municipal waste.

Products must be disposed of at the end of their useful life according to local regulations and the WEEE Directive.

Panel Mounting Template

⚠ This document **must** be printed actual size to preserve the scale of the template.

- MINIMUM CUTOUT LINE
- CUTOUT LINE
- MAXIMUM CUTOUT LINE

4.6843 [118.98] MAX
4.5591 [115.80]
4.4343 [112.63] MIN

2.7894 [70.85] MAX
2.5394 [64.50] MIN
2.6646 [67.68]

0.125 [3.18]
ACCEPTABLE TOLERANCE
(±0.0626 [±1.59])

UNITS: Inches [mm]

ECx-Display_IG_13_EN