DIS1710 Local Controller Display Installation Instructions

MS-DIS1710-0

Part No. 24-10240-9, Rev. H
Issued April 2016

Refer to the QuickLIT website for the most up-to-date version of this document.

Applications

The DIS1710 Local Controller Display is a stand-alone display module designed for installation on the front panel of an enclosure. The DIS1710 display can connect to the Network Control Engine (NCE), Field Equipment Controller (FEC), or Advanced Application Field Equipment (FAC) models that do not have integral displays. The display provides a local user interface for the application running in the controller. Use the Controller Configuration Tool (CCT) tool to configure the display.

North American Emissions Compliance

United States

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when this equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area may cause harmful interference, in which case the users will be required to correct the interference at their own expense.

Canada

This Class (A) digital apparatus meets all the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la Classe (A) respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Installation

Observe these guidelines when installing the DIS1710 display:

- Transport the display in the original container to minimize vibration and shock damage to the unit.
- Verify that all parts were shipped with the display.
- Do not drop the display or subject it to physical shock.

Parts Included

- one DIS1710 Local Controller Display
- one communication cable
- one O-ring
- one installation instructions sheet

Materials and Special Tools Needed

- power saw for cutting a hole into the panel to hold the display, if no hole is provided
- small Phillips-head screwdriver

Enclosures

Use *Table 1* to order enclosures for use with the display.

Table 1: Enclosures with DIS1710 Cutout

Product Code Number	Size (in.)	Description
PAN-ENC1620WDF4 **PAN-ENC1620WDP4**	16 x 20 x 6.62	Standard Johnson Controls® Enclosure with Cutout for display
PAN-ENC2024WDF4 **PAN-ENC2024WDP4**	20 x 24 x 9.25	
PAN-ENC2424WDF4 **PAN-ENC2424WDP4**	24 x 24 x 9.25	
PAN-ENC2436WDF4 **PAN-ENC2436WDP4**	24 x 36 x 9.25	
PAN-ENC1620FMD4	16 x 20	Standard Johnson Controls Panel Door with Cutout for display
PAN-ENC2024FMD4	20 x 24	
PAN-ENC2424FMD4	24 x 24	
PAN-ENC2436FMD4	24 x 36	

Mounting

Location Considerations

The display is mounted onto the front panel door of an enclosure.

Mounting Dimensions

See *Figure 1* for the mounting dimensions of the display.

Physical Features

See *Figure 2* for the physical features of the display.

Figure 1: DIS1710 Mounting Dimensions, mm/in.

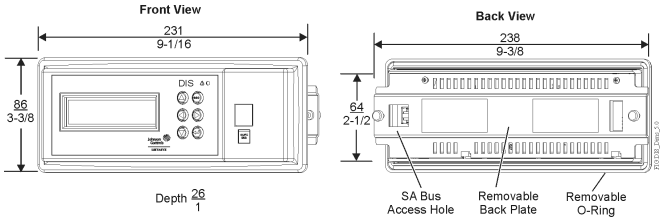
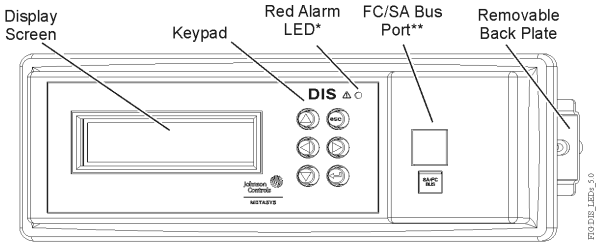


Figure 2: DIS1710 Physical Features



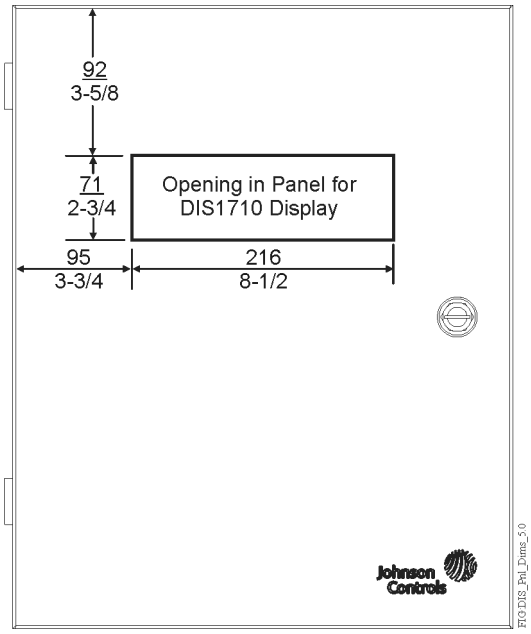
* Alarm Light Emitting Diode (LED) not currently in use.

** RJ-12 6-pin modular jack. To use port, remove cap plug. When done, replace cap plug.

Preparing the Panel

The display is mounted onto the front panel door of the enclosure. The panel door must have a maximum thickness of 6-7/20 mm (1/4 in.). Also, if the panel you intend to use lacks a presized cutout, make the cutout 71 mm x 216 mm (2-2/3 in. x 8-1/2 in.). See *Figure 3* for the recommended cutout location.

Figure 3: DIS1710 Panel Cutout Dimensions, mm/in.

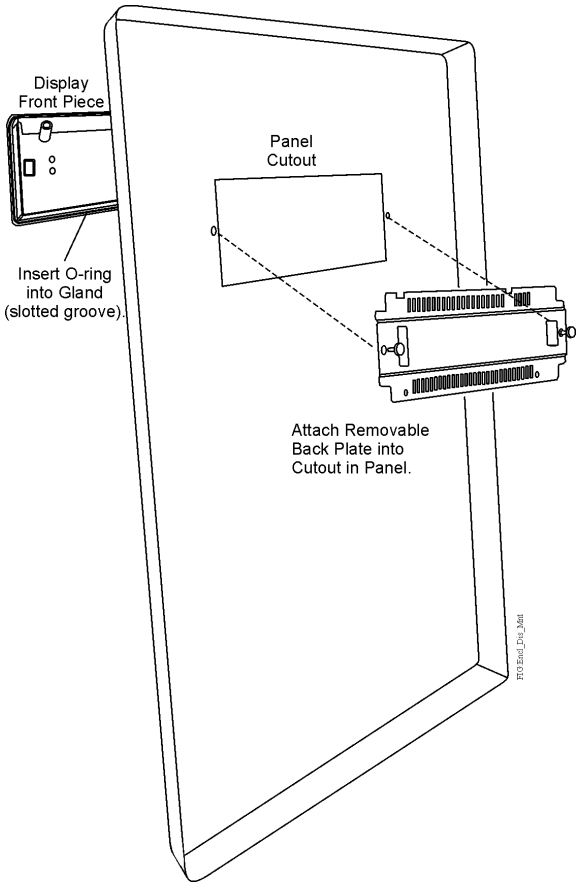


Mounting Display to Enclosure Door

Follow these steps to mount the display onto the front of the enclosure door (*Figure 5*):

1. Loosen the two thumbscrews on the back plate, but do not remove them.
2. Detach the back plate from the display by using a small Phillips-head screwdriver to remove the two back plate screws. Tilt the back plate forward to remove it from the retaining tabs.
3. Insert the O-ring into the gland (slotted groove) in the back of the display (*Figure 4*).
4. Insert the display into the front access hole on the panel door. Hold in place.
5. Carefully insert the back plate to the other side of the access hole (inside of the panel door) and secure it to the cutout by hand-tightening the two thumbscrews. You may need to tilt the back plate to slide it onto the two bottom retaining tabs.

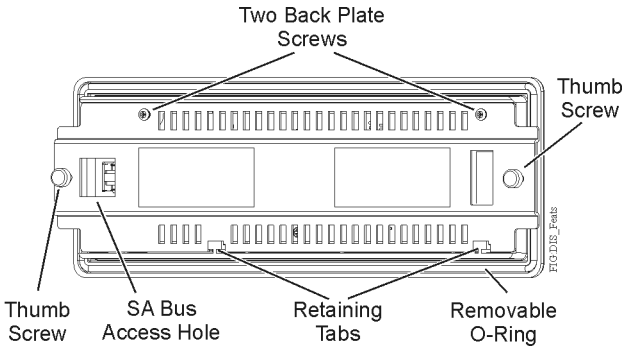
Figure 4: Attaching the Display into Panel Cutout



6. Using the screwdriver, tighten the two back plate screws to secure the back plate in place. Tighten the thumbscrews against the panel to provide a snug fit.

Important: Do not overtighten the thumbscrews. Overtightening the screws may exert too much pressure on the back plate.

Figure 5: DIS1710 Back Plate



Wiring

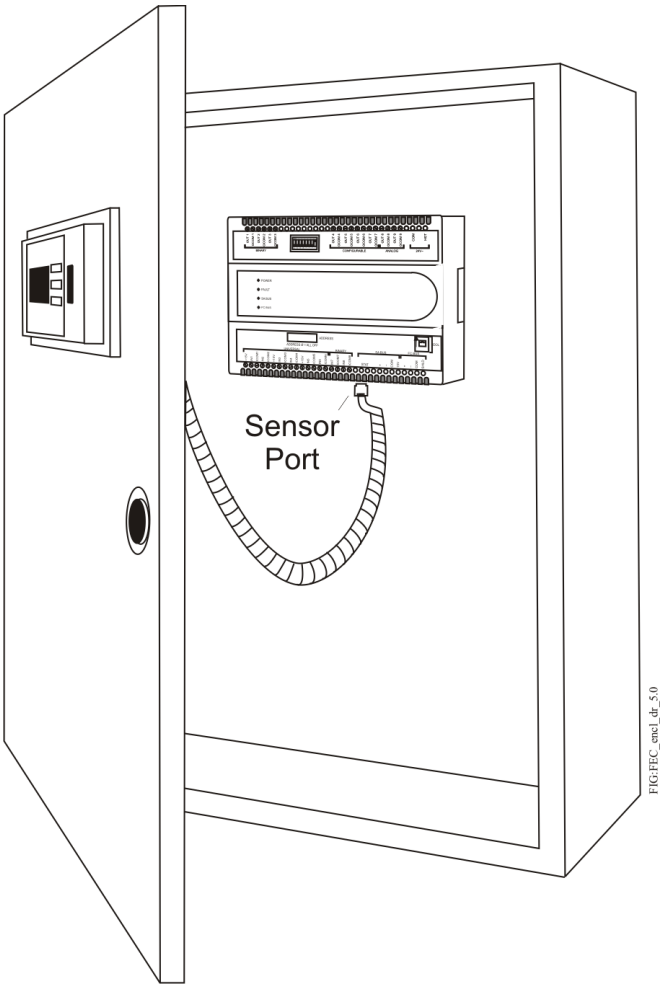
The display receives power over the Sensor-Actuator (SA) Bus from the NCE, FEC, or FAC controller.

Note: Do not connect the display to an NCE, FEC, or FAC that has an integral display. Also, do not connect more than one display on the same SA Bus.

Connecting Cable to Controller

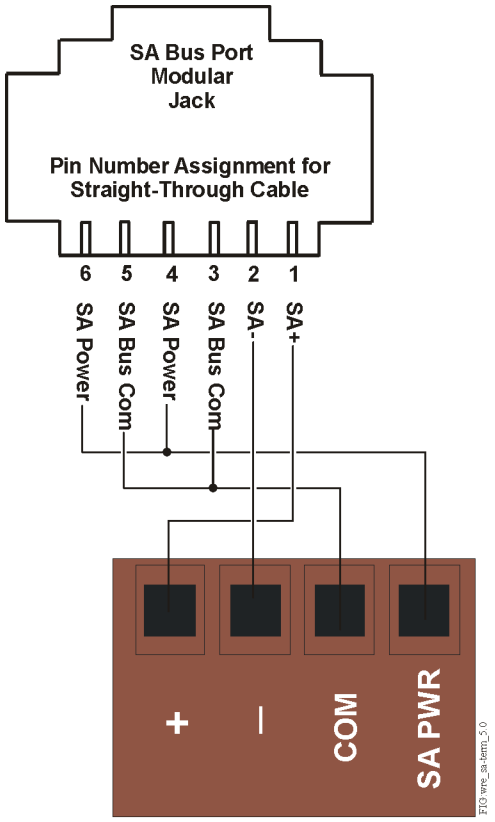
Connect the communication cable (included in box) between the SA Bus connector on the back of the display and the SA Bus jack on the front of the controller (*Figure 6*). The coiled cable is 91 cm (3 ft) in length and can be stretched to a maximum length of 152 cm (5 ft).

Figure 6: Connecting the SA Bus Cable



If the SA Bus jack on the controller is in use, you can wire the display's communication cable to the SA Bus terminal block. Splice one end of the communication cable and connect it to the SA Bus terminal block using the wiring designations in *Figure 7*.

Figure 7: Wiring Cable to SA Bus Terminal Block



SA Bus Terminal Block

Setup and Adjustments

Power On the Controller

1. Supply power to the controller.
2. Close the panel door of the enclosure.
3. Verify that the display is on and initiating the startup sequence.

Commissioning

The DIS1710 Local Controller Display does not require commissioning. Cable connection between the DIS1710 Local Controller Display and a commissioned field controller allows for immediate display function. Ensure that the communication cable is connected between the display and the controller. For more information on commissioning, refer to the Controller Tool *Help (LIT-12011147)*.

Troubleshooting

Refer to the *DIS1710 Local Controller Display Technical Bulletin (LIT-12011270)* for information on how to use and troubleshoot the DIS1710 display.

Technical Specifications

Table 2: DIS1710 Local Controller Display

Product Code Number	MS-DIS1710-0 Local Controller Display for Field Equipment Controllers
Power Requirement	Nominal 15 volts provided by controller over SA Bus.
Power Consumption	2 VA maximum
Ambient Operating Temperature	0–50°C (32–122°F)
Ambient Operating Conditions	10–90% RH, 30°C (86°F) maximum dew point
Ambient Storage Temperature	-40–70°C (-40–158°F)
Ambient Storage Conditions	5–95% RH, 30°C (86°F) maximum dew point
Terminations	RJ-12 6-pin jack at Service Port (covered by removable cap-plug) SA Bus connection on back of unit
Processor	Renesas® H8S-2398 16-bit microprocessor
Memory	256 KB Flash Memory 8 KB Random Access Memory (RAM)
Operating System	RTOS-H8S
Network and Serial Interfaces	Communication to controller over SA Bus

Table 2: DIS1710 Local Controller Display

Graphic Display Resolution	240 x 64 pixels with white LED backlighting (adjustable)
Dimensions (Height x Width x Depth)	85.9 x 238 x 25.8 mm (3.4 x 9.37 x 1.0 in.)
Housing	Plastic housing material: ABS + polycarbonate Protection: IP20 (IEC60529)
Mounting (Height x Width)	Mount to the outside of the enclosure 70.5 x 216.5 mm (2.78 x 8.525 in.)
Shipping Weight	0.14 kg (0.3 lb)
Compliance CE	**United States:** UL Listed, File E107041, CCN PAZX, UL 916, Energy Management Equipment; FCC Compliant to CFR47, Part 15, Subpart B, Class A
	Canada: UL Listed, File E107041, CCN PAZX7, CAN/CSA C22.2 No. 205, Signal Equipment; Industry Canada Compliant, ICES-003
	Europe: CE Mark – Johnson Controls, Inc. declares that this product is in compliance with the essential requirements and other relevant provisions of the EMC Directive.
	Australia and New Zealand: RCM Mark, Australia/NZ Emissions Compliant

The performance specifications are nominal and conform to acceptable industry standard. For application at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

European Single Point of Contact:
JOHNSON CONTROLS
WESTENDHOF 3
45143 ESSEN
GERMANY

NA/SA Single Point of Contact:
JOHNSON CONTROLS
507 E MICHIGAN ST
MILWAUKEE WI 53202
USA

APAC Single Point of Contact:
JOHNSON CONTROLS
C/O CONTROLS PRODUCT MANAGEMENT
NO. 22 BLOCK D NEW DISTRICT
WUXI JIANGSU PROVINCE 214142
CHINA

Building Efficiency
507 E. Michigan Street, Milwaukee, WI 53202

Published in U.S.A.
www.johnsoncontrols.com