Control Panel 2.0 Installation Guide

Product Description
The View Control Panel 2.0 houses the control components and power source that are responsible for the operation of a View system. There are two configurations of the panel, one supporting up to 128 window controllers, with six Class 2 circuit outputs, and the other supporting up to 256 window controllers with twelve Class 2 circuit outputs. Additionally, each control panel includes a six-port Layer 3 Ethernet switch to allow for interconnection of the panels on a private VLAN and support for up to two IEEE 802.3af midspan injectors for connection of View sensors.

Purpose
The purpose of this Guide is to provide explanations and procedures for installing, configuring and operating the View Control Panel 2.0 (CP 2.0)

Package Includes
1. Control Panel 2.0
2. Four (4) mounting brackets, one for each corner of the Control Panel

Scope
This Guide provides safety guidelines, detailed planning installation instructions and setup information for installing the View Control Panel 2.0.

- Determining the location and placement
- Mounting the Control Panel
- Adding Power to the Control Panel

Note: The Control Panel weighs 70 lbs, recommend 2-person handling (lifting) when moving or installing the Control Panel.
Audience

This guide does not provide sufficient information for anyone but a C10 qualified installer to install this product. Installers should be licensed electricians familiar with the hazards of installing electrical equipment.

Optional Accessories

1. Pull Box - PN: 010-101611
2. PoE Injector
   - PoE 1: 015-101821-01
   - PoE 2: 015-101821-02
3. SFP Kits
   - 850 mm PN: 015-101844-01
   - 1310 sm PN: 015-101844-02
   - 1000 base T PN: 015-101844-03

Abbreviations and Acronyms

NEC - National Electric Code (NFPA 70)
NFPA79 - Standard for Industrial Control Panels (NFPA 79)
UL508 - Underwriters Laboratories Standard UL-508
CEC - Canadian Electric Code
CSA - Canadian Standards Association
DC - Direct Current
FCC - Federal Communications Commission
NFPA - National Fire Protection Association
SFP - Small Form Factor Pluggable
VAC - Volts AC
VDC - Volts DC
LOTO - Lock-Out, Tag-Out

Additional Supporting Documentation

1. Control Panel 2.0 Data Sheet - QDM-02-000033
2. Pull Box 2.0 Data Sheet - QDM-02-000037
Installation

Step 1: Identify installation location

1. The Control Panel should be placed in the location determined by the General Contractor as seen on the Interconnect Drawings (schematics). If there are multiple Control Panels for the installation, they will each be marked on the front panel with their designated location and labeled to coincide with the Interconnect Drawings.

2. Before mounting the Control Panel to the wall, be sure there is enough clearance provided to install the Trunk Line and Power Insert cables as required.

3. Mounting surface must be capable of handling the weight of the unit (70lbs). Recommend mounting surface ¾” Fire Retardant Rated plywood. Securely mount the Control Panel using the 4 mounting tabs onto the wall according to local building code requirements for mounting 70lb. enclosure.

4. The Control Panel should be mounted with sufficient working clearances. Per NEC Article 110.26: a) the top of the Control Panel should be no higher than 2m (6.5 ft. A.F.F. above finished floor), including the pull box if one is used; b) 15 in. of clear space from the vertical center-line of the panel to the sides; c) 36 in. of clearance in front of the panel.

Step 2: Connecting Power

1. Refer to the control panel schematic (340-101695) provided in the document pocket on the door of the control panel for details of the AC connections and locations

2. The View Control Panel is rated for 120-240VAC, single phase operation (Line, Neutral and Ground). This product cannot be used in 3-phase circuits (e.g. 208VAC wye or delta connections).

3. Installation requires an upstream (facility panelboard) UL-489 branch circuit protection sufficient to provide 20A (at 120VAC, 10A for 240VAC) for the control panel (per NEC Article 409.21 A-1), marked as disconnect device for the control panel. This unit can also be installed in jurisdictions that specify IEC 60947-1 and IEC 60947-3 Each View control panel requires a “DEDICATED” 20-amp circuit, do NOT share ground or neutral with other circuits.

4. Lock-out and Tag the facility disconnect before proceeding

5. Open the front panel to reveal the inside of the Control Panel.
6. Turn CB1 off (lever in the down position)

7. Remove the protective panel covering CB1
8. Install flexible or rigid (EMT) ½” conduit (per NEC Ch9, Annex C, table C.1) to port shown below.

9. Conduit installation should resemble the configuration below.

10. Furnish Line, Neutral, and ground wiring from the upstream panelboard to the CP. Typically this should be 12AWG THHN wire per NEC table 310.15(B).
11. Connect the facility ground (green or green/yellow wire) to the ground stud designated by the PE ground symbol in the top left of the enclosure. Termination will require a ring terminal for a #10 or M5 stud.

12. Connect Line to the top of CB1, tighten the screw to 20 in-lbs

13. Connect Neutral to one of the open positions of TB1-N. Tighten the screw to 20 in-lbs
14. Verify there are no shorts between L and N, and between L and ground
15. Close the panel door and energize the enclosure by removing the LOTO and switching power on
16. With the appropriate PPE (as specified by NFPA 70E) open the enclosure and verify a reading of 120 to 240VAC is present between the line side of CB1 and N
17. De-energize the enclosure by reapplying the LOTO
18. Replace the protective panel removed in step 7
19. Turn CB1 ON by moving the lever to the UP position.

20. Close the Cabinet door.
21. Remove the LOTO and re-energize the panel.

Verify the green light is illuminated on the front of the Control Panel. Once verified, turn the Control Panel off.

22. Final commissioning to be completed by View FSE only.