TROVE™

Access & Power Integration

Trove2R

Access Control Subassembly

Installation Guide

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SECURITY **SIGNALING**

UL LISTED   UL LISTED   CE

Altronix®

Rev. 082420

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Overview:

Trove2R is an access control sub-assembly designed to accommodative variety of Altronix and other Access control manufacturers' UL Listed sub-assemblies. A variety of backplanes offer a wide range of scalable access and power configurations. Trove2R simplifies board layout and wire management, while reducing installation and labor costs.

Specifications:

Agency Listings:
- UL 294 - 7th edition. Trove2R Access Control Sub-Assemblies: Destructive Attack I.
- CE European Conformity.

Environmental:
- Humidity and Temperature conditions as tested by   UL: (85%, +/-5% @ 30ºC +/-2ºC),

Additional Features:
- 16 Gauge enclosure with ample knockouts for convenient access.

Installing Trove2R into Rack Tower:

Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. These products are for indoor use only and must be installed within the protected premises.

Note: First assemble and Install Z Bracket Wire Management Accesory
(refer to Z Bracket Installation pg. 4)

1. Remove backplane from enclosure prior to installing into rack cabinet (do not discard hardware).
2. In order to mount included cUL Listed tamper switch (Tane Model 3/8 ASH FM WH or equivalent) turn the enclosure upside down and locate mounting holes *(Fig. 1, pg. 3)*. Insert the tamper switch flying leads into the center knockout of the three (3) holes from outside of thedrawer with the button facing outwards, make sure tamper switch is inserted properly then secure it with the two (2) screws (supplied). Connect tamper switch wiring to the Access Control Panel input or the appropriate UL Listed reporting device.
   To activate alarm signal open the rack drawer.
3. Slide the rack enclosure into an open 2U location in the four post rack cabinet.
4. Utilizing proper fasteners attach front ears to the rack rails *(Rack drawer, pg. 8)*.
5. Attach the rear of the adjustable slides to the rear rails of the rack cabinet with the proper fasteners.
6. Secure the rack cover *(Fig. 2a, pg. 3)* and rack drawer *(Fig. 2b, pg. 3)* to earth ground.
7. Ensure that all internal cofigurations (voltage selection, switch settings, etc.) are completed before mounting backplane back into Trove rack enclosure.

Fig. 1
Back of the drawer, viewed from outside.
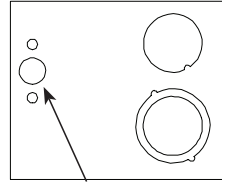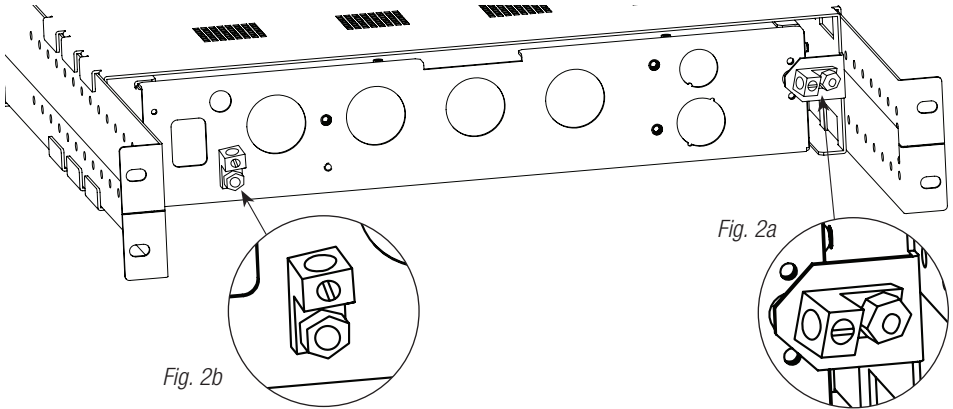

Tamper Switch mounting location

Fig. 2

Fig. 2a

Fig. 2b

Z Bracket Installation for Trove2R:

Altronix Trove2R enclosure includes Z Bracket, a convenient and reliable wire management accessory.

Hardware (included):

Twelve (12) bolts and   eight (8) lock nuts.

1. Carefully unpack Z Bracket. Do not discard hardware (included) *(Fig. 3, pg. 4)*.
2. Attach arms to each other using bolts and lock nuts *(Fig. 4a, pg. 4)*.
3. Attach the hinge brackets to the ends of arms using bolts and nuts positioning them as shown on *(Fig. 4b, pg. 5)*.
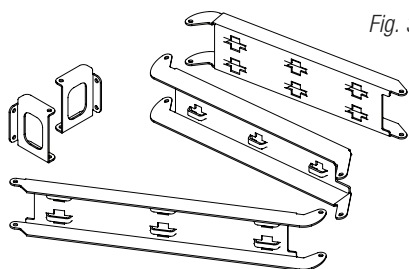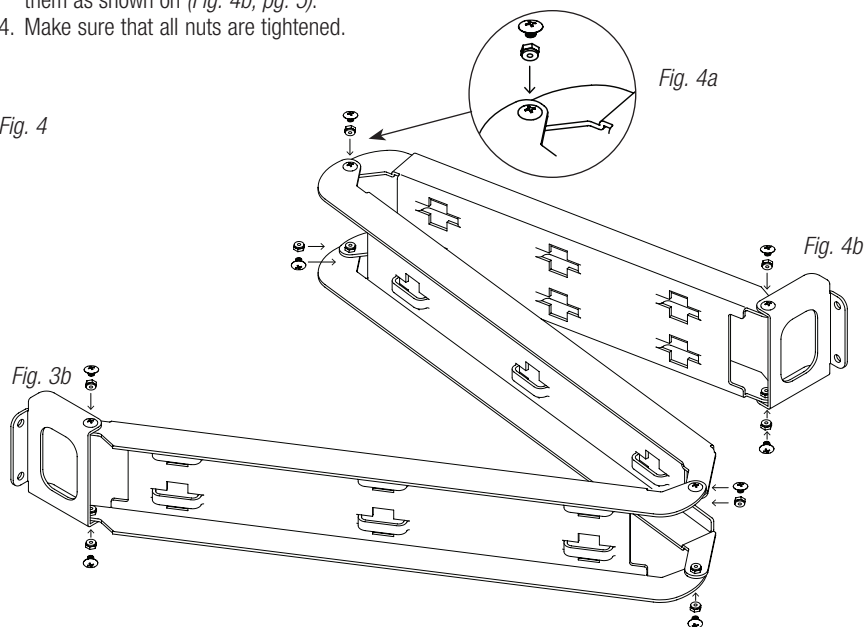4. Make sure that all nuts are tightened.

Fig. 3

Fig. 4

Fig. 4a

Fig. 4b

Fig. 3b

5. Attach the hinge bracket on each end of Z Bracket, then attache the Z Bracket to the adjustable slide using bolts and lock nuts
   (included) *(Fig. 5, 5a, pg. 4)*.
6. Attach the hinge bracket on the shorter side of Z Bracket to the rear of the rack enclosure using bolts (included).
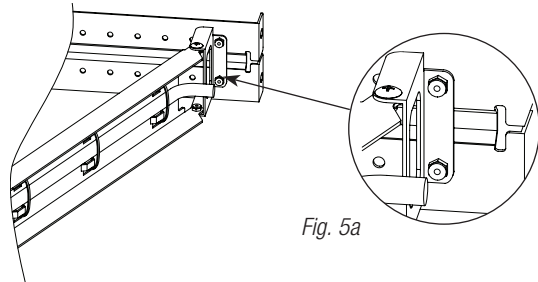
Fig. 5

Fig. 5a

Battery Backup:

If batteries are being used in your installation do not fit into the Trove2R unit, it is required to install a separate UL Listed enclosure for appropriate application (Altronix Model: RE2). Separate battery enclosure is required to have 50 cubic inches of additional open space.

All wiring methods shall be in accordance with the National Electrical Code NFPA 70/NFPA 72/ANSI and with all local codes and authorities having jurisdiction.

Battery circuits are not power-limited; provide 0.25" spacing from power-limited circuits and use separate knockout. If additional battery enclosure is required, it must be UL Listed for the application and mounted within 5' of the Trove2R enclosure in the same room; minimum 12 AWG wire in appropriate conduit is required for connection. When using conduit, make sure it is installed in a matter where it can not turn.

UL Listed Altronix Power Supplies and Sub-Assemblies:

Power Supply Specifications:				
Altronix UL Listed Power Supply	**Input Rating**	**Output Rating**	**Battery Size for 30 min. Backup**	**Refer to**
AL400ULXB2	115VAC, 60Hz, 3.5A	12VDC @ 4A or 24VDC @ 3A	4AH	ULXB Installation Guide Rev. ULXB-020419
AL600ULXB	115VAC, 60Hz, 3.5A	12VDC or 24VDC @ 6A	7AH	
AL1012ULXB	115VAC, 60Hz, 2.6A	12VDC @ 10A	12AH	
AL1024ULXB2	115VAC, 60Hz, 4.2A	24VDC @ 10A	12AH	
eFlow4NB	120VAC, 60Hz, 3.5A	12VDC or 24VDC @ 4A	4AH	eFlow Installation Guide Rev. EFNB-021319
eFlow6NB	120VAC, 60Hz, 3.5A	12VDC or 24VDC @ 6A	7AH	
eFlow102NB	120VAC, 60Hz, 3.5A	12VDC @ 10A	12AH	
eFlow104NB	120VAC, 60Hz, 4.5A	24VDC @ 10A	12AH	

(A) groups rows AL400ULXB2 through eFlow104NB.

Sub-Assembly Specifications:			
Altronix UL Listed Sub-Assembly	**Description**	**Current Draw**	**Refer to**
LINQ8ACM(CB)	8 Fused (or PTC) Output Networked Access Power Controller	12VDC @ 0.6A max. or 24VDC @ 0.3A max.	LINQ8ACM Installation Guide Rev. 100219
ACM8(CB)	8 Fused (or PTC) Output Access Power Controller	12VDC @ 0.6A max. or 24VDC @ 0.3A max.	ACM8/ACM8CB Installation Guide Rev. 031819
ACMS8(CB)	8 Fused (or PTC) Output Access Power Controller	12VDC @ 0.6A max. or 24VDC @ 0.3A max.	ACMS8/ACMS8CB Installation Guide Rev. 090518
ACMS12(CB)*	8 Fused (or PTC) Output Access Power Controller	12VDC @ 0.6A max. or 24VDC @ 0.3A max.	ACMS12/ACMS12CB Installation Guide Rev. 061622
PDS8(CB)	8 Fused (or PTC) Output Power Distribution Module	N/A	PDS8/PDS8CB Installation Guide Rev. 070116
PDS16(CB)*	16 Fused (or PTC) Output Power Distribution Module	N/A	PDS16/PDS16CB Installation Guide Rev. 060822
ACM4(CB)	4 Fused (or PTC) Output Access Power Controller	12VDC @ 0.4A max. or 24VDC @ 0.2A max.	ACM4/ACM4CB Installation Guide Rev. 052819
MOM5	5 PTC Output Power Distribution Module with Fire Alarm Interface	12-24VDC 55mA max.	MOM5 Installation Guide Rev. 020119
VR6	Voltage Regulator	24VDC @ 1.75A or 3.5A Output: 5VDC or 12VDC @ 6A	VR6 Installation Guide Rev. 050517
PD4UL(CB)	4 Fused (or PTC) Output Power Distribution Module	N/A	PD4UL Installation Guide Rev. 020119 / PD4ULCB Installation Guide Rev. 020119
PD8UL(CB)	8 Fused (or PTC) Output Power Distribution Module	N/A	PD8UL Installation Guide Rev. 020119 / PD8ULCB Installation Guide Rev. 020119

(B) groups LINQ8ACM(CB) through ACMS12(CB)*. (C) groups PDS8(CB) through PD8UL(CB).

* These modules have not been evaluated by UL.

Compatible Hirsch Controllers and Sub-Assemblies**

Hirsch Board	**Description**
Mx-28-SBOB	High-Security Access Controller
RREB	Reader Expansion Board
AEB8	Access Expansion Board
REB8	Relay Expansion Board

** To mount the above Hirsch Controllers and Sub-Assemblies you must utilize THR2R backplane.

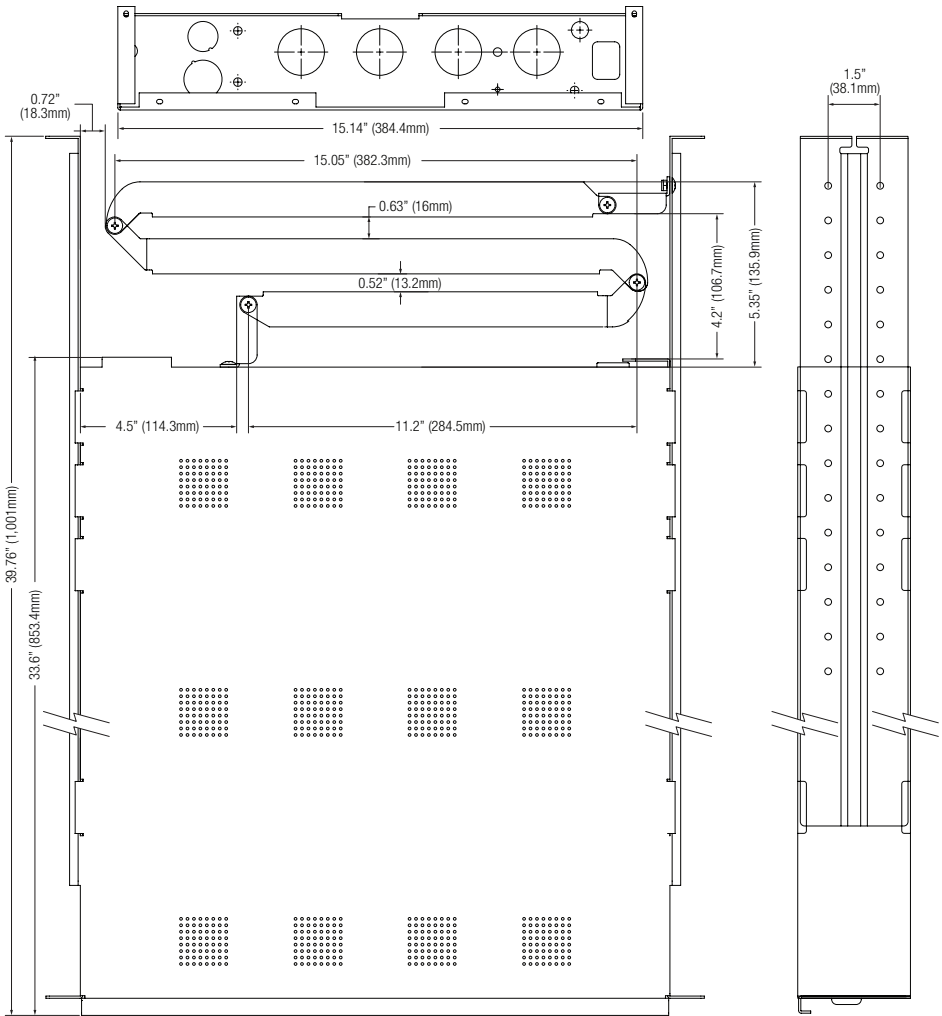# Trove2R Sub-Assemblies Configuration:

Fig. 6
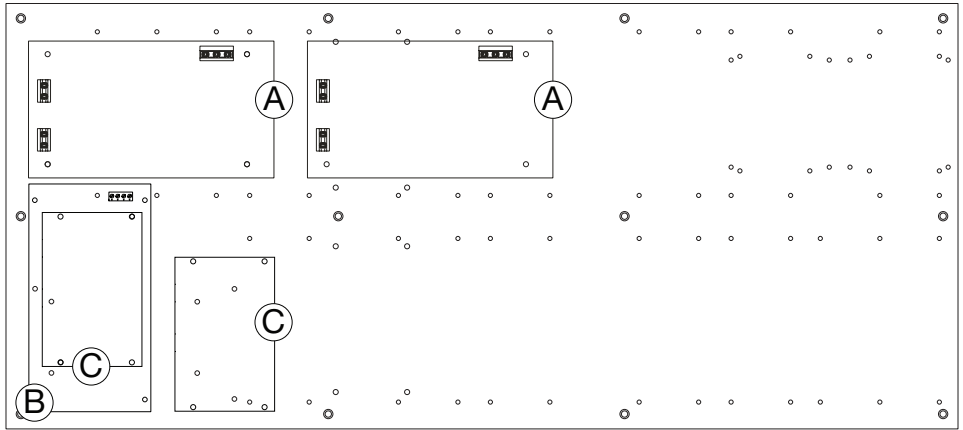
Compatible Backplanes:

Backplane Model*	Access Controller Manufacturer	Backplane Size
TAG2R	AMAG	
TAL2R	Altronix	
TBH2R	Bosch	
TBL2R	Universal Blank Backplane	
TBR2R	Brivo	
TCV2R	CDVI	
TDM2R	DMP	
THR2R	Hirsch	
THN2R	Honeywell NetAXS	
THW2R	Honeywell ProWatch/WinPak	32" x 14.3" x 0.375"
TKA2R	Keyscan	(812.8mm x 363.2mm x 9.5mm)
TKH2R	Kantech	
TM2R	Mercury	
TPX2R	Paxton	
TSA2R	Salto	
TSH2R	Software House	
TSL2R	Sielox	
TV2R	HID/VertX	
TZ2R	ZKTeco	

*X or XX = May be letters A-Z, where X or XX represents stud pattern for particular manufacturer

Trove2R Enclosure Dimensions:

3.375" x 19.0" x 33.25" (85.8mm x 482.6mm x 844.6mm). Shown with Z Bracket attached.

MEMBER