

TR□VE Access & Power Integration

Trove1M1R

- Trove rack enclosure with Altronix/Mercury backplane (TM1R)

Installation Guide



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Rev. TMR112818	
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Installing Company:	Service Rep. Name:	
Address:		Phone #:

Overview:

Altronix Trove1M1R rack mount access & power integration solution accommodates various combinations of Mercury boards with or without Altronix power supplies and accessories for access systems.

Specifications:

Agency Listings:

• CE European Conformity.

Trove1M1R

Trove1R rack mount enclosure with TM1R Altronix/Mercury backplane.

- 16 Gauge black enclosure with ample knockouts for convenient access.
- Modular 2U standard EIA 19" drawer with extendable slides up to 48".
- Dimensions (H x W x D): 3.25" x 19.0" x 26.5" (82.6mm x 482.6mm x 673.1mm).
- Includes tamper switch (Altronix Model TS112 or equivalent) and cam lock.

TM1R

Altronix/Mercury backplane.

- 16 Gauge backplane.
- Dimensions (H x W x D): 18.5" x 15.25" x 0.3125" (469.9mm x 387.4mm x 7.9mm).

Optional Accessories:

- RE2: Rack Mount Battery Enclosure accommodates up to four (4) 12VDC/7AH batteries
- *WM5, WM25, WM100:* Magnetic Cable Tie Mounts (5, 25, 100 counts).
- LC3: 6 ft. three-wire line cord.

Backplane Accommodates a Combination of the Following:

Altronix:

- One (1) eFlow4NB, eFlow6NB, eFlow102NB, eFlow104NB, ACMS8(CB) or ACM8(CB).
- Up to two (2) ACM4(CB), MOM5, PD4UL(CB), PD8UL(CB), PDS8(CB), or VR6.

Mercury:

- Up to four (4) EP1502, MR52, MR16IN or MR16OUT.
- Up to two (2) EP2500 or MUX8.
- Up to two (2) EP1501 or MR51e.
- Up to two (2) MR50.

Hardware and Accessories:

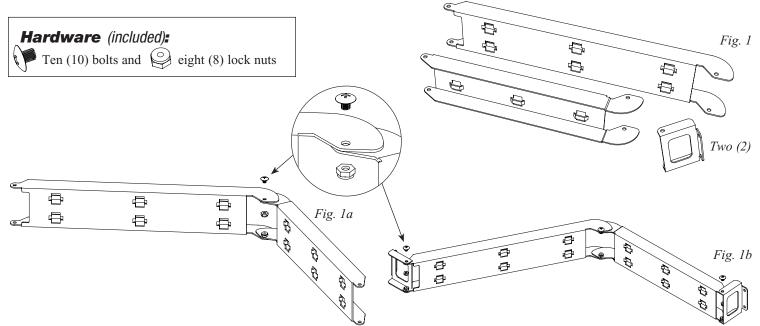
Spacer | (5/16" Pan Head Screw | (Lock Nut

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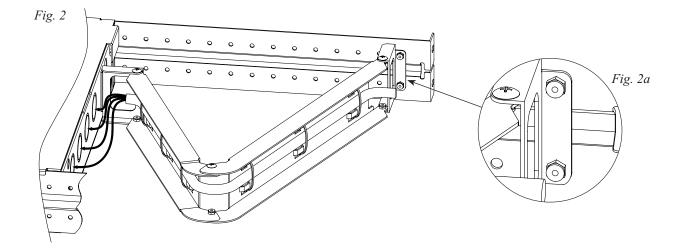
Assembling and Attaching Z Bracket Wire Management Accessory (included):

Altronix Trove Rack enclosures include Z Bracket, a convenient and reliable wire management accessory.

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



- 5. Attach the hinge bracket on the longer side of Z Bracket to the adjustable rail using bolts and lock nuts (included) (Fig. 2, 2a, pg. 3).
- 6. Attach the hinge bracket on the shorter side of Z Bracket to the rear of the rack enclosure using bolts (included).



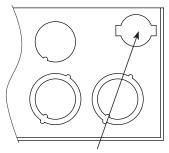
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Installation Instructions for Trove1R:

Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. Product is intended for indoor use only.

- 1. Remove backplane from enclosure prior to installing into rack cabinet (do not discard hardware).
- 2. In order to mount included UL Listed tamper switch (Altronix Model TS112 or equivalent), turn the enclosure upside down. Punch out the knockout in designated location, on the back of the unit, from outside of the drawer (*Fig. 3, pg. 4*). Insert the tamper switch into the knockout from outside of the drawer with the button facing outwards and spaded connectors inside the drawer. 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 Trove rack enclosure into an open 2U location in the rack cabinet.
- 4. Utilizing proper fasteners attach front ears to the rack rails.
- 5. Attach the rear of the adjustable slides to the rear rails of the rack cabinet with the proper fasteners.
- 6. Make sure that all internal cofigurations (wiring, voltage selection, switch settings, etc.) are complete before mounting backplane back into enclosure.
- 7. After all components are mounted on the backplane, attach it to the enclosure using included hardware.

Fig. 3
Back of the drawer,
viewed from outside.



Tamper Switch mounting location

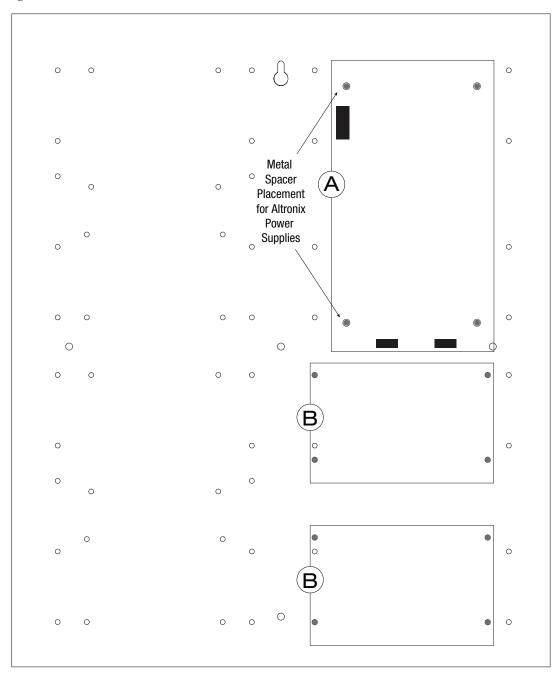
TM1R: Configuration of Altronix Power Supply and/or Sub-Assembly Boards

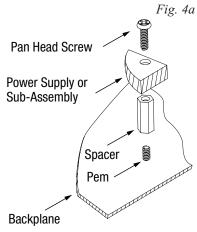
- 1. Fasten spacers onto metal pems configuration (A) or (B) of backplane depending on the power supply and/or Sub-Assembly (Fig. 4, pg. 5).
- 2. Position access controller module over corresponding spacers and fasten screws into spacers (Fig. 4a, pg. 5).
- 3. Mount backplane to enclosure with hardware.

Position Chart for the Following Models:

Altronix Power Supply/Charger or Sub-Assembly	Pem Mounting
eFlow4NB, eFlow6NB, eFlow102NB, eFlow104NB, ACMS8(CB), ACM8(CB)	A
ACM4(CB), MOM5, PD4UL(CB), PD8UL(CB), PDS8(CB), or VR6	(B)

Fig. 4





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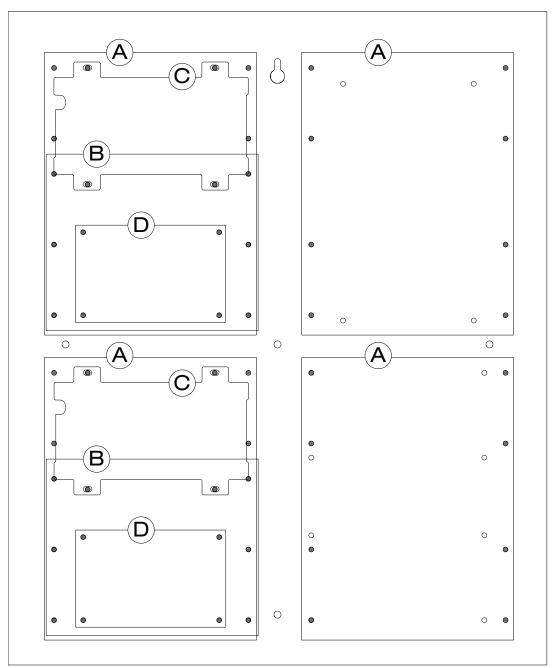
TM1R: Configuration of Mercury Boards

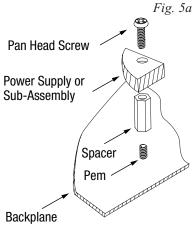
- 1. Fasten spacers onto metal pems configuration (A), (B), (C) or (D) of backplane depending on the access controller (Fig. 5, pg. 6).
- 2. Position access controller module over corresponding spacers and fasten screws into spacers (Fig. 5a, pg. 6).
- 3. Mount backplane to enclosure with hardware.

Access Controller Position Chart for the Following Models:

Mercury Access Controller	Pem Mounting
EP1502, MR52, MR16IN, MR16OUT	A
EP2500, MUX8	B
EP1501, MR51e	©
MR50	(D)

Fig. 5





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TM1R Enclosure Dimensions (H x W x D):

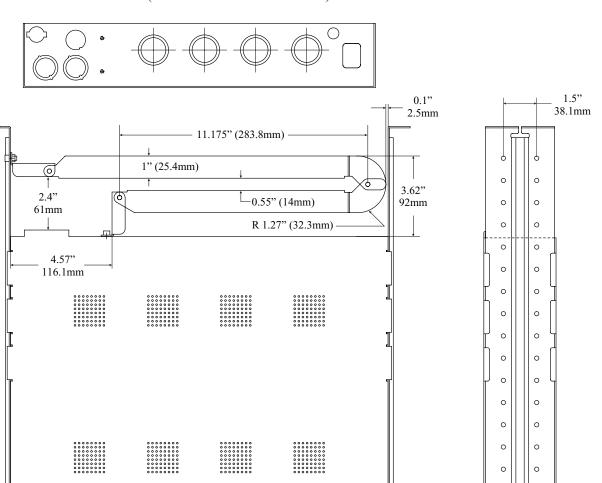
18.5" x 15.25" x 0.3125" (469.9mm x 387.4mm x 7.9mm)

	15.25" (387.4mm)	
		
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Trove1R Enclosure Dimensions (H x W x D):

3.25" x 19.0" x 26.5" (82.6mm x 482.6mm x 673.1mm). Shown with Z Bracket attached.





19" (482.6mm)



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26.5"

673.1mm