HyNet™ Gateway SFP 4/1

StrongArm M30, StrongArm M50, HydraSupply XL, HydraWedge SM50

Installation Manual for HyNet Attachment Kit: MX3868

This document is a supplemental document that provides specific information regarding configuration of the HySecurity gate operator with installation and wiring of the HyNet Gateway. For safety considerations and information specific to your gate operator, refer to the HySecurity gate operator's product manuals.
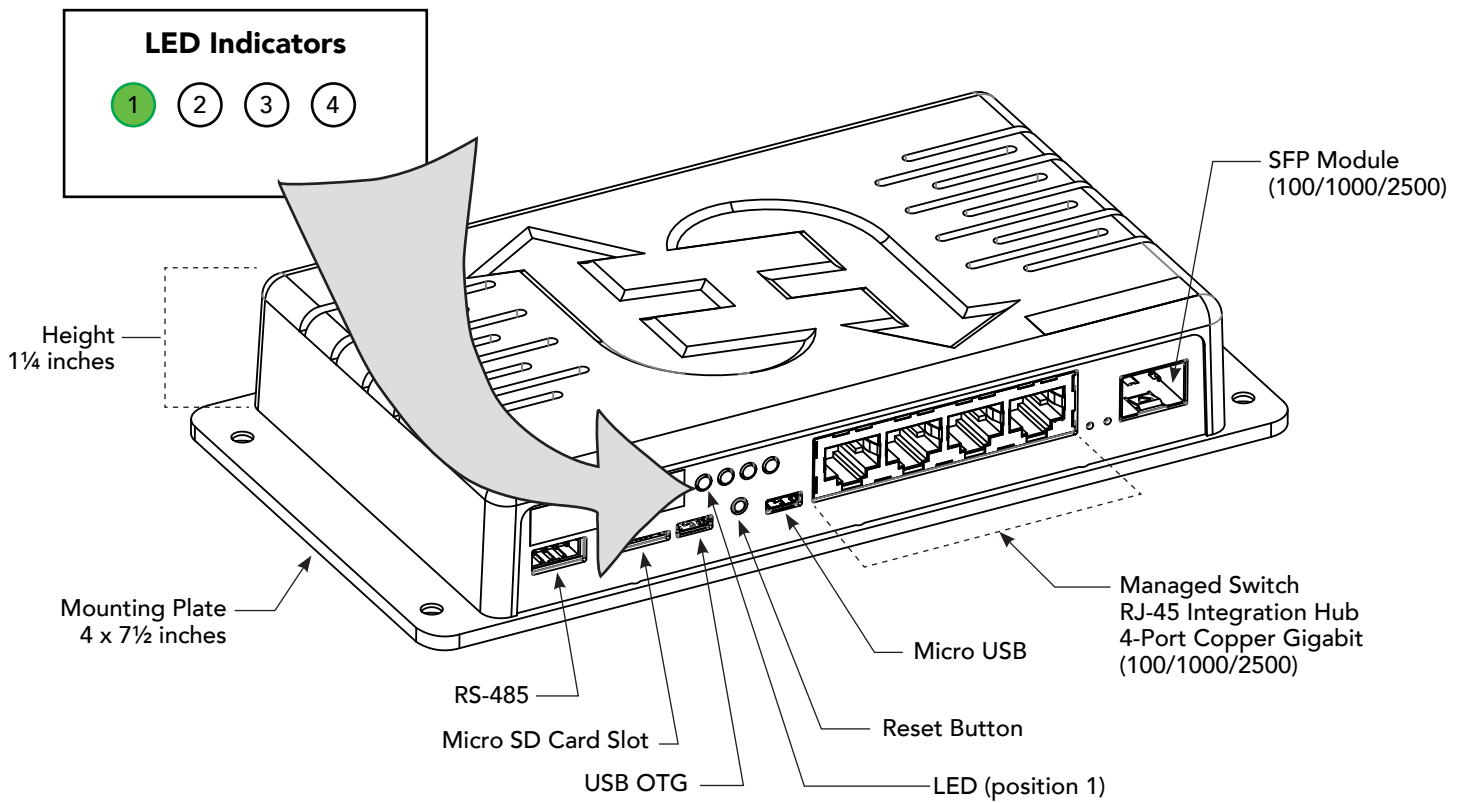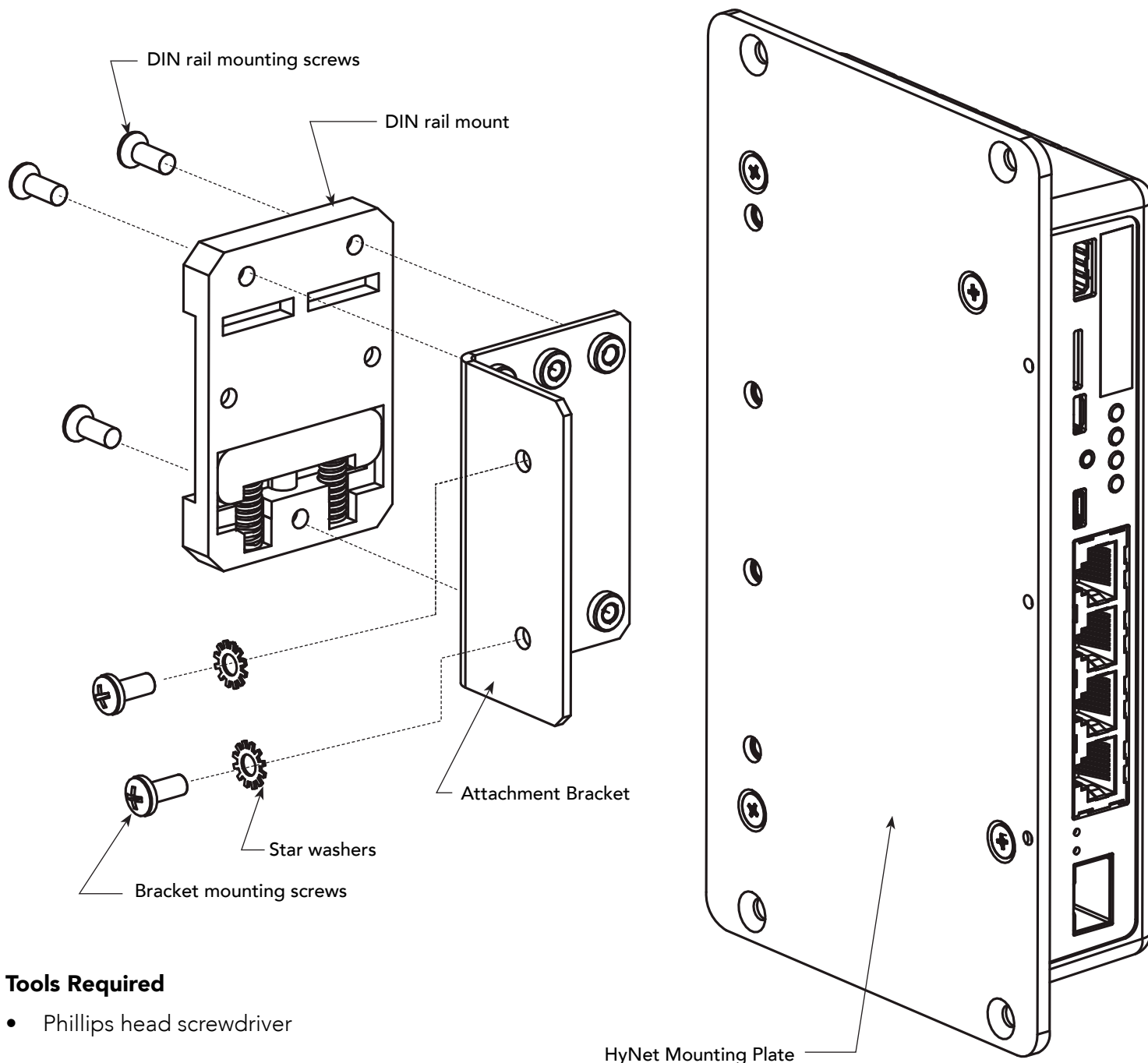
HySecurity®

Simple. Reliable. Secure.®

HyNet Components

LED Indicators

① ② ③ ④

SFP Module
(100/1000/2500)

Height
1¼ inches

Mounting Plate
4 x 7½ inches

Managed Switch
RJ-45 Integration Hub
4-Port Copper Gigabit
(100/1000/2500)

Micro USB

RS-485

Micro SD Card Slot

Reset Button

USB OTG

LED (position 1)

Table 1: HyNet LED Indicators

LED Position	LED Color	Indicates
1	RED flashing	No communication from gate operator to HyNet.
1	Green steady	Communication is established between gate operator and HyNet.
2	RED steady	Gate operator network communication is not configured or established.
2	RED flashing	HyNet is attempting to connect to network (web interface).
2	GREEN flashing	Network (web interface) is established and working. (May not be wholly configured, yet. Verify configuration with your IT administrator.)
3	RED steady	Hardware fault.
3	RED flashing	Charge is low on coin battery. Replace coin battery.
3	GREEN steady	Hardware functioning and coin battery charged.
4	Red steady or no LED lit	HyNet internal switch is not functioning.
4	GREEN steady	HyNet internal switch is functioning.

Drawing is not to scale
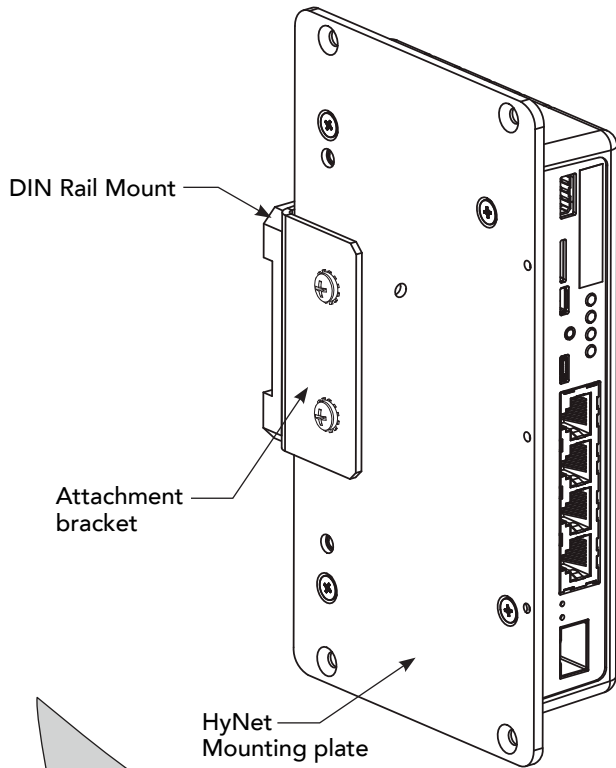
HySecurity CRASH Products and HyNet Assembly with Attachment Bracket

DIN rail mounting screws

DIN rail mount

Attachment Bracket

Star washers

Bracket mounting screws

HyNet Mounting Plate

Tools Required

- Phillips head screwdriver

HyNet Assembly

DIN Rail Mount

Attachment bracket

HyNet Mounting plate
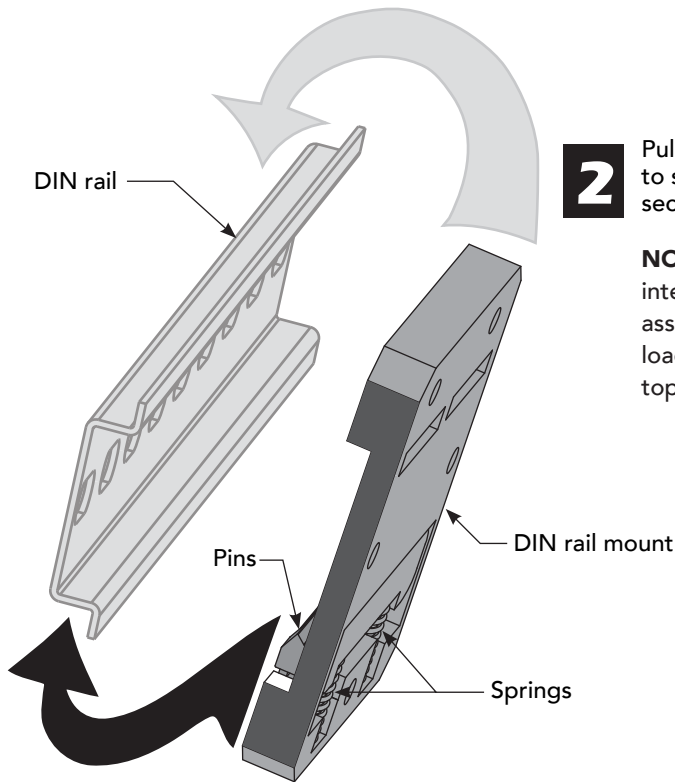
HyNet Installation on StrongArm M30 Control Panel
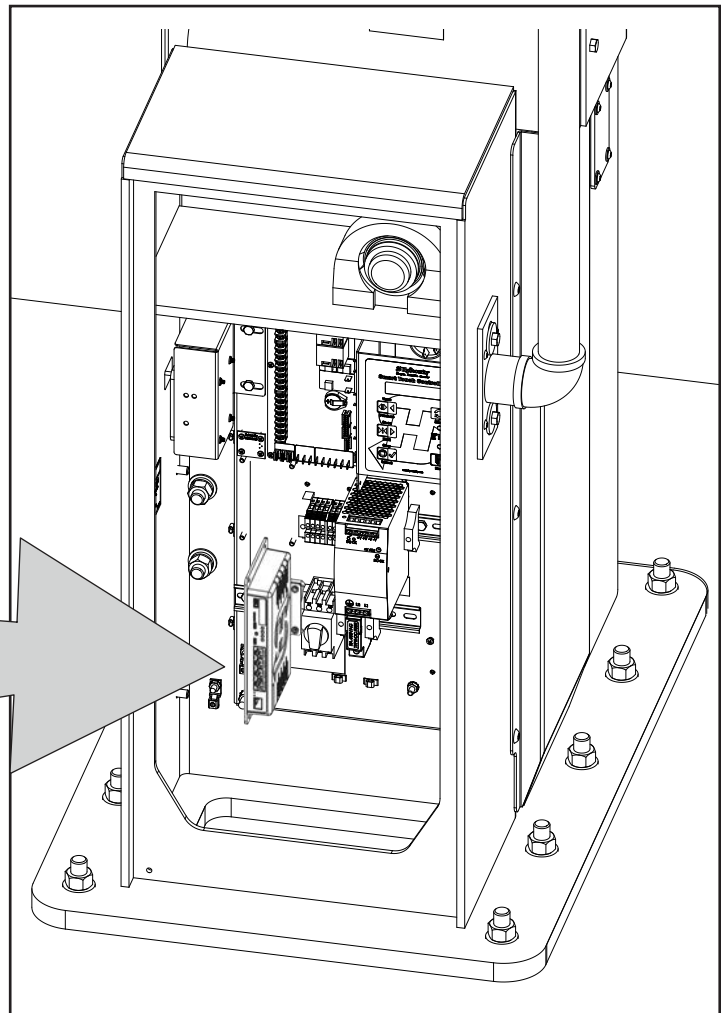
Mount HyNet module onto DIN rail next to Power Disconnect Switch.
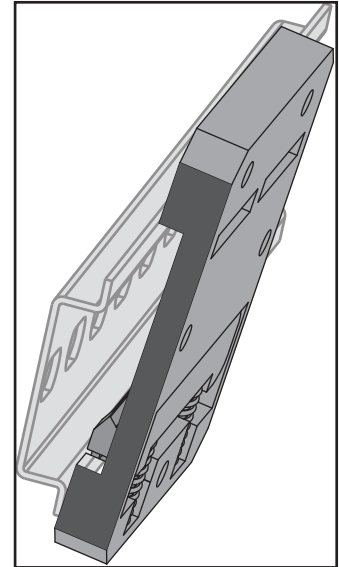
Mount HyNet Assembly to DIN Rail

Mount the HyNet assembly to the DIN rail inside the gate operator or HydraSupply.

DIN rail

Pins

Springs

DIN rail mount

1 Tip the HyNet Assembly so the spring loaded pins fit under the DIN rail.

2 Pull on the DIN rail mount to slide and set the opposite section over the DIN rail.

NOTE: The DIN rail mount is interchangeable and can be assembled so that the spring loaded pins clasp onto the top rail or the bottom rail.

NOTE: For clarification only, DIN rail and DIN rail mount shown without HyNet Assembly attached.

3

DIN rail
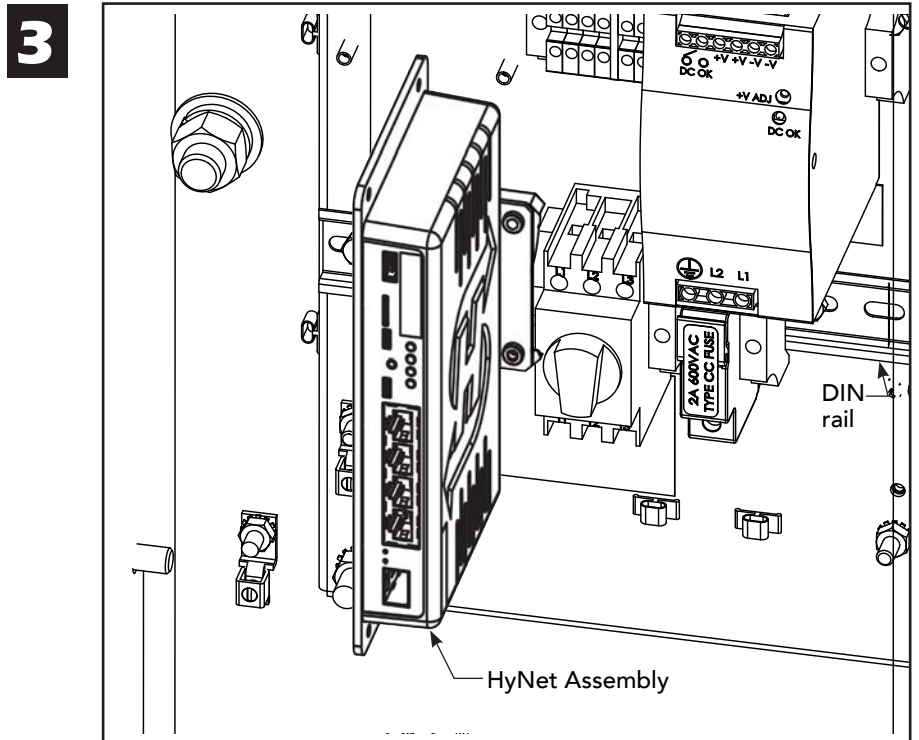
HyNet Assembly

StrongArm M30
HyNet Assembly shown attached to DIN rail in Pivot Post

NOTE: The HydraSupply cabinet (not shown) contains a DIN rail and the HyNet is mounted similarly to it.

HyNet Gateway

4 Snip off lug and strip wire. Connect flying lead to +24VDC terminal block.

RED TERMINAL BLOCKS (+24V)

BLACK TERMINAL BLOCKS (-24V)

RS-485 ports

Pin 1, COM

RS-485 Connector

3 Connect to RS-485 port on Smart Touch Controller.

NOTE: More detailed wiring information is shipped with the HyNet.

Wire harness (supplied in box)

Supply RJ-45 network connection **5**

HyNet

RS-485 Connector

1 Attach to RS-485 port on HyNet.

RS-485 port

Pin 1, +24V

Installer supplied shielded cable

2 Attach shielded cable to wire harness.*

*Measure distance between HyNet and Controller connections for appropriate shielded cable length.

Smart Touch Controller

DRIVE POWER RS485

STOP/BUZZER

MOTOR

FREE EXIT VEHICLE DETECTOR

USER 1

INSIDE OBSTR VEHICLE DETECTOR

USER 2

USER 3

COM

NO

OUTSIDE OBSTR VEHICLE DETECTOR

STATUS

SHADOW/RESET

DISPLAY VEHICLE DETECTOR

RS232

HySecurity

MX000585
VERSION
S/N

Inputs

1	STOP BUTTON
2	OPEN BUTTON
3	CLOSE BUTTON
4	REMOTE OPEN AND RADIO CONTROL
5	OPEN/CLOSE
6	OPEN PARTIAL
7	INTERLOCK OPEN TIME CLOCK OPEN
8	FREE EXIT DETECTOR
9	DISABLE EXIT DETECTOR DISABLE CLOSE TIMER
10	INSIDE OBSTRUCTION VEHICLE DETECTOR
11	OUTSIDE OBSTRUCTION VEHICLE DETECTOR
12	SHADOW/RESET VEHICLE DETECTOR
13	SENSOR 1
14	SENSOR COM
15	
16	DO NOT USE
17	SENSOR 2
18	DO NOT USE
19	SENSOR 3
20	DO NOT USE
21	CHARGER AC LOSS
22	LOCK INTERLOCK
23	EMERG CLOSE
24	FIRE DEPT OPEN

LED **Smart Touch Controller**

Tact button

LIMIT RPM DUAL GATE COM A B RADIO OPTIONS COM OPEN +24V +24V S 1 COM WIEGAND

⚠ **CAUTION** DO NOT connect to +24V tabs at base of Smart Touch Controller. Only use the +24V connections on the power supply terminal block.

Drawing is not to scale.

Smart Touch Controller

HySecurity gate operators provide a 2-wire, serial interface (RS-485 connection) which allows remote access to one or more operators.

When the physical connection is made and protocols are established, an SA (System Address) must be assigned for each operator through its Installer Menu.

For network communication, choosing a "SA" of 1 to 4 establishes individual network polling addresses. HyNet only utilizes numbers 1, 2, 3, or 4.

A "SA" of zero means no network communication is desired.
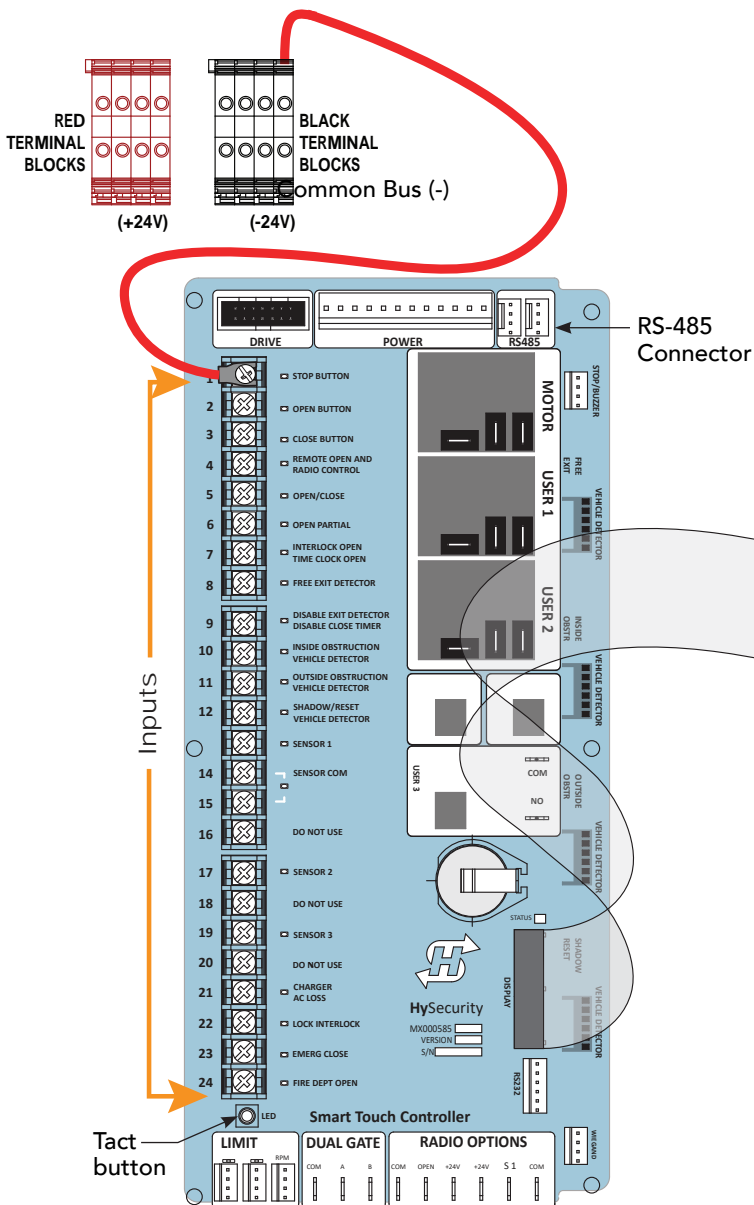
1 To access Installer Menu, press Menu button twice. Then, press Reset and Open.

Press Select to navigate to Installer Menu item "SA" System Address.
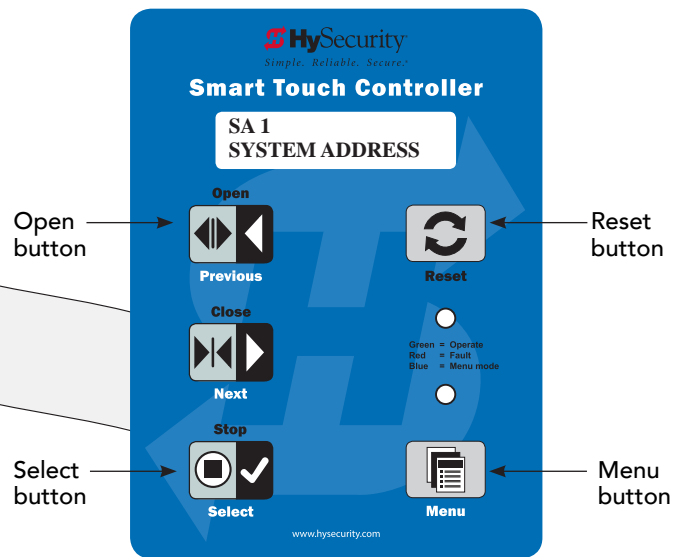
2 Press Select again to set gate operator's system address (Each gate operator attached to the same HyNet must have a unique SA number. Choose 1, 2, 3, or 4.)

3 To exit Menu mode, press Menu. The gate operator returns to Run mode.

4 Refer to "Table 1: HyNet LED Indicators" on page 2. Solid green means serial communication is active and functioning well.

5 For IP network setup, refer to the HyNet Quick Start manual supplied in the HyNet box..

INSTALLER'S CHECKLIST

Date Installed: _____   **Gate Operator Model:** _____

Site Location: _____

HyNet Serial Number: _____

Gate Operator Serial Number: _____

Gate Operator Serial Number: _____

Gate Operator Serial Number: _____

Gate Operator Serial Number: _____

Customer Name: _____

Mailing Address: _____   **Inspected by:** _____

_____   **Date Inspected:** _____

Phone Contact: _____   **Phone contact number:** _____

	Checked	Initials

1. Site Planning   ❑   _____

RJ-45 cable to system network.

2. Safety   ❑   _____

Review *Important Safety Information* in the gate operator's product manual.

Warning labels apparent and affixed properly.

Area around the gate and gate operator free of debris, cabinets/chassis include locking mechanism.

3. Electrical   ❑   _____

3.1 Grounding

- NFPA 780 Standard for the Installation of Lighting Protection Systems.
- Solid copper ground rod (C\,-inch diameter, 10 ft length) driven into ground within 3 ft of the gate operator.
- Single length of unspliced 6AWG copper wire less than 3 ft long attached to lug nut in gate operator.

3.2 Gate operator has current software loaded.

3.3 Configure the Controller

- Set the System Address (SA) in the Installer Menu.
- Communicate (verify) system address to IT Network Admin for proper web page configuration.

4. Review gate operator installation checklist from gate operator manual   ❑   _____

5. Take photographs of installation and provide an End User Demo   ❑   _____