

Relay Bridge™

Installation Guide

PART NUMBERS

FREEDOM
by IDENTIV

50-40-E, 50-40-EL
Replaces 50-40-5

ENTERPHONE
by IDENTIV

50-24-E
Replaces 50-24-5

PHYSICAL SPECIFICATIONS

Length	277 mm (10.91 in.)
Width	165 mm (6.50 in.)
Height	24 mm (0.94 in.)
Weight	564 g (19.89 oz.)
Max Readers	2 (each reader requires a 50-40-W485 adapter)
Max Input	0
Max Output	24
Certifications	Electrical: UL294 and UL294B EMI Radiation: FCC Part 15 Class B

SUMMARIZED LEVELS OF ACCESS CONTROL COMPONENTS

Destructive Attack	Level I
Line Security	Level I
Endurance	Level I
Standby Power	Level I
Single Point Locking	Level I

INSTALLATION REQUIREMENTS

Freedom Bridges should only be installed in dry, non-condensing environments. The ambient temperature of the environment should range between -40°C and 50°C.

Freedom Encryption Bridges should only be mounted to non-conductive surfaces. Incorrect mounting may short-circuit the electronics, which will cause it to malfunction.

DC power, reader, input contact, and output device wires should be between 16-28 AWG. They should also be stripped 5.5mm to sufficiently fit the terminal blocks and ensure that they do not come in contact with each other.

READER INSTALLATION REQUIREMENTS

The RS-485 input on the 50-40-E is intended for use in elevator cabs.

Two wire shielded cable running inside the travelling cable to the elevator cab is connected to the RS-485 inputs on the 50-40-E Freedom Bridge and then connected to a 50-40- W485 (Wiegand to 485 adapter) in the cab.

A Wiegand output reader can then be connected to the inputs on the 50-40- W485 adapter. Up to two reader adapters can be connected to the RS-485 inputs on the 50-40-E.

The shield wire should only be connected at the RS-485 input on the 50-40-E.

INSTALLATION PROCEDURE

1. Wire any output devices to the Relay Outputs shown on the wiring reference on the back.
2. Supply power to the Freedom Bridge using 12 - 16 Vdc & 1500 mA (1500 mA internal; ~60.4 mA per relay) DC power connected directly to the Power In terminal on the Freedom Bridge.
3. Connect a Cat5e or Cat6 cable from any port on an Ethernet switch to the RJ-45 connector on the Freedom Bridge. Ensure that the length of the cable between the switch to the Freedom Bridge is 100m or less. Greater lengths can be achieved by adding switches or repeaters every 100m.
4. To configure and add the Freedom Bridge to a MESH/Freedom Server, refer to the MESH/Freedom Solution Guide manual. the RJ-45 connector on the Freedom Bridge. **Note:** Ethernet only supports a maximum cable length of 100 m.



A flashing green "Ready" LED light on the Freedom Bridge circuit board indicates that the bridge is powered but not connected to a server.



A solid green "Ready" LED light indicates that the Freedom Bridge has established a connection to the server and is ready to use.

DC POWER IN

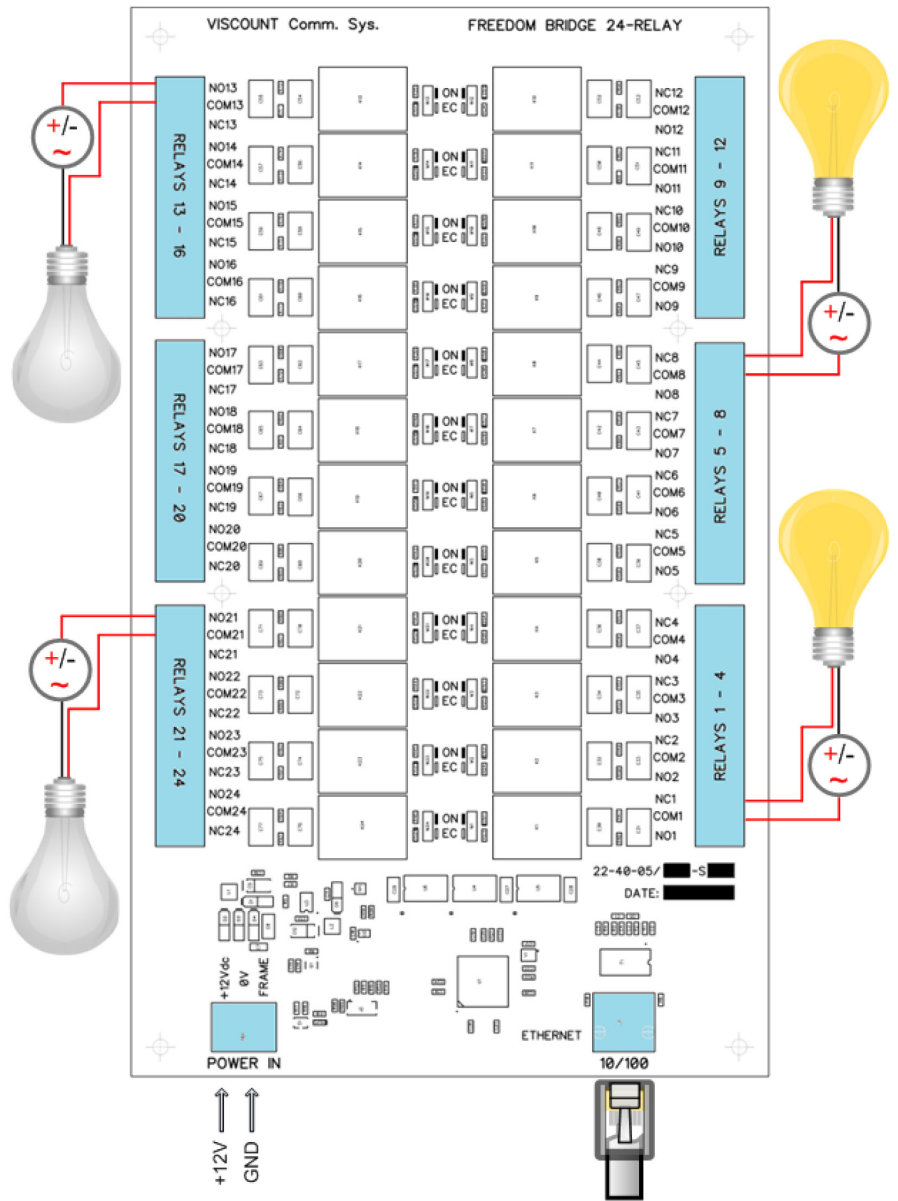
0v	DC Power Ground
+12	DC Power Input
Requirements	<ul style="list-style-type: none"> • 12 – 16 Vdc • 1500 mA (1500 mA internal & ~60.4mA per relay)

RELAY OUTPUTS

NC 1 - 24	Normally closed 1 - 24
COM 1 - 24	Common 1 - 24
No 1 - 24	Normally open 1 - 24
Relay Contact	<p>DC: 30 Vdc @ 4 Adc</p> <p>AC: 120 Vac @ 5 Aac</p> <p>AC: 240 Vac @ 2.5 Aac</p>

RESET BUTTON

Press and hold this button for 10 seconds to reset the configuration back to default.



CAUTION

This product is sensitive to Electrostatic Discharges (ESD).
Take precautions while handling the product by using proper grounding straps at all times.

NOTE

As long as the total current of the reader plus a door strike DOES NOT EXCEED 300mA, you may power the door strike using the power out and ground from the reader Input terminal block.