Quik Bridge™ 9-Relay Card

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Installation Instructions

Product Summary

The Quik Bridge[™] 9-Relay Card provides two opportunities to enhance safety and convenience of the peripherals used in a sophisticated security system.

- v You can use the card to control an additional power supply.
- V If you need to electrically isolate the panel from a particular output for personal safety or fire prevention reasons, the card can isolate the device from the panel.

For additional security, the plastic case includes space for installing a magnetic reed switch that can provide tamper protection when the switch is connected to panel input zone.

The Quik Bridge 9-Relay card provides nine "Form C" relays for a compatible panel. The relays are controlled by a touchpad or a combination of states and events in the system.

For example, you can use the touchpad to operate lights, drapes or a garage door.

You can program the system to turn on a CCTV camera during a burglary alarm, turn exit lights on during a fire alarm, or activate backup cellular phones or long-range radios if primary communications are inoperable.

Figure 1 shows the card's main components.



Figure 1. Card Components and Mounting

Installation Guidelines

- ν Each card can draw a maximum of 155mA.
- ν $\,$ Each relay can switch up to 2A at 60 VDC or 120 VAC.
- ν The card may be used with any 12V panel.
- v Use 4-conductor, 22-gauge or larger stranded wire from the card to the panel.
- For larger current output devices, use the appropriate gauge wire from the device to the card.

Tools and Supplies Needed

- v Screwdriver
- $v = \frac{3}{8}$ -inch self-tapping screws (included)
- v Wall anchors where needed (included)
- ν #6 panhead screws
- Drill with sheet metal bits to match screws (cabinet mount only)
- v Case tamper reed switch and magnet (optional)

Installation

The card can be mounted on a wall or inside some security system panel cabinets.

To mount the card on a wall:

- 1. Unplug the panel transformer and disconnect all back up batteries.
- 2. Remove the cover and set it aside.



Figure 2. Removing the Cover

- 3. Place the back plate on the wall and mark the mounting holes as shown in figure 1.
- 4. Drill holes and insert appropriate anchors.
- 5. Secure the back plate to the wall with panhead screws.

To mount the card inside a panel cabinet:

- 1. Unplug the panel transformer and disconnect all back up batteries.
- 2. Remove the cover and set it aside (Figure 2).
- 3. Place the back plate inside the cabinet at the lower-right corner and mark the mounting holes as shown in figure 1.
- 4. Drill holes in the cabinet wall.
- 5. Secure the back plate to the cabinet with self-tapping screws.

Installing a Tamper Switch

If the card is visible, you may want to add case tamper detection. To do this, install a reed switch in the plastic cover and wire the switch to an unused panel hardwire input terminal. If someone opens the cover, the switch opens and causes an alarm.

The tamper switch holder is located at the lower-right side of the back plate as shown in figure 1. The plastic cover holds the magnet.

To install the reed switch:

- 1. Slide the reed switch into the holder.
- 2. Connect the normally closed reed switch to the terminals on the panel.
- 3. Insert the reed switch magnet into the nibs on the card cover (not shown). Press the magnet clip (supplied) down over the magnet until it clicks into place.

Wiring

This section describes how to wire the card to panels and how to connect devices to the card.

Table 1. Terminal Strip Connections

Name	Used for
+12VDC	12VDC power for relay coils. 155mA maximum required.
Relay 1	Negative side of relay 1 coil. 17mA sink maximum.
N/O 1	Normally open (N/O, closes on activation) relay 1 dry contact connection.
N/C 1	Normally closed (N/C, opens on activation) relay 1 dry contact connection.
COM 1	Common (C) side of relay 1 N/C and N/O contacts). 2 amp maximum at 12 VDC or 120 VDC.

Table 1. Terminal Strip Connections (Continued)

Name	Used for
Relay 2	Negative side of relay 2 coil. 17mA sink maximum.
N/O 2	Normally open (N/O, closes on activation) relay 2 dry contact connection.
N/C 2	Normally closed (N/C, opens on activation) relay 2 dry contact connection.
COM 2	Common (C) side of relay 2 N/C and N/O contacts). 2 amp maximum at 12 VDC or 120 VDC.
Relay 3	Negative side of relay 3 coil. 17mA sink maximum.
N/O 3	Normally open (N/O, closes on activation) relay 3 dry contact connection.
N/C 3	Normally closed (N/C, opens on activation) relay 3 dry contact connection.
COM 3	Common (C) side of relay 3 N/C and N/O contacts. 2 amp maximum at 12 VDC or 120 VDC.
Relay 4	Negative side of relay 4 coil. 17mA sink maximum.
N/O 4	Normally open (N/O, closes on activation) relay 4 dry contact connection.
N/C 4	Normally closed (N/C, opens on activation) relay 4 dry contact connection.
COM 4	Common (C) side of relay 4 N/C and N/O contacts). 2 amp maximum at 12 VDC or 120 VDC.
Relay 5	Negative side of relay 5 coil. 17mA sink maximum.
N/O 5	Normally open (N/O, closes on activation) relay 5 dry contact connection.
N/C 5	Normally closed (N/C, opens on activation) relay 5 dry contact connection.
COM 5	Common (C) side of relay 5 N/C and N/O contacts. 2 amp maximum at 12 VDC or 120 VDC.
Relay 6	Negative side of relay 6 coil. 17mA sink maximum.
N/O 6	Normally open (N/O, closes on activation) relay 6 dry contact connection.
N/C 6	Normally closed (N/C, opens on activation) relay 6 dry contact connection.
COM 6	Common (C) side of relay 6 N/C and N/O contacts. 2 amp maximum at 12 VDC or 120 VDC.
Relay 7	Negative side of relay 7 coil. 17mA sink maximum.
N/O 7	Normally open (N/O, closes on activation) relay 7 dry contact connection.
N/C 7	Normally closed (N/C, opens on activation) relay 7 dry contact connection.

Table 1. Terminal Strip Connections (Continued)

Name	Used for
COM 7	Common (C) side of relay N/C and N/O contacts. 2 amp maximum at 12 VDC or 120 VDC.
Relay 8	Negative side of relay 8 coil. 17mA sink maximum.
N/O 8	Normally open (N/O, closes on activation) relay 8 dry contact connection.
N/C 8	Normally closed (N/C, opens on activation) relay 8 dry contact connection.
COM 8	Common (C) side of relay 8 N/C and N/O contacts. 2 amp maximum at 12 VDC or 120 VDC.
Relay 9	Negative side of relay 9 coil. 17mA sink maximum.
N/O 9	Normally open (N/O, closes on activation) relay 9 dry contact connection.
N/C 9	Normally closed (N/C, opens on activation) relay 9 dry contact connection.
COM 9	Common (C) side of relay 9 N/C and N/O contacts. 2 amp maximum at 12 VDC or 120 VDC.

To wire the card to a Advent[™] panel:

- 1. Unplug the panel transformer and disconnect all back up batteries.
- 2. Wire the card to the panel as shown in figure 3 and table 1.



** DO NOT EXCEED POWER SUPPLY CAPACITY

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Figure 3. Wiring Card to Advent Panel.

To wire the card to the Quik Bridge Loop Receiver:

- 1. Disconnect the panel's transformer and all batteries.
- 2. Wire the devices to the card as shown in figure 4 and table 1.



Figure 4. Wiring Card to Quik Bridge Loop Receiver

Power Up

This section describes how to power up the panel and the card. Refer to the panel's installation instructions for more information.

To power up the panel and the card:

- 1. Verify that all wiring at the panel and the card are correct.
- 2. Reconnect the panel battery and plug in the power transformer.

Troubleshooting

The following procedures show you what to do if the card is not working as expected.

If no relays activate.

- 1. Check panel fuse(s).
- 2. Check card/panel and output device wiring and connections.
- 3. Check panel output programming.
- 4. Check to see if you have 12V from the panel.

If one relay never activates.

- 1. Check panel output programming for that output.
- 2. Check card output wiring and connections.
- 3. Check that the output programmed trigger event for that relay actually occurs.
- 4. Ground out the relay input (coil) terminal on the relay. If the relay activates, then the relay is OK.
- 5. Card output relay may have failed or been overloaded. Use a different (unused) relay or replace the card.

If one relay stays activated.

- If you have an UltraGard[™] panel, check if the output is programmed for a 3 minute "on" time and if the triggering event is repeatedly "resetting" the 3 minute timer and keeping the output activated.
- 2. Check card output wiring and connections.
- 3. Check that the output programmed trigger event for that relay actually occurs.
- 4. Check voltage on the relay input (coil) terminal. Make sure voltage is 12V when the relay is not activated.
- 5. card relay may have failed or been overloaded. Use a different (unused) relay or replace the card.

Specifications

Compatibility: All panels with 155mA output source.

Power Requirements: 12 VDC, 155mA all relays activated (maximum @17 mA per relay)

Outputs: Nine "Form C" (common, normally open, normally closed) contact relays.

Relay Contact Ratings: 2.0 A at 60 VDC or 120 VAC maximum (each contact)

Dimensions: 5.25" x 4.125" x 1.0" (L x W x D)

Case Material: ABS plastic

Case Color: Belgian gray

Notices

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- This device must accept any interference that may be received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Interactive Technologies, Inc. can void the user's authority to operate the equipment



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