# Crestron B-G2-FP & B-G3-FP

# 2 and 3 Gang Faceplates

**Installation Guide** 



CRESTRON

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# 2 and 3 Gang Faceplates: B-G2-FP & B-G3-FP

#### Introduction

Two and three gang faceplates, B-G2-FP and B-G3-FP, are wall-mounted plastic accessories that allow you to mount the CNX-B2/4/6/8/12 single-gang keypads in groups of two or three. For more information on the keypads, refer to latest version of the Operations and Installation Guide for the Single Gang Keypads, Doc. 8173. The number in the product's name corresponds to the number of gangs. Each of these units is available in three colors (almond, black, and white). The suffix 'A', 'B', and 'W', respectively denotes color, i.e. B-G2-FPB is a 2-gang black unit. The 2 and 3 gang faceplates are specifically designed for the Crestron keypads and will not accommodate third-party decorator-style components.

Several different metal finishes are also available (must be purchased separately) for mounting on the plastic faceplates. Finishes include chrome, brushed gold, polished black, polished brass, polished gold, stainless steel and primed.

# **Physical Description**

Refer to the illustrations on pages 2 and 3. The faceplate unit consists of a removable 2 or 3-gang plastic faceplate and a 2 or 3-gang detent plate. The metal faceplates are slightly larger than the plastic units. Refer to the **NOTE** on page 6 for metal faceplate installation instructions.

The number of buttons on a keypad can vary from 2, 4, 6, 8, or 12. Each button assembly consists of a rear speaker, and a male port (standard Cresnet network port labeled 24 Y Z G). The port provides operating power and communications to/from the keypad

#### Physical Views

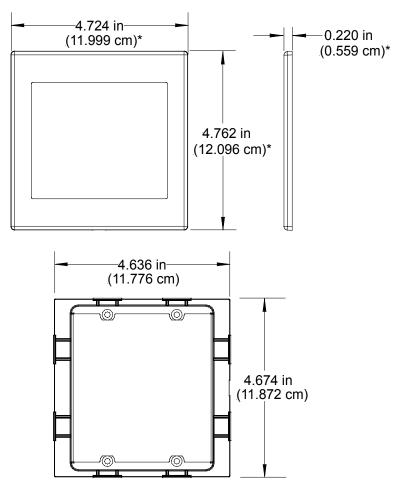


2-Gang black faceplate with 12 and 8 black button keypads



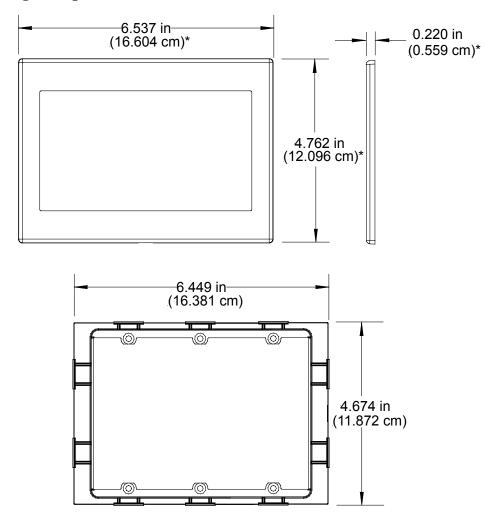
Metal finish mounted on 3-gang faceplate with 12 (2) and 8 black button keypads

#### 2-Gang Faceplate/Detent Plate



<sup>\*</sup> Metal faceplate dimensions – Height: 4.840 in (12.294 cm), Width: 4.800 in (12.192 cm), Depth: 0.283 in (0.719 cm)

#### 3-Gang Faceplate/Detent Plate



<sup>\*</sup> Metal faceplate dimensions – Height: 4.840 in (12.294 cm), Width: 6.614 in (16.800 cm), Depth: 0.283 in (0.719 cm)

## **Industry Compliance**

As of the date of manufacture, the keypads have been tested and found to comply with specifications for CE marking and standards per EMC and Radiocommunications Compliance Labelling (N11785).



# Setup

# **Network Wiring**

**NOTE:** When installing network wiring, refer to the latest revision of the wiring diagram(s) appropriate for your specific system configuration, available from the Downloads | Product Manuals | Software and Wiring Diagrams section of the Crestron website (<a href="www.crestron.com">www.crestron.com</a>).

When calculating the wire gauge for a particular Cresnet run, the length of the run and the power factor of each network unit to be connected must be taken into consideration. If Cresnet units are to be daisy-chained on the run, the power factor of each unit to be daisy-chained must be added together to determine the power factor of the entire chain. If the unit is a home-run from a Crestron system power supply network port, the power factor of that unit is the power factor of the entire run. The length of the run in feet and the power factor of the run should be used in the following resistance equation to calculate the value on the right side of the equation.

#### Resistance Equation

$$R < \frac{40,000}{L \times PF}$$
 Where:  $R = R$ 

Where: R = Resistance (refer to table below). L = Length of run (or chain) in feet. PF = Power factor of entire run (or chain).

The required wire gauge should be chosen such that the resistance value is less than the value calculated in the resistance equation. Refer to the table below.

#### Wire Gauge Values

RESISTANCE (R)	WIRE GAUGE
4	16
6	18
10	20
15	22
13	Doubled CAT5
8.7	Tripled CAT5

**NOTE:** All Cresnet wiring must consist of two twisted-pairs. One twisted pair is the +24V conductor and the GND conductor and the other twisted pair is the Y conductor and the Z conductor.

**NOTE:** When daisy-chaining Cresnet units, strip the ends of the wires carefully to avoid nicking the conductors. Twist together the ends of the wires that share a pin on the network connector, and tin the twisted connection. Apply solder only to the ends of the twisted wires. Avoid tinning too far up the wires or the end becomes brittle. Insert the tinned connection into the Cresnet connector and tighten the retaining screw. Repeat the procedure for the other three conductors.

# **Identity Code**

Every equipment and user interface within the network requires a unique identity code (NET ID). Refer to latest version of the Operations and Installation Guide for the Single Gang Keypads, Doc. 8173, for procedures on setting the NET ID.

#### Installation

**NOTE**: For simplicity, the following procedure is for a 2-gang unit.

#### Tools/hardware required

- 2-gang Plastic Faceplate (supplied with B-G2-FP)
- 2-gang Detent Plate (supplied with B-G2-FP)
- (2) Single Gang Keypads (supplied separately), which includes:

**Buttons** 

- (2) Dividers
- (4) 1 in. panhead phillips screws
- (4) 3/16 in. flathead phillips screws

Cresnet network cable (supplied separately)

Phillips screwdriver (supplied by other)

After the Cresnet network wiring has been installed and verified, use the following procedure to install the keypads in a standard, 2-gang electrical box (refer to illustrations on pages 7 and 8).

- 1. Turn Cresnet system power **OFF**.
- 2. Connect the Cresnet cable to the keypads' Cresnet ports and the other ends to the control system.
- 3. Attach the two keypad button assemblies to the detent plate using the (4) 3/16 in. flathead screws (supplied with keypads).

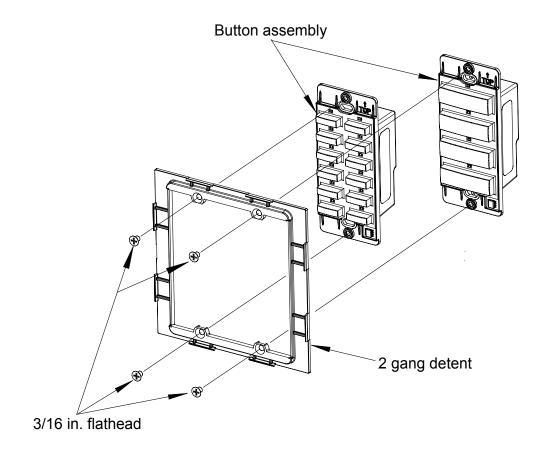
**CAUTION:** Excess wire that is pinched between the keypad and electrical box could short out. Make sure that all excess wire is completely inside the electrical box and not between the box and the keypad.

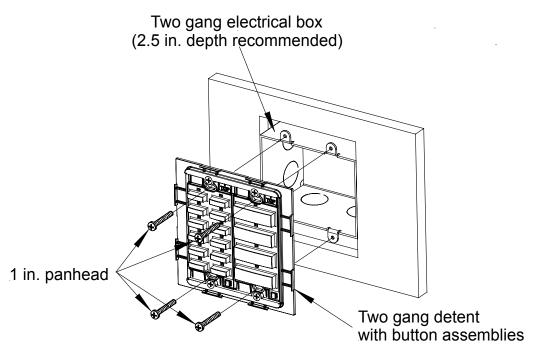
- 4. Make sure 2-gang unit is oriented as marked with keypads' arrows at top, and place unit in the electrical box.
- 5. Attach units using the (4) 1 in. panhead screws (supplied with keypads).
- 6. Attach buttons with LED window oriented upward to match each LED indicator.
- 7. Attach dividers making sure dividers' interlock tabs are oriented correctly (refer to the "Interlock Tabs Example" illustration on page 8).
- 8. Attach faceplate (orient with arrow up, make sure it snaps into place).

**NOTE:** If you are installing a metal 2-gang faceplate, carefully clean plastic faceplate mentioned in step 8, (leave no dust or debris on faceplate), observe alignment, remove adhesive liners from inner surface of metal faceplate and mount over 2-gang plastic faceplate.

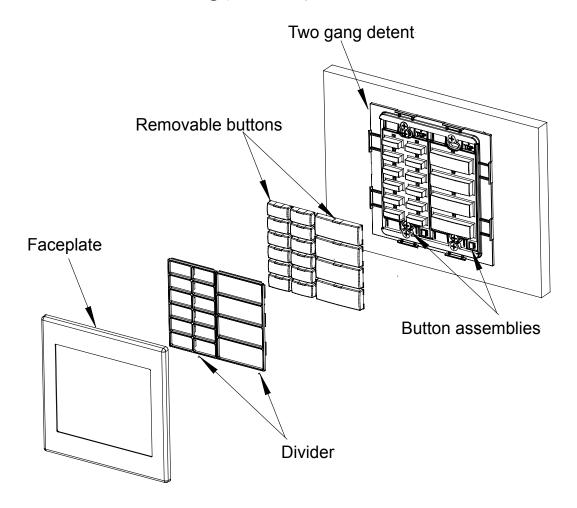
9. Turn Cresnet system power **ON**.

#### Installation View 2-Gang

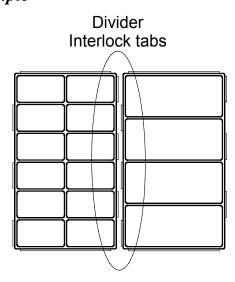




## Installation View 2-Gang (continued)



Interlock Tabs Example



# **Troubleshooting**

Refer to latest version of the Operations and Installation Guide for the Single Gang Keypads, Doc. 8173, for troubleshooting information on the keypads.

# **Further Inquiries**

If after reviewing this Installation Guide, you cannot locate specific information or have questions, please take advantage of Crestron's award winning customer service team by calling:

- In the US and Canada, call Crestron's corporate headquarters at 1-888-CRESTRON [1-888-273-7876] or 1-201-767-3400.
- In Europe, call Crestron International at +32-15-50-99-50.
- In Asia, call Crestron Asia at +852-2341-2016.
- In Latin America, call Crestron Latin America at +5255-5093-2160.
- In Australia and New Zealand, call Creston Pacific at +613-9480-2999

## **Future Updates**

As Crestron improves functions, adds new features, and extends the capabilities of the 2 and 3 gang faceplates, additional information may be made available as manual updates. These updates are solely electronic and serve as intermediary supplements prior to the release of a complete technical documentation revision.

Check the Crestron website (<a href="www.crestron.com">www.crestron.com</a>) periodically for manual update availability and its subjective value. Updates are available from the Download | Product Manuals section and are identified as an "Addendum" in the Download column.

# **Return and Warranty Policies**

## Merchandise Returns / Repair Service

- 1. No merchandise may be returned for credit, exchange, or service without prior authorization from CRESTRON. To obtain warranty service for CRESTRON products, contact the factory and request an RMA (Return Merchandise Authorization) number. Enclose a note specifying the nature of the problem, name and phone number of contact person, RMA number, and return address.
- 2. Products may be returned for credit, exchange, or service with a CRESTRON Return Merchandise Authorization (RMA) number. Authorized returns must be shipped freight prepaid to CRESTRON, Cresskill, N.J., or its authorized subsidiaries, with RMA number clearly marked on the outside of all cartons. Shipments arriving freight collect or without an RMA number shall be subject to refusal. CRESTRON reserves the right in its sole and absolute discretion to charge a 15% restocking fee, plus shipping costs, on any products returned with an RMA.
- 3. Return freight charges following repair of items under warranty shall be paid by CRESTRON, shipping by standard ground carrier. In the event repairs are found to be non-warranty, return freight costs shall be paid by the purchaser.

#### **CRESTRON Limited Warranty**

CRESTRON ELECTRONICS, Inc. warrants its products to be free from manufacturing defects in materials and workmanship under normal use for a period of three (3) years from the date of purchase from CRESTRON, with the following exceptions: disk drives and any other moving or rotating mechanical parts, pan/tilt heads and power supplies are covered for a period of one (1) year; touchscreen display and overlay components are covered for 90 days; batteries and incandescent lamps are not covered.

This warranty extends to products purchased directly from CRESTRON or an authorized CRESTRON dealer. Purchasers should inquire of the dealer regarding the nature and extent of the dealer's warranty, if any.

CRESTRON shall not be liable to honor the terms of this warranty if the product has been used in any application other than that for which it was intended, or if it has been subjected to misuse, accidental damage, modification, or improper installation procedures. Furthermore, this warranty does not cover any product that has had the serial number altered, defaced, or removed.

This warranty shall be the sole and exclusive remedy to the original purchaser. In no event shall CRESTRON be liable for incidental or consequential damages of any kind (property or economic damages inclusive) arising from the sale or use of this equipment. CRESTRON is not liable for any claim made by a third party or made by the purchaser for a third party.

CRESTRON shall, at its option, repair or replace any product found defective, without charge for parts or labor. Repaired or replaced equipment and parts supplied under this warranty shall be covered only by the unexpired portion of the warranty.

Except as expressly set forth in this warranty, CRESTRON makes no other warranties, expressed or implied, nor authorizes any other party to offer any other party to offer any warranty, including any implied warranties of merchantability or fitness for a particular purpose. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty. This warranty statement supercedes all previous warranties.

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