

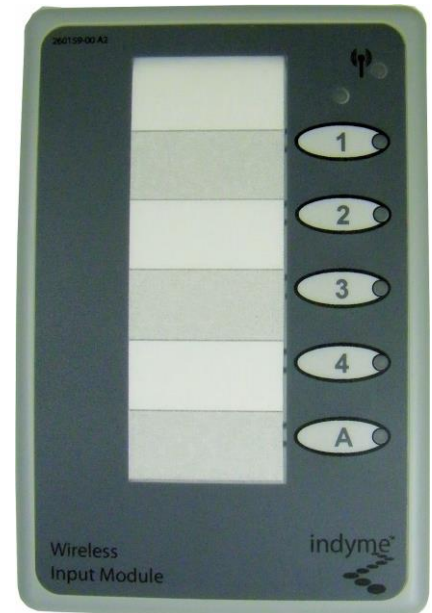
CB929A Multi-purpose Help button

Programming and Installation Instructions

Overview

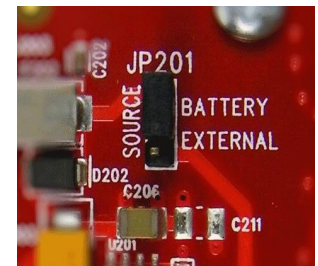
The CB929A is a special purpose, multi-function GSF help button. It is designed for use as a director, shopper and/or external contact help button. The CB929A is a member of the Global Solutions Family. Indyme GSF products operate in the 800MHz – 900 MHz frequency spectrum. GSF help buttons are designed to communicate with a GSF access point. GSF products are not compatible with legacy devices.

The CB929A contains 4-inputs, each input can be configured for use as a normally opened or normally closed contact. The contacts can be configured individually or globally. The CB929A must be correctly configured and programmed to operate with external devices. Identify the quantity and types of circuits you will be using prior to beginning installation.

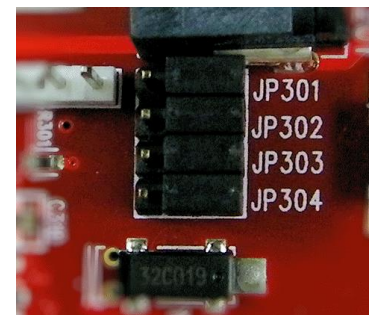


Help button Jumpers

The CB929A requires +3VDC to operate. Power can be supplied via 2-C size batteries or an external +12VDC power supply. Using **JP201**, select the desired power source by placing the jumper over the two corresponding pins. Removing the jumper or placing it on one pin of **JP201** will disable the help button.



The CB929A has 4-inputs, each input has a jumper used to assign the circuit type, normally opened (NO) or normally closed (NC). Using the jumpers labeled, **JP301- JP304**, set the circuit type for each input. Placing a jumper over both pins on the right, or removing the jumper, assigns a normally opened input. Placing a jumper over both pins on the left assigns a normally closed input. (The picture at right indicates all inputs configured for normally opened inputs.)



Programming Parameters

GSF products **MUST** be properly programmed to establish communication. Programming parameters **MUST** match your configuration. The default settings (Table-A) are for testing purposes only and should not be used. Failure to properly program your help button and access point will prevent your devices from working.

GSF Help buttons have four primary programming parameters; Netcode, Address and Operating Mode. These **MUST** be programmed in the correct order to establish communication and ensure proper operation. Identify the parameters for your configuration before you begin programming.

Using the programming instructions below set the following parameters in order.

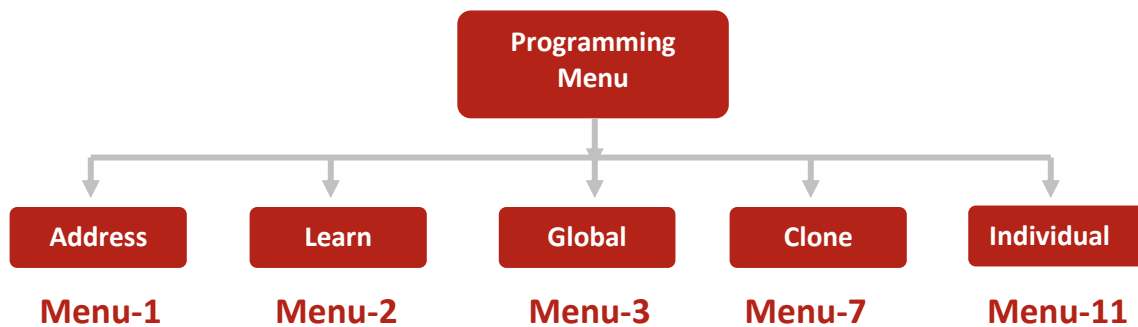
- Netcode – unique identification code for the installation environment.
- Address – alarm number associated with a control unit alarm event.
- Operating Mode – defines how the help button will respond when activated

Table – A (Default Programming Parameters)	
Netcode	00000001
Address	0001
Operating Mode	1

Programming a help button requires a series of button presses. The specific buttons vary by help button type. On the CB929A, **SET is button-1, RESET is button-A**. The assurance **LED is red** and is **adjacent to button-1**. The transmit **LED is green** and is located in the upper right corner of the help button. Either LED will flash during programming to indicate your progress. See the specific menu for details.

GSF Help button Programming

GSF Help buttons function in the 800MHz – 900MHz frequency spectrum. These wireless transceivers, communicate with the CB951 Access Point. Each help button **MUST** be programmed with the correct parameters to match the CB951 Access Point(s). Help buttons use a hierarchy based menu structure. You must enter the Programming Menu first, to select the desired submenu. Each submenu may have one or more options available. These options are used to assign specific operational characteristics to the help buttons. Review the submenus/options before you begin programming. The submenus/options will vary by help button model.



Enter Programming Menu

Press and hold the **RESET** button (approx. 8-sec) until the assurance LED blinks once.
 Press and hold the **SET** button (approx. 8-sec.) until the assurance LED blinks twice.
 Press and hold the **RESET** button (approx. 8-sec.) until the assurance LED blinks three times. The help button is now in Programming Menu mode, proceed to the desired submenu.

Menu-1: Address Programming -used to assign an alarm address to a help button. The address will define which message(s) are broadcast when the help button is activated. The valid address range is from 0001 to 4095. Leading zeros are required. The default alarm for all help buttons is alarm-0001. (Example: Alarm-0107)

After entering the Programming Menu;

Press the **SET** button once, **RESET** once. The assurance LED will flash once to confirm your entry. You are now in Menu-1.

Enter your address as follows.

- Press the **RESET** button once to represent the zero. **(0)**
- Press the **SET** button once, **RESET** once to save. **(1)**
- Press the **RESET** button once to represent the zero. **(0)**
- Press the **SET** button seven times, **RESET** once to save. **(7)**

When the last digit is saved, the assurance LED will confirm your entry by flashing to indicate the digits entered. A zero is indicated by a long flash of approximately 1-second.

Help button buttons-2-4 are automatically assigned the next consecutive alarm numbers. They cannot be programmed independently.

Menu-2: Learn Mode –used to capture, (Learn) the Netcode from another GSF device that is in Clone Mode; help button or access point.

After entering the Programming Menu;

Press the **SET** button twice, **RESET** once. The assurance LED will flash twice to confirm your entry. You are now in Menu-2.

The transmit LED will begin flashing ¼-sec ON, 1-sec OFF. This indicates that the help button is requesting a Netcode. When the help button receives a Netcode, the transmit LED will flash rapidly for approximately 3-seconds, and then exit Learn Mode. If the help button does not receive a Netcode within 5-minutes, the help button will exit Learn Mode.

Menu-3: Global Input Mode -used to assign operational characteristics to all inputs globally. The operational characteristics define how the help button will respond to button presses, input triggers and timing parameters.

After entering the Programming Menu;

Press the **SET** button 3-times, **RESET** once to save.

The assurance LED will flash three times to confirm your entry. You are now in Menu-3.

Press the **SET** button <1--6> times to select the Operating Mode, **RESET** once to save.

The assurance LED will flash to confirm your entry.

Menu-7: Clone Mode –used to send the Netcode to another GSF device.

After entering the Programming Menu;

Press the **SET** button seven times, **RESET** once. The assurance LED will flash seven times to confirm your entry. You are now in Menu-7.

The assurance LED will flash a cadence of 4-ON, pause, 4-ON, pause, etc, to indicate it is in Clone Mode.

To exit press the **RESET** button. The help button will stay in Clone mode for 5-minutes or until the **RESET** button is pressed. Insure you are using a help button that is already working with the installed system.

To Clone using an access point see the CB951 installation document.

Menu-11: Individual Input Mode -used to assign operational characteristics to each input individually. The operational characteristics define how the help button will respond to button presses, input triggers and timing parameters.

After entering the Programming Menu;

Press the **SET** button 11- times, **RESET** once to save.

The assurance LED will flash eleven times to confirm your entry. You are now in Menu-11.

Press the **SET** button <1–4> times to select the input you are programming, **RESET** once to save. The assurance led will flash to confirm your entry.

Press the **SET** button <1–4> times to select the Operating Mode, **RESET** once to save.

The assurance LED will flash to confirm your input number, pause, then flash to confirm your Operating Mode entry.

NOTE: Operating Modes <5--6> are NOT valid for Individual Input Mode.

When Operating Modes <5--6> are set globally, Individual Input Mode is disabled.

Operating Modes

Mode-1: Alarm Notify Non-Latching

Basic alarm notification; compatible with “Shopper Help button” alarm processing.

When any INPUT is activated, an alarm SET is broadcast and the corresponding LED will flash according to “LED Sequence 1”. (Indicated below.)

When the INPUT is deactivated, an alarm RESET is broadcast and the corresponding LED will turn off.

Mode-2: Alarm Notify Latching

Basic alarm notification, response required;

When any INPUT is activated, an alarm SET is broadcast and the corresponding LED will flash according to “LED Sequence 1”. (Indicated below.)

When the INPUT is deactivated, NO alarm RESET is broadcast. The corresponding LED will continue to flash until the front panel button is pressed.

Responding user must press the front panel button corresponding to the active INPUT to broadcast an alarm RESET and turn off the LED. If a front panel button is pressed when the INPUT is not active, (non-alarm), an alarm RESET is broadcast.

Mode-3: Alarm Reminder Non-Latching

Same as Mode 1 except, the alarm is re-started if the INPUT is not cleared. Periodically re-starts the alarm sequence for situations in which a persisting alarm condition may be overlooked (such as an alarm sequence that starts during unstaffed hours and does not self-clear). If alarm state persists more than XXX minutes (XXX specified by CU-based variable in the range of 15 to 999 minutes; default is 30 minutes), then repeatedly re-start this sequence from the beginning as a new alarm.

Mode-4: Alarm Reminder Latching

Same as Mode 2 except, the alarm is re-started if the corresponding front panel button is not pressed.

Periodically re-starts the alarm sequence for situations in which a persisting alarm condition may be overlooked (such as an alarm sequence that starts during unstaffed hours and does not self-clear). If alarm state persists more than XXX minutes (XXX specified by CU-based variable in the range of 15 to 999 minutes; default is 30 minutes), then repeatedly re-start this sequence from the beginning as a new alarm.

Mode-5: Director Buttons Latching

Four Button Director Help button; the four external inputs are disabled.

When user presses any of buttons 1 through 4, an alarm SET is broadcast and the corresponding LED will flash according to “LED Sequence 1”. (Indicated below.) Responding user presses the front panel button “A” (RESPOND) to clear all active alarm(s); an alarm RESET is broadcast and the corresponding LED(s) will turn off. If

RESPOND button is not pressed within 10 minutes, the help button terminates “LED Sequence 1” and the alarm will timeout.

Mode-6: Alarm Notify & Director Latching

Provides a combination of External Inputs and Director Buttons:

INPUTS 1 and 2 operate in Mode 2; the corresponding front panel button must be pressed to RESET.

Buttons 3 and 4 operate in Mode 5; button “A” is used to RESET active alarms on Buttons 3 & 4.

Mode-7: GSF Site Survey (4-Button GSF Help buttons ONLY)

Press any of the 4 buttons to activate the site survey. LED’s 2,3,4 turn on as a 3-second timer, counting down before the start of the survey. The LED’s will turn off, one per second, (2-3-4) to indicate the count down. When all 3 LED’s are off, the survey will begin. LED 1 will begin flashing to indicate that the help button is searching for the strongest AP with the correct Netcode. When the strongest AP is found, the help button will send 10 pings to that AP and calculate the average RSSI. (Received Signal Strength Indication) The following table describes the LED results.

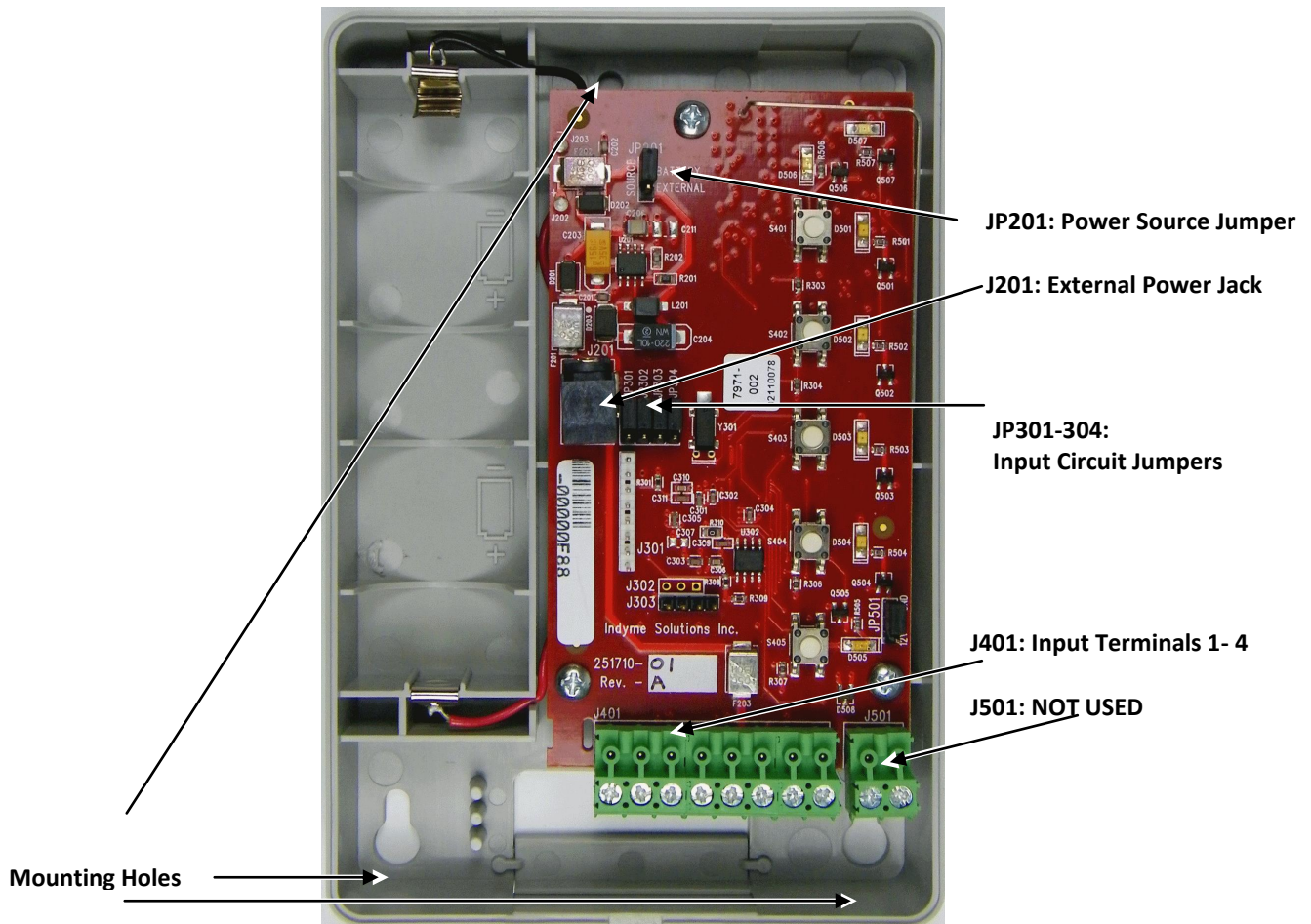
LED's	Meaning
1,2,3,4 on	Excellent - RSSI is -70 dBm or better
2,3,4 on	Good - RSSI is -80 to -71 dBm
3,4 on	Fair - RSSI is -88 to -81 dBm
4 on	Poor - RSSI is -89 dBm or worse
4 flashing	Not connected to an AP

Table – B (LED Flash Sequence)

- LED lights solid for the duration that the input alarm exists for a maximum of 5-seconds.
- LED continues flashing rapidly for 2-minutes.
- LED continues flashing in short bursts indefinitely.
- LED ends the flash sequence with two long flashes, then extinguishes when:
 Non-latching Operating Modes - the alarm condition clears.
 Latching Operating Modes – when associated RESET button is pressed, (if the input alarm condition is clear).

Wiring and Installation

Insure the help button is correctly programmed before installing wiring or mounting the help button. Install the two green terminal blocks onto the pins of J401 and J501 respectively. J401 contains 4-pairs of screw terminals corresponding to inputs 1-4. J501 has 1-pair of screw terminals, this connection is not used. Insert the wires through the hole in the back of the help button. Insert each wire into the corresponding input screw terminal; inputs 1-4, left to right. Secure the wires by tightening the screws. Verify the power jumper **JP201** is installed and the corresponding power source is installed/connected. Test the help button for proper operation before final installation.



Using the installation hardware provided, install the help button in a secure location. Ensure the wires are properly secured and will not pull out of the help button.

DO NOT MOUNT THE HELP BUTTON IN OR NEAR THE FOLLOWING;

- Moist or damp environments.
- Radio Frequency devices that may interfere with help button signals.
- Outdoors or exposed to outdoor elements.
- Excessive vibration which may cause wires to come loose.

FCC Notice of Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Industry Canada Notice of Compliance

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This Class B digital apparatus complies with Canadian ICES-003.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Les changements ou modifications non approuvés expressément par la partie responsable de la conformité pourrait annuler l'autorité de l'utilisateur à faire fonctionner l'équipement.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.