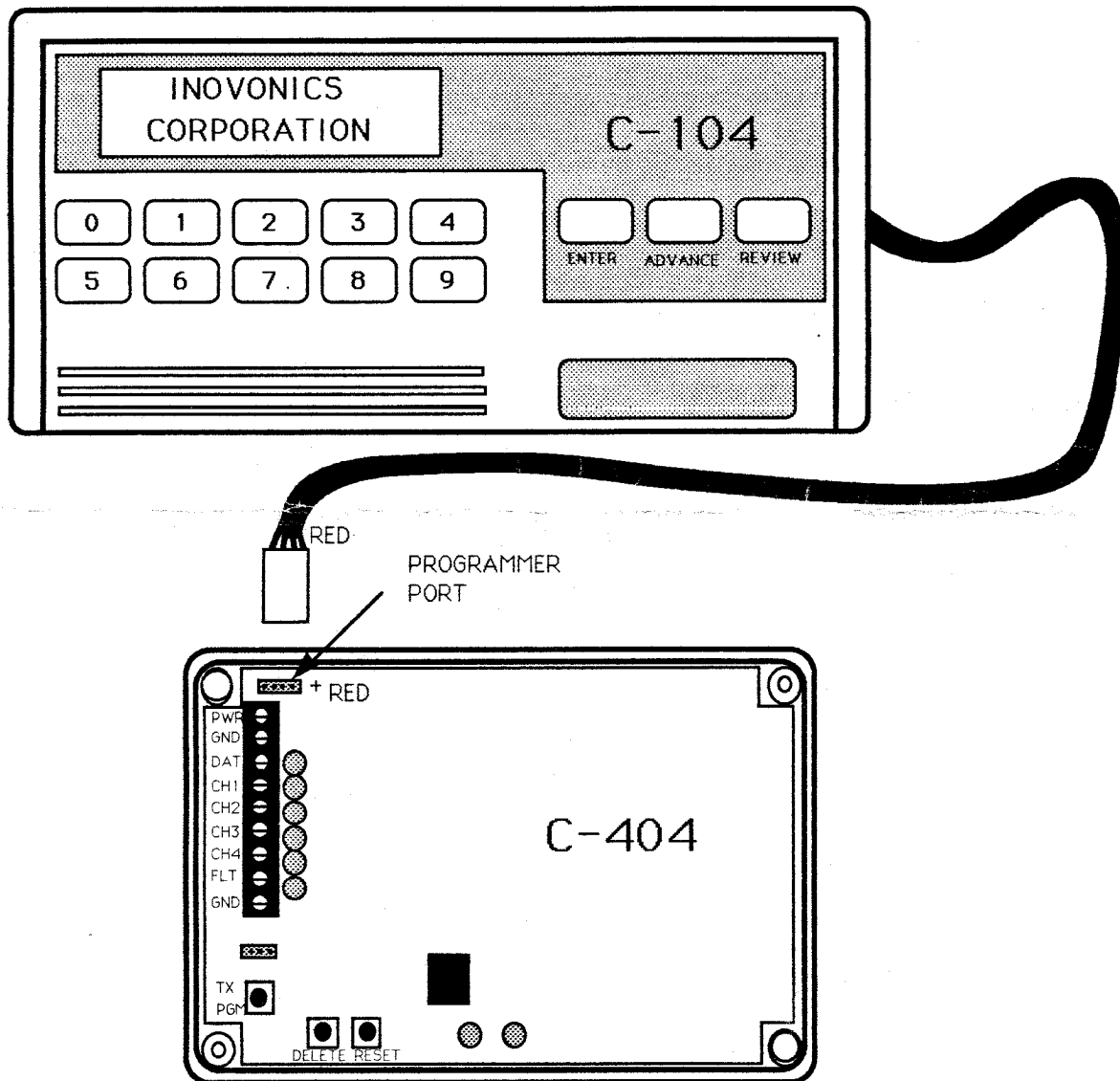


C-104 KEYPAD PROGRAMMER USER MANUAL

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The C-104 Keypad is a programming/diagnostic device for accessing the C-404 Receiver. Through the Keypad, all of the programmable parameters of the Receiver and of the transmitters monitored by the Receiver can be modified. Diagnostic information can also be retrieved from the Receiver relative to the transmitters being monitored. Once the Keypad is connected to the Receiver, diagnostic information is available simply by pressing a review key. To access the programming, an access code must be entered. All information is displayed on an alphanumeric display making it easy to interpret data or to be prompted through the programming steps.



CONNECTING THE KEYPAD

The Keypad is powered from the Receiver by connecting to the Programmer Port on the Receiver. Once powered, the Keypad will display the message

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REVIEWING TRANSMITTER STATUS

Pressing the REVIEW button allows the status of the transmitters monitored by the Receiver to be reviewed.

PNT 01
Not Programmed

Status reported by each point will be Activated, Tampered, Low Battery, or Inactive. Pressing the ADVANCE button will sequence to the next point to be reviewed. To exit status review, press the REVIEW button.

PNT 04 Activated
Pool Entrance

PROGRAMMING

Entering a four digit code on the keypad will allow access to the main programming menu. The default code from the factory is 0 0 0 0. Pressing ADVANCE sequences through the menu items. Pressing ENTER will select a given item. The menu selections are:

RECEIVER PROGRAM
POINT PROGRAM
DELETE POINT
STATUS REVIEW
SIGNAL LEVEL

RECEIVER PARAMETERS

To program Receiver parameters, press ENTER when the display indicates RECEIVER PROGRAM

The display will then prompt for the selection of System ID.

SYSTEM ID - XXX

This ID will be unique to the Receiver and the transmitters that it will monitor. Thus, multiple receivers can be operated within range of one another with out interference. To change the ID, enter a number from 0 to 254 and press ENTER. When the desired ID is displayed, press ADVANCE.

The next parameter to be set is the Supervision Window.

SPVS WINDOW - XXX
(0=none) Min

The Supervision Window is a time window for which the Receiver expects to receive at least one check in report from the transmitters monitored. If a transmitter does not check in, it is declared Inactive. The time period is set in one minutes increments. Enter a number between 1 and 254 and press ENTER. When the desired time is displayed, press ADVANCE.

OUTPUT - XXXXXXXX
(ENTER to Change)

The configuration of the four channel outputs can be set as FOLLOW, LATCHED, or MOMENTARY. FOLLOW mode causes the output to "follow" the condition of the sensor monitored by the transmitter. LATCHED will cause the output to stay activated continually once the output has been activated. MOMENTARY will provide a 2 to 3 second activation. Press ENTER until the desired configuration is displayed then press ADVANCE.

ACCESS CODE
CODE = XXXX

The four digit code for accessing the programming menu may be set to any four digit configuration to provide security against unauthorized changes to programmable parameters. The code is set by pressing the numeric digit keys. When the desired code is displayed, press ADVANCE.

Once all the receiver parameters have been set, press REVIEW to exit the programming sequence.

POINT PARAMETERS

To program point parameters, advance through the main menu until the display indicates PROGRAM POINT and press ENTER. The system ID will be displayed as validation only. The ID cannot be changed from this menu. Press ADVANCE to move to the first point parameter.

PNT - X
(Enter 1 to 4)

Input a number from 1 to 4 and press ENTER. This selects the desired point corresponding to channel 1 through 4. When the appropriate point number is displayed press ADVANCE. If the selected point has not been previously programmed the display will indicate

PNT - XX
Not Programmed

Not Programmed will be displayed until all programming information has been set though the Keypad or until downloading from the Receiver to a transmitter has occurred. Press ADVANCE.

PNT - XX Text

A sixteen character alphanumeric description can be assigned to the point if desired. This description may assist in identifying the location of a point. Press ADVANCE if no text is required or if existing text does not need to be changed. To enter new text, use the text overlay on the Keypad and press the appropriate key repeatedly to display the desired character. When the correct character is displayed, press ENTER. Continue in this manner until the full description is entered then press ADVANCE.

The Keypad will now prompt for the selection of transmitter type.

TYPE - STANDARD [COMMAND]

There are two types of transmitters that are accommodated by the Receiver, STANDARD and COMMAND. A standard transmitter is any transmitter that is not a C-100 Command transmitter. Standard transmitters include the C-200 Universal Transmitter, C-201 Smoke Detector, C-203 Glass Break Detector, C-204 Pendant Transmitter, and C-206 Passive Infrared Detector.

To select type, press ENTER until the desired type is displayed then press ADVANCE.

Programming a STANDARD Transmitter

If programming a STANDARD type, the display will prompt with

POINT LOOP - N/O [N/C]

The transmitter can be set to accept either a normally open loop or a normally closed loop. Press ENTER to select the desired configuration. When the correct selection is displayed, press ADVANCE.

EOL RESIST - NO [YES]

If an end of line resistor is required to provide tamper indication of the wire connection between the transmitter and the sensor or contact, press ENTER until the display indicates YES. When the correct selection is displayed, press ADVANCE.

INT CNTCT - NO [YES]

If the C-200W universal transmitter is to be used with its internal contacts, press ENTER until YES is displayed. When the correct selection is displayed, press ADVANCE.

CHECK IN - 10sec [30sec]
[60sec]
[NONE]

The rate at which the transmitter is to send supervisory transmissions can be set to one every 10 seconds, 30 seconds, 60 seconds, or not at all. Press ENTER to select the appropriate check in interval. When the correct selection is displayed, press ADVANCE.

ENTER to Program
ADV to Review

Pressing ENTER will update the Receiver's non-volatile program memory with the selected data. This data will be downloaded to a transmitter when the download procedure is implemented as described in the C-404 instructions.

Press REVIEW to exit the point programming menu.

Programming a COMMAND Type Transmitter

A Command transmitter is the C-100 or C-100A four button transmitter. It can be programmed to any point (1, 2, 3, or 4). Regardless of the point # selection, the operation of each button on the Command transmitter will affect a corresponding channel output of the four channel Receiver. The lower button on the transmitter will control Channel 1, the next button up will control Channel 2, and so on. If the Receiver is programmed to an output configuration of FOLLOW, each press of a given button on the transmitter will "toggle" the corresponding channel output.

To program a COMMAND transmitter, proceed with POINT PROGRAM and advance to

TYPE - STANDARD [COMMAND]

Press ENTER to select COMMAND. When the display indicates COMMAND, press ADVANCE.

ENTER to Program
ADV to Review

Pressing ENTER will update the Receiver's non-volatile program memory with the selected data. This data will be downloaded to a transmitter when the download procedure is implemented as described in the C-404 instructions.

Press REVIEW to exit the point programming.

DELETING A POINT

If a previously programmed point needs to be deleted from the Receiver's program memory, advance through the main menu until the Keypad displays DELETE POINT

Press ENTER. The Keypad will prompt for the point to be deleted.

PNT - XX

Input the point number to be deleted and press ENTER. When the display indicates the appropriate point # press ADVANCE. The point is then set as Not Programmed and the Receiver will no longer respond to that point.

REVIEWING TRANSMITTER STATUS

The current or latched status of any of the points can be reviewed by advancing through the main menu to STATUS REVIEW and pressing ENTER. The display will then indicate the point, its text description, and its status. Pressing ADVANCE will cycle to the next point. To exit this function, press REVIEW.

TRANSMITTER SIGNAL LEVEL INFORMATION

The signal level of each of the transmitters programmed by the Receiver can be observed by advancing through the main menu to SIGNAL LEVEL and pressing ENTER. Once the signal level mode has been entered, the Keypad will begin collecting signal level information from the Receiver for each point that checks in. The ADVANCE key can be pressed to cycle through each point. The display will indicate the point number, whether the signal level is acceptable (good) or unacceptable (weak), and a numeric reading of the signal strength level. The numeric value is an indication of the signal level in decibels relative to a milliwatt (dBm). The dBm indication will fluctuate due to automatic gain switching and antenna switching of the Receiver. The Receiver is designed to optimize the probability of reliable communications and as long as the signal level is displayed as "good", reliable communications is assured. If a signal level is shown as "weak", reliable communication between that transmitter and the Receiver is in question.

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