STATUS LED

ACTIVATION LED

# Click2Enter-I.V4

**Installer's Guide**
**Version 4.0**
**Software Version 2.07**

*Click2Enter, Inc.*  Click2Enter®

# Designing and Manufacturing
# Access Control Technology
# For the 21st Century

Protected By:
United States Patents Pending

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# Contents

# 1 Introduction

**OVERVIEW**  Click2Enter-I.V4 (C2E) does away with cumbersome keys, access control codes, and remote control actuators, because every emergency response vehicle and responder already carries the key—their mobile or portable radio transceiver **(*)**.

Click2Enter-I.V4 was developed to provide public safety personnel (or any authorized user) immediate access to electronically controlled gates, common area doors, roll-up doors, or any electronically controlled access control device. Other authorized users can use C2E as long as they have programmed access into its frequency bank and have a radio transceiver. Click2Enter-I.V4, compared with other emergency access control systems, has set the industry standard for many years to come.

The C2E uses modified scanner/receiver technology with control technology to act as a radio-controlled key to open access control devices (gates, doors, or other security control mechanisms), allowing public safety agencies and authorized users immediate access for dealing with emergencies as they occur. All that is required to activate the C2E is that the operator be in proximity to the unit, and a short deliberate pulse of their radio transceiver to effect an instant entry.

A final comment relating to SAFETY. Never use the C2E device without proper safeties in place. Safety devices and terminology are clearly defined under the **UL 325 Guidelines**. We recommend that you have reviewed and are aware of the information covered under this very important document. **Never operate the C2E outside of "LINE OF SIGHT" for obvious safety reasons.**

*(*) NOTE: The Click2Enter-I.V4 has specific limitations when being used with TDMA radio systems. Because of the sophisticated nature of TDMA radio systems, operating in the DIGITAL MODE, the Click2Enter-I.V4 can't receive or operate with them. However, with a TDMA radio frequency set to the ANALOGUE MODE, the Click2Enter-I.V4 can receive/operate.*

## FEATURES

- MODIFIED SCANNING RECEIVER RADIO
- VARIABLE ACTIVATION RANGE VIA PROGRAMMING
- ONE OR TWO RADIO TRANSMISSION "CLICKS" FOR ACTIVATION
- 100 CHANNEL CAPACITY (PRIMARY FREQUENCY BANK)
- MUTUAL AID COMPATIBLE
- INDEPENDENT RELAY CONTROL FOR ROLL-UP DOORS
- BRIGHT ACTIVATION LED AND POWER LED
- TIME/DAY/AGENCY MEMORY RECALL
- CTCSS, PL/DPL PRIVATE LINE (PL) PROGRAMMING CAPABILITY
- AUTO DETECT AND LOAD OF PRIVATE LINE CODES
- COMPATIBLE WITH ANALOG OR DIGITAL RADIO TRANSMITTERS, USING PRIVATE LINE SUB-AUDIBLE TRANSMISSIONS
- WILL OPERATE WITH CARRIER ONLY FOR USE WITH DIGITAL RADIO SYSTEMS
- ABLE TO USE TALK AROUND CARRIERS (CAR TO CAR) OF TRUNK LINE RADIO SYSTEMS
- ABLE TO OPERATE IN AN "ON-TRUNK" MODE TRUNK'ED RADIO SYSTEMS (SINGLE PULSE MODE ONLY)
- ABLE TO RECEIVE RADIO TRANSMISSIONS TO INCLUDE ALL PUBLIC SAFETY BANDS
- LATCH OPEN AND CLOSE FEATURES
- ENHANCED USER-PROGRAMMABLE LATCH OPEN FEATURE LETS YOU SPECIFY GATE OPEN PERIODS FROM ONE MINUTE TO UNLIMITED
- LATCH BACK AND HOLD FEATURE FOR EXTRA SAFETY
- ABILITY TO HANDLE HIGH POWER MOBILE TRANSMITTERS AND LOWER POWER HAND HELD PORTABLE TRANSMITTERS
- PROPRIETARY PROGRAMMING SOFTWARE BUILT INTO EACH UNIT
- FIELD PROGRAMMABLE USING EITHER A LAPTOP OR NET-BOOK COMPUTER WITH TERMINAL EMULATION SOFTWARE
- PROGRAMMABLE VIA USB STANDARD TO MINI JACK
- USER-SELECTED PIN FOR SECURITY OF PROGRAMMED FREQUENCIES
- ABLE TO CAPTURE AND EXHIBIT ACTIVATION DATA LOG, VIA SOFTWARE
- COMPUTER SOFTWARE PROGRAMMABLE USING STANDARD TERMINAL EMULATION SOFTWARE
- USES REGULATED 12V TO 24V DC @ 500mA POWER SUPPLIES
- REFLECTIVE LOGO FOR NIGHT IDENTIFICATION.
- UNIT ENCLOSED IN A NEMA TYPE 4 BOX, WITH SECURITY SCREWS SUPPLIED
- RELAY OR DRY CONTACT READY
- EXTRA SET OF RELAY CONTACTS TO ACTIVATE A MULTITUDE OF DEVICES
- RETROFIT HEATER KIT AVAILABLE FOR OPERATION BELOW 15° F

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# 2 Installation

The C2E has a minimum and maximum operating temperature specification:

*Maximum Range:* 158°F
For most high temperature applications, the maximum rated temperature of the unit is **158°F**. For best operation, mount the unit in a location where it is shaded from direct sunlight. Should it be necessary to mount the unit in the direct sun, you may purchase an after-market sun bonnet retrofit device from Click2Enter, Inc. You may also add your own shade device to adequately shade the C2E and expand its upper limit temperature range.

*Minimum Range:* 15°F
The low end operations of the C2E is **≤15°F**. For installations that may subject the C2E to a temperature range below this limit, you must purchase an after-market retrofit heater kit from Click2Enter, Inc. The heater retrofit kit will allow operations well below **15°F**.

**MOUNTING**

It is highly recommended that the C2E be mounted so that the operator can clearly see the red operation LED and green status LED. Both of these LED's provide important feedback to the operator. Also, C2E has a reflective logo on its front panel to assist in immediate identification during night use. The C2E can be mounted on a post placing it out of reach in areas prone to vandalism. Another mounting location can be behind the gate thus keeping it out of reach **Note: The C2E needs to be seen to be operated**!

The C2E plastic box has mounting brackets molded into it. We suggest that you use security head screws or bolts when mounting the unit, to prevent theft. The bottom pre-drilled conduit hole supports ½ inch connectors.

For projects that require a more low profile approach the C2E can be mounted out of sight and a smaller external LED/Activation box (kit) can be used. Call your Wholesaler, Dealer, or Click2Enter, Inc. to ask about this additional kit.

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The operational activation range of the C2E can be configured in many different ways.

A chart to assist you in assigning an estimated distance setting of 10 feet for installations in the field is located on *page 21*. This is a guide for you to set the general distance based on the frequency range of operation and the radio output power in WATTS (W). The base line settings were made under optimal conditions. The values in your application may vary. The base range/gain settings are not absolute. NOTE: The data on *page 21* was obtained using a 2W portable radio in the UHF LOW frequency bands.

Should the C2E not activate at a reasonable distance or be too sensitive causing spurious activation to occur, you may want to modify/change these settings.

The GAIN, RANGE, OR DISTANCE setting feature of the C2E is/are based on a linear scale. What this means is that the settings should predictably increase or decrease along a step value. The C2E will accept gain values from 4 to 100, however the actual functional or operational range will vary depending on the transmitter output power. Using higher power transmitters will require lower gain values somewhere between **30** on the low end to **60** on the high end. The default GAIN setting that each unit begins with is **100**.

Once the initial starting point for the GAIN/RANGE is established, it is recommended that increasing or decreasing the range should be in steps of FIVE [5].

Using the chart located on *page 21* titled "**BASELINE GAIN/RANGE SETTINGS**" you first determine the general distance, in feet, you are attempting to achieve activation at. Next, you determine the output power, in W, of the radio being used. Once you have this data do a simple *x* (Gain) **–** *y* (Distance) plot and you will have the APPROXIMATE gain starting point for your application.

## INSTALLATION OF THE CLICK2ENTER-I

**OPERATORS
WITHOUT
BATTERY
BACKUP**

Install the C2E where the top and bottom LED lights and the reflective sticker can be seen. Also, note that the logo is reflective for night identification so mount the C2E in a visible location:

1. Install two wires from the appropriate transformer to the power terminals. Use the "Power In DC" block REGULATED 12-24 V DC @ 500 mA power. The Click2Enter-I.V4 uses ≈160 mA in resting state and ≈250 mA in the latch state with applied 12V DC.

2. Install the two wires from terminal block "Gate (A)" (gate operation) on the C2E to the keying relay terminal and the common terminal. The proper location on the operator terminal strip will be designated by the manufacturer's instructions. This device needs to be set up as a keying and hold-open function.

   *Note:* **Be sure to check with your manufacturer instructions to identify proper terminals for hold-open activation.**

**OPTIOIN RELAY**

3. Terminal block "Option (B)" on the C2E is used for an optional relay. You can then run wires to any low voltage load (up to 1 amp) that you wish to key. This relay does not have a timed function. If you need a timed relay for your auxiliary devices, you must install a timer circuit.

4. <u>CAUTION</u>: Damage may occur to C2E relays from systems using relays that deliver a high counter EMF. The C2E can <u>ONLY</u> accommodate micro-volt systems. Call for an isolation relay kit to protect C2E in high counter EMF applications. *Note:* **The C2E will not activate when power to the operator has failed. This condition will be shown by no visible Green status LED.**

**GROUNDING**

The C2E comes with a grounding wire attached to the circuit board. It is highly recommended that you attach this grounding wire to a suitable "earth ground" source. The use of this grounding wire is to help minimize the damage from a high voltage event. **ALWAYS USE SUITABLE SURGE PROTECTION DEVICES.**

1. Apply the power by connecting the C2E terminal block "Power in DC" to a transformer rated at REGULATED 12V DC to 24V DC @ 500mA. Set the operator to "FAIL IN THE OPEN" during a power failure situation. Once power is restored the gate and C2E will return back to normal operation.

*Note:* **Consult your gate operator manufacturer for proper installation for battery backup systems.**

2. Exterior battery backup system.

   This is usually an inverter type system providing 110 VAC to the gate operator. With this type of system, you may connect the C2E in the same manner as if there were no battery backup system.

*Caution:* Remember that in the case of the built-in battery backup system, there is no safety function during the power failure mode of operation. Therefore, the C2E must be used only when the gate is visible and there are no obstructions or people present. Never bypass or disable any of the manufacturer gate safety systems or those required under the **UL325** guidelines.

## Final Comments Regarding C2E Power Requirements:

The C2E experiences significant problems with AC line noise that is passed into the radio receiver of the device. In some frequency bands the C2E can lock on a false noise signal which is not desirable. To provide optimal operation of the system ONLY use a 12V DC to 24V DC (any step) **Regulated or Switching** @ 500mA power source. ALWAYS use a good quality surge protector to protect the C2E from unwanted voltage spikes.

*Note: Using small diameter wire over long distances can affect the operation of the unit, due to voltage drop line loss. Always use wire BETWEEN 14 AWG TO 16 AWG.*

# 3 Configuration

The Click2Enter-I.V4 is simple to configure. The door on the waterproof case can be opened by unscrewing the security screws.

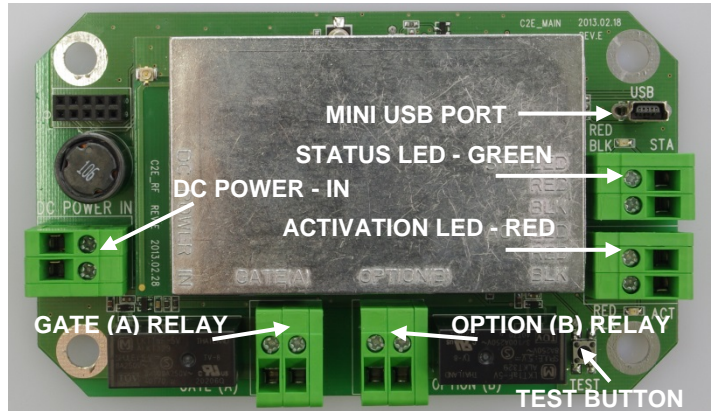Once the door to the C2E is open, Mini USB Connect, Gate (A) and Option (B) Relays, Test Button can be accessed.



Figure 2. The Click2Enter-I.V4 System Board

*Caution:* DO NOT tamper with or otherwise modify any of the circuitry within the C2E this will adversely affect the performance of the device.

Enclosure Door Tightening Recommendations: The enclosure is rated as a NEMA 4X. When tightening the security screws, to secure the door, DO NOT over tighten. The best gauge to use, when tightening the security screws, is to tighten the screws so you can **slide a standard thickness business card** between the door/lid and enclosure base. Do not tighten so that the enclosure door and box base touch.

**USB MINI CONNECTION**    Please refer to the Click2Enter website to obtain access to the necessary cable drivers and software to load frequencies into and program the unit.

> **WARNING**
> Do not drill holes into the enclosure or in any way modify the NEMA 4X box, this will VOID your warranty!

Table 2: Terminal Input Connections

| Terminal Connection | Connection Type | Description |
|---|---|---|
| Option (B) Relay | Option Relay | Pulse on dry contact. NORMALLY OPEN relay |
| Gate (A) Relay | Gate Relay | NORMALLY OPEN dry contact relay: Assignable pulse on or timed hold open |
| Power IN DC POLARITY NOT REQUIRED | Power Input | Used to supply power to the C2E: REGULATED or SWITCHING 12V DC to 24V DC @ 500mA Power Supply |

**TEST BUTTON** The test button toggles the unit to a test bank of frequencies so the installer can operate the system to receive radio signals. Once the test button is pressed, the status LED will blink to indicate test mode is active and for approximately three minutes the unit will activate with any of the frequencies programmed into this bank. Once test mode times out, the C2E will revert back to using the programmed operations channels in the main bank of frequencies.

**PASSWORD ACCESS** Access to the C2E programming mode is protected by two levels of passwords. The initial passwords are set when the unit is powered up for the first time. The default values for the unit are:

Level 1: **123456**          Level 2: **234567**

**Level 1** is the lowest level and is used primarily by installers and other field personnel. **Level 2** is intended for use by distributors or when using the C2E Tools Software.

For example, the level 2 password may be the same for all units sold for system wide entry in a particular region or city. However, the level 1 password would be set to a unique value for individual unit access.

If the other two passwords are lost, Click2Enter, Inc. can access the unit through a factory override password. If this is necessary, please contact Click2Enter at (877) 939-3800.

Passwords can be from 1 to 15 characters in length. Level 1 *must* begin with the number 1 and level 2 *must* begin with the number 2 as shown above.

**TEST MODE**   The C2E has a special test mode feature. Test mode can be activated by pressing the button on the C2E, or selecting the test mode command from the programming interface. Once activated, the status LED will blink until the unit returns to normal mode after approximately FIVE minutes (via test button activation) or indefinitely via computer programming mode (key command "T"). *Table 3* shows the frequencies which we have pre-programmed for you to use during test mode.

You can also enter your own user-defined test frequencies in any of the 50 available channel memories. 00 through 06 have been pre-assigned by the factory using the Family Radio Service (FRS GMRS) frequencies. Any of those channels can be re-programmed as needed.

### Table 3: Pre-Loaded Test Channel Memory

| CH | FREQUENCY | PL CODE | GATE HOLD | GAIN | OPT | WAIT TO CLOSE | PULSE |
|----|-----------|---------|-----------|------|-----|---------------|-------|
| 00 | 462.56250 | None | 0 Min | 80 | N | N | 1 |
| 01 | 462.58750 | None | 0 Min | 80 | Y | N | 1 |
| 02 | 462.61250 | 74.4 | 1 Min | 80 | N | N | 1 |
| 03 | 462.63750 | 77.0 | 2 Min | 80 | Y | N | 1 |
| 04 | 462.66250 | 79.7 | 0 Min | 80 | N | N | 2 |
| 05 | 462.68750 | 82.5 | 1 Min | 80 | Y | N | 2 |
| 06 | 462.71250 | 85.4 | 2 Min | 80 | N | N | 2 |

ENTER YOUR OWN TEST CHANNEL DATA BELOW

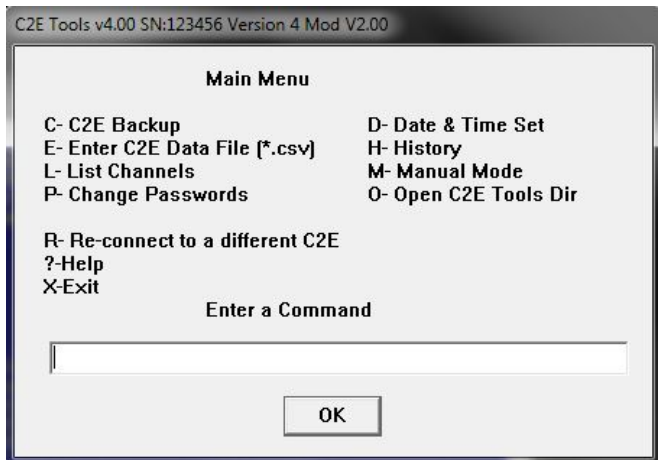| | | | | | | | |
|----|----|----|----|----|----|----|----|
| 07 | | | | | | | |
| 08 | | | | | | | |
| 09 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |

# 4 Programming

Having multiple-user programmability answers the mutual aid problem that presently exists with other emergency access control products.

The C2E is capable of operating with the most commonly used frequencies used by public safety agencies. See "Specifications" section for more information.

*Note:* As an added feature any standard radios frequency and tone (PL or DPL) may be entered into the C2E to allow property owners, with their own commercial radios, to open the gate. Basically, any "authorized user/s" can access the system if their radio frequency is programmed into the C2E.

**PROGRAMMING USING THE C2E TOOLS SOFTWARE**

C2E Tools v4.00 SN:123456 Version 4 Mod V2.00

### Main Menu

C- C2E Backup                    D- Date & Time Set
E- Enter C2E Data File [*.csv]   H- History
L- List Channels                 M- Manual Mode
P- Change Passwords              O- Open C2E Tools Dir

R- Re-connect to a different C2E
?-Help
X-Exit

### Enter a Command

[                                                    ]

OK

**ADDING FREQUENCIES TO THE CLICK2ENTER-I.V4**

1. Once the necessary frequency and other operational information has been obtained from the public safety agencies, for the region or city of operation, base range settings can be obtained from *Table 1.* (see section "Initial System Setup Guidelines")

2. Connect and log in to the C2E using a standard USB to MINI cable and a terminal emulator program (Tera Term). See the section titled "Logging On to the Unit." Type **E** at the **C2E>** prompt and enter the frequency data.

**REMOVING EXISTING FREQUENCIES**

If you need to remove a frequency from the C2E, you must zero out the frequency from the assigned channel:

1. Enter the C2E setup program (See section titled "Logging On to the Unit") and select **E – Enter Channel Data**.
2. Enter the Channel number at the Channel prompt.
3. Use the **Backspace** key to remove the entire frequency data including the leading space at the frequency prompt.
4. Enter **0**, and press **Ente**r, the setup program will then clear the channel of all data.

**GAIN SETTINGS**

The gain must be set while entering the frequency into the unit. The gain setting allows the programmer to set the range of operation by adjusting the unit sensitivity. When programming the gain setting, always adjust to the **minimum distance** necessary for your application to prevent unwanted activations.

> *Note:* It should be noted that the C2E default gain setting is 100. This is the greatest setting and as such would allow operations of great distance using a mobile radio. Operating any access control device beyond line of site is dangerous and not recommended.

The gain can be set from 4 to 100. The actual gain swing typically programmed will be between **30** and **100**. This allows for operational ranges of mobile radios between **100 Ft to 300 Ft.** The radio output power is the determining variable as to how great of a distance of operation you will get (see Baseline Gain/Range Settings table on page 21).

*Warning:* To protect the lives of people and pets, as well as to prevent property damage, do not set the gain to a level that allows for the operation of the gate beyond the line of sight.

**LOGGING ON TO THE UNIT**

**DURING INITIAL POWER UP**

Once the appropriate DC power is applied to the unit check to be certain that the Status LED (Green) is operational. If confirmed "ON" move onto the next step.

**DURING NORMAL OPERATION AND PROGRAMMING**

To access the C2E programming mode:

1. Connect a PC or Mini Computer (netbook) to the C2E USB mini port.

2. Obtain a FREE copy of the recommended terminal emulation program **Tera Term** from the Click2Enter website:

   - *http://www.click2enter.net/supportdownloads.asp*

**C2E Tools Software:**

There is now a program available from the Click2Enter website to auto set-up your communication link to the C2E and to auto-load frequencies. Visit our website DOWNLOADS section to obtain a **FREE** copy.

*Note: The Tera Term emulator is not integrated into Windows, it will operate as an independent program. The following settings apply when working in a manual mode (You must highlight the "Serial Port" mode first):*

3. The C2E operates at:

   - **9600 bps**
   - **Eight data bits**
   - **No Parity**
   - **One stop bit**
   - **Xon/Xoff Flow control**
   - **Transmit Delay 250 x 250**
   - **Select APPLY then OK**

4. Press the **ENTER** key to initiate the final handshake.

   *Note:* The unit will not display anything on the terminal program until you press the **Enter** key. Also, if you save your initial session and assign a desktop icon you will not have to set-up the emulation program again.

5. Enter the password as shown below. For default password, see section titled "Password Access."

```
Click2Enter-I Version 4 Mod V2.07 SN:70000
Copyright(C)2000 - 2018
Click2Enter Inc.
P.O. Box 174
Chromo, CO 81128
Phone Toll Free: 877-939-3800
United States Patents Pending

Password :
```

**Figure 4. The Program Screen Login Prompt**

> ***Note:*** When the programmer leaves C2E idle for approximately TEN minutes, a time-out feature causes the unit to default to asking for the re-entry of the assigned password.

If you enter the password correctly, the maintenance command prompt shown below appears:

```
Press ? for help.


C2E>
```

**Figure 5a. The Primary Programming Screen Command Prompt**
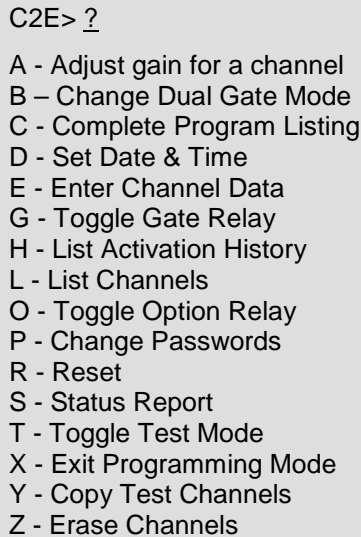
```
Press ? for help.


DUAL>
```

**Figure 5b:The Primary Programming Screen Prompt For Independent Relay Control Function**

Independent Relay Control:

The "DUAL" feature or "Change Dual Gate Mode" function, as seen in *figure 6*, is activated by typing "B" on the command prompt line. Once initiated the command prompt changes from the C2E> to DUAL> as seen in *figure 5b*. Once in this mode you can assign independent control of both the Gate (A) and Option (B) relays. Note: You will only be able to assign a "pulse only" (500mSec.) function to either of the two relays. To return to the regular programming mode just type "B" again and the prompt will return to the familiar C2E>.

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## Programming Commands

Enter the **?** command to list the following maintenance commands.

```
C2E> ?

A - Adjust gain for a channel
B – Change Dual Gate Mode
C - Complete Program Listing
D - Set Date & Time
E - Enter Channel Data
G - Toggle Gate Relay
H - List Activation History
L - List Channels
O - Toggle Option Relay
P - Change Passwords
R - Reset
S - Status Report
T - Toggle Test Mode
X - Exit Programming Mode
Y - Copy Test Channels
Z - Erase Channels
```

**Figure 6. Viewing the List of Programming Commands**

**A**      This command allows the programmer to bypass all other programming steps and go directly to the "Gain" (range) setting step. Thus, making it easier to adjust the operating range once all other information has been entered.

**B**      This command switches the C2E so that it can independently control the Gate (A) and Option (B) relays. This typically used to control two separate devices or roll-up doors with two separate frequency assignments.

**C**      This command will list and screen print all data stored in the three banks of the C2E: Main Activation, History, and Test banks.

**D**      This command sets the time and date of the on-board clock chip. The data must be entered *exactly* in the form: mm/dd/yyyy hh:mm. For example, "01/03/2004 18:43."

***Note:*** Time is in 24 hour format.

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**E**     This command allows the operator to enter data for a specific channel.

```
C2E> E

Channel: 1
Frequency: 462.57500
Mode (C/P/D): P
PL Code (0 = auto):  69.3
Gain: 100
Momentary gate relay (Y/N): N (default)
Gate mode (S/M/H/?): M (default)
Gate open minutes (1-59): 01 (default)
Latch open & hold: N (default)
Option control (Y/N): N (default)
Single pulse mode (Y/N): N (default)

C2E>
```

Figure 7a: Entering Channel Data (Momentary gate relay enabled N screen)

```
C2E> E

Channel: 1
Frequency: 462.57500
Mode (C/P/D): P
PL Code (0 = auto):  69.3
Gain: 100
Momentary gate relay (Y/N): Y (50mSec PULSE)
Option Control (Y/N): N
Single pulse mode (Y/N): N

C2E>
```

Figure 7b: Entering Channel Data (Pulse Only Screen)

- **Frequency:** Enter a frequency at the Frequency prompt. To remove or zero a programmed frequency, see section titled "Removing Existing Frequencies."

- *Note:*     At least FIVE digits, after the decimal point, must be entered into the frequency space. A ZERO [0] is a valid place holder: 000.00000 MHz

- **Mode:** Select the channel Mode by entering one of the following:

  - **C**   Carrier-only operation
  - **P**    PL tone activation
  - **D**   DPL code activation

- **Code:** Enter the DPL or PL coding that are supplied by the public safety agency. The DPL and PL coding can also be auto-loaded by selecting PL/DPL Code **0**. If auto-load is selected, be sure to have the public safety agency test the unit for proper operation.

*Note:*   When entering a DPL Code, you must add a "D" prior to the number as shown in **Figure 7a** above. For PL codes, just enter the number without a preceding letter.

- **Gain:** Range settings typically run between **30** & **100**. When increasing or decreasing range stepping **FIVE (5)** at a time is recommended. The units default setting for gain is **100**. See *Table 1* for base gain settings.

- **Momentary gate relay (Y/N):** Enter the length of time the gate will stay open before it automatically closes. This feature is defaulted to the ON position, and 01 MIN. Thus, if you select N to the "Momentary gate relay" you will be asked to choose one of the three following time modes:

  1. M = Gate open minutes (1-59)
  2. H = Gate open hours (1-15)
  3. S = Gate stays open, unit must be reset to close. If this feature is selected the unit will hold the gate open indefinitely. To reset either open the unit and push the "TEST" button and the unit will reset immediately. Or, turn the system power OFF and this will reset the unit to normal operation.

- **Latch open & hold (Y/N):** Enter **Y** at the Wait For Close prompt to enable the C2E to hold the gate open. When activated the C2E will not allow an override closure, unit will defer to the countdown timer. While enabled, in this mode, C2E will not accept another activation request. The "Activation LED" will blink at a 50% duty cycle during the this time period.

- **Option Control (Y/N):** Enter **Y** at the Option Control prompt to enable the option relay. For more information on the option relay, see section titled "Option Relay" **Page 6**
- **Single pulse mode (Y/N):** The C2E is defaulted to the "double pulse" mode. To enable the "single pulse" mode answer **Y** in the assigned space. The following message appears:

    *You are about to change the operation of this unit from double-pulse to single-pulse activation mode. Accidental activation is more likely in this mode.      Proceed? Y (default)*

**G** This command changes the state of the Gate relay for testing purposes, allowing field service personnel to check the wiring of the Gate relay (activates relay).

**H** This command lists the 50 most current entries stored in the activation history log.

**L** This command lists the contents of the channel memory. NOTE: Only the programmed channels will show, all empty memory registers will not list.

**O** This command changes the state of the Option relay for testing purposes, allowing field service personnel to check the wiring of the Option relay (activates relay).

**P** This command allows the user to change passwords. At level 1, only the level 1 password can be changed. At level 2, the level 1 and level 2 passwords can be changed. *See Figure 8 below.*

```
C2E> P

 Password level: 1
   New Password: 123456
    Enter again: 123456

C2E> P

 Password level: 2
   New Password: 234567
    Enter again: 234567
                   (Typical error messages)
Invalid password or passwords don't match.
Installer password must start with a '1'.
Distributor password must start with a '2'.

C2E>
```

**Figure 8. Changing Passwords**

Level 1 *must* begin with the number 1 and level 2 *must* begin with the number 2, as shown in *Figure 8* above. See section titled "Access Control." The previous example shows the original factory override passwords. Programmers should ALWAYS use LEVEL 2 when using the C2E Tools Software.

**R** The reset command resets the C2E to a normal operating status as follows:

- Test Mode is cancelled
- The gate is closed
- The option control is deactivated

**S** This command lists the current state of the C2E.

**T** This command toggles the test mode on or off. See section titled "Test Mode."

**X** This command exits from the programming mode access to the C2E. The maintenance mode terminates automatically if no commands are entered within approximately TEN minutes.

**Y** This command is for Click2Enter, Inc. use only.

**Z** This command erases all channels.

## Critical Steps For A Successful Operational Deployment

There are three critical steps that need to be met prior to a successful initial deployment/introduction of the Click2Enter-I.V4 emergency access control system into a new city, county, town, region, or state:

*1.* Prior to installing the Click2Enter-I.V4 you **must** initiate contact with the fire, law enforcement, and EMS agencies who will be using the system. This contact/introduction will help in gathering the necessary operational frequency information required in order to program the C2E. **NOTE:** *The C2E receiver will not operate with TDMA radio systems in the "DIGITAL" mode. However, the C2E will operate on any TDMA channel/frequency set in the "ANALOG" mode.*

2. The Click2Enter-I.V4 **must** be installed as per the directions provided in this Installer's Guide. Prior to project completion the unit should be tested by all of the various agencies who will be using the system.

3. Once installed the various public safety agencies, who will be using the Click2Enter-I.V4, **must** be trained on how to operate it.

Once all three steps have been completed, for the initial installation, future installations will only require repeating STEP #2— **Congratulations!**

# 5 Specifications

| | |
|---|---|
| *Channels Main Bank* | 100 (0 – 99) |
| *Channels Test Bank* | 50 (0 – 49) |
| *Current Demand Idle @ 12V DC* | ≈ 160 mA |
| *Current Demand Latching @ 12 V DC* | ≈ 250 mA |
| *Current Demand Idle @ 24V DC* | ≈ 85 mA |
| *Current Demand Latching @ 24 V DC* | ≈ 115 mA |

*Frequency Coverage*

| FREQUENCY RANGE | STEP | MODE |
|---|---|---|
| 29 ~ 54 MHz | 5 KHz | FM |
| 108 ~ 174 MHz | 5 KHz | FM |
| 380 ~ 512 MHz | 6.25 KHz | FM |
| 764 ~ 824 MHz | 6.25 KHz | FM |
| 849 ~ 869 MHz | 6.25 KHz | FM |
| 894 ~ 960 MHz | 6.25 KHz | FM |

*Max. Current at Relay*

Gate      1 A
Option    1 A

Working Voltage 50V DC MAX

CAUTION: Damage may occur to C2E relays from systems using relays that deliver a high counter EMF. Click2Enter can ONLY accommodate micro-volt systems. Call for an isolation relay kit to protect C2E in high counter EMF applications.

*Power Requirement*

REGULATED or SWITCHING POWER SUPPLY:

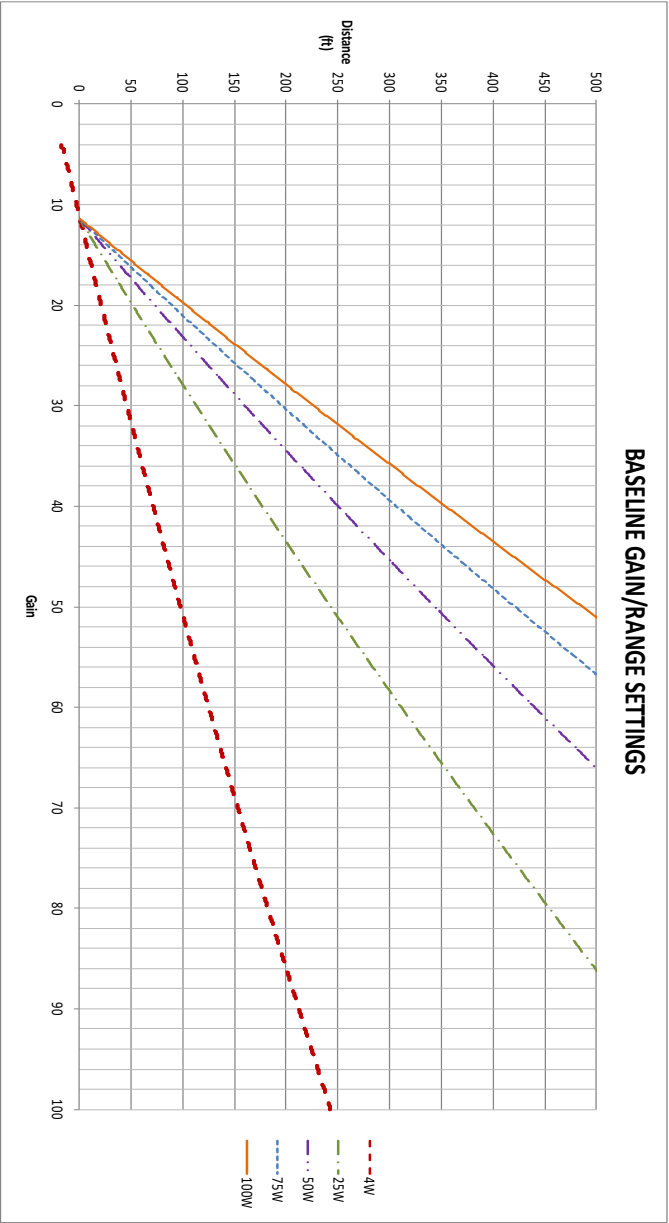12V DC to 24V DC @ 500 mA

*Operating Temperature*      (15ºF to 158ºF) Without Heater Kit

*NEMA 4X Poly Carbonate Enclosure Dimensions*      6" x 4" x 3.5"  (HWD)

*Weight*      ≈1.9 lbs. or 28 oz.

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BASELINE GAIN/RANGE SETTINGS

# 6 Click2Enter, Inc. Limited Warranty

Click2Enter, Inc. (Click2Enter) warrants the Click2Enter-I.V4 (Product) only to be free from defects in material and workmanship under normal use and service for a period of either <u>one year</u> after the date of purchase by the original customer or <u>eighteen months</u> from date of factory shipment, at the discretion of Click2Enter, Inc.

Click2Enter's sole obligation under this warranty is limited to repairing or replacing, at our discretion, any parts which shall be determined by Click2Enter to be defective, and is conditioned upon the original customer giving notice of any such defect to Click2Enter within the warranty period. Click2Enter reserves the sole right to make the final decision whether there is a defect in materials and/or workmanship, and whether or not the product is within the warranty period. Click2Enter is not responsible for any damages or other cost/s proximately caused by, or which may result from installation, handling, non-recommended operation abuse, or modifications not authorized by Click2Enter for any damages which may arise out of use of the Product.

This warranty shall not apply to any Click2Enter product which has been subject to misuse, neglect, accident, or to use in violation of instructions furnished including improper installation or connection to an improper voltage source, or products damaged by Acts of God (lightning strikes, power surges, floods, fire, natural disaster) or extended to units which have been repaired or altered outside of the factory.

Click2Enter, Inc. reserves the right to make changes or improvements to our products without incurring any obligation to similarly alter products previously purchased.

The warranty represents "DEPOT SERVICE" and specifically excludes any costs associated with the troubleshooting, removal, shipment, and reinstallation of Click2Enter unit(s). All repairs must be made at the factory or place designated in writing by Click2Enter. Any product must be returned to Click2Enter with a Return Merchandise Authorization (RMA) number prominently marked on the outside of the package. To obtain an RMA, contact Click2Enter, Inc. by calling toll free **877-939-3800**; or by writing Click2Enter, Inc. P.O. Box 174 Chromo, CO 81128; or via the world wide web at www.click2enter.net. Freight will be paid by the party seeking warranty service and units shipped freight collect will be refused. Click2Enter will pay freight on our return of repaired or replaced items in warranty using a shipping method determined by Click2Enter, Inc.

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