

Communication Equipment & Engineering Company

**TECHNICAL INFORMATION FOR TELEPHONES EQUIPPED WITH
P/N 301-RC2A REMOTE TOUCH TONE DEVICE CONTROLLER.**

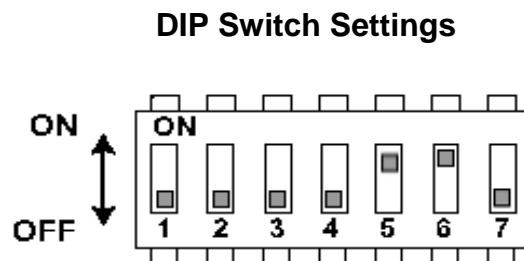
Specifications: Power: 120VAC / 12VDC 500mA UL listed adapter provided, alternative power input: 12-24V AC/DC 200mA minimum. **Dimensions:** 133mm x 89mm x 44mm (5.25" x 3.5" x 1.75"). **Environmental:** 0° C to 32° C (32° F to 90° F) with 5% to 95% non-condensing humidity. **Relay Contact Ratings:** 5A @ 30VDC/250VAC. **Connections:** (1) 8 position screw terminal block.

*******WARNING*******

- **Never install telephone wiring during a lightning storm.**
- **Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.**
- **Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.**
- **Use caution when installing or modifying telephone lines.**

If you will be connecting the unit to a telephone line or PABX extension, the unit will always be monitoring the line for the correct string of touch tones dialed. If the correct string is dialed, the unit will operate the relay. For example, if you chose the Alternative Mode, programmed a single digit relay command of "9" and installed the unit on a line that is shared with other telephones, there could be a problem. As the other telephones or devices are making calls, if they dial anything that includes the "9", the relay will be triggered. In these scenarios, you must set at least one digit of the relay activation command to either "*" or "#" (preferred) and set a 2 or 3 (preferred) total digit code. This will help to guard against erroneous trips of the gate relay.

- **Set the DIP switches as follows:**



Note: DIP switches are shown in factory default settings

- **Entry Code Switches**

The entry code switches set the relay activation code. This code can make use of any of the digits available on the rotary switches, as long as the user is aware that D and E can only be entered using a special 4x4 keypad.

Rotary Switch	Touch Tone
F	ignore
C	#
B	*
0...9	0...9

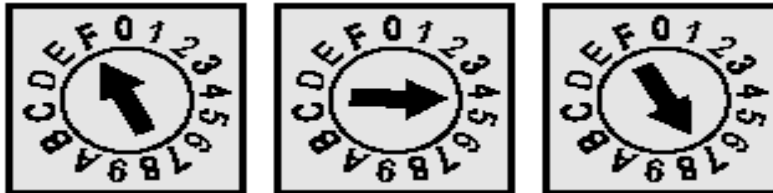
- Set the entry code as follows, choosing either a 1, 2 or 3 digit code. The “F” setting is basically “OFF” for that switch or dial:

1. Single Digit Relay Activation Code



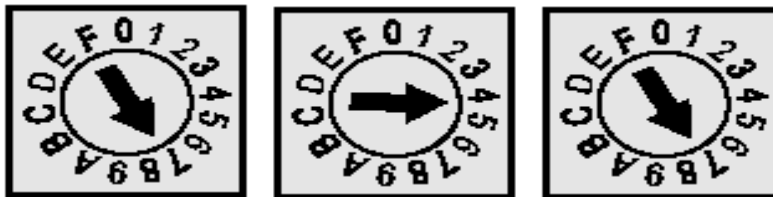
To program a single digit relay activation code, set any two of the three code switches to F.
Example: FF3

2. Two-Digit Relay Activation Code



To program a two-digit relay activation code, set any one of the code switches to F. The other two switch settings comprise the relay activation code. **Example: F47**

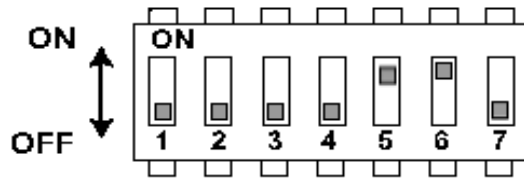
3. Three-Digit Relay Activation Code



To program a three-digit relay activation code, set all switches to desired digits. **Example: 747**

SPECIAL NOTE: CEECO Telephones equipped with speed dialing capabilities requiring the # key to be pressed, DO NOT emit the actual DTMF tone associated with the # key and WILL NOT trigger the gate relay. In most applications, this adds a measure of security against erroneous trips of the gate relay, by persons randomly pressing keys on the keypad. As noted on the first page, it would be wise to include the # key in the access code. If it is desired for the access code to be able to be entered by the person using the CEECO telephone at the gate, then the * or asterisk key and any other digit(s) may be used.

1. Relay Activation Time (DIP switches 1- 4), illustrated with ½ second activation time:



DIP switches 1- 4 provide 16 different relay activation times according to the following table.

Switch 1	Switch 2	Switch 3	Switch 4	Relay Activation Time
OFF	OFF	OFF	OFF	1/2 second
OFF	OFF	OFF	ON	1 second
OFF	OFF	ON	OFF	2 seconds
OFF	OFF	ON	ON	3 seconds
OFF	ON	OFF	OFF	4 seconds
OFF	ON	OFF	ON	5 seconds
OFF	ON	ON	OFF	6 seconds
OFF	ON	ON	ON	7 seconds
ON	OFF	OFF	OFF	8 seconds
ON	OFF	OFF	ON	9 seconds
ON	OFF	ON	OFF	10 seconds
ON	OFF	ON	ON	30 seconds
ON	ON	OFF	OFF	45 seconds
ON	ON	OFF	ON	1 minute
ON	ON	ON	OFF	5 minutes
ON	ON	ON	ON	10 minutes

OPERATION:

The 301-RC2A provides relay activation (opening or closing a relay contact) remotely via DTMF touch tone input over a standard analog C.O. line or PBAX/KSU station. When the correct relay activation code is entered, the 301-RC2A activates its relay contacts on the terminal strip followed by an acknowledgement tone.

Using the 301-RC2A:

Step 1	Establish voice connection on the line associated with the 301-RC2A.
Step 2	Enter the one, two or three digit activation code, as programmed. A single beep (acknowledgement tone) should be heard and the contact closure should occur for the length of time as programmed.

Installation

