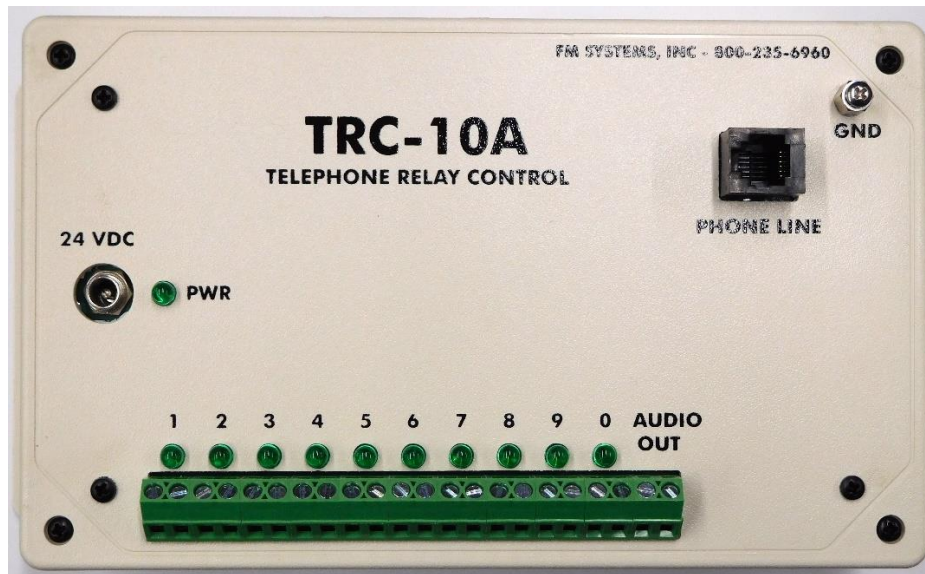


TELEPHONE DIAL-UP RELAY REMOTE CONTROL

By: Don McClatchie



Public Switched Telephone Networks (PSTN) are everywhere connecting our world with voice and data communication. These networks can connect you with any place in the world by country code, area code, and destination number. Wouldn't it be great if you could dial up a PSTN line have the device at the other end answer the phone and operate relays to control remote equipment. It could be used for access control or special processing equipment. Or during an emergency you could have some remote control at the distant site.

This kind of dial up control is available by using the TRC-10A unit sold by FM SYSTEMS, INC. All the control is done with a telephone keypad. When the equipment is installed, and you need to control one or more of the dry contact relays at the remote site, just dial the telephone number of the (PSTN) phone line, enter a password that you program into the TRC-10A and then by depressing a number followed by the Pound (#) sign for On or a Star (*) sign for Off and you have relay control.

When you are through you can just hang up the phone and you are done. For users that have a P.A. system (Public Address System) the TRC-10A also has an audio output that can be connected to the P.A. system. When you dial up the phone, enter the password, and enter a Zero (0) followed by the Pound (#) sign the mouth piece of your telephone (your audio) will be connected to the input of your P.A. and you can talk to the location. When you are through just push the Zero (0) followed by the Star (*) key and the audio connection will turn off. This audio function can be used to insert emergency instruction over the P.A. or into any audio input for distribution during an emergency.

The TRC-10A has up to ten dry contact relays, (0-9), one for each of the numbered keys on the telephone keypad. If you are actively using the audio output then nine relays are available. The Zero (0) relay has a dry contact output and opens and closes with the audio use. Each relay has an LED to tell you the position of the relay Off for Open and On for Closed.

The unit can be connected to the PSTN phone line directly without a telephone receiver and it will answer the phone and control the relays. If you wish to have a telephone receiver on the same line you can do that by using the two-way adaptor supplied with the unit. In this way you can set the unit for 10 rings internally and then you can use the line as a telephone also.

The unit can be set using internal jumpers to select 2 rings or 10 rings. When the unit is on the PSTN line alone then set the unit for 2 rings, and if used as a telephone line then set the jumper for 10 rings. When the location is un-attended the unit will pick up the line after 10 rings.

The relay contacts are rated at 0.5 Amps @ 120 VAC and 1 Amp @ 24 VDC. The telephone jack is an RJ-11 also called 6P4C and uses Pins 3-4. There is a ground lug available for areas that are subject to lightening.

