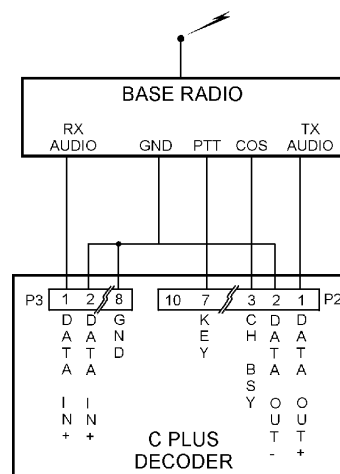# Radio Kill using CIM-2000 and C Plus

A radio is lost or stolen. Maybe it ends up in the hands of an inmate at a prison or a fugitive at an active crime scene. This application allows the dispatcher to send a digital message to the radio, killing both transmit and receive function. The radio can still be controlled by the dispatcher (to key up and transmit ambient noise) and can be restored over the air as well.
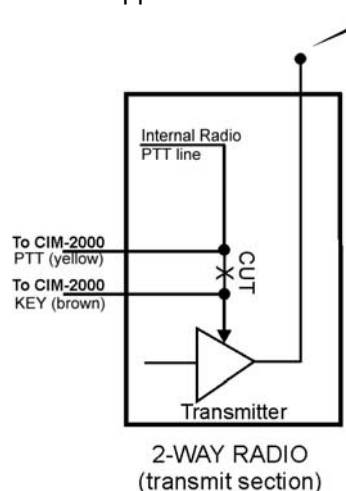
How it Works:
Using a Cimarron CDT or a computer interface with dispatching software attached to the C Plus, send the radio kill command to the targeted units ID. The radio to be disabled will execute the command and then send an acknowledgment back to the C Plus. The radio will remain disabled even if power is turned off and back on again. Full functionality can only be restored by sending a radio enable command over the air.
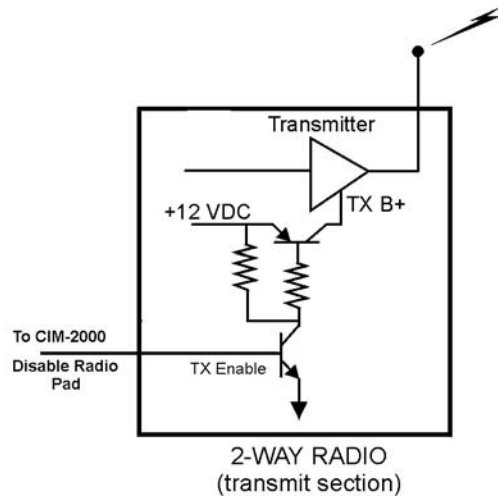

How to make it work:
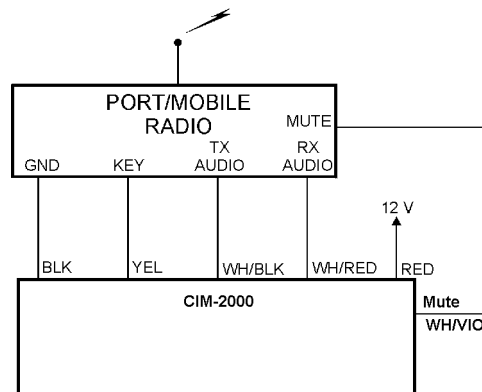There are a couple of different ways to implement the transmit side disable for this application. The easiest is to place the CIM-2000 key circuit in series with the radio keyline. This way, the radio keyline tells the CIM-2000 to key the radio. If the CIM-2000 is in kill mode, it doesn't relay the keying information to the radio. This method requires the keyline of the radio to be broken in order to add the CIM-2000 circuitry in series and "Key Follows PTT" to be enabled in the CIM-2000 programming.

Transmitter

+12 VDC   TX B+

To CIM-2000
Disable Radio Pad   TX Enable

2-WAY RADIO
(transmit section)

The other method of transmit side disable is to use the Disable Radio Pad (T17) on the back of the CIM-2000. When the CIM-2000 receives a radio kill message, the pad goes low (near ground potential). It stays in this state until a radio enable message is received. Even if the power is removed, (radio turned off) the states are remembered and restored at power-up.

The receive side of the radio is disabled using the mute function of the CIM-2000. Normally, this line goes low during received data bursts to limit the amount of annoying data heard by the user. When the CIM-2000 is in kill mode, the line remains low until a radio enable message is received.

PORT/MOBILE RADIO
MUTE
GND   KEY   TX AUDIO   RX AUDIO

12 V

BLK   YEL   WH/BLK   WH/RED   RED

CIM-2000   Mute
WH/VIO

Additional Information:
Suppose the bad guy has the radio but keeps it turned off except when he wants to transmit and disrupt communications. Using the Ambush feature, you can have the C Plus lay in wait for the next time the radio is used. When the C Plus hears from the radio, it automatically sends the kill command, disabling the radio.

See Also:
Encode Capability

Operating with a Cimarron CDT

Data Output

Data Input

Channel Busy

Ambush