Programming using the CIM-CABLE

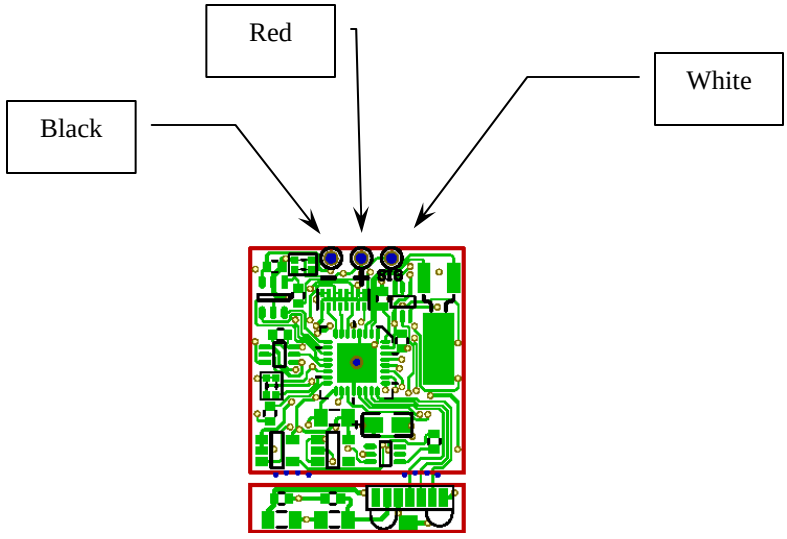
The programming cable, CIM-CABLE, supports connection via a computer serial port with any computer running terminal emulation software. One such program that is included in most Microsoft operating systems is called Hyperterm. Hyperterm is usually accessed under “Programs”, “Accessories” and “Communications” in the windows start menu.

Start the Hyperterm program on your computer by double clicking on *Hyperterm.exe* or selecting *Hyperterm* under the Communications menu selection. A *New Connection* window will open. Name the new connection “CIM1000”, select one of the available icons and click the “OK” button. A *Connect To* window will open. Under *Connect Using,* select “*Direct to COM1*” and click the “OK” button. A *Port Settings* window will open. Adjust the settings to match the below table and then click the “OK” button:

Parameter	Value
Bits per Second	9600
Data Bits	8
Parity	None
Stop Bits	1
Flow Control	None

Once you have made the changes above, reset the connection by disconnecting and reconnecting using the icons in the toolbar. To disconnect, click the icon with the phone having the lifted handset. To connect, click the icon with the phone having the cradled handset. Be sure to save your selections under “File”.

The CIM-Cable consists of a DB-9 connector that connects to the computer serial port, and three “micro-grabbers” that connect to three programming holes on the CIM-1000. Note that on the component side of the board, the holes are labeled (-), (+) and (SIG). Attach the Black grabber to (-), the Red grabber to (+) and the White grabber to (SIG).



Typing **$CIM** will cause the CIM-1000 to connect with the terminal emulation software and it will output the following main menu.

```
Config v128
1.Manual
2.Upld
3.Dnld
0.Default
X.Exit

>
```

Important
When you have completed programming the device. Exit program mode gracefully by pressing the '\' button to return to main menu and then press 'X' to exit program mode.

- Press '1' to enter Group menu level display and view the first group settings.
- Press '2' to upload all parameters in hexadecimal to be stored by Hyperterm.
- Press '3' to download all parameters through Hyperterm.
- Press '0' to reset all parameters to their factory defaults.
- Press 'X' to exit program mode and return the device to normal operate mode.

Pressing '\' at any time will return you to the main menu.

Group Menu Level
Entering a "1" selects Manual configuration, and the CIM-1000 outputs the first group programming menu:

```
SIGNALING = GESTAR
        ID Type : B
         ANI ID : 2047
      AuxANI ID : 2047
         EMR ID : 2047
        ANI Msg : 01
        EMR Msg : 07
        TOT Msg : 09
        MAN Msg : 0F
       Preamble : 024 bit
```

This first group defines the signaling type and parameters specific to the selected type. Pressing 't' will "toggle" between GE Star® and MDC-1200®.

```
SIGNALING = MDC1200
         ANI ID : 1234
      AuxANI ID : 1234
         EMR ID : 1234
        ANI Msg : 8001
        EMR Msg : 8000
        MAN Msg : 8000
```

Pressing the 'space' bar selects the first item on the displayed group menu for editing. Additional presses of the 'space' bar, moves you down the list to the next item.

To change an item, space to the item and enter the new desired setting. Changes take effect after pressing the <TAB> or <CR> button. The group will be re-displayed to confirm the changes have been made. If power is removed before moving away from the edited group, the changes will not be stored. To move to the next group, press the <TAB> or <CR> button again.

```
COMMON
          Start ANI : YES
            End ANI : NO
          ANI RepDly : 000 Sec
        PTT Sidetone : NO
        PTT Courtesy : NO
   ANI becomes Crit : YES
       Preamb w/Atk : NO


RADIO INTERFACE
             Attack : 300 mS
                TOT : 060 Sec
         Cont.Data  : NO
      KeyFollowsPTT : NO
             AuxOut : CritChOnce
            TxLevel : 030 dB
              PttIn : actLOW
            SleepIn : actLOW

TX MODE = CONVENTIONAL
```

Pressing ‘t’ will toggle between Conventional mode and Trunking mode. If trunking is selected, trunking related parameters are made available for editing.

```
TX MODE = TRUNK
            KeyTime : 3000 mS
           Debounce : 300 mS
            Timeout : 3000 mS
           TrunkAck : actLOW

EMER
              RepQty : 005
              RepDly : 010 Sec
           ActiveDly : 000 Sec
            WarnTone : NO
                  In : actLOW
            OpnMicTx : 000 Sec
            OpnMicRx : 000 Sec

MAN-DOWN
              RepQty : 005
              RepDly : 010 Sec
           ActiveDly : 005 Sec
             WarnDly : 005 Sec
                  In : actLOW
            OpnMicTx : 000 Sec
            OpnMicRx : 000 Sec
```