



FourthRack[®] G.703 Card - Management

User Guide

Fourthtrack Systems
Unit 11 Lowfield Green
Caversham Park
Reading – RG4 6NZ
England

Telephone: 0118-946-3061
Fax: 0118-946-3091
Web: www.fourthtrack.co.uk
Email: info@fourthtrack.co.uk

Communications answers for the World Market

© Fourthtrack Systems
FourthRack and MicroMux are trademarks of R J Barrett

1 G.703 Line Card Management

The G.703 Line Card can be managed via management functionality implemented as an option on the plug in Power Supply Modules. One or two Management enabled modules may be plugged into the rack. The left hand module (slot 1) defaults to the active management module. The modules are equipped with a serial asynchronous console interface, a 10BASE-T Ethernet interface, and an alarm interface.

The Line Cards in the rack can be configured via the Management functionality (see "FourthRack System Management" User Guide). This document lists the management functions specific to a G.703 Line Card.

NOTE: The factory default start-up state of the G.703 Line Card, when there is an active Management System in the FourthRack, is the stand-by (power off) mode. No LEDs will light up! The G.703 Line Card power on state must be enabled before the status LEDs will function and the line interfaces and the Line Card become active. If no active Management System is present in the FourthRack then the G.703 Line Card will power up with the configuration defined by the link field at the rear of the Line Card.

If the link field SW10 is made, then the G.703 Line Card is in read only mode. The Line Card status can be reported by the FourthRack Management System, but the operating parameters cannot be changed via the CLI. Please refer to the G.703 User Guide for the full description of the Link Field functions.

2 Connecting to the Line Card

The management interface is connected to a FourthRack G.703 Line Card from either the ASYNC console port interface or via the telnet interface, using the command:

cli nn – command line interface to slot number nn

This will connect the terminal interface to the CLI (Command Line Interface) of the card in slot number nn

Use **CTRL-Z** to return back to the management card prompt

3 Configuring G.703 Line Cards using the FourthRack Management System

3.1 Commands at the FourthRack G.703 line card prompt.

Commands may be augmented with optional arguments, which need to be typed after the command name.

<Command> [<opt # 1> <opt # 2> . . . <opt # n>]

Each option is to be delimited by one (or more) white spaces (not tabs). The command line is then terminated with a carriage return.

Unrecognized commands will result in the error message 'Command not found'.

Commands with illegal, or unrecognized options will result in the error message 'Syntax error'.

All commands are case insensitive, however it is usual practice to use lower case.

The command line is limited to 22 characters, including the command itself and spaces.

3.1.1 Help

Displays a list of commands with options.

3.1.2 Power

Power (on/off)

This command enables the line interfaces. It is recommended that the user save the power on state using the 'write' command.

Syntax: <power on>

3.1.3 Read

Recovers the E2PROM data

Note: If the link field SW10 is made the G.703 Line Card is in read only mode and the read command will report 'Read Only'.

Syntax: <read>

3.1.4 Write

Store the current configuration (as displayed using the status command) to E2PROM.

Note: The G.703 Line Card must be in read / write mode (link field SW10 open) in order to make configuration changes to the Line Card and save them to the E2PROM. With SW10 made, the write command simply writes the configuration defined by the link field to the E2PROM.

Syntax: <write>

3.1.5 Name

Get / set the name assigned to the FourthRack G.703 Line Card

Limited to fifteen characters including spaces

Syntax: <name abcde>

3.1.6 mclk on / off

Enables / disables master clock

Syntax <mclk on> or <mclk off>

3.1.7 tclk on / off

Enables / disables terminal timing

Syntax: <tclk on> or <tclk off>

3.1.8 Status

Reports the status of the FourthRack G.703 Line Card

Syntax: <status>

```
Name: Name of card

      LOOP MCLK XINV CINV DINV TTC  MTTC
Build: OFF  ON   OFF  OFF  OFF  OFF  OFF
Config: OFF  OFF  OFF  OFF  OFF  OFF  OFF
Status:
      POWER = ON      G703 I/F = E1      G703 RX = LOI
READ ONLY = OFF     SERIAL I/F = X21     LOOP SW = OFF
```

3.1.9 xinv on / off

Enables / disables X.21 / V.35 TxD clock inversion

Syntax: <xinv on> or <xinv off>

3.1.10 lpbk on / off

Enables / disables loop back

Syntax <lpbk on> or <lpbk off>

3.1.11 dinv on / off

Enables / disables data inversion

Syntax: <dinv on> or <dinv off>

3.1.12 cinv on / off

Enables / disables X.21 / V.35 RxD clock inversion

Syntax: <cinv on> or <cinv off>

3.1.13 Ver

Reports the version information for the Line Card.

Syntax <ver>

3.1.14 Reset

If in read only mode this command forces the G.703 Line Card to re-boot management code and operating code from the saved configuration or link field settings. Note that the reset command is enabled even when the G.703 Line Card is in read only mode.

4 Application Notes

4.1 First time installation

The Line Card may appear not to be working when first installed in a managed rack. This is due to the card initially being set to the default stand-by mode.

To bring up the Line Card use the "power on" command.

To ensure that it remains enabled following a power interruption it is necessary to use the "write" command to change the state of the non-volatile memory on the Line Card

If there are any questions please contact your distributor or the Fourthtrack Systems support Line on +44-118-946-3061