

User Manual



Management Software for CFO841 Units

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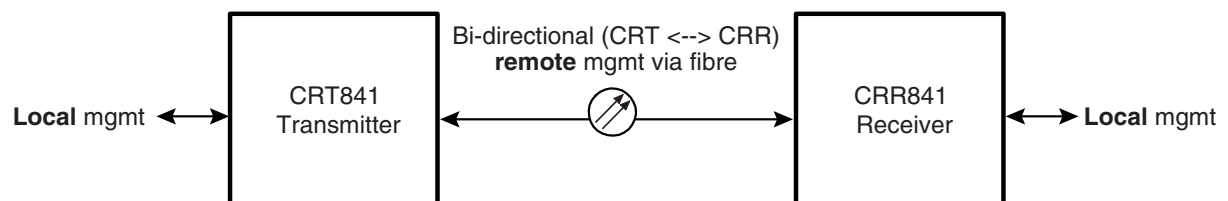
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Management Software for CFO841 Units (SW version 1.1.14 -->)

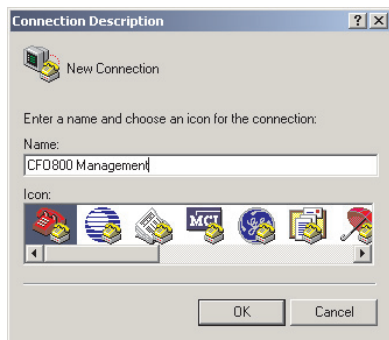
Introduction

Management connection between **CFO800** series fibre optic link units and e.g. laptop or PSION is based on a serial data communication by means of any terminal type program.

Management software for **CFO800** series fibre optic link units (v1.1.14 -->) is a Command Line Interface type and it is meant for configuration and controlling of **CFO841** link units (bi-directional communication via fibre, CRT <--> CRR).



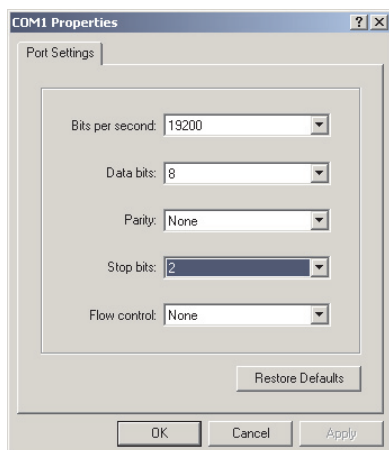
Management Software for CFO841 Units (Bi-directional communication via Fibre).



Picture 1.
Naming a terminal connection.



Picture 2.
Selecting COM port.



Picture 3.
Settings for COM port.

GENERAL

This chapter tells how with help of management software you can configure settings of **CFO800** series fibre optic link consisting of **CRT841** and **CRR841** units.

SYSTEM REQUIREMENTS

- * Any program using serial port and supporting **VT100 / 102** or **ANSI** protocols, e.g. Windows 95/98 or Windows NT 4.0/2000/XP, PSION.
- * **RS232**-cable (type **CIC503**). See table 1 for cable pinout.

1. HOW TO MAKE THE TERMINAL CONNECTION

PC/PSION	D9 female	RJ-45 male	CFO
Receive data	2	2	MGMT output
Transmit data	3	3	MGMT input
System ground	5	5	Ground

Table 1.

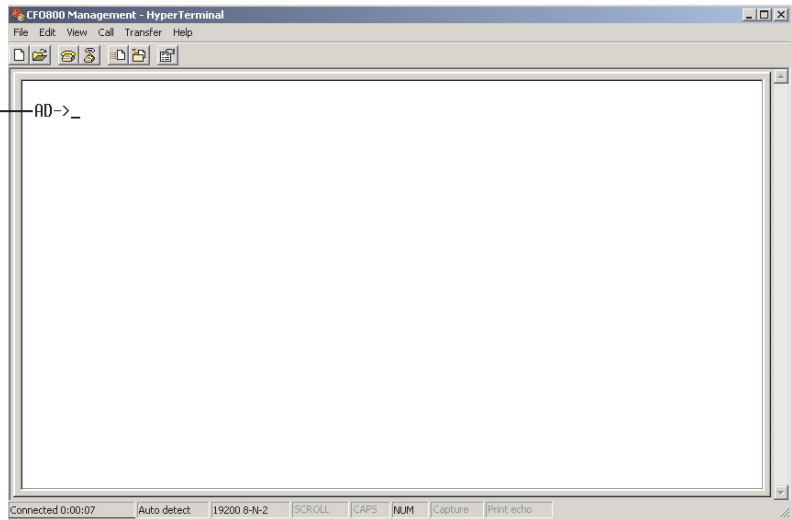
Management cable (**CIC503**) pinout (D9 female / RJ-45 male).

1. Start the Windows hyper terminal program (in Windows 95/98 and NT 4.0/2000/XP by choosing -> Start/ Programs/Accessories/Communications/Hyper Terminal). Wait until the following **“Connection Description”** window appears on the screen (see picture 1).
2. Enter a name for connection, e.g. **“CFO800 Management”** and click **OK** to continue. The following **“Connect To”** window appears on the screen (see picture 2).
3. Choose **COM** port where the **RS232** cable is connected, e.g. **COM1** port and click **OK** to continue. The following **“COM1 Properties”** window appears on the screen (see picture 3). Set here the values as described in table 2. Click **OK** to continue. The **“CFO800 Management”** window appears on the screen (see picture 4).
4. Press **Enter** to activate terminal window (**“AD->”** appears on the screen, see picture 4). The terminal connection to **CFO841** unit is now created and you can now use the management commands to controlling the unit.

Setting	Value
Emulation	VT100, VT102 or ANSI
Protocol	Serial
Baud rate	19200
Data bits	8
Parity	None
Stop bits	2
Flow control	None

Table 2. Port settings to terminal connection.

When the management software is activated, "AD->" text appears on the screen.



Picture 4. The Windows Hyper terminal program window view.

2. MANAGEMENT SOFTWARE COMMANDS

After making and starting the terminal connection for the **CF0841** unit it is possible with help of separate commands of management software e.g. check the status or change the settings of **CRT841** and **CRR841** units. Entering **help**, **+** or **?** displays a list of commands (see picture 5).

```

***** ( Teleste Action Direct Help ) *****
-----
help/?..... Help          | reset cpu.... Reset CPU
<Tab>..... Prev. command  | chat xxxxx... Free Text, Max 40 chr's
<Esc>..... Clear Line     | speed ..... 0 - 100 ms
rc ..... Remote Prefix    | video[x&y] ... 1&2 2&3 4&5 5&6 7&8 On/Off
status..... Status, Local | dwelltime ... 50 - 10000
status r.... Status, Remote | datatype .... RS422/RS485/RS485-4W/TTL
                                | dataterm .... None/Hardbias/Hardbias+Term
                                | audio ..... 600/High
                                | cc1=vsa..... CC out = Video Source Alarm
alias ..... Element Name   | cc1=cc1..... CC out = CC Out
vers..... SW Version       | vsa[n] ..... 1 - 8 enable/disable
about..... About The Program | factoryset... Defaults
demonr #.... Set Demo Mode | # . // ..... Comment Line Prefix
tv ..... Set Test Value    |
-----

```

Picture 5. CFO841 "help" view.

2.1. Description of commands

help / ? / +	Help view (a list of commands, see picture 5).
rc [command] [value]	Remote command via fibre, e.g. changing remote device's dwelltime to 80 --> rc dwelltime 80 .
status l / status	Status view of local CR* unit (see pictures 6 & 7).
status r	Status view of remote CR* unit (see pictures 6 & 7).
alias [name]	Alias naming (max 32 characters).
vers	Application software version, alias name, hardware version and serial number info of the local unit.
about	Additional information displays (10 pages, by pressing tab and enter the pages steps). Includes e.g. info code explanations describing the link status (during malfunction info codes are echoed to the prompt and demo modes for unit/link testing).
demonr [value]	Set desired demo mode on (see page 8).
tv [value]	Set test value for demo mode.
reset cpu	CPU boot (last settings are kept in memory).
chat [text]	Send max 40 characters text via fibre (CRT <--> CRR).
speed [0-100]	Define speed (ms) that terminal's text is printed on the screen (baudrate is 19200).
video [ch&ch] on/off	Set video channel pair on/off.
dwelltime [50-10000]	Set dwelltime (50...10000 µs).
datatype [value]	Set datatype (RS422/RS485/RS485-4W/TTL).
dataterm [value]	Set dataterm (none/hardbias/hardbias+term).
audio [600/high]	Set audio input impedance (600 ohm/high).
cc1=vsa	Set cc output channel to video source alarm.
cc1=cc1	Set cc output channel to cc usage.
vsa - [ch]	Enables/disables vsa (in chosen channels 1...8).
factoryset	Set default factory settings.

2.2. Description of status listing

Supply voltage	Supply voltage value (V).
Module Temperature	Internal temperature value (cels).
Hours:Mins	Usage hour meter (hours:mins).
Module address	Unit's slot address in rack (not in use).
Link Status	Link's status.
Module Status	Unit's status.
Delay between bytes	Speed (ms) that text is printed on the screen.
CH1...8	Video channel's status.
CH1...8 VSA	Video channel's vsa status (enabled/disabled).
CC / Vid Src Alarm	Cc output channel's status (CC1/vsa enabled).
Dwell Time	Dwelltime in use.
Data Type	Data type in use.
Data Termination	Data termination in use.
Audio Input Level	Audio input level (ok/too high).
Audio Input Impedance	Audio input impedance (600 ohms/high).
CC1 / Vid Src Alarm	Cc output channel's status (CC1/vsa usage).

```

Transmitter Status Listing
-----
Supply Voltage..... 12.2 V
Module Temperature..... 35.5 Cels.
Hours:Mins..... 219:19
Module Address..... 0000...FFFF
Link Status..... OK / No Sync or Optical Input Low
Module Status..... OK / HW Failure
Delay Between Bytes..... 0...100 ms
CH1..... Video Present / NO Video / Disabled
CH2..... Video Present / NO Video / Disabled
CH3..... Video Present / NO Video / Disabled
CH4..... Video Present / NO Video / Disabled
CH5..... Video Present / NO Video / Disabled
CH6..... Video Present / NO Video / Disabled
CH7..... Video Present / NO Video / Disabled
CH8..... Video Present / NO Video / Disabled
CH1 VSA..... Enabled / Disabled
CH2 VSA..... Enabled / Disabled
CH3 VSA..... Enabled / Disabled
CH4 VSA..... Enabled / Disabled
CH5 VSA..... Enabled / Disabled
CH6 VSA..... Enabled / Disabled
CH7 VSA..... Enabled / Disabled
CH8 VSA..... Enabled / Disabled
Dwell Time..... 50...10000 us
Data Type..... RS422/RS485/RS485-4W/TTL
Data Termination..... None/Hardbias/Hardbias+Term
Audio Input Level..... OK / Too High
Audio Input Impedance... 600 ohms/High
CC1 / Vid Src Alarm.... CC1/VSA
-----

```

Picture 6. Transmitter's "status" info view/settings.

```

Receiver Status Listing
-----
Supply Voltage..... 12.2 V
Module Temperature..... 35.5 Cels.
Hours:Mins..... 219:19
Module Address..... 0000...FFFF
Link Status..... OK / No Sync or Optical Input Low
Module Status..... OK / HW Failure
Delay Between Bytes..... 0...100 ms
CH1..... Video Present / NO Video / Disabled
CH2..... Video Present / NO Video / Disabled
CH3..... Video Present / NO Video / Disabled
CH4..... Video Present / NO Video / Disabled
CH5..... Video Present / NO Video / Disabled
CH6..... Video Present / NO Video / Disabled
CH7..... Video Present / NO Video / Disabled
CH8..... Video Present / NO Video / Disabled
CH1 VSA..... Enabled / Disabled
CH2 VSA..... Enabled / Disabled
CH3 VSA..... Enabled / Disabled
CH4 VSA..... Enabled / Disabled
CH5 VSA..... Enabled / Disabled
CH6 VSA..... Enabled / Disabled
CH7 VSA..... Enabled / Disabled
CH8 VSA..... Enabled / Disabled
Dwell Time..... 50...10000 us
Data Type..... RS422/RS485/RS485-4W/TTL
Data Termination..... None/Hardbias/Hardbias+Term
Audio Input Level..... OK / Too High
Audio Input Impedance... 600 ohms/High
CC1 / Vid Src Alarm.... CC1/VSA
-----

```

Picture 7. Receiver's "status" info view/settings.

CFO841 INFO CODES

- 00 No Info code
- 01 DVX Write buffer full
- 02 DVX Write buffer empty
- 03 DVX Read no packet
- 04 DVX Read too long packet
- 05 DVX Checksum error in read packet
- 06 DVX Wrong address
- 07 DVX General info
- 10 FPGA IRQ over flow
- 11 Edge Tracking
- 12 Transmitter Laser Disabled
- 13 Debug version
- 14 UART0 Rx ring full
- 15 FPGA Tx ring full
- 16 FPGA Rx ring full
- 17 UART0 Tx ring full
- 18 Laser restart
- 19 Resynchronization
- 20 EMS Too long packet
- 21 EMS Unknown type of packet
- 22 EMS Unknown Element ID
- 23 EMS Unknown command
- 30 Too long command for Action Direct
- 32 E2 storage error
- 35 I2C IO Expander read error
- 36 I2C IO Expander write error
- 50 Error in Nonvolatile Storage, item: Data Type
- 51 Error in Nonvolatile Storage, item: Data Termination
- 52 Error in Nonvolatile Storage, item: Video Plan
- 53 Error in Nonvolatile Storage, item: Dwell Time
- 54 Error in Nonvolatile Storage, item: Audio Impedance
- 55 Error in Nonvolatile Storage, item: Start Counter
- 56 Error in Nonvolatile Storage, item: Video Source Alarm
- 57 Error in Nonvolatile Storage, item: Aliasname
- 58 Error in Nonvolatile Storage, item: Hour Meter Minutes
- 59 Error in Nonvolatile Storage, item: Hour Meter Hours
- 60 Error in Nonvolatile Storage, item: Video Source Alarm Plan
- 90 No alarm for info codes above this
- 98 Info Code manually cleared
- 99 Big Bang, stands for power up

DEMO NUMBERS for CFO841 simulations and testing

Note! Unit will return from demo mode to normal operation mode automatically after one hour.

00 No Demo, Default (also demo interrupt)
03 ** Video Detection Demo, All Channels
05 * Temperature Demo
08 * Power Supply #1 Demo
14 A Alarm for backplane bus & red led
15 B Alarm for backplane bus & yellow led
16 A Alarm for CCUxxx
17 B Alarm for CCUxxx
21 CC1 Input Close State Demo
31 ** Video Detection Demo Ch #1
32 ** Video Detection Demo Ch #2
33 ** Video Detection Demo Ch #3
34 ** Video Detection Demo Ch #4
35 ** Video Detection Demo Ch #5
36 ** Video Detection Demo Ch #6
37 ** Video Detection Demo Ch #7
38 ** Video Detection Demo Ch #8
58 * Temperature & Power Supply #1 Demo
222 ** Led Test
2222 Running Led Demo
22222 All RJ45 Connector Leds Used For VU meter Display

* This Demo Uses Test Value. Command is “**tv [value]**”.

** Video Leds In Transmitter Not Affected

Lines Starting With # . ; // Are Treated As Comment Line

