CFO100 Series

# User Manual


## Management Software for CFO141 Units

CFO100sw2 User Manual, 59300065, rev001

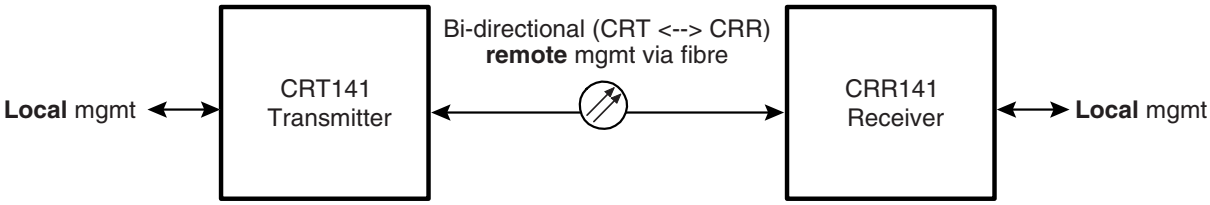
# Contents

# Managemet Software for CFO141 Units (version 1.22 -->).

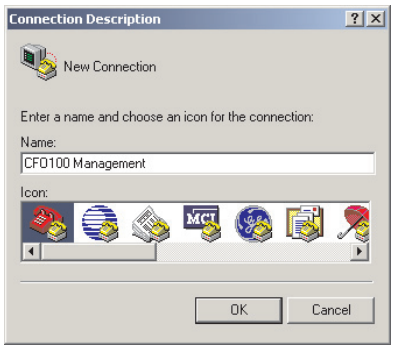
## Introduction

Management connection between **CFO100** 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 **CFO100** series fibre optic link units (v1.22 -->) is a Command Line Interface type and it is meant for configuration and controlling of **CFO141** link units (bi-directional communication via fibre, CRT <--> CRR).

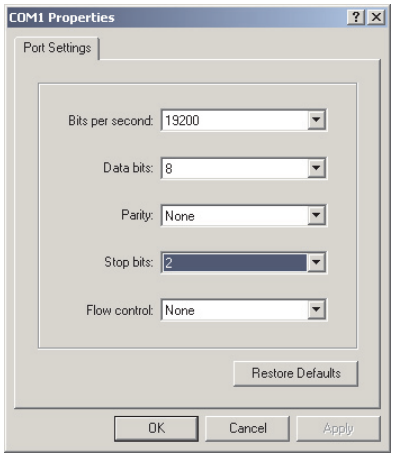


# Management Software for CFO141 Units (Bi-directional communication via Fibre).




**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 **CFO100** (digital) series fibre optic link consisting of **CRT141** and **CRR141** units.

## SYSTEM REQUIREMENTS

* Any program using serial port communication 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).

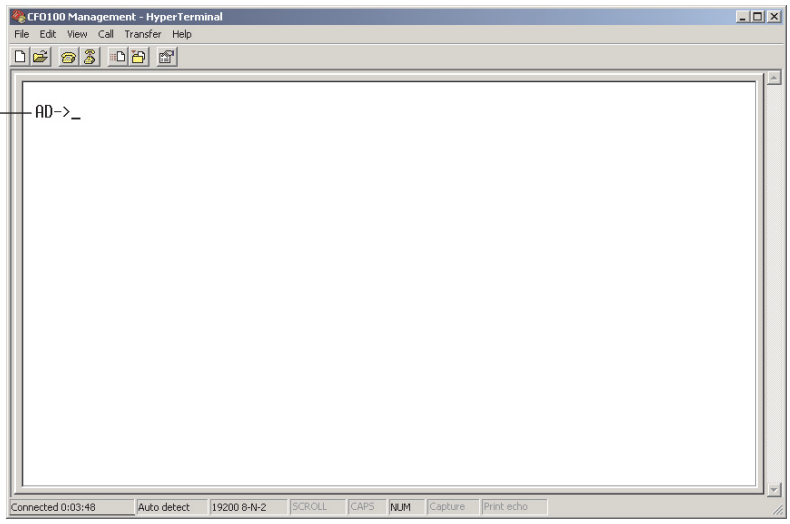
1. Start the Windows Hyper Terminal program (in Windows 95/98 and NT 4.0/2000/XP by choosing -> Start/ Programs/Accessories/Communications/Hyper Terminal). Wait until the following "**Connection Description**" window appears on the screen (see picture 1).
2. Enter a name for connection, e.g. "**CFO100 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 "**CFO100 Management**" window appears on the screen (see picture 4).
4. Press **Enter** to activate management software ("**AD->**" appears on the screen, see picture 4).
   The terminal connection to **CFO141** 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 **CFO141** unit it is possible with help of separate commands of management software e.g. check the status or change the settings of **CRT141** and **CRR141** 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      | dwelltime .....50 - 10000 us
status.......Status, Local      | datatype ......RS422/RS485/RS485-4W/TTL
status r.....Status, Remote     | dataterm ......None/Hardbias/Hardbias+Term
factoryset...Defaults           | audio .........600/High
alias .......Element Name       | cc1=vsa........CC out = Video Source Alarm
vers.........SW Version         | cc1=cc1........CC out = CC Out
demonr #.... Set Demo Mode      | factoryset.... Defaults
tv ......... Set Test Value     | # . //  ...... Comment Line Prefix
about....... About The Program  |
-------------------------------------------------------------
```

**Picture 5**. CFO141 "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** / **status l** | 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. |
| **demonr** [value] | Set desired demo mode on (see page 7). |
| **tv** [value] | Set test value for demo mode. |
| **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). |
| **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). |
| **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. |
| **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.
**Video** Video channel's status.
**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 Inmpedance** Audio input impedance (600 ohms/high).

```
Transmitter Status Listing
-----------------------------------------------------------
Supply Voltage..... 12.3 V
Module Temperature..... 40.5 Cels.
Hours:Mins..... 1198:19
Module Address..... 0000...FFFF
Link Status..... OK / No Sync or Optical Input
Module Status..... OK / HW Failure
Delay Between Bytes..... 0...100 ms
Video..... Video Present / NO Video / Disabled
CC / Vid Src Alarm..... CC / VSA
Dwell Time..... 50...10000 us
Data Type..... RS422/TTL
Data Termination..... None / Hard Bias / Hard Bias + Term
Audio Input Level..... OK / Too High
Audio Input Impedance... 600 ohms/High
-----------------------------------------------------------
```

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

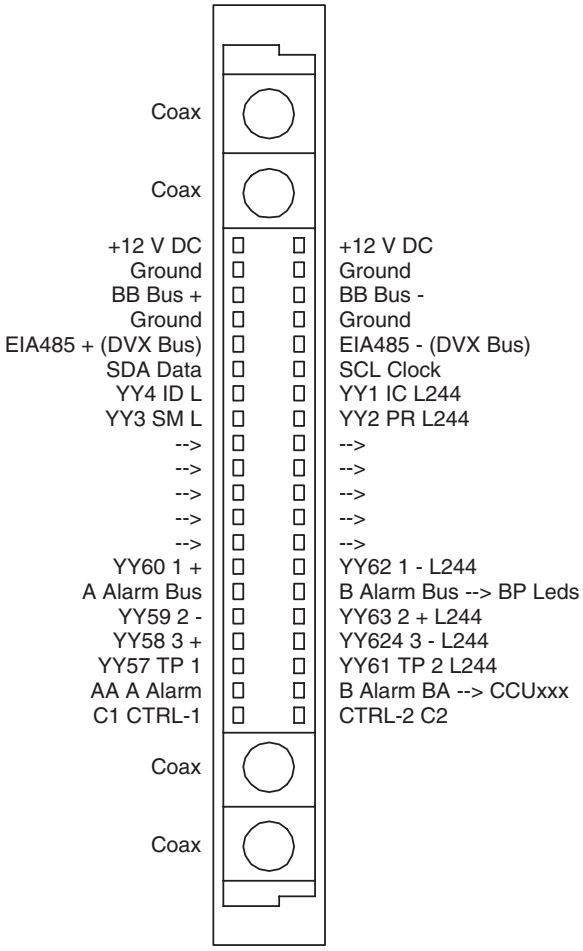
```
Receiver Status Listing
-----------------------------------------------------------
Supply Voltage..... 12.2 V
Module Temperature..... 47.0 Cels.
Hours:Mins..... 687:14
Module Address..... 0000...FFFF
Link Status..... OK / No Sync or Optical Input Low
Module Status..... OK / HW Failure
Delay Between Bytes..... 0...100 ms
Video..... Video Present / NO Video / Disabled
CC / Vid Src Alarm..... CC / VSA
Dwell Time..... 50...10000 us
Data Type..... RS422/TTL
Data Termination..... None / Hard Bias / Hard Bias + Term
Audio Input Level..... OK / Too High
Audio Input Impedance... 600 ohms/High
-----------------------------------------------------------
```

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

**CFO141 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 XIRQ #5 from FPGA over flow
11 Edge Tracking
12 Transmitter Laser Disabled
14 UART0 Rx ring full
15 FPGA Tx ring full
16 FPGA Rx ring full
17 UART0 Tx ring full
18 Laser restart
19 Resyncronization
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
90 No alarm for info codes above this
97 Action Direct, bad command
98 Info Code manually cleared
99 Big Bang, stands for power up

### CFO Backplane Euro Connector




### DEMO NUMBERS for CFO141 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 Signal Demo: Transm. Vid. Led Not affected |
| 05 | Temperature Demo * |
| 08 | Power Supply #1 Demo * |
| 21 | CC #1 Input Low Level Demo |
| 58 | Temperature & Power Supply #1 Demo * |
| 22222 | Square Leds As Audio VU Meter, Receiver |

* This Demo Needs test value to be set.

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