

CYGNUS 803 V.35 - E1 Converter

Q What is the function of CYGNUS 803 Converter?

A The CYGNUS 803 converter provides interface conversion at up to 2 Mbps between V.35 data interface and E1 PCM telecom interface.

Q What are the typical applications of the CYGNUS 803 Converter?

A The CYGNUS 803 is typically used to connect networking equipment such as routers to E1 PCM telecom links.

Q Which connector on the CYGNUS 803 do I use to connect to the PCM equipment?

A The RJ-45 socket on the back panel of the unit marked "E1" is used to connect the converter to PCM equipment.

Q Which connector on the CYGNUS 803 do I use to connect to V.35 DTEs such as routers?

A The DTE's V.35 WAN cable should be connected to the 34 pin block type connector on the unit's back panel (the connector is marked "V.35").

Q What is the pin out of the E1 interface connector?

A Pins 1,2 - TX; pins 4,5 - RX.

Q What protection is provided against current and voltage surges on the E1 interface?

A Current limiting devices (PTCs) and GD Tubes are provided for this purpose.

Q What is the default clock mode in CYGNUS 803?

A E1 Slave clock. This clock mode is suitable for use when the clock is supplied by the PCM equipment connected to the unit's E1 interface.

Q How do I know whether the E1 interface of the CYGNUS 803 is properly connected to the PCM equipment?

A The E1 LINK indicator is ON if the unit is properly connected to the PCM equipment.

Q If ALARM indicator is flashing, what does it indicate?

A It indicates failure of the E1 link.

Q What diagnostic facilities are available in CYGNUS 803?

A Local loopback, Digital loopback and Pattern generation and checking.

Q How do I test whether the end-to-end circuit is OK?

A Start the Pattern Generation test from the local CYGNUS 803 unit. TST and PAT ERR indicators should glow on this unit. Now initiate Digital Loop back test from the remote end. With a properly working end-to-end link PAT ERR indication on the local CYGNUS 803 unit should go off.

Q What is the function of the optional built-in buzzer in the CYGNUS 803?

A The buzzer will sound if the E1 link goes down.

Q Can I disable the buzzer?

A Yes, by pressing the DSBL BZR switch on the front panel.



Q What indicators on the CYGNUS 803 will glow if it is properly connected to the V.35 DTE as well as to the PCM equipment?

A **PWR, E1 LINK, E1 SLV, DTR indicators will glow. TXD and RXD will flash whenever there is data traffic.**

Q How do I configure the CYGNUS 803 for framed operation at (say) 256 kbps?

A **Connect a terminal to the console port of the modem. Configure the terminal for 9600 bps, no parity, 8 data bits and 1 stop bit. Log into the supervisory function. Default password is "0".**

From Main Menu > Configuration, select framing mode.

From Main Menu > Configuration > TDM Slots, select 4 slots to E1 (4x64=256).

Store the parameters and reset the unit.

Q How do I select between 120 ohms and 75 ohms E1 interface?

A **Set switches SW1 - 1,2,3,4 OFF to select 120 ohm E1 interface, and ON to select 75 ohm E1 interface (the 4 way DIP switch SW1 is provided inside the unit).**