



Model:BD-E1-C37

C37.94 to E1 converter

User Manual

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9. COMPANY STATEMENT	错误！未定义书签。

Dear users:

Sincerely thank you for purchasing baudcom transmission product!

For your more smoothly working, we strictly suggest that you must read this manual carefully before connecting and operating and pay more attention to the cautions and notes.

1. Overview

This series of devices provide 1 E1 port and 1 C37.94 optical port, can realize the interface conversion from E1 to C37.94

2. Features

- Integrated circuit based on self intellectual copyright
- E1 port support 120Ω and 75Ω impedance, which is self-adaptive
- System has passed strict test and verify, completely complies with ITU-T V.35, G.703, G.704
- AC 220V, DC -48V and DC +24V are optional, and DC power has no distinguish between negative and positive polarity

3. Specification

◆ E1 port

E1: G.703

Rate: 2048Kbps±50ppm

Code type: HDB3

Impedance: unbalanced 75Ω/balanced 120Ω

The unbalanced matches coaxial port adapter, can match 75-2/3 coaxial cable

Jitter characteristic: G.742, G.823

Input port allowed attenuation: 0~6dBm

◆ Optical port

Wavelength: SM 1310/1550nm;

Optical fiber core: dual core/single core

Transmitting power: -9dBm/-5dBm

Transmission distance: SM 20/40/60/80/100/120KM

Receiving sensitivity: better than -36dBm(error code rate<10⁻¹¹)

Connector: FC/SC

◆ Power

System power: AC100V ~ 260V; DC -48V; DC +24V

Power consumption: ≤3W

◆ Dimension 216 (L) X140 (W) X31 (H) Desk-top

◆ Working environment

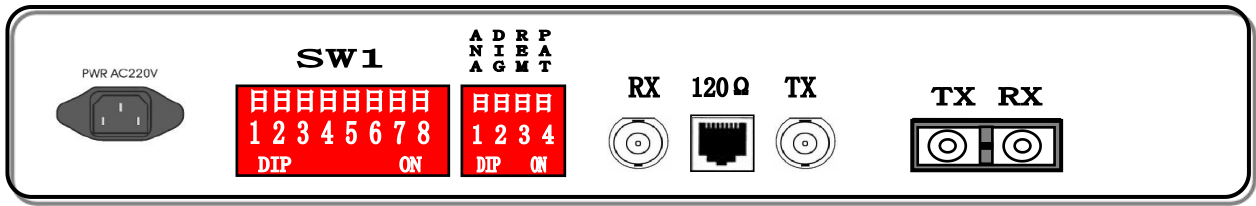
Working temperature: -10°C ~60°C

Working humidity: 5% ~ 95% (no condensation)

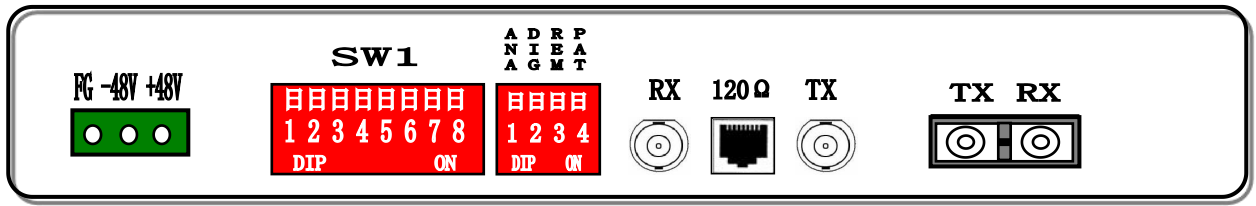
Storage temperature: -40 °C~ 80°C

Storage humidity: 5%~ 95% (no condensation)

4. Panel diagram



Picture 1: rear panel (AC220V)



Picture 2: rear panel (DC-48V)



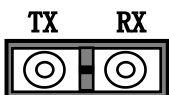
Picture 3: front panel

Note: dial number has no definition

5. Indicator lights description

NAME	COLOR	STATUS	DESCRIPTION
There are 12 indicator lights, and the definition is as follows:			
LPWR	Green	On	Local device power is connected
		Off	Local device power is disconnected
FLOS	Green	On	Optical port has signal access
		Off	Optical port has no signal access
FRXD	Red	Flash	Optical port has data receiving
		Off	Optical port has no data receiving
FTXD	Red	Flash	Optical port has data transmitting
		Off	Optical port has no data transmitting
NC	Red		
ELOS	Red	On	E1 port has signal access
		Off	E1 port has no signal access
ERXD	Green	Flash	E1 port has data receiving
		Off	E1 port has no data receiving
ETXD	Green	Flash	E1 port has data transmitting
		Off	E1 port has no data transmitting

6. Optical fiber port



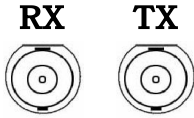
Optical fiber connector can be FC or SC, the fiber can be single fiber or dual fiber.

Dual fiber : TX—transmit RX—receive

Single fiber: transmitting and receiving are on the same fiber (note: when it is single fiber, 1510nm and 1330nm device should be used in pairs)

7. E1 interface

75Ω-BNC socket

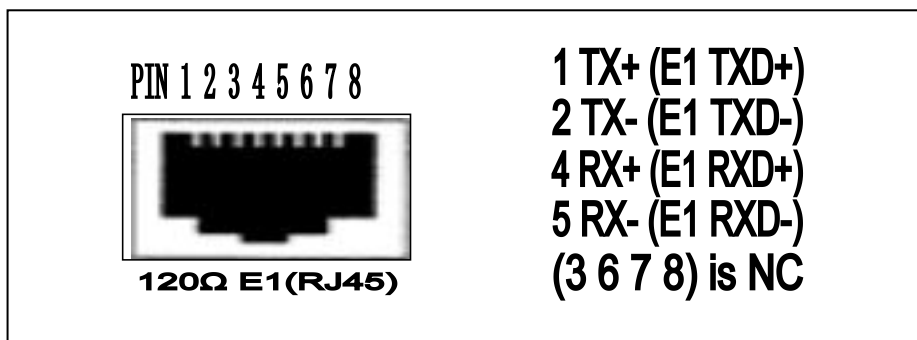


“RX”: 75Ω (BNC) unbalanced E1 input

“TX”: 75Ω (BNC) unbalanced E1 output

120Ω-RJ45 socket

The following definition:



8. Power

Device support AC220V/DC-48V/DC+24V power supply.

If you choose AC220V power, connect by power cable.

If you choose DC power, the following connection way is a example for you:

“FG”pole	connect to the earth
“-48V”pole	connect to the negative pole
“+48V”pole	connect to the positive pole

Note:device has polarity protection measure, it will not be damaged and can work normally when the power pole is reversely connected, which is convenient for maintenance and installation.(including DC48V, DC-48V, DC24V, DC-24V)