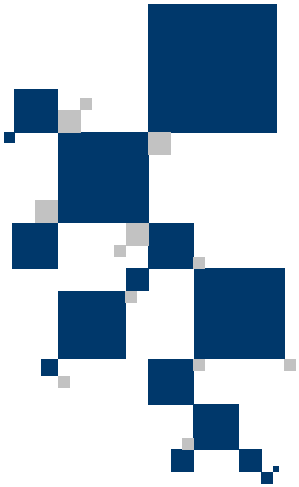

USER MANUAL

G.703 / V.35 Interface Converter

TAHOE 235

TAHOE

FREEDOM OF COMMUNICATION

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Tahoe® 235 (G.703 / V.35 converter)

User Manual

http://www.tahoe-group.com/

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1. Introduction

Tahoe® 235 G.703 / V.35 interface converter allows connecting a terminal (DTE) equipped with V.35 serial interface to a G.703 network. The communication is performed in full-duplex with throughput of 2048 kbps.

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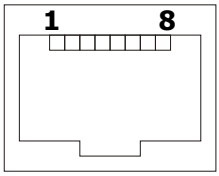
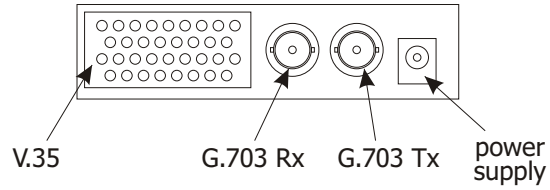
2. G.703 interface

Tahoe® 235 interface converter is exists in two versions. The first one is equipped with a modular RJ-45 jack for connection to a balanced 120 G.703 network interface. Although G.703 recommendation does not specify the pinout of this jack, the most common one has been chosen. Nevertheless care should be taken to properly connect a DCE device. Pin Rx+ should be connected to pin Tx+ in the DCE, pin Rx- to Tx- , Tx+ to Rx+, and Tx- to Rx-.



Pin	Signal
1	Rx+ (input)
2	Rx- (input)
3	-
4	Tx+ (output)
5	Tx- (output)
6	-
7	-
8	-

The second version of the converter is equipped with two coaxial BNC connectors for connection with 75 network interface.



Rear view of the 75 version

3. LED Indicators

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- **Power -** turned on, when the interface converter is powered up
- **V.35 -** turned on after connecting a DTE device to the V.35 port and driving DTR line
- **G.703 -** turned on, when G.703 signal is detected

4. Jumper settings

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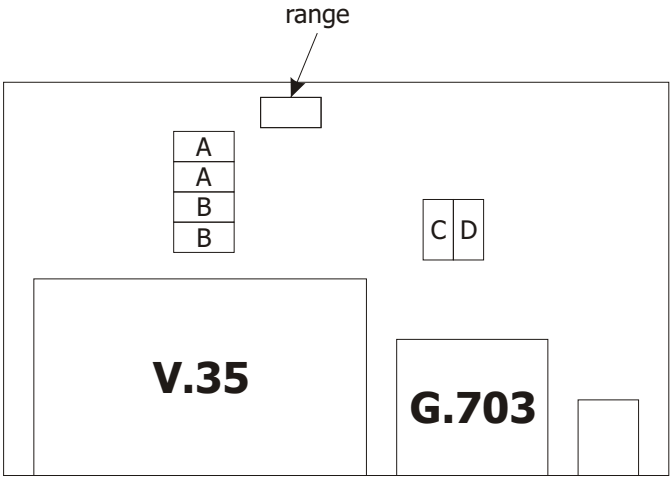
Configuration jumpers are used to select the G.703 interface range and G.703 transmit clocking. Factory defaults are appropriate in most applications.



Range:

- shorted **(default)** - 2000 m (receiver sensitivity -43 dB)
- open - 50 m (receiver sensitivity -21 dB)

G.703 transmit data clocking:

Clocking source	A	B	C	D
from DTE (router)	✓		✓	
from internal 2.048 Mhz generator		✓	✓	
derived from received G.703 signal **(default)**		✓		✓

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5. Specifications

- throughput:
  2048 kb/s full-duplex

- **V.35 interface**
  - 34-pin Winchester connector (conforms to ISO-2539) DCE (female)
  - clocking: derived from G.703 signal, external (supplied by DTE on SCT(a)/SCT(b) lines) or internal (from local 2.048 MHz oscillator)

- **G.703 interface**
  - balanced, 120 , unframed, modular RJ-45 connector
    or
  - coaxial, 75 , unframed, two BNC connectors
  - receiver sensitivity: -12 dB or -43 dB
  - range: 50 m or 2000 m

- dimensions:
  100 mm (width) x 60 mm (length) x 30 mm (height)

- power supply:
  15V, 100mA, 2W
  external 100-240V, 50-60Hz power supply included

- environmental conditions:

storage:	temperature	-20°C to 70°C
	humidity	5 to 95%
operation:	temperature	0°C to 50°C
	humidity	0 to 85%

6. Declaration of Conformity

CE

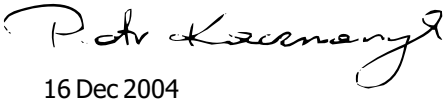
We declare that the product Tahoe 235 complies with the regulations of the following European Directives:

- **73/23/EEC** low voltage safety requirements
- **89/336/EEC** EMC requirements
- **99/5/EEC** radio & telecommunication terminal equipment requirements

The compliance of Tahoe 235 with the requirements of the above mentioned directives is ensured by complete application of the following harmonized European Standards:

- **EN 60950:2000**
- **EN 55022:1998**
- **EN 61000-6-1:2002**
- **EN 61000-6-3:2002**

Signed: Piotr Kaczmarzyk
Position: Director

Signature: 

Date: 16 Dec 2004
Place: Wroclaw, Poland

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