

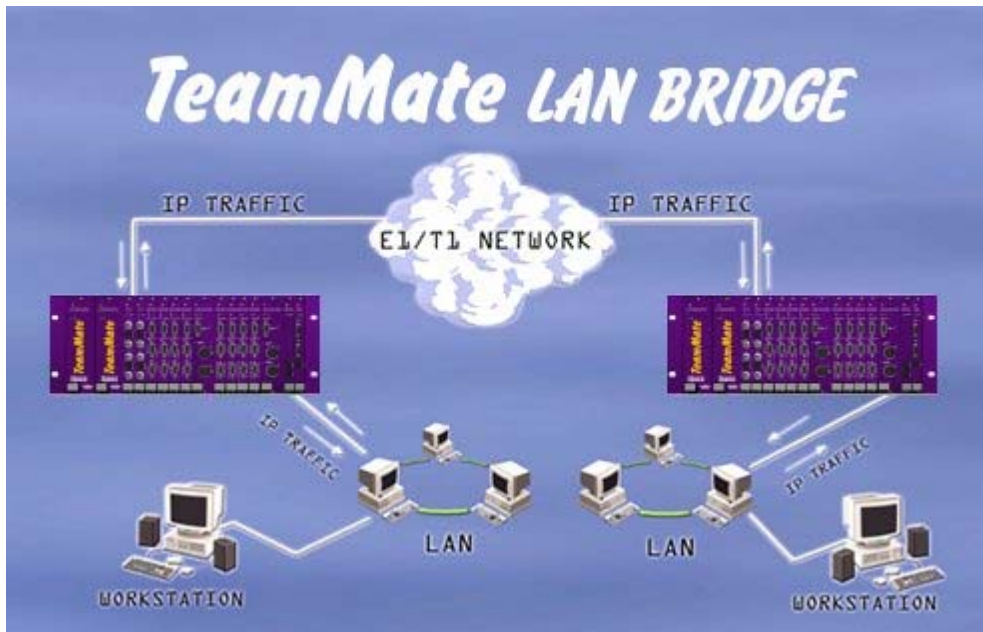


**TeamMate** T1/E1 Multiplexer is a system that allows transportation of voice channels, high quality audio and data across 1.544 Mbps or 2.048 Mbps dedicated links (T1 or E1 circuits), using time division multiplexing (TDM). The TeamMate multiplexer supports up to four T1 or E1 links. It is possible to drop/insert time slots across any of the connected T1 or E1 circuits.

## FEATURES

- Ability to connect up to four T1/E1 circuits to one base device.
- Drop/insert across any of the connected T1/E1 circuits.
- AC or DC (48V) power supply.
- Option of redundant AC or DC power supply.
- Hot swapping of modules to make servicing and updating easier.
- Up to 14 Encoder or Decoder modules in one rack.
- Option to extend the configuration with additional racks (up to a maximum of 8 racks).
- Local or remote control and configuration through RS232 (Telnet) or LAN interface (SNMP).
- Ability to assigning time-slots for IP traffic dynamically. Routed interconnection of LAN through T1/E1 circuits (*LAN Bridge*).
- Totally control of audio modules via software: selection of analog or digital interface as well as encoding/decoding algorithm.
- Bi-directional module of synchronous data (two ports per module). The interface can be configured V35/X21 and as DTE or DCE.

# T1/E1 Multiplexer



## BASE DEVICE

- Modular 4U-high 19" rack
- Up to four T1 or E1 Multiplexed modules with drop insert capability
- X21 local data module for synchronous data transmission N x 64Kbps
- Encoder and decoder modules with analog and digital AES/EBU audio inputs and outputs and auxiliary data
- PBX interconnection module
- TC/IP Control Module
- Redundant Power Supply
- Management software control
- Extension module to cascade more subracks

## AUDIO STANDARDS

- ITU-T G711 & G722
- ITU-T J57
- ITU-T J41
- ITU-T J42
- ISO MPEG Layer II (mono/stereo)
- ISO MPEG Layer III (mono/stereo)
- Apt-X standard and enhanced 16, 20 & 24 bits (mono/stereo).

# T1/E1 Multiplexer



## POWER SUPPLY MODULES

The **TeamMate** base device can accept up to two power supplies

AC POWER SUPPLY MODULE  
DC REDUNDANT POWER SUPPLY 48V

If a power supply fails, the **TeamMate** can change over to the spare power supply without interruption.

Monitoring of status and power supply failure



## E1/T1 MODULE

E1/T1 circuits are full duplex with 2Mbps capacity in each direction. The E1/T1 module supports mux/demux signals over this 2Mbps circuit.

Up to two interfaces per module for the connection of two E1/T1 links (2 Mbps each).

Multiplexer will support up to two modules of this kind, that is, four interfaces for connection of four E1/T1 links (2 Mbps each)

Multiplexer allows Drop/Insert functions among any of the four E1/T1 connected circuits.

Interface: CCITT G703  
Connector: RJ45 and BNC  
Binary speed: 2048Mbps +/- 50ppm  
Plot format: CCIT G704  
Line code: HDB3  
Impedance: 75 or 120 Ohms

# T1/E1 Multiplexer



## CONTROL MODULE

### MAIN FUNCTIONS:

- To manage the system.
- To work as an additional input/output synchronous data module.

### Interfaces:

- Asynchronous port for connecting a VT-100 compatible terminal to configure the multiplexer.
- This module is also a router for direct LAN connection to configure the multiplexer using TCP/IP protocol (Telnet).

This module configures and control input/output modules. It facilitates switching between PCM buses and E1/T1 links according to the slots assigned by the user.

The Multiplexer can keep one slot of the E1/T1 link reserved for the control module in order to manage the remote multiplexer and then transmit and receive by this channel the remote control request. The control module monitors the system state and reports back to the management software.

It keeps system configuration information for automatic reset.



## DATA MODULE

### SYNCHRONOUS DATA MODULE

- Allows synchronous transmission of data at Nx64Kbps
- Free assignment of the number of slots
- Provides two WAN V24/V35 interfaces

## AUDIO ENCODER MODULE

(Slim(*takes 1 slot*) or Standard (*takes 2 slots*))

This module supports analog or digital inputs.

Audio Coding Options:

- J41 384Kbps for mono signals - 15kHz frequency response.
- J42 192Kbps for mono signals – 7.5kHz frequency response.
- J57 for AES/EBU signal transmission.
- ISO MPEG Layer II
- ISO MPEG Layer III
- G722
- G711
- Apt-X standard & enhanced
- Auxiliary data with audio working in Apt-X.

Converters: 24bit A/D

Interfaces: Slim: DB-9

Standard: 2 XLR female with selection between analog or digital input.

DB9 for auxiliary data



## AUDIO DECODER MODULE

(Slim(*takes 1 slot*) or Standard (*takes 2 slots*))

This module supports analog or digital outputs.

Audio Coding Options:

- J41 384Kbps for mono signals - 15kHz frequency response.
- J42 192Kbps for mono signals – 7.5kHz frequency response.
- J57 for AES/EBU signal transmission.
- ISO MPEG Layer II
- ISO MPEG Layer III
- G722
- G711
- Apt-X standard & enhanced
- Auxiliary data with audio working in Apt-X.

Converters: 24bit A/D

Interfaces: Slim: DB-9

Standard: 2 XLR male with selection between analog or digital output.

DB9 for auxiliary data

