



## Zeus II Trunking Digital Matrix Intercom System

You need the capabilities, redundancy and programmability of a full-featured, top of the line digital matrix intercom system, but have limited space in which to add the equipment. You also need to be able to expand the intercom system as your communications needs grow.

The RTS Zeus II matrix intercom system provides 24 channels of high-quality audio in a compact 2 rack unit package with the added benefit of linking to other RTS matrix intercoms via intelligent trunking.

Each channel is capable of supporting any of the RTS line of matrix keypanels, or four-wire inputs and outputs for program, party line and IFB feeds.

The Zeus II comes complete with AZedit, a Windows based, full-featured configuration software, providing on-line and off-line programming capabilities.

### Features

#### Redundant power supplies standard

The unit comes complete with two completely independent power supplies that can be powered from separate AC feeds. Because of the extremely low power consumption, the use of low cost UPS units for particularly critical installations is possible.

#### Meet any communications needs without rewiring, jumper changes, or the need to take the system "off-line"

Nearly all changes can be made by the users, using a keypanel. More involved changes can be made on-line or off-line using the Zeus-Edit programming software.

#### Better than CD quality audio

Zeus uses the RTS TDM ASIC to perform all audio switching and mixing in the digital reel. Input and outputs are converted at 44.1 kHz, 20-bits for a full 20 kHz bandwidth. The TDM

ASIC performs all DSP with 45-bits resolution, avoiding any degradation of communications, regardless of the number of users on a given path.

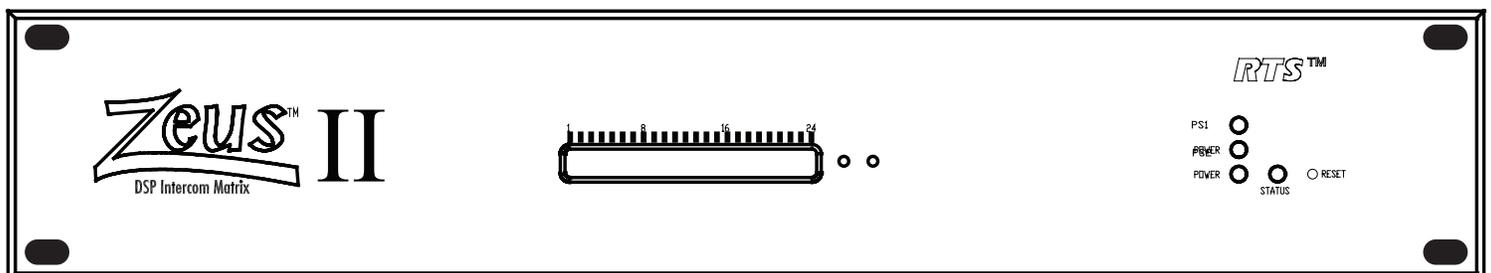
#### All communications modes are provided

Zeus comes standard with full support for point-to-point communications, party-line conferences, IFBs, Isolate, and special lists.

#### External interfaces standard

Eight general purpose inputs and outputs (GPIOs) are provided for control of external devices including two-way radios, VOXs, tally and alarm indicators. A serial port is also provided for connection of RTS accessories including additional GPIO, level control panels, conference assignment panels and program assignment panels.

### Line Drawing



# Zeus II Specifications

## Matrix

Size: 24 Ports

Processing: Digital, 45 bits

Conversion: 44.1 kHz, 20 bits

Programming: Zeus-Edit via Windows

Memory: Non-volatile Flash

## Controls and Indicators

Power On / Off toggle switch, located on back panel

Reset pushbutton switch, recessed in front panel

Diagnostic pushbutton switches (2), recessed in front panel

Power On indicator

General Status Indicator

Keypanel Status indicators (24)

Zeus controller status indicator

Zeus audio status indicator

Zeusedit status indicator

UIO-256 status indicator

LCP-102 status indicator

Miscellaneous diagnostic indicators (19, for service only)

Note: all indicators located on front panel

## Audio Performance

Input Type/Impedance: Active Balanced, 22k $\Omega$

Output Type/Impedance: Active Balanced, 600 $\Omega$

Operating Level: +8 dBu

Maximum Level: +20 dBu

Freq. Response at +20 dBu: 50 Hz to 20 kHz,  $\pm$  1dB

THD+N at +20 dBu (unweighted): <0.007%

SNR at +20 dBu (A-weighted): >90 dB

Crosstalk at +20 dBu: <-80 dB

CMRR: >85 dB

## Connections

Intercom Channels (J1 to J24)

General: 4-wire, balanced audio; RS-485 data for optional intelligent keypanels

Connector type: 9-pin male D-sub (DE-9P)

Pin 1: Keypanel data +; Pin 2: Keypanel data -; Pin

3: Audio out shield; Pin 4: Audio in + (high); Pin 5:

Audio in - (low); Pin 6: Keypanel data shield; Pin 7:

Audio out - (low); Pin 8: Audio out + (high); Pin 9:

Audio in shield

## Configuration Computer (J25)

General: RS-232 Serial port

Connector type: 9-pin female D-sub (DE-9S)

Pin 2: RX; Pin 3: TX; Pin 5: Ground

## Accessory Connector (J26)

General: An RS-485 data port for LCP-102 / PAP / UIO-256 connection.

Connector type: 9-pin female D-sub (DE-9S)

Pin 1: LCP-102 / PAP / UIO-256 RS-485 data -; Pin

2: ground; Pin 3: N/C; Pin 4: N/C; Pin 5: N/C; Pin

6: LCP-102 / PAP / UIO-256 RS-485 data +; Pin 7:

ground; Pin 8: N/C; Pin 9: N/C

## GPI (General Purpose Interface) Connector (J27)

General: Provides 8 control inputs which can simulate keypanel keys, and 8 control outputs which can be assigned to keys and used to activate external devices.

Connector type: 25-pin female D-sub

## Ports

Keypanel: DB-9M

Audio IN

Audio OUT

RS-485 Data

Configuration: DB-9F

RS-232 Data

Accessory Port: DB-9F

RS-422 Data

Trunking Port: DB-9M

RS-232 Data

GPIO: DB-25F

TTL Active Low

## Physical/Power

Power Requirements: 90-250 VAC, 50/60 Hz, 60W

Note: Primary and backup supplies are identical.

Size: 3.5" H x 19" W x 17 D" (88.9mm H x 482.6mm W x 431.8 D)

Weight: 10.68 lbs (4.84 kg)

## Contact Information

Telex Communications, Inc.  
12000 Portland Avenue South  
Burnsville, Minnesota 55337  
Telephone: 877-863-4169  
Fax: 800-955-6831

Form Number: LIT000034000

Date: April, 2006

## Ordering Information

### Zeus II

Trunking Capable Digital Matrix Intercom System

Catalog Number: 90007731000

This specifications information is preliminary and is subject to change without notification.

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