

## Zeus II

### Trunking Digital Matrix Intercom System

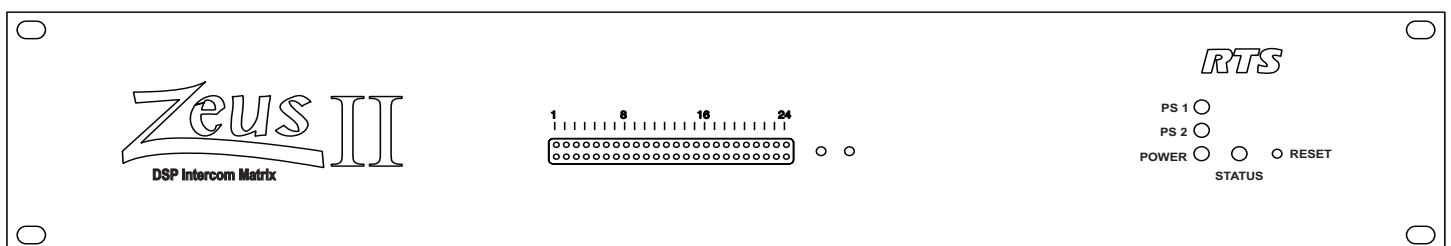


The RTS Zeus II Matrix intercom system provides 24 channels of high-quality audio in a compact two (2) **RU** (Rack Unit) package with the added benefit of linking to other RTS matrix intercoms via intelligent trunking. Each channel is capable of supporting any of the RTS line of matrix keypanels, or 4-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 (2) 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 AZedit programming software.
- All communications modes are provided, Zeus comes standard with full support for point-to-point communications, party-line conferences, IFBs, isolate, and special lists.
- 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 44.1kHz, 20-Bits for a full 20kHz 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.
- External interfaces standard, eight (8) **GPIOs** (General Purpose Inputs and Outputs) are provided for control of external devices including 2-way radios, 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



# Specifications

## Matrix

Size: 24 Ports

Processing: Digital, 45-Bits

Conversion: 44.1kHz, 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

Zeus-Edit 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: +8dBu

Maximum Level: +20dBu

Freq. Response at +20dBu:

50Hz to 20kHz,  $\pm 1$ dB

THD+N at +20dBu (unweighted):

<0.007%

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

Crosstalk at +20dBu: <-80dB

CMRR: >85dB

## 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)

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

General: provides eight (8) control  
inputs which can simulate keypanel  
keys, and eight (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:

90–250VAC, 50/60Hz, 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 431.8mm D)

Weight: 10.68lbs (4.84kg)

# Order Information

ZEUS II • Zeus II • Trunking Capable Digital Matrix Intercom System

The specification information is preliminary and is subject to change without notification.  
Brand names mentioned are the property of their respective companies.