THE WORLD'S MOST ADVANCED IP CODEC
ZEPHYR/IP

Now Available in a 2RU Studio Rackmount and a Compact Mixer Version

Available in both Studio Rackmount and portable Mixer models, the Zephyr/IP now makes it possible to use public IP networks and mobile phone data services for high quality, trouble free audio transmission. The Z/IP does this automatically with minimal setup and very little delay. The connection is nearly bulletproof and traverses firewalls and NATs. The new Z/IP Mixer combines the versatility of the Zephyr/IP with the utility of a digital four-channel stereo mixer, all in a rugged, road-ready portable chassis.

Agile Connection Technology (ACT), a Telos exclusive, is the foundation for the Z/IP's excellent performance on real-world networks. It delivers reliable audio despite varying network conditions, and without the need for user intervention. The Z/IP dynamically adapts to the network, minimizing the effects of packet loss and jitter.

The Zephyr/IP introduces a new codec based on low delay AAC. Advanced Audio Coding-Enhanced Low Delay (AAC-ELD) combines excellent fidelity at low bitrates, nearly inaudible loss concealment, with very little delay. This produces superior audio for two-way applications over uncontrolled IP networks.

When the network is well-behaved, you will benefit from the lowest possible delay and the highest possible fidelity. Should network conditions become challenging, the Z/IP automatically responds by lowering the bitrate and increasing the buffer length, doing everything possible to ensure audio makes it to your studio reliably.

The Z/IP is Livewire™ enabled and ready to accept and provide audio to any of your other Livewire devices.

Standard Features

- Codecs include New AAC-ELD (Advanced Audio Coding - Enhanced Low Delay), AAC-HE, MPEG Layer 2, G.711, G.722, Linear PCM.
- New Telos ACT (Agile Connection Technology) provides Dial-By-Name, Group Speed Dial, NAT / Firewall Traversal, IP Address Resolution, Media Relay, Adaptive Bitrate, Dynamic Buffering, Jitter Correction, Effective Packet Loss Concealment.
- Audio I/O via AES/EBU*, analog (balanced XLR) and Axia Livewire IP-Audio interface. Additional connections include Headphone Jack, RS-232 Serial, USB.
- Studio-grade 24-bit A-to-D and D-to-A converters.
- Wired Ethernet and Wireless Wi-Fi, EVDO, UMTS connections with approved USB devices.
- 18 kbps to 256 kbps transmission bitrates.
- High-resolution, information-rich interface with context-sensitive on-screen help.
- Full-VGA display screen displays network conditions in an intuitive color-coded graphics format.
- Telos-hosted Z/IP Server enables lookup of, and connection to, other Zephyr/IP users worldwide through firewalls and Network Address Translation (NAT) devices.
- Compatible with Telos Zephyr Xstream.
- Supports Session Initiation Protocol 2.0 (SIP) Direct or via Proxy Server.
- Web server for remote configuration and remote control.

* Studio Rackmount models only.

Telos

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Z/IP Studio Rackmount Back View

Z/IP Mixer Back View

ZEPHYR/IP
Specifications and Additional Features

Additional Features

- Digital stereo mixer with four mic / line switchable inputs.
- Main mixer stage feeds codec directly.
- Selectable AGC / limiter processing presets by Omnia.
- Built-in 48-volt Phantom power for two mic inputs.

Specifications

Input Levels - Menu Selectable	+4dBu Pro -10dBv Consumer
THD+N	< 0.01% @ +18dBu, 1 kHz Sine
Freq Response	+/- 0.5dB 20Hz – 20 kHz
Headroom	18dB
Dynamic Range	> 101dB Unweighted > 103dB "A" Weighted
Crosstalk	Crosstalk < -92dB 10Hz – 1KHz < -79dB @ 10KHz
Output Clipping	1% @ 22dBu Bridged Load (10.1 Vrms) 1% @ 22dBu 600ohm Load
Output Level Difference between bridged and 600ohm Load	-0.67dB
Calculated Output Impedance	45ohms < Zout < 50ohms differential
Calculated Input Impedance	10Kohms < Zin < 14Kohms differential
Analog to Digital Converter	24bits
Digital to Analog Converter	24bits
AES3 Digital Inputs and Outputs	Conform to AES3 Standards Sample Rates Supported (input): 32KHz, 44.1KHz, 48KHz, 96KHz Sample Rate Convert (output): 32, 44.1, 48KHz; Slave to Input, Slave to Sync
Conformance and Compatibility	Conforms to N/ACIP (Open) Standards Fully supports Session Initiation Protocol 2.0 (SIP) Compatible with TCP, UDP, DNS, Zephyr Xstream, Uncompressed
Codecs	PCM and other Internet Protocols. SIP: G.711, G.712, MPEG Layer2, MPEG AAC, Linear PCM MPEG AAC-Enhanced Low Delay (ELD) High Efficiency AAC
Power	110 - 240 VAC 3 terminal plug Switch-mode power supply
Available Form Factors	3RU and 2RU Studio Rackmount 2RU Mixer