NETSTAR& ILLISTA

On the road or in the studio, deliver perfect stereo via IP or ISDN*

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CCS shipped

the world's first professional broadcast audio codecs in 1987. Since then, we have led the industry with innovative codec products that have connected tens of thousands of broadcasters and audio professionals worldwide.

Long the standard of those who test and measure audio, CCS codecs were first to offer multiple algorithms, multiple data rates, PrimaTM Logic Language, in-band SMPTE Time Code, remote relay contact closures, ISDN BONDING, ISDN Speed Dial Addressing, Quick Configurations, enhanced MPEG Layer 2 Encoding, and a host of useful features designed to make your job easier. Our TEAMTM and SuperLinkTM offer multi-channel Web Streaming and direct connection to multiple E1 and T1 transmission lines.

In 2002, CCS innovated again with the amazing NetStar[™]. While maintaining compatibility with existing codecs, NetStar opened a new realm of connection capabilities. NetStar can send and receive full fidelity, real-time stereo audio, contact closures and ancillary data not only via ISDN(optional) and dedicated data lines(optional), but also via IP(Standard). NetStar contains not only standard coding algorithms like G.711, G.722, MPEG 1 & 2 Layer 2 and MPEG 1 & 2 Layer 3, but also the latest MPEG 2 Advanced Audio Coding (AAC) and MPEG 4 AAC-Low Delay. NetStar can even connect bi-directionally via IP with uncompressed linear audio and near-zero delay.

Now, NetStar steps out. The new RoadStarTM gives you all the benefits of NetStar in a rugged, road-tough case complete with a 4-channel mixer, 48 VDC phantom power, analog and AES/ EBU inputs and outputs and a flexible headphone monitoring system. NetStar changed your studio. Now RoadStar rules the road.





NetStar is an advanced 19-inch rack mount codec offering full compatibility with legacy based systems plus new features for today and the future. Full, bi-directional stereo audio via IP is supported through an Ethernet port. Built-in ISDN is optional, as is V.35, X.21 and RS422 interfaces are available. And the full compliment of standard coding algorithms, as well as MPEG 2 AAC and MPEG 4 AAC-LD are included as standard equipment. NetStar supports RS232 Ancillary Data and eight end-to-end contact closures. An on-board Web Server lets you control NetStar from any Web browser.



NetStar is easy to use and easy to afford. Simple and familiar interfaces support a host of features to get you connected today and keep you connected in the future. Full ISDN compatibility and full IP compatibility with automatic recognition of the calling codec. Automatic Fallback keeps you connected if your primary network becomes unreliable. MPEG 2 & 4 AAC modes for superior audio quality at low bit rates. And CCS quality throughout.



RoadStar gives you features, benefits and specifications identical to NetStar, and includes a 4-channel mixer with selectable input level, 48 VDC phantom power, level and pan controls for each input. The AES/EBU input bypasses the mixer for direct feeds from larger mixing desks. Dual headphone monitors accommodate two announcers, and the heavy duty enclosure protects operating controls and connectors.

NETSTAR & HOADSTAR SPECIFICATIONS



Audio

Stereo Analog I/O 24 bit / 96 kHz Stereo Digital I/O up to 24 bit / 96 kHz, automatic rate adaptation

Frequency Response (+0/-1 dB, swept sine wave) AAC and MPEG

1 & 2 Layer 3, all modes: 20-20 kHz @ 48 kHz 20-15 kHz @ 32 kHz MPEG 1 & 2 Layer 2: 20-20 kHz @ 48 kHz

20-15 kHz @ 32 kHz

G.722: 20-7000 Hz @ 16kHz G.711: 300-3300 Hz @ 8kHz

Signal-to-Noise Ratio: >95 dB Total Harmonic Distortion: <0.005% L/R Phase Difference: <0.5 degrees Clipping Level: >18 dBu All connectors: Neutrik[®] XLR, gold plated

Headphone Monitor Modes Encoder to both ears Decoder to both ears Encoder & Decoder mix to both ears

Coding Algorithms

For ISDN and dedicated data connections: G.711 G.722 G.722 MPEG 1 & 2 Layer II MPEG 1 & 2 Layer II MPEG 1 & 2 Layer II MPEG 1 & 2 Layer III MPEG 2 AAC-LC MPEG 2 AAC-LC MPEG 4 AAC-Low Delay MPEG 4 AAC-Low Delay Linear Audio (uncompressed)

Codec Compatibility and Auto Detect NetStar is compatible with most G.722 and MPEG codecs. NetStar can auto-detect the calling codec and automatically synchronize to it. NetStar can automatically set its Encoder to match the Encoder of the calling codec.

Transmission Data Rates

For Dedicated Data connections: 8, 16, 24, 32, 40, 48, 56, 64, 80, 96, 112, 128, 144, 160, 192, 224, 256, 320 and 384 kb/s For ISDN: 64 & 128 kb/s For IP: 8, 16, 24, 32, 40, 48, 56, 64, 80, 96, 112, 128, 144, 160, 192, 224, 256, 320, 384 kb/s and linear rates to 1536kb/s

Notes: Some algorithms do not support all data and sampling rates; i.e., G.722 is limited to 64 kb/s at 16 kHz sampling rate. ISDN Interface (Optional) Supports U or S/T, all switch types ISDN Voice Telephone Mode via G.711 Connector type: RJ-45

LAN Interface

10-100 Base-T Ethernet port, supports full bi-directional stereo audio with embedded ancillary data and contact closures, IGMP Multicast, included Web Server for browser based remote control, and download of operating code upgrades.

Connector type: RJ-45

Synchronous Data Interface (NetStar option only)

Provides X.21, V.35 or RS422 dual-port synchronous data for use with dedicated data lines or satellite uplink modulators.

Ancillary Data

Multi-function port for RS232 bi-directional asynchronous data, compatible with all CCS codecs and others. Supports data rates to 38.4 kb/s. Also supports wired Remote Control from a local PC and local operating code upgrades. Connector type: DB9F

Remote Contact Closures

8 TTL inputs and outputs for end-to-end contact closures Compatible with CCS codecs and others Inputs: Open collector, closure to ground Outputs: Sink up to 150 mA to ground Contact closures operate bi-directionally in all MPEG and Linear modes

Software Upgrades Downloadable

Download

Power Supply

Universal Power Supply Operating voltage: 94-240 VAC Operating line frequency: 47-65 Hertz

Dimensions & Weight

NETSTAR

2 U Rack Mount: 19 W x 3.47 H x 12 D inches (48.26 x 8.81 x 30.48 cm) Desktop mounting: 17.1 W x 3.6 H x 12 D inches (43.43 x 9.14 x 30.48 cm) Shipping Weight: 16 pounds (7.3 kg) ROADSTAR

ROADSTAR

13.25 W x 4.5 H x 13 D (33.66 x 11.43 x 33.02 cm) Shipping Weight: 14 pounds (6.4 kg) **NetStar 300** is ideal for use in unattended locations. The onboard Web Server provides full remote control from any connected Web browser.

STATUS Enc: AAC St 48K 128kb Tx : IP 205.197.242.26

Dec: AAC St 48K 128Kb Rx : IP 205.197.242.26 Aud: ANA IN + ANA OUT

Direct Connect ...ransmit IP 2.ISDN Call 5.Voice Call 4.Back

IP RX OPTIONS Accept IP (Yes) Accept Mcast [No] J.IP two-way [No] A.Rx Port [5000] Multicast Addr S.Back

NetStar menus make setup a snap.

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