

SystemBase

Digital Audio Codex

KEY FEATURES

- **DSP Architecture**
24Bit Digital Audio
32Bit Signal Processing
Selectable Headroom
(+12dBm or +18dBm)
- **Ethernet Support**
Web Server
Multi Codec Monitor Tool
Remote Management
SMTP Email Alerts
Backup User Settings
Restore User Settings
Firmware Updates
SNMP Management
BNCS Support
- **Multi-Algorithm**
G.711 (Telephone)
G.722
APT-X (384Kbps)
- **AES3**
Transformer Isolated
Dedicated XLR
- **User Interface**
24x2 Character VFD
Full VU Metering
Back Space Key

PRODUCTS

- **C510xr**
ISDN: 128Kbps
X21: 384Kbps
9600bps Aux Data
Alarm Contacts
ISDN Backup/Restore
External Trigger Dial
12 ISDN Standards
Backup User Settings
Restore User Settings
SMTP Email Alerts
Firmware Updates
SNMP
- **C520xr**
ISDN: 256Kbps
X21: 384Kbps
9600bps Aux Data
Alarm Contacts
ISDN Backup/Restore
External Trigger Dial
12 ISDN Standards
Backup User Settings
Restore User Settings
SMTP Email Alerts
Firmware Updates
SNMP
- **C530xr**
X21: 384Kbps
9600bps Aux Data
Alarm Contacts
SMTP Email Alerts
Firmware Updates
SNMP

C500xr Series

PROFESSIONAL QUALITY AUDIO

The Systembase C500xr range of digital audio codecs have been designed and manufactured to deliver unparalleled performance for professional, real-time audio applications. All models incorporate the fast apt-X Sub Band ADPCM compression system with a coding delay of only 2.8ms at data rates of 384Kbps. The C510xr and C520xr ISDN models also support G.711 and G.722 coding algorithms to provide compatibility with other manufacturers codecs.

Additional design features include 24 Bit analogue and AES audio interfaces. The analogue interface is electronically balanced resulting in a high Common Mode Rejection Ratio (CMRR) for a significant improvement in performance.

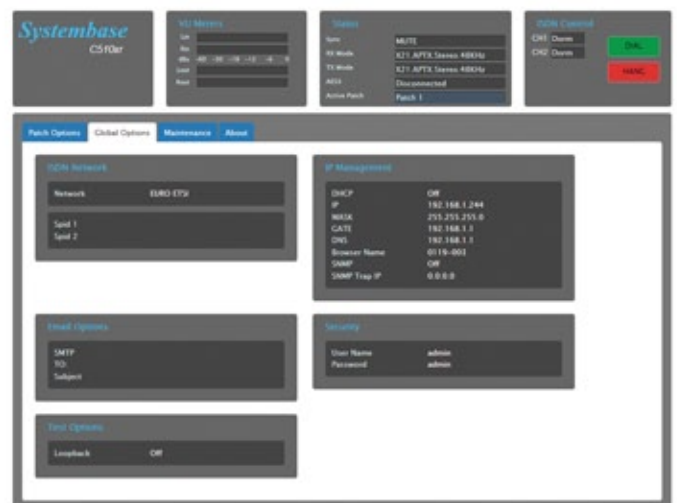


WORLD-WIDE OPERATION

Systembase codecs interface directly to the ISDN network via standard RJ45 sockets. To facilitate world-wide operation, 12 International ISDN standards are supported, and can be selected by the user from either the front panel or the Web Server interface.

WEB SERVER

The C500xr codecs feature a dedicated Ethernet connection specifically for remote management. This ethernet connection maybe configured with either a static or DHCP allocated IP address, allowing access from a standard Windows web browser for remote management purposes.



DIGITAL AUDIO INTERFACE

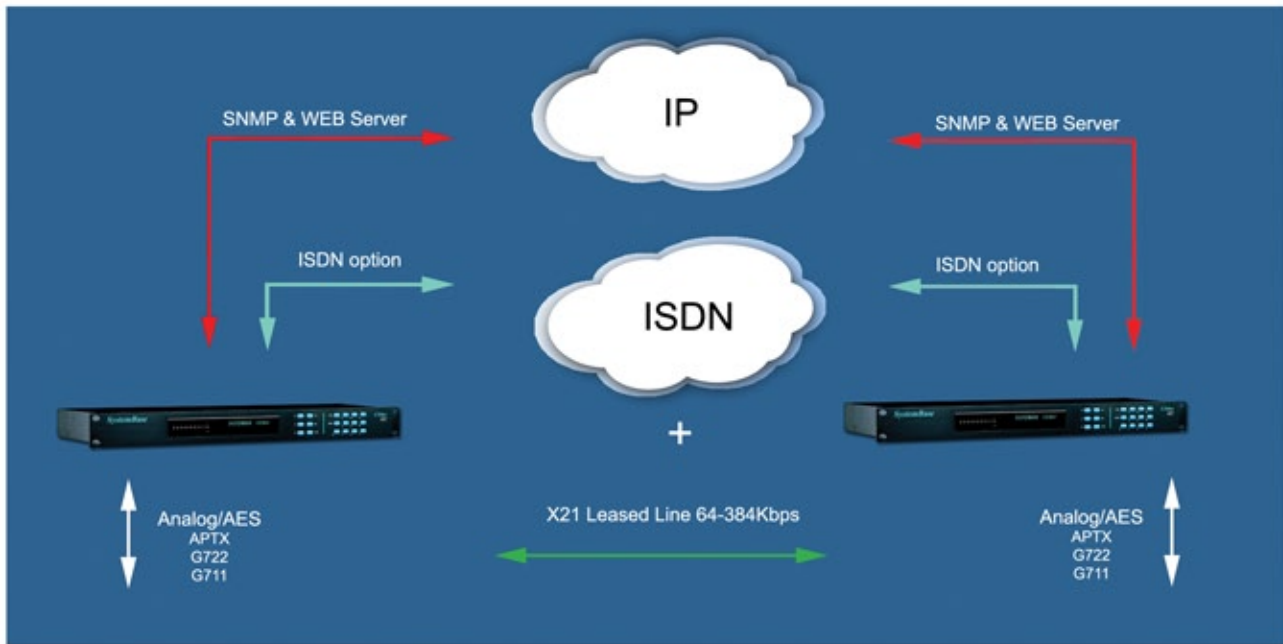
AES3 digital audio interface is provided on both models, and is equipped with automatic sample rate conversion to simplify the problems of connecting between a studio reference clock and the ISDN network clock. The AES3 interface is supported via two transformer isolated XLR connectors located on the rear panel.

BACKUP SETTINGS

The WEB Server interface enables users to save the entire codec configuration to the hard disk of a computer. Once saved, the user can optionally edit the settings and restore them back to a codec at a later time.

STUDIO TO TRANSMITTER LINK

The C500xr Codecs are ideally suited for implementing Studio-to-Transmitter Links (STL's) for FM and DAB radio, providing up to 22.5KHz Stereo audio over a 384Kbps digital line. To maintain program continuity, an automatic ISDN backup is initiated if there is a failure on the primary circuit. The restoration of the audio back to the digital line also occurs automatically once the fault condition has cleared. To reduce the number of ISDN lines required, the codecs can be configured to monoise the input audio during ISDN backup, and to deliver the audio to both left and right outputs. The bi-directional auxiliary data port facility can be used to simultaneously send RDS control signals to the transmitter, and receive telemetry information in either serial format or end-to-end contact closure format.



COMPATIBILITY

The C510 series is fully compatible with the existing C310xr and C400xr ISDN codecs when operating over ISDN and X.21 circuits. In addition, the C500 series also supports Dual G.711 and Dual G.722 coding on ISDN to provide enhanced compatibility with codec manufacturers.



MULTI CODEC MONITOR APPLICATION

New for 2015 is a monitor tool that allows all Systembase C500 series codecs to be monitored from a browser window. Each codec icon allows the user to monitor the audio input and output levels together with the "SYNC" status of the codec. A simple click of the "OPEN CODEC" tag will take the user directly to the associated codecs web browser interface.



SNMP

The C500 series codec's provide support for SNMP (Simple Network Management Protocol). SNMP allows the codec to be managed by industry standard, third party applications, such as BNCS, that are capable of monitoring and controlling equipment over LAN and WAN environments.

Technical Specifications

| | C510xr | C520xr | C530xr |
|---------------------------|--------------------------|--------------------------|--------------------------|
| AUDIO PERFORMANCE | | | |
| Coding Standards | G.711,G.722,APTX-100 | G.711,G.722,APTX-100 | APTX-100 |
| Analogue S/N Ratio | >102dB | >102dB | >102dB |
| Headroom | +12dBu Max or +18dBu Max | +12dBu Max or +18dBu Max | +12dBu Max or +18dBu Max |
| Input Impedance | >10K ohms | >10K ohms | >10K ohms |
| Output Impedance | <100 ohms | <100 ohms | <100 ohms |
| Physical Connectors | XLR | XLR | XLR |
| Sample Rate / Resolution | 48KHz / 24Bit | 48KHz / 24Bit | 48KHz / 24Bit |
| AES3 | | | |
| Physical Connectors | XLR | XLR | XLR |
| Sample Rate / Resolution | 48KHz / 24Bit | 48KHz / 24Bit | 48KHz / 24Bit |
| ETHERNET | | | |
| Web Server Management | yes | yes | yes |
| Backup/Restore Settings | yes | yes | yes |
| SMTP Email Alerts | yes | yes | yes |
| Firmware Flash Updates | yes | yes | yes |
| SNMP | yes | yes | yes |
| DHCP | yes | yes | yes |
| Remote Monitor Facility | yes | yes | yes |
| ISDN FACILITY | | | |
| Standards | 12 User Selectable | 12 User Selectable | |
| Sub Addressing | yes | yes | |
| G.711 Dual: 3K2 | Dual Mono (64KBps) | Dual Mono (64KBps) | |
| G.722 Dual: 7K5 | Dual Mono (64KBps) | Dual Mono (64KBps) | |
| APTX: 8/16/32 FS | Mono/Stereo (64-128KBps) | Mono/Stereo (64-256KBps) | |
| BACKUP MODES | | | |
| X.21 to ISDN | yes | yes | |
| ISDN AUDIO MODES | | | |
| G711: 3K2 Dual Mono (64K) | yes | yes | |
| G722: 7K5 Dual Mono (64K) | yes | yes | |
| APTX: 3K7 Stereo (64K) | yes | yes | |
| APTX: 7K5 Mono (64K) | yes | yes | |
| APTX: 7K5 Stereo (128K) | yes | yes | |
| APTX: 15K2 Mono (128K) | yes | yes | |
| APTX: 12K2 Stereo (192K) | yes | yes | |
| APTX: 22K5 Mono (192K) | yes | yes | |
| APTX: 15K2 Stereo (256K) | yes | yes | |
| X21 AUDIO MODES | | | |
| APTX: 3K7 Stereo (64K) | yes | yes | yes |
| APTX: 7K5 Mono (64K) | yes | yes | yes |
| APTX: 7K5 Stereo (128K) | yes | yes | yes |
| APTX: 15K2 Mono (128K) | yes | yes | yes |
| APTX: 12K2 Stereo (192K) | yes | yes | yes |
| APTX: 22K5 Mono (192K) | yes | yes | yes |
| APTX: 15K2 Stereo (256K) | yes | yes | yes |
| APTX: 22K5 Stereo (384K) | yes | yes | yes |
| POWER | | | |
| Voltage | 80-260VAC 50/60Hz | 80-260VAC 50/60Hz | 80-260VAC 50/60Hz |
| Connector | IEC Mains Plug | IEC Mains Plug | IEC Mains Plug |
| Consumption | 20W | 20W | 20W |
| PHYSICAL | | | |
| Weight | 2.5Kg | 2.5Kg | 2.5Kg |
| Height | 45mm (1U) | 45mm (1U) | 45mm (1U) |
| Width | 480mm(19") | 480mm(19") | 480mm(19") |
| Depth | 200mm | 200mm | 200mm |

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