

SystemBase

Digital Audio Codecs

KEY FEATURES

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

PRODUCT OPTIONS

- **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

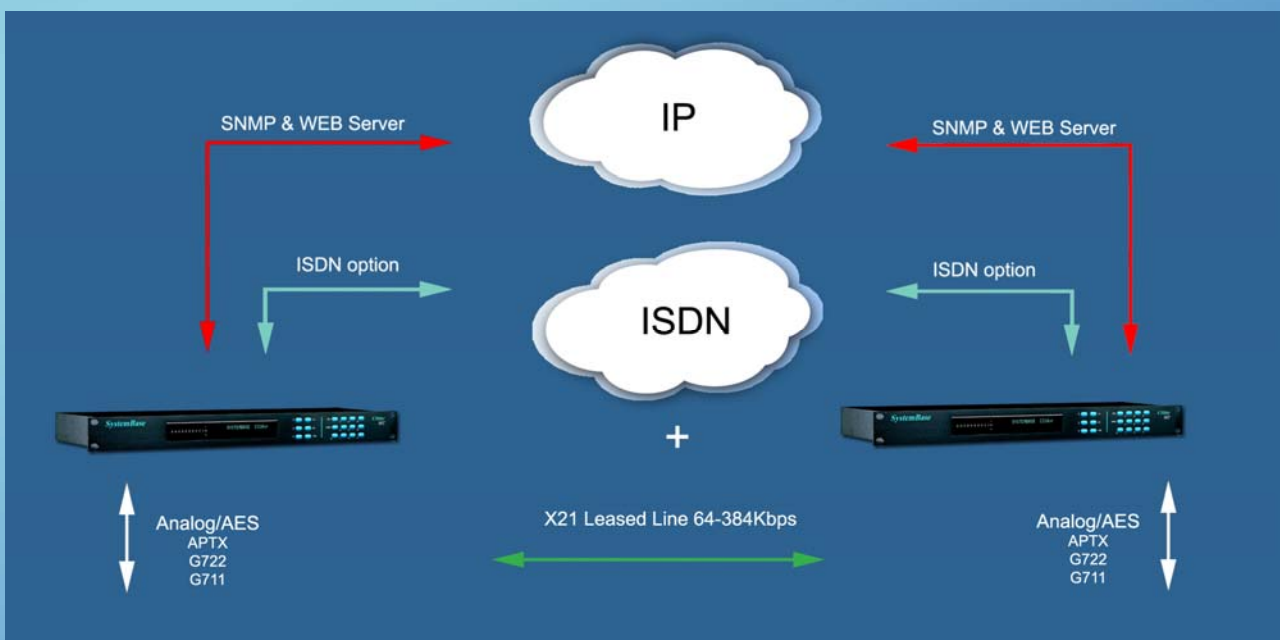
The Systembase C500xr range of digital audio codecs have been designed and manufactured to deliver unparalleled performance for professional, real-time audio applications. All models incorporate the fast apt-X Sub Band ADPCM compression system with a coding delay of only 2.8ms at data rates of 384Kbps. 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.



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.



WORLD-WIDE OPERATION

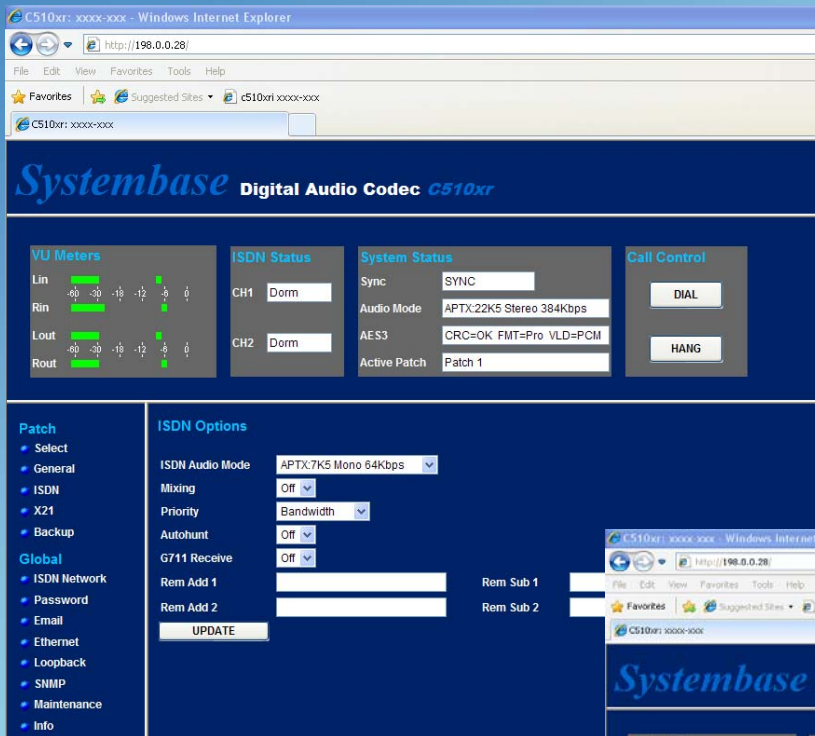
Systembase codecs interface directly between the audio equipment and the ISDN network via standard ISDN RJ45 sockets. To facilitate world-wide operation, 12 international ISDN standards are supported, and can be selected by the user from either the front panel or the Web Server interface.

DIGITAL AUDIO INTERFACE

AES3 digital audio interface is provided on all 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.

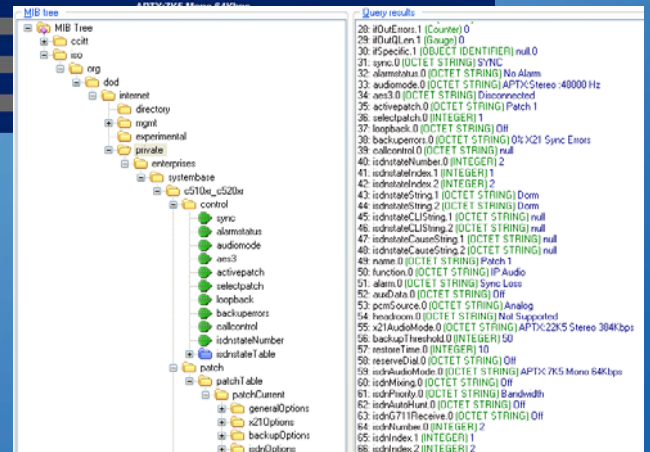
WEB SERVER

The C500xr range of audio codecs, feature a dedicated Ethernet connection specifically for remote management. This feature allows a codec to be configured with a unique IP address, allowing access from a standard Windows web browser for remote management purposes.



SNMP

The C500xr Codecs provide support for SNMP (Simple Network Management Protocol). SNMP allows the codec to be managed by industry standard third party applications that are capable of monitoring and controlling equipment over LAN and WAN environments.



Technical Specifications

	<i>C510xr</i>	<i>C520xr</i>	<i>C530xr</i>
AUDIO PERFORMANCE			
Coding Standard	G711,G722,APT-X-100	G711,G722,APT-X-100	APT-X-100
Analogue S/N Ratio	>102dB	>102dB	>102dB
Input Level	+18dBu Max	+18dBu Max	+18dBu Max
Input Impedance	>10Kohms	>10Kohms	>10Kohms
Output Level	+18dBu Max	+18dBu Max	+18dBu Max
Output Impedance	<100ohms	<100ohms	<100ohms
Physical Connectors	XLR	XLR	XLR
Sample Rate	48KHz	48KHz	48KHz
Resolution	24Bit	24Bit	24Bit
Headroom	+12dBu or +18dBu	+12dBu or +18dBu	+12dBu or +18dBu

AES3			
Physical Connectors	XLR	XLR	XLR
Sample Rate	48KHz	48KHz	48KHz
Resolution	24Bit	24Bit	24Bit

ETHERNET			
Web Server Management	●	●	●
Backup/Restore Settings	●	●	
SMTP Email Alerts	●	●	●
Firmware Update	●	●	●
SNMP	●	●	●

ISDN FACILITY			
Standards	12 User Selectable	12 User Selectable	
Sub Addressing	●	●	
Multiplexing	2B (128KBps)	4B (256KBps)	
ISDN Backup/Restore	●	●	

X21 AUDIO MODES			
APT-X: 3K7 Stereo (64K)	●	●	●
APT-X: 7K5 Mono (64K)	●	●	●
APT-X: 7K5 Stereo (128K)	●	●	●
APT-X: 15K2 Mono (128K)	●	●	●
APT-X: 12K2 Stereo (192K)	●	●	●
APT-X: 22K5 Mono (192K)	●	●	●
APT-X: 15K2 Stereo (256K)	●	●	●
APT-X: 22K5 Stereo (384K)	●	●	●

ISDN AUDIO MODES			
G711: 3K2 Mono (64K)	●	●	
G722: 7K5 Mono (64K)	●	●	
APT-X: 3K7 Stereo (64K)	●	●	
APT-X: 7K5 Mono (64K)	●	●	
APT-X: 7K5 Stereo (128K)	●	●	
APT-X: 15K2 Mono (128K)	●	●	
APT-X: 12K2 Stereo (192K)		●	
APT-X: 22K5 Mono (192K)		●	
APT-X: 15K2 Stereo (256K)		●	

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")

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