

P561 Audio Encoder

For Multi-Channel Audio with ASI & IP Outputs

Applications

- Professional Audio Networks
- DVB PES Audio

Features

- Dual ASI Output
- MPEG Transport Stream over IP outputs
- MPEG Layer II
- AAC
- MPE Encapsulation
- AES/EBU digital inputs
- Analog audio inputs
- DVB compliant
- RDS ancillary data (DVB standard TR 101 154)
- 8 GPIO inputs
- Remote controllable over IP via SNMP
- Available with MPTS or Elementary Stream over IP output
- Tested compatible with following
 - IDC Event Managers
 - IDC SFX210x Receivers
 - IDC SFX310x Receivers
 - IDC STAR G1 Receivers
 - IDC STAR G2 Receivers

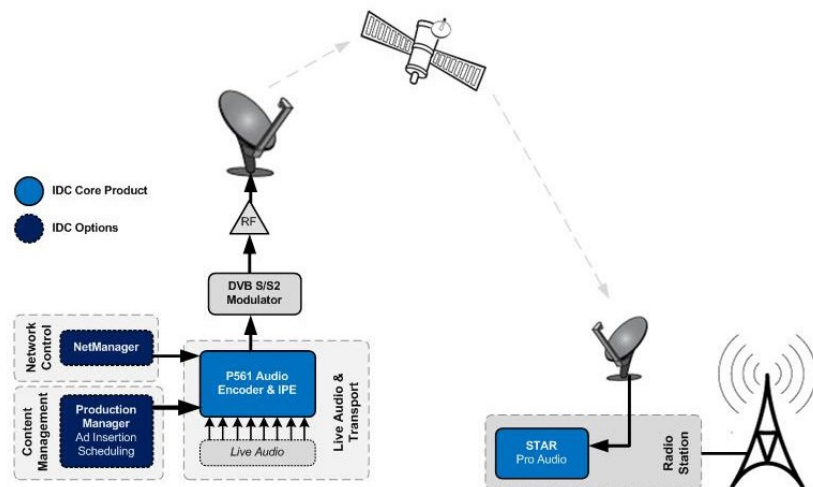
The P561 Audio Encoder features MPEG-4 Advanced Audio Coding (MPEG-4 AAC) and MPEG Layer II encoding capabilities. All of the common bit rates and sample rates are offered to enhance the IP delivery of audio.

The P561 is an audio encoder for up to eight stereo channels (encoder channels). The unit is built in a compact 19" 1 U housing. It is DSP-hardware based and highly energy efficient (< 2W per stereo channel). The P561 is capable of transporting elementary streams over IP and DVB-compliant MPEG-2 transport stream outputted via IP or ASI. Several configurations are available to adapt the audio input configuration to the network requirements in a flexible way.

The P561 also allows for the encapsulation of IDC's Net Manager, Production Manager and various other in-band functions such as NTP.

The P561 also supports up to 8 MPE data services which can be used for insertion of IDC Production Manager, Net Manager or other required IP data services.

The LCD and keypads on the front panel allow for easy setup and monitoring. Users can select the audio quality by adjusting the codec, bit rate and sample rate. The IDC STAR Pro Audio™ Receiver (and SuperFlex® Pro Audio Receiver in PES mode) will automatically follow the changes which allows for maximum network flexibility and minimal cost. Software can be upgraded by using the internal IP based capabilities allowing future-proof protection for the implementation of next-generation codecs currently being developed. The P561 is RoHS compliant and CE certified to meet the demands of users worldwide.



TECHNICAL SPECIFICATIONS—P561 Audio Encoder

MODEL	DESCRIPTION
Base	<ul style="list-style-type: none"> Licensed for one audio encoding channel MPEG Layer 2 support ASI and MPEG Transport Stream over IP outputs RDS ancillary data (DVB standard TR 101 154) 8 GPIO inputs (shared across all audio channels) 8 MPE input services
HARDWARE OPTIONS	
4 Channel analog and digital	<ul style="list-style-type: none"> Up to 4 stereo channels (analog and digital AES/EBU)
8 Channel digital	<ul style="list-style-type: none"> Up to 8 stereo channels (digital AES/EBU only)
SOFTWARE OPTIONS	
Additional Channel	<ul style="list-style-type: none"> Additional licensed channel Max. 4 analog or 8 AES per unit (software option)
AAC Encoding Support	<ul style="list-style-type: none"> AAC Support Licensed per channel (software option)



AUDIO INPUT	
Digital	AES/EBU, electrical, XLR (IEC958)
Analog	XLR, electronically balance, level range 0 ... +18 dBu A/D converter: 24 bits
Audio Encoding	<ul style="list-style-type: none"> ISO/IEC 11172-3, 13813-3 MPEG-1/2 Layer II ISO/IEC 13813-7 MPEG-2 AAC LC ISO/IEC 14496-3 MPEG-4 AAC LC, MPEG-4 HE-AACv1, MPEG-4 HE-AACv2
Encoding Bitrate	<ul style="list-style-type: none"> All allowed bitrates as defined in the respective standards Sampling rate: 32 kHz, 48 kHz Audio frequency range (analog): 20 Hz ... 20 kHz, +/- 0.3 dB
Ancillary Data	<ul style="list-style-type: none"> Private stream inside the MPEG-2 transport stream or embedded in MPEG audio data Content ancillary data Transparent, UECF
Ancillary Data Input	RS-232 (Sub-D9 pin connector, 1200...38400 bits/sec) or via IP interface
TRANSPORT PROTOCOLS	
Over IP	<ul style="list-style-type: none"> Streaming of elementary streams compliant to RFC3550/3551, RFC3016, RFC3640 Output of DVB MPEG-2 transport streams including service information according to ETSI EN 300 468 compliant to Pro-MPEG Code of Practice #3 release 2
Over ASI (2 Ports)	Output of DVB MPEG-2 transport streams including service information according to ETSI EN 300 468
MPE	Support 8 MPE inputs (non-section pocketed)

NETWORK INTERFACES	
<ul style="list-style-type: none"> 2 Ethernet interfaces DVB ASI (EN 50083-9) 	
SYSTEM CONFIGURATION AND CONTROL	
<ul style="list-style-type: none"> Via Ethernet by accessing the on-system HTTP web server with any Internet browser Via Ethernet using SNMP Via the front panel keyboard and display 	
POWER REQUIREMENTS	
Supply Voltage	100 to 240 V AC +/- 10%, 50-60 Hz
Power Consumption	Dependent on number of channels, 30 W typical
PHYSICAL PARAMETERS	
Chassis	1 RU rackmount
Dimensions (H, W, D)	4 cm x 48 cm x 36 cm (1.7" x 19" x 14")
Weight	3.5 kg (7.7 lbs.)
ENVIRONMENTAL CONDITIONS	
Operating Temperature	0° to 45° C (32° to 113° F)
Storage Temperature	-20° to 70° C (-4° to 158° F)
Humidity	-20% to 90% non-condensing
OPTIONS	
Additional IP Output	2nd IP Output - duplicate of the primary IP output
Additional Power Supply	power supply redundancy
44.1 KHz Sample rate	in addition too 32 kHz & 48 kHz in base unit
SCTE ST 2022-1 FEC	adds configurable FEC to the IP output
Multiplexing	allows multiple encoders to be serially cascaded together to increase the number of channels

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