



audio coding



VoIP
VoIP
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OPTICODEC 7600

The newest addition of ORBAN'S reliable, flexible and easy to use full duplex broadcast audio codec.

The OPTICODEC 7600 has been designed and engineered by our German Engineering team from the ground up with the objective to serve the broadcasters reliably 24/7/365 under all conditions. We have succeeded with our goal, Broadcasters and Telkom providers across the world are broadcasting without fail thanks to the OPTICODEC 7600.

The OPTICODEC 7600 is fully DSP based and because we do not use PC processors the unit runs cool under all conditions. No forced cooling required.

OPTICODEC 7600 is equipped with XLR based analog and digital I/O, ISDN interface and Ethernet 10/100BaseT. Optional RS232, up to 3 ISDN interfaces, 2nd Ethernet, X.21/V.35 and GPI.

Configuration and operation through the front panel or by the standard supplied program Orban NetControl which can also be used to configure monitor and connect and configure any OPTICODEC connected to the network.

The OPTICODEC 7600 distributes audio over all modern communication networks such as ISDN, X.21/V.35, Intranet and Internet.

We support SIP/RTP and SIP is fully compliant to EBU TECH 3326. For streaming applications we support RTSP.

Modern codecs should support codec algorithms such as AAC-LC / AAC-HE / AAC-HEv2, enhanced apt-X (16/24 Bit) AETA 4SB ADPCM, Linear 8 – 24 bits, MPEG L2 and L3, G.711, G.722 with H.221 and SRT. You will be pleased to know we have made all of these codecs available. For exact details please refer to the technical specifications.

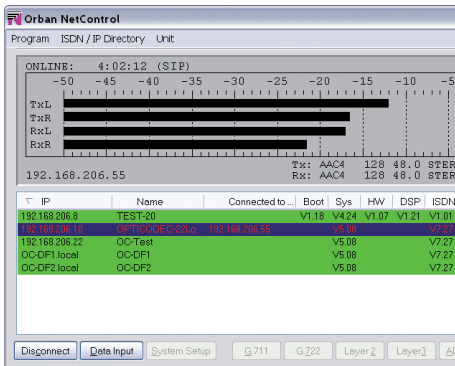
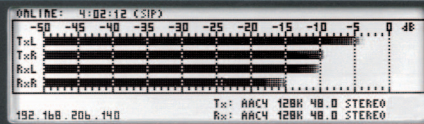
Once the OPTICODEC has been plugged in and set-up you will never have to think about it again.

If you consider that the OPTICODEC is manufactured in Germany to the highest possible standards, the software is reliable (bullet proof) and that the unit can be configured remotely to fulfill your audio broadcast requirements you need to look no further.

For a test drive please call your local dealer or send us an email.

We guarantee that you will not be disappointed.

OPTICODEC 7600



Orban OPTICODEC — The Reliable Audio Codec

Description:

Fully duplex audio codec with ISDN and Ethernet 10/100BaseT connection for remote control and the possibility to distribute audio over networks such as Intranet, ATM, etc. Additionally, an X.21 or V.35 interface (optional) as well as optionally up to three ISDN interfaces. Configuration and operation directly with the keypad. High resolution graphical display.

Dimensions:

19", 2 U, depth: 380 mm, weight: approx. 6 kg, no fan.

Power Supply:

90 ... 240 V AC, 50 - 60 Hz, 0,28 ... 0,13 A, max. 25 VA.

Algorithms:

ISO/MPEG 11172-3 Layer II (MUSICAM) MPEG 1 & 2,
ISO/MPEG 11172-3 Layer III MPEG 1 & 2,
4SB ADPCM (optional, in mono or stereo),
ISO/MPEG 13818-7 AAC MPEG2 (optional),
ISO/MPEG 14496-3 AAC MPEG4 (optional),
ISO/MPEG 14496-3 AAC HE (optional),
ISO/MPEG 14496-3 AAC HEv2 (optional),
Enhanced apt-X 16-Bit (optional),
Enhanced apt-X 24-Bit (optional),
Linear 8-, 12-, 16-, 20- and 24-Bit (in Mono und Stereo),
G.711, G.722 whit H.221 and SRT.

Transmission Rates:

Ethernet: 8 ... 2304 kbps.
ISDN: n x 64 kbps (n=1 to 6).
X.21/V.35: 32, 96, 128, 160, 192, 224, 256, 320, 384 or 1920 kbps.

Audio Modes:

Mono, Dual Mono, Stereo, Joint Stereo.

Sampling Frequencies:

16, 22.05, 24, 32, 44.1 and 48 kHz.

Analog Audio Interfaces:

Input: 24 bit, adjustable level range from -4 to 21 dBu, impedance >10 k Ω / 600 Ω . XLR-type female.
Output: 24 bit, adjustable level range from -4 to 21 dBu, impedance <50 Ω . XLR-type male.

Digital Audio Interfaces:

AES/EBU input and output according to IEC 958 prof. Format.

External Sync:

DISABLED
(Word clock is generated from the ISDN transmission clock),
DIGITAL IN
(Word clock is generated from the AES input signal),
SYNC IN (Word Clock is taken over from the SYNC IN).

Samplerate Converter:

(Standard for input and output): 32, 44.1 or 48 kHz.

Ancillary Data:

0, 1200, 2400, 4800, 9600 Baud.

Alarm/Control Interface:

8 bit optocoupled bidirectional alarm port and additional RS232 for remote control or ancillary data.

X.21 / V.35 Interface:

Serial transmission interface ((32 ... 1920 kbps).

PC Remote Control:

With RS232 or ACI module (optional).
NETControl software for the remote control of one or more OPTICODEC 7600 units over the 10/100 BaseT interface.

Headroom Adjustment:

Via menu from 0...20 dB.

Frequency Response:

20 Hz to 20 kHz, +0.5/-1 dB.

Signal to Noise Ratio:

Weighted >80 dB, unweighted >85 dB.

Distortion (THD+N):

With a 20 kHz filter, to f=5 kHz) at maximum level <0.06%.

Crosstalk Attenuation:

(ratio) at 1 kHz > 100 dB.

Phase Error:

<1.5 degree.

ISDN Interface:

RJ45 for S₀ connections and RJ11 for U connections.

ISDN S₀ Extension:

'Plug In' module for master board.
Extendible up to 3x S₀ and 3x U.

ISDN Synchronisation:

Via menu:
Bonding for MusicTAXI,
Sync for CDQPRIMA, CDQ2000 and Telos Zephyr in Stereo (L II),
64 & 128 kbps,
Sync for Telos Zephyr in Stereo, (L III), 64 & 128 kbps,
AETA Sync for 4SB ADPCM (optionally),
No Sync / No Sync Inverse,
G.722/H.221 / G.722/SRT,
AUTO.

ISDN Setting:

Selectable via menu:
Own number for operation at private exchange
(sent during connection establishment),
SPID number for operation on U.S. networks,
Accept incoming calls (telephone and MPEG):ACCEPT / NO,
Accept incoming calls: Own number (MSN) check YES / NO.

IP Transmit Protocols:

Point-to-Point, RTP, SIP/RTP, EBU TECH 3326 compatible and RTSP.

Connection Monitoring:

Online menu displays:
Peak Level Tx (send),
Peak Level Rx (receive),
IP address / ISDN number of connection,
Encoder configuration,
Decoder configuration,
Selected headroom setting,
Decoder SYNC of remote unit,
On-line connection time.

Telephone Directory:

96 entries can be configured individually:
Name,
IP address / ISDN number,
Audio configuration,
Type of Ethernet Connection,
ISDN SYNC mode.

Software Download:

From Internet Server (www.orban-europe.com) or from the CD-ROM on the PC over the RS232 or Ethernet.



www.orban.com

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