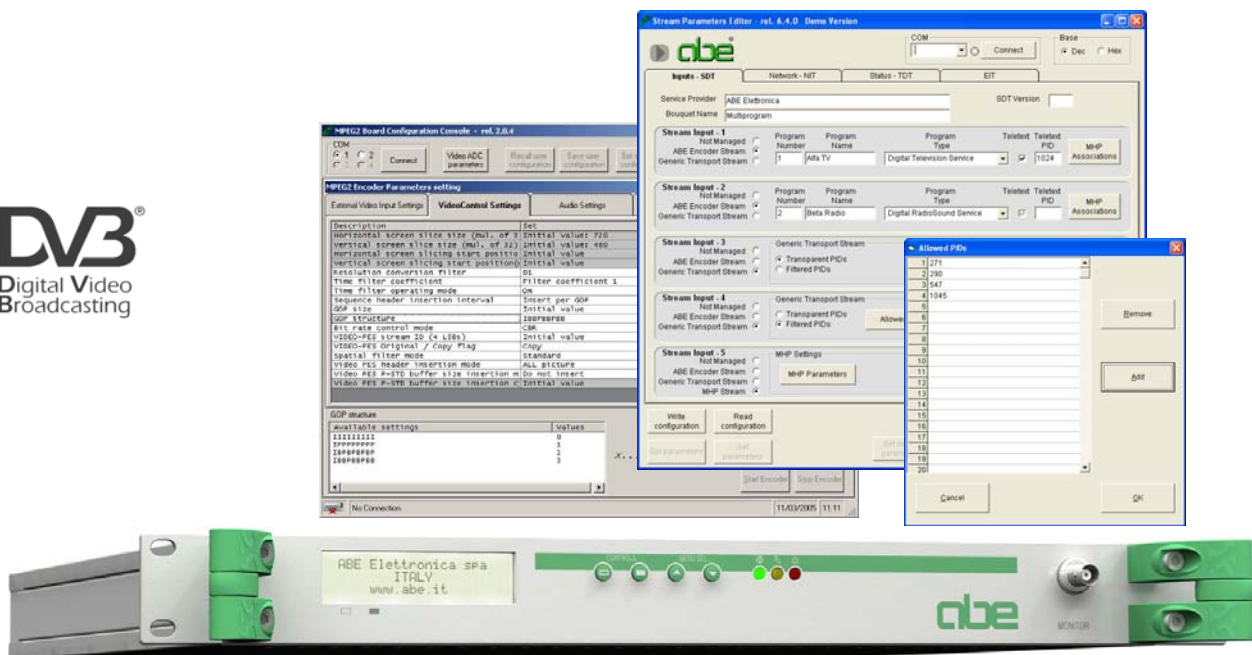


MPEG-2 ENCODERS + MULTIPLEXER/REMULTIPLEXER

The high quality, professional and cost-effective solution

DVB[®]
Digital Video
Broadcasting



The **“EMX 1000 series”** is a high quality, professional, flexible and really cost-effective solution that combines one or more high performances MPEG-2 Encoder, and a Multiplexer/Remultiplexer.

Applications

- Digital TV Terrestrial Broadcasting;
- Digital satellite Uplinks for Distribution and Contribution;
- DSNG Mobile news gathering;
- Digital Microwave Links (Mobile and STL).

Features

- 1 to 4 real time MPEG-2 video/dual audio Encoders (Main Profile @ Main Level – 4:2:0) and Multiplexer;
- Up to full D1 encoding resolution with up to 720 horizontal pixels;
- User configurable Encoders settings through RS232 port (GOP size and structure, resolution, filters, bit rate, ...) + four easy to recall pre-defined factory settings;
- Teletext or Closed Captioning extraction from video input and reinsertion in the transport stream (option for models with multiplexer board);
- User-friendly local control with front panel LCD display and keypad;
- RS485; RS232; Ethernet 10/100 Base-T (SNMP and web server support) remote control interface options;
- Stand-Alone unit 1U high.



MPEG-2 Encoder

VIDEO INPUTS

Video input format:	Analog: Composite PAL / SECAM / NTSC, Y-C (S – video) Digital: D1 (ITU-R 656) 8 Bit Parallel (internal connector) Option: SDI (Serial Digital Interface with embedded audio or with AES/EBU audio input)
Composite video input:	1Vp-p / 75Ω / BNC socket
Composite video filter:	Notch of Comb (selectable)
Pre-processing:	TBC (Time Base Corrector) Noise Reduction Filter

VIDEO ENCODING

Standard:	ISO / IEC 13818-2 MP@ML (MPEG-2 4:2:0)
Bit rate:	Up to 15Mb/s
Supported resolutions:	Full D1, 3/4 D1, 2/3 D1, 1/2 D1, SIF, QSIF
Picture size:	Horizontal: up to 720 pixel in 32 pixel steps. Vertical: PAL – up to 576 pixel in 32 pixel steps NTSC – up to 480 pixel in 32 pixel steps
Picture encoding type:	I, P, B
GOP Structure:	Flexible
Minimum latency:	Around 200mS, according to settings (GOP structure, bit rate etc.)

AUDIO INPUTS AND ENCODING

Audio input format:	Analog: Two (mono, stereo, dual, joint stereo) Digital: LR Multiplex Serial (I2S) (internal connector) Option: SDI (Serial Digital Interface with embedded audio or with AES/EBU audio input)
Analog audio inputs:	0dBu (adjustable) / 600Ω balanced / mini-DIN 6 pole
Sampling frequency:	32KHz, 44.1KHz, 48KHz
Encoding standard:	ISO / IEC11172-3 (MPEG-1 audio) layer 1/2 – compliant
Bit rate:	Max. 448Kb/s

STREAM AND INTERFACES

Stream type:	Transport stream
System multiplexing:	ISO / IEC 13818-1 (MPEG-2) – PAT and PMT tables

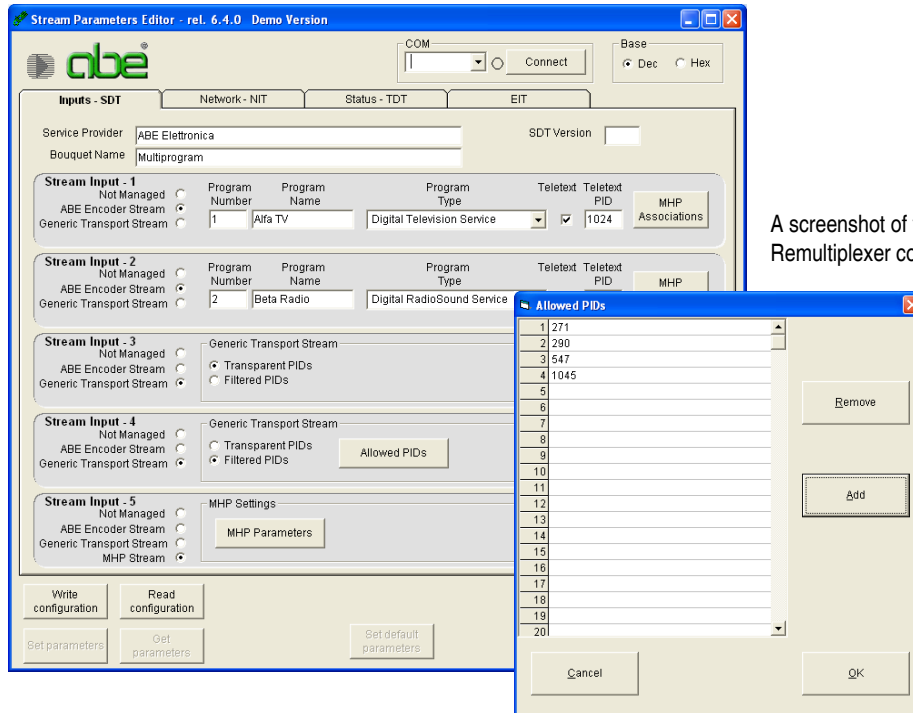
OTHERS SPECIFICATIONS

Pre-settings:	Nº4 Factory preset + Nº4 User configurable (by software, via RS232 port)
Teletext / Closed Captioning data:	Extraction from analogue video input

Multiplexer

INPUTS AND ENCODING

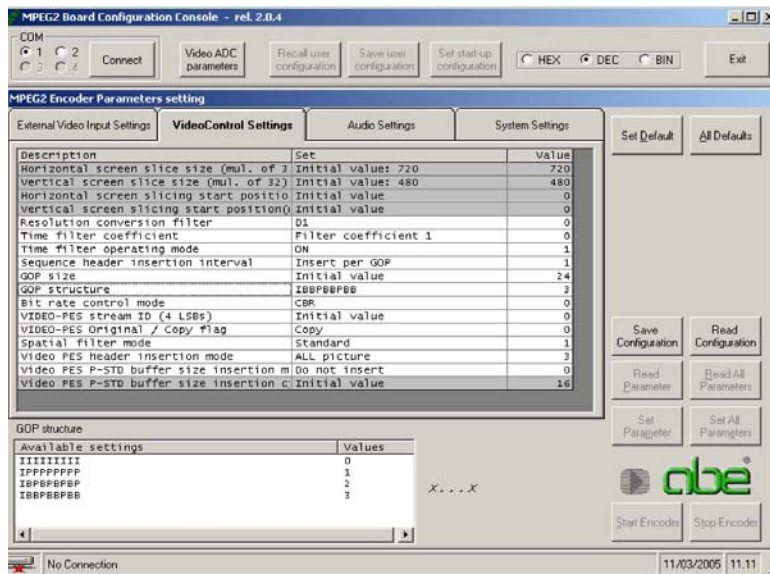
Tables:	Add / modify (NIT, SDT, TDT, EIT...)
Settings:	Fixed or by software via RS232 port
Optional Input:	DVB Transport Stream (ASI interface – PID Filtering and MHP support)
Output digital interface:	DVB – ASI
Teletext / Closed Captioning data:	Optional insertion in the transport stream



A screenshot of the Multiplexer / Remultiplexer configuration software

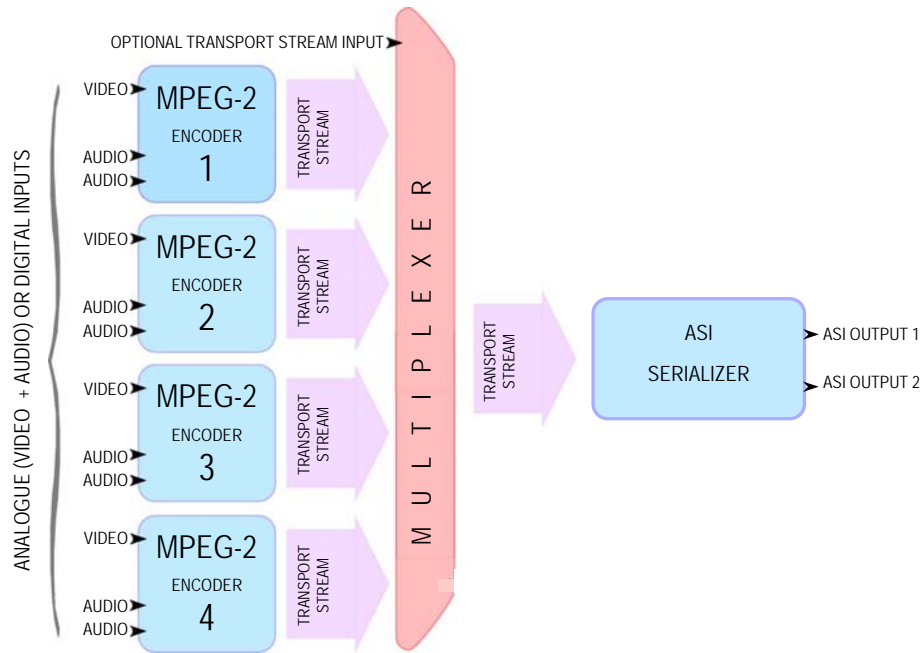
GENERAL SPECIFICATIONS

Power supply:	85 to 264Vac 50/60 Hz (Different power supplies available on request)
Remote control interface options:	RS232; RS485; Ethernet 10/100 Base-T (SNMP and web server support)
Housing:	Rack drawer 19" 1U
Operating temperature range:	0 to 45° C.



A screenshot of the MPEG-2 Encoder configuration software

EMX 1000 MPEG-2 encoders + multiplexer general block diagram



Model	Number of MPEG-2 encoders	Multiplexer
EMX 1001-B (*)	1	
EMX 1001	1	✓
EMX 1002	2	✓
EMX 1003	3	✓
EMX 1004	4	✓

(*) - only PAT & PMT tables

Other models available with built-in digital modulator (DVB-S, DVB-S2, DVB-DSNG, DVB-T/H...
See DME 1000 Series.

AVAILABLE MAIN OPTIONS:

- SDI / AES-EBU input interface for MPEG-2 encoders
- ASI Transport Stream Input

Please consult factory for exact equipment configuration and options



All specifications contained in this document may be changed without prior notice.