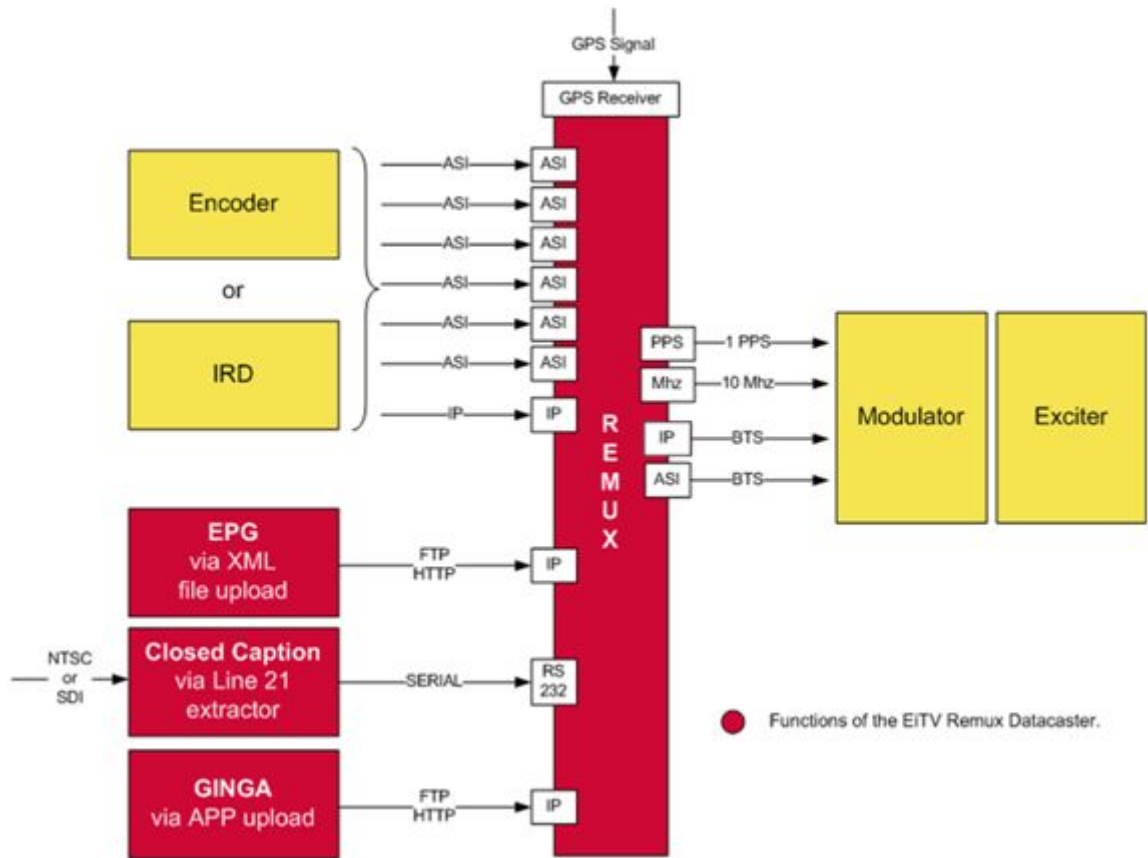# EiTV Remux Datacaster

MULTIPLEXER AND REMULTIPLEXER ISDB-T

Remux with an exclusive generation of EPG, Ginga and Closed Caption.

◥ The product EiTV Remux Datacaster is an ISDB-T multiplexer and remultiplexer developed for the digital TV standard used in Brazil and other countries of South America.

◥ The product can work with multiprogramming as needed by the TV station. Additionally, it has editing tables PSI / SI generation IIP packages and configuration for operation in single frequency networks (SFN).

◥ The EiTV Remux Datacaster have dedicated functions for internal generation of EPG, Closed Caption and Ginga. Allows generation of EPG via upload XML file and GUI (WEB), insertion of Ginga through complementary software that came with it and generating Closed Caption from serial port (RS232) or composite video (NTSC / PAL-M) with CEA-608 protocol.

◥ The multiplexer has up to 7 input channels (6 ASI and 1 IP) and 3 output channels (2 ASI (BTS) and 1 IP). The management and updating of the multiplexing system are performed by the user remotely over the network via Ethernet.

GPS receiver with output of 10Mhz and 1PPS Integrated into Remux to synchronism the clock.

Recourses and Performance

- Multiplexing streams compatible with MPEG-2 TS;
- Compatible with TS entries (188 bytes) and BTS (204 bytes);
- Filter and remap the PIDs of entries and correcting PCR;
- Network Configuration type SFN;
- Follow the recommendations of ABNT NBR 15601;
- Compatible with standard ISDB-T and ISDB-Tb;

Generation of information PSI / SI with the insertion of data descriptors:

- Generation of the information tables PAT, CAT, PMT, NIT, EIT, SDT, TOT, BIT and AIT;
- Setting the timezone for automatic adjustment of time based on UTC;
- Setting the tables that will be generated in the transport stream;
- Setting the number of virtual channel;
- Setting the service id;
- Possibility of setting the PSI / SI tables and user definition of the respective layer transmission;
- Transmission of stored tables PSI/SI;

Allows generation of EPG via upload XML file and GUI (WEB):

- Multiplexing and the generation of EPG according to Brazilian Standard ABNT NBR 15603;
- Generation of H-EIT, M-EIT and L-EIT;
- Generation of the EIT p / f and EIT scheduling for electronic program guide;
- Information of the date, time, duration, title, subtitle and description of programs;
- EIT Descriptors (short event, parental rating, component, content);
- Automatic updating of the EIT tables based on XML file and FTP protocol;

Allows generation of Closed Captioning in ARIB-B24a format from serial port (RS232) or composite video (NTSC / PAL-M) with CEA-608 protocol:

- Compliant with the norms ABTN NBR 15606-1 and ARIB STD-B24 VOL1 PART 3;
- Real-time generation of subtitle and superimpose characters;
- Support the closed caption roll-up and pop-up;
- Signal serial input (EIA-608) from interface RS-232;
- Configuration of the PID and language stream of the output of closed caption (CC);
- Support the generation of multiple streams of simultaneous CC (HD, SD, 1SEG);
- Real time output stream multiplexed with CC via ASI interface;

Allow the generation of interactivity GINGA from complementary software that came with the equipment:

- Encoding data according to Brazilian Standard ABNT NBR 15606;
- Generation of the object carousel DSM-CC;
- Support applications GINGA-J, GINGA-NCL;
- Generation of data carousel DSM-CC;
- Insertion in real-time carousel objects / data in the transport stream;
- Setting of organization id and application id;
- Setting of option to auto start;
- Data Descriptors (association tag, component tag, carousel id, data broadcast id);
- AIT Descriptors (application signalling, transport protocol, application descriptor, control code);
- GINGA Descriptors (optional flags, document resolution, content ID, default version, language);
- Setting of bitrate application transmission;
- Setting of PIDs from AIT and data stream;
- Scheduling automatic transmission, start and stop applications via complementary software;

- Allows the transmission of OAD generated from implementer of functions;
- Configuration and update via network through embedded WEB server to Mux;

Specifications

Signal Input

- 6 ASI inputs;
- 1 IP Input;
- Support to TS packets of 188/204 bytes;

BTS Output

- 2 DVB ASI Outputs and 1 IP Output;
- Specification of BTS based on the standard ARIB STD-B31 and ABNT NBR 15601: 2007;
- Bit Rate 512X4/63 Mbps (~32,508Mbps);
- Impedance of 75 ohms;
- BNC Connector;

Power Supply

- Tension 100 - 240 VAC;
- Frequency 50 - 60 Hz;
- Maximum power consumption. 45 VA;
- Harmonic correction EN61000-3-2;

Size

- Rack 1U of 19";
- Dimension: 48.3cm x 4.39cm x 42,7cm;
- Weight: 6Kg;

Operational Environment

- Temperature: 0ºC to 50ºC;
- Relative humidity: Máxima 95%.

GPS receiver

Antenna:
- Active antenna module powered by the receiver module (80mA max)
- External antenna gain measured at the receiver input: 10 dB up to 50 dB

Output of 10Mhz:
- 10 dBm + / -2,5 dBm, Sine Wave
- Harmonic Level: -40 dBc Max
- Connector: BNC (F), 50 ohms

Output of 1PPS:
- 1PPS, TTL
- Connector: BNC (F), 50 ohms