DATASHEET

MUX841

MPEG2 Audio-Video Coder Multiplexer
(briefly Multiplexer MUX841)

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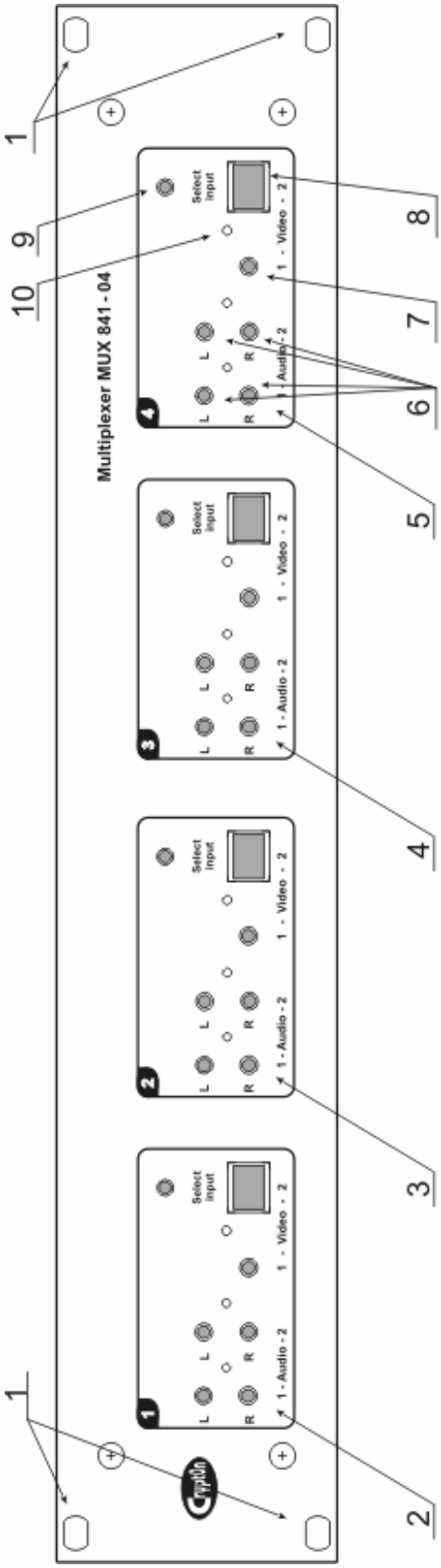
2. GENERAL DESCRIPTION

MUX841 is a 4-channel MPED2 video/audio encoder/multiplexer that is a part of Crypton digital TV system. It makes one multiprogram DVB transport stream from 4 input CVBS or D1 video and 4 stereo audio signals. You can easily choose witch one of its CVBS or D1 inputs is to be selected as an input of a MPEG2 encoder. PID and SI edit functions are also possible with the device application control software wire RS-232 interface port.

3. Key features

- CCIR-656(D1) or analogue Composite video input.
- MPEG-2 4:2:0 MP@ML video encoding.
- MPEG Layer 2 and Layer 1 audio encoding
- Highly efficient multiplexing algorithms
- Device control software is available
- RS-232 interface control.
- Led check for availability

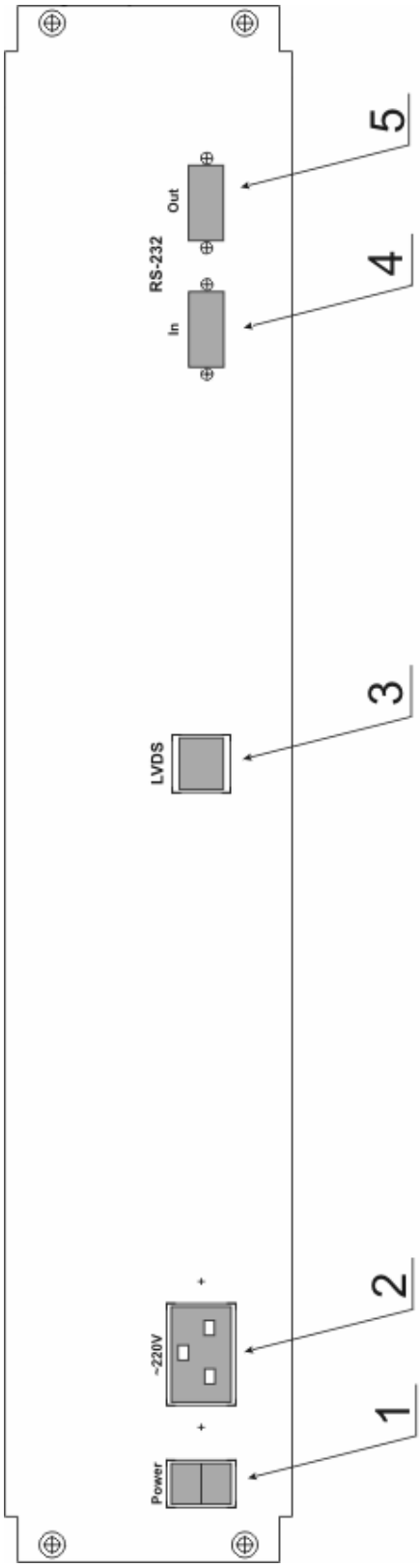
4. Front view of MUX841



1 - Fixing apertures
2 - The panel of sockets of input signals of the channel №1
3 - The panel of sockets of input signals of the channel №2
4 - The panel of sockets of input signals of the channel №3
5 - The panel of sockets of input signals of the channel №4
6 - Input sockets of channels audio (RCA)
7 - Input video analogue (BNC)
8 - Input video digital (RJ - 45)
9 - Switching input (BNC)
10 - The indicator of a status of the channel

PIC.1 Front panel MUX841-04

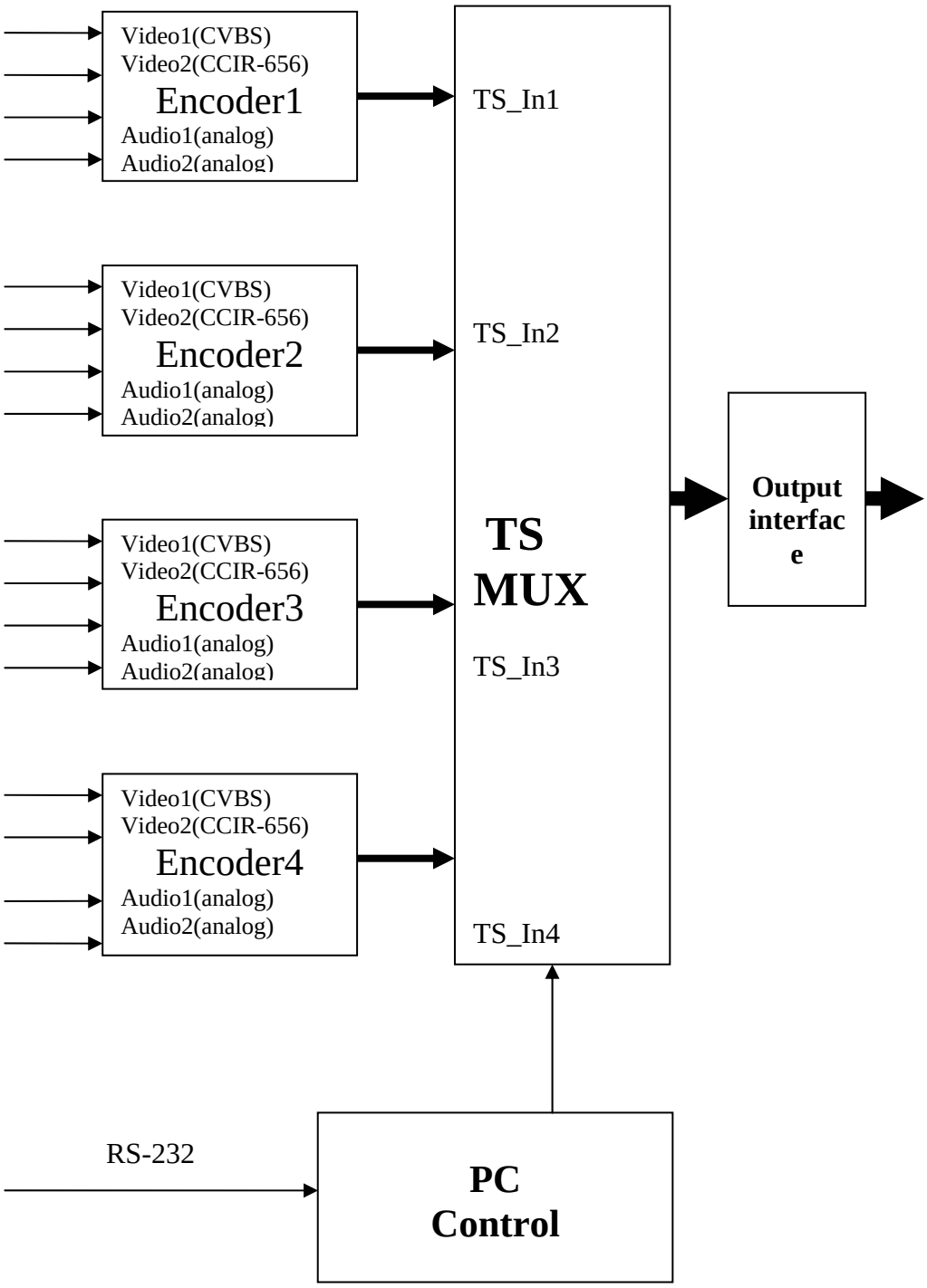
4. Rear view of MUX841(continue)



1 - The switch of the power supplies
2 - Socket of the power supplies
3 - Target socket of the interface LVDS
4 - Input socket of the interface RS - 232
5 - Target socket of the interface RS - 232

PIC.2. The back panel of MUX841-04

6. Block Diagram



7. FUNCTION OVERVIEW

- **MPEG2 Encoder**
  Selects one of its analog CVBS or D1(CCIR-601) inputs.
  Video encoding according to ISO/IEC13818-2(MPEG2 video).
  Audio encoding according to ISO/IEC11172-3(MPEG1 audio).
- **TS Multiplexer**
  Multiplex 4 audio/video inputs into a one DVB transport stream EN50083-9.
  Replacement PID's
  Replacement of the SI/PSI tables
- **Output interface module**
  Performs interface agreement between the multiplexer and external devices (computer)
- **PC Control**
  PC configuration of some multiplex functions of the device.
  PID replacement and SI/PSI edit over RS-232.

8. TECHNICAL SPECIFICATION

The functional characteristics

Parameter	Option values	Notes
Format of input video signal	PAL, ITU/CCIR-656(D1)	
Number of a video - inputs(entrances)	4	
Number of аудио – inputs	4	Stereo
Control	RS – 232	Type of a socket – DB-9
Outputs	Serialized DVB TS EN50083-9	Type of a socket - RJ45
VIDEO ENCODER	Corresponds ISO/IEC 13818-2 (MPEG-2 video), ISO/IEC 11172-3 (MPEG-1 video).	
AUDIO ENCODER	Corresponds ISO/IEC 11172-3 (MPEG-1 video).	Sampling rates – 48 кГц
Output Bit Rate for encoder, Mbit/s	4	Summary to one channel
Summary Output Bit Rate, Mbit/s	16.5	
Functions of the multiplexer	4 channel multiplex, editing of the service information	

The electrical characteristics of audio channels

Parameter	Option values	Notes
Level of an input signal, V, no more	1	
Frequency a range, Hz, not less	40 - 15000	
Non-uniformity AFC, dB, no more	1	
Factor of nonlinear distortions, %, no more	0,3	
Entrance impedance, to ohm	30 (+/-10%)	is normalized

PHYSICAL AND POWER

Parameter	Option values	Notes
Power Input, Vac	90 - 260	Single-phase network
Power consumption, W, no more	40	From a single-phase network
Average time of a time between failures, hours	10 000	
Average service life, years	1	
Dimensions	2U	Euromechanical