



ESA-110

Digital Satellite Receiver

Art.no: 101110.01

PRODUCT INFORMATION

ESA-110

The ESA-110 is a high quality Professional Digital Satellite Receiver designed for use in any Cable TV or SMATV head end. All the functions are integrated in an extremely compact unit that can be mounted in several different ways. The ESA-110 can easily be connected to the CATV modulators EVA-200 and EVA-210.

Features:

- High quality professional digital satellite receiver
- For operation in SMATV and Cable TV head ends
- Common Interface for various encryption standards
- Embedded Conax decryption
- Embedded NDS Videoguard decryption
- Video (phono) and stereo audio (phono) outputs
- PAL/SECAM/NTSC operation
- Settings via PC or PALM PDA (RS-232)
- Low power consumption



DVB's main transmission standards, DVB-S for Satellite, DVB-C for Cable and DVB-T for terrestrial, dominate the world and are the basis for most of the alternative standards.

design for TV

ESA-110 Digital Satellite Receiver

TECHNICAL SPECIFICATION

(This specification may be subject to change without notice).

QPSK Satellite Receiver

Input Frequency	950 to 2150 MHz
LNB connector	Type F female, 75 Ω
Input Level	-65 to -25 dBm ¹⁾
Spectral inversion	Manual/Auto selection (Ku-Band & C-Band)
LNB voltage	Auto, Off, +13,5V, +18,5V programmable (short circuit protected max 400mA)
Symbol Rate	22kHz to LNB Auto, On or Off programmable
DVB compliant	2 to 45 Mbaud
Error correction	DVB-S Viterbi (1/2, 2/3, 3/4, 5/6, 7/8) +Reed Solomon (188/204) +Interleave (I=12) +/- 3MHz (2-45 MSymb.)
Max LNB freq. Offset	QEF reception with test signal: 24,5 MSymb, 7/8 FEC, 8,4dB C/N
¹⁾	

Connectors and Interfaces

Control connector	9pin male, D-sub
LNB input connector	F female
Video output connector	Phono female (yellow)
Audio output connector	Phono, female (R red, L white)
LED Indicator lights	Power on, QPSK error, Access error
Smartcard connector	ISO 7816
CAM connector	PCMCIA (5 VDC)
Remote controls	Settings of LNB, Tuner frequency, Symbol rate, Polarization, Decryption

MPEG Decoder - Audio

Output	Stereo or Mono
Impedance	< 100 Ω
Output level	Phono: Typ. 0dBm @ 600 Ω
Variable +/-6dB	(0.77 Vrms)

MPEG Decoder - Video

Output standards	PAL, SECAM or NTSC
Impedance	75 Ω
Output level	1 Vpp @ 75 Ω
Aspect Ratio	Letterbox, Pan/Scan, or conversion Combined (14:9) programmable
Teletext	Insertion in VBI Subtitling Teletext or DVB subtitling
Decryption	Embedded Conax, embedded NDS Videoguard plus Common Interface for other standards (tested with Viaccess, Irdeto, Cryptoworks, Aston (Mediaguard, Seca), Conax, Alphacrypt)

Miscellaneous

Power supply	6-9 VDC
Power consumption	Typ. 4W without CAM and external load Typ. CAM <1W, typ. LNB <3W, Max. LNB current at +18V = 7.2W Max. current at LNB in: 400 mA
Dimensions	165x105x20 mm (exclusive connectors)
Weight	Approx. 330 g
Controller	Palm handheld or PC (software included)
Operating temperature	0 to +50°C

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To view our full line of Professional E-series Products, visit our Web site at www.a2b.se.



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