

## Technical Specification

# TT-select<sup>®</sup> S845 HD+

Digital receiver for HDTV and HD+ by Astra



Based on TT-select<sup>®</sup> family

## BASICS

- Pay- and Free-TV HDTV DVB satellite receiver compliant to EN 302 307
- HD+ compliant
- PVRready (from 09/2010)
- 16 digit dot-matrix front display
- Internal power supply incl. Switch
- Stylish and high quality housing
- Common Interface and smartcard reader behind lid
- HDMI output
- MPEG-2 and MPEG-4 AVC/H.264 video decoding
- Video support for 574p, 720p and 1080i
- Video and Audio out via SCART
- Digital Audio out via optical S/PDIF
- Analogue Audio out (left/right) via RCA (Cinch)
- MPEG -2 compliant: ISO/IEC 13818-1
- Video Decoding:
  - ISO/IEC 13818-2 (MPEG-2 Video)- MP@ML&MP@HL
  - ISO/IEC 14496-10 (MPEG-4/Part 10) – HP@4L
  - High Definition and Standard Definition: 1080i50, 720p50, 576i25
- Audio Decoding:
  - ISO/IEC 13818-3 (MPEG-1/2, Layer 1, 2 & 3)
  - Dolby AC-3 pass-through and down-mix
- Automatic FEC selection: 1/2, 2/3, 3/4, 5/6, 7/8
- Update over satellite network

## POWER SUPPLY

- Power supply 230 VAC/50Hz to 12VDC
- Power consumption in operation mode less than 20 W
- Power consumption in standby less than 1 W
- On/Off switch

## ACCESSORIES

- Receiver (ca. 432 x 250 x 57 [mm])
- Remote Control including battery
- Instruction manual: A5 format black/white
- Standard HDMI<sup>®</sup> Cable

## LOGOS



## HIGHLIGHTS

- Inclusive HD+ smartcard
- ARD HD, ZDF HD and free HD programs
- PVRready (software update in September 2010)
- CI-Slot for PayTV
- 16-digit display
- High class housing
- Ideal for HD-ready and full HD flat panel monitors
- Razor-sharp images and brilliant colours

## FRONT PANEL



## BACK PANEL

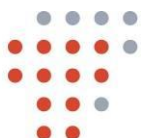


## REMOTE CONTROL



## PVR FUNCTIONALITY

- Recording / Playback via USB-connected mass storage, e.g. USB-HDD or USB memory stick
- Time shift
- Start recording with one single key
- Easy to program recordings by means of EPG data
- Playback / Pause
- Fast forward / fast rewind (may be restricted for HD+ content)



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Version December 2010

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# TT-select® S845 HD+

Digital receiver for HDTV and HD+ by Astra



Based on TT-select® family

## STB MODE FUNCTIONALITY

- DVB satellite TV and Radio reception
- Fully HD+ compliant
- Pay- and Free-TV support
- Reception of High Definition and Standard Definition
- Excellent Easy-To-Use graphical user interface
- Context referred help function
- Automatic and manual channel scan
- Separated program list for TV and Radio
- Up to 4 different favorite lists
- Up to 4000 programs storable
- Electronic Program Guide (EPG): present/following program plus additional 7-days EPG
- Automatic format shift form 4:3 and 16:9
- One-Touch Timer setting in EPG
- Simultaneous display of HD content on HDMI and SD content on SCART
- Multi language support, e.g. German, English, Swedish and Finnish
- Integrated Tele text browser and Tele text re-insertion (VBI)
- DVB and EBU subtitling support (ETS 300 743)

## STANDARD + REGULATION COMPLIANCE

- DVB satellite standard EN 302 307
- MPEG-2 Transport Stream support to ISO/IEC 13818-2
- MPEG-4/Part 10 Transport to ISO/IEC 14496-10
- MPEG-1/2, Layer 1,2 & 3 – Audio support compliant to ISO/IEC 13818-3
- MPEG-4 Audio support compliant to ISO/IEC 14496-3
- Tele text in VBI according to ETS 300 472
- Safety and EMC regulations: EN 55013, EN 55020 and EN 60065

## LNB CONTROL

- Band selection: 22 KHz
- Polarity selection: 14/18 V
- Tone burst mode
- DiSEqC 1.0
- LNB support maximal 400 mA

## RF SPECIFICATION

- QPSK demodulation compliant to DVB satellite standard EN 302 307
- Frequency range: 950...2150 MHz
- Symbol rate: 1...45 Msymbol/s (SCPC & MCPC)
- INPUT RF level: -25...-65 dBm
- Input connector: IEC F-type female
- Input termination 75Ω

For DVB-S

- SCPC/MCPC support 2 Msymbol/s to 45 Msymbol/s
- QPSK with supported rates 1/2, 2/3, 3/4, 5/6, 6/7, 7/8
- Viterbi soft decoder rate 1/2
- Support of Reed-Solomon decoding (EN 300 421)
- Up to 60 Mbps channel bit rate

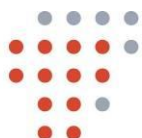
For DVB-S2

- Broadcast profile
- SCPC/MCPC support 10 Msymbols/s to 30 Msymbol/s
- QPSK and 8PSK with supported rates 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
- LDPC and BCH decoder as per DVB-S2 requirements
- Digital Nyquist root filter with 0.20, 0.25, 0.35 roll-off factors
- Up to 90 Mbps channel bit rate

## INPUT / OUTPUT SPECIFICATION

- Input connector: female IEC F-Type (75Ω)
- Digital HDMI Video out
- 2x SCART out (TV & VCR) accordingly to EN 50049-1
- TV SCART out: CVBS, Y/C, RGB, Audio
- VCR SCART out: CVBS, Y/C, Audio
- VCR SCART in (pass to TV SCART): CVBS, Y/C, Audio
- Switching signal: at PIN 16 0/1-3 V
- RCA out (Cinch)
- 3x Component Video out – YpbPr
- 2x Analogue Audio out (left/right)
- 1x Digital Audio out
- Digital Audio out (PCM stereo, AC3) via optical S/PDIF
- Common Interface
- Smartcard Reader
- Ethernet LAN
- USB 2.0 connector

## AWARDS



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