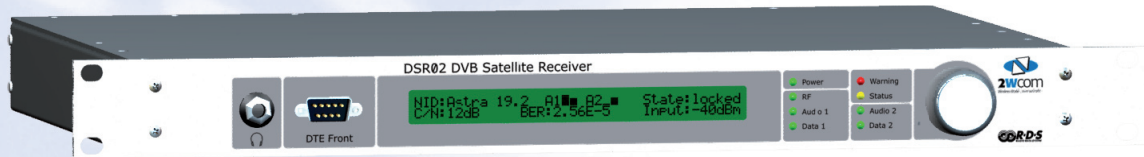


DSR04 Version 2011 Digital Satellite Receiver

Professional DVB-S, DVB-S2 and DSS audio receiver



Transportstream inputs

- DVB-S 1-45 Msym/s
- DVB-S/S2 128 Ksym/s...45 Msym/s single and multiple channel per carrier
- DVB-S/S2 Tuner module 16 APSK A/B switching and PL scrambling etc.
- ASI (optional)
- Gigabit IP

Redundancy/local commercials

- IP Audio Input combined with enhanced memory as an additional back-up solution (optional SD card)

Audio output

- Balanced analogue and digital AES/EBU (switchable 15KHz low-pass filter)

Data output

- 8x Serial (e.g. RDS, DRM)
- MPE decoding via Gigabit IP

Transportstream output

- ASI (optional)
- Gigabit IP

Decoding

- 4x Audio decoding:
MPEG 1/2 Layer 1, 2, 3 (optional: MPEG 2/4 AAC LC, HEv1&v2 and AC3)
- RDS decoding (built in RDS/UECP decoder)

Control

- Via webinterface
- Via Satellite Inband Control (satellite carrier) (e.g. changing configuration, trigger commercials, relay switching)
- SNMP v2c

Decryption

- CAM Conditional Access Modul or BISS (optional)

Monitoring

- RF and MPEG parameters via SNMP v2c and relay
- Monitoring of up to eight audio programs via IP



1. Harmony FM	[1036]	[AUDIO1]	<input type="button" value="configure"/>
2. H.FM(TMC)	[1037]	DTE1	<input type="button" value="configure"/>
3. H.FM(Clock)	[1035]	[PCR1]	<input type="button" value="configure"/>
4. Hit Radio	[1024]	[AUDIO2] [X.21]	<input type="button" value="configure"/>
5. H.R.(TMC)	[1023]	DTE2	<input type="button" value="configure"/>
6. H.R.(Clock)	[1025]	[PCR2]	<input type="button" value="configure"/>
7.	[0]		<input type="button" value="configure"/>
8.	[0]		<input type="button" value="configure"/>

PID

Very straight forward and easy - but nevertheless flexible way of decoder-configuration

Alarm Settings

Extensive alarming possibilities, via SNMP or relays contacts - with flexible alarm levels and times

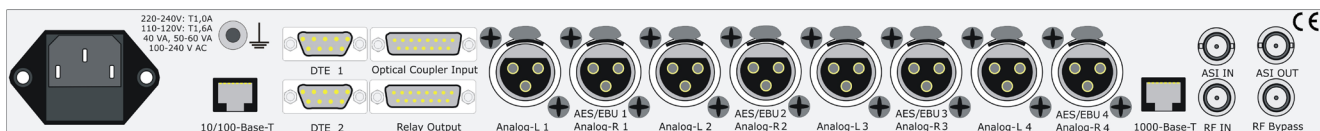
warning LED on	<input checked="" type="checkbox"/>	alarm enable	<input checked="" type="checkbox"/>	state	☯					
id:	SNMP + Relay 2	T1	1	s	T2	1	s			
warning LED on	<input checked="" type="checkbox"/>	alarm enable	<input checked="" type="checkbox"/>	state	☯					
:	SNMP	>	0.00E-0	T1	1	s	T2	1	s	
warning LED on	<input checked="" type="checkbox"/>	alarm enable	<input checked="" type="checkbox"/>	state	☯					
:	SNMP	<	0	db	T1	1	s	T2	1	s
warning LED on	<input checked="" type="checkbox"/>	alarm enable	<input type="checkbox"/>	state	☯					
:	SNMP	T1	1	s	T2	1	s			
warning LED on	<input checked="" type="checkbox"/>	alarm enable	<input type="checkbox"/>	state	☯					

System parameter

Nr.	Timestamp	Message
1	2008-08-20 14:39:09	DTE no. 1 alarm. State: OK
2	2008-08-20 14:39:09	Audio no. 2 alarm. State: OK
3	2008-08-20 14:39:09	Audio no. 1 alarm. State: OK
4	2008-08-20 14:39:09	TS alarm. State: OK
5	2008-08-20 14:39:09	C/N alarm. State: OK
6	2008-08-20 14:39:09	Viterbi BER alarm. State: OK
7	2008-08-20 14:39:09	RF unlogged alarm. State: OK
8	2008-08-20 14:39:09	RF input alarm. State: OK

Error Log

Long time report of all occurred alarm-events to provide objective evidence of the system



DSR04 Version 2011 Digital Satellite Receiver – Technical Details

Format Specification	DVB-S, DSS ETS 300421 DVB-S	Data interfaces	
Inputs		Remote control output	16 standard (SPST), 4 change-over (SPDT) relays (for DC: max. 24 V, 1 A, 10 W), 2 x 26 pole sub-D male 9 x RS-232C (1 front, 8 rear) 2 rear direct or 8 rear with break out cable
RF	F-jack	Serial	Private data or MPEG ancillary data (IRT) 9 pole sub-D male 1200 to 115200 baud, asynchronous
RF input frequency	950...2.150 MHz	Data	
Input Level	-75...-20 dBm	Connector	
DVB-S/S2 (High performance & Advanced DVB-S2 processing functions)		Transmission rate	
DVB-S		TCP/IP	
Modulation/Symbol rate	QPSK (0.1...45 Msym/s)	Data	Controlling and Setup functions output of: - Private data, - MPEG ancillary data (IRT), - MPEG audio stream
FEC	Viterbi and Reed Solomon	input of:	- MPEG audio stream
Roll-off	1/2, 2/3, 3/4, 5/6, 6/7, 7/8 0.20, 0.35	Connector	RJ 45
DVB-S2		Type	full duplex 10/100 BASE-T
Modulation/Symbol rate	QPSK (0.1...45 Msym/s)	Data format	HTTP, SNMP, SMTP, UDP
Modulation type	8PSK (0.1...45 Msym/s)	Gigabit IP output	
Frame type	16PSK (0.1...45 Msym/s)	Data	MPEG TS or MPE
FEC	CCM	Connector	RJ 45
Roll-off	Short/Normal	Type	full duplex 10/100/1000 BASE-T
Transport stream processing	LDPC and BCH	ASI output (optional)	
PL scrambling	1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10	Data	MPEG2 TS
Input switching	0.20, 0.25, 0.35	Connector	BNC 270 Mbps
Advanced processing functions (optional):		Control	
Modulation/Symbol rate	32 APSK (0.1...38 Msym/s)	Web menu	HTTP, at least 3 users, 2 levels
Modulation Type	VCM/ACM	Satellite Inband Control (SIC)	2wcom professional SIC (optional: request for information)
Transport stream processing	Single and Multiple Transport stream Single and Multiple Generic Stream	SNMP	v2c
ASI input (optional)		General data	
Data	MPEG2 TS	Power consumption	20 VA
Connector	BNC 270 Mbps	Case dimensions	19", 1 HU, depth: 310 mm, width: 424 mm, front panel: 484 mm
Audio		Weight	5.5 kg
Digital reference	0 dBFS (adjustable)	Housing	steel plate
Audio level	+18dBu	Rated temp. range	+5°...+45°C
Volume	-32...+6 dB	Operating temp. range	0°...+50°C
Filtering	Switchable 15 kHz Low-Pass	Storage temp. range	-40°...+70°C
Digital	AES/EBU, 110 Ω bal., XLR 4 x Stereo	Power supply	internal, 100 V...230 V (±10%), 50 Hz...60 Hz
Analogue	L/R, < 20 Ω bal., XLR 4 x Stereo	Languages	English, French
Headphone	XLR connectors switchable between analog and digital L/R, < 10 Ω, 6.3 mm		
MPEG decoding			
No. of decoders	Up to 4	Version 09.11.2010	
Adjustable Delay	10...2000 ms	These data are subject to modifications and amendments.	
Format	MPEG PES or MPE	Errors excepted	
Codecs	MPEG 1&2 Layer 1, 2, 3 Dolby digital AC3 (Loopthrough) MPEG 2/4 AAC LC MPEG 4 AAC HE v1 & v2 AC3 (Stereo Downmix) ask for other codecs MP3 Files with ID3 Tags		
optional:			
Front panel			
LCDisplay	2 x 40 characters		
Jog wheel	impulse, ENTER button		
8LED's	Power, Signal, Status, Alarm, Warning, Audio, Remote, Data		

