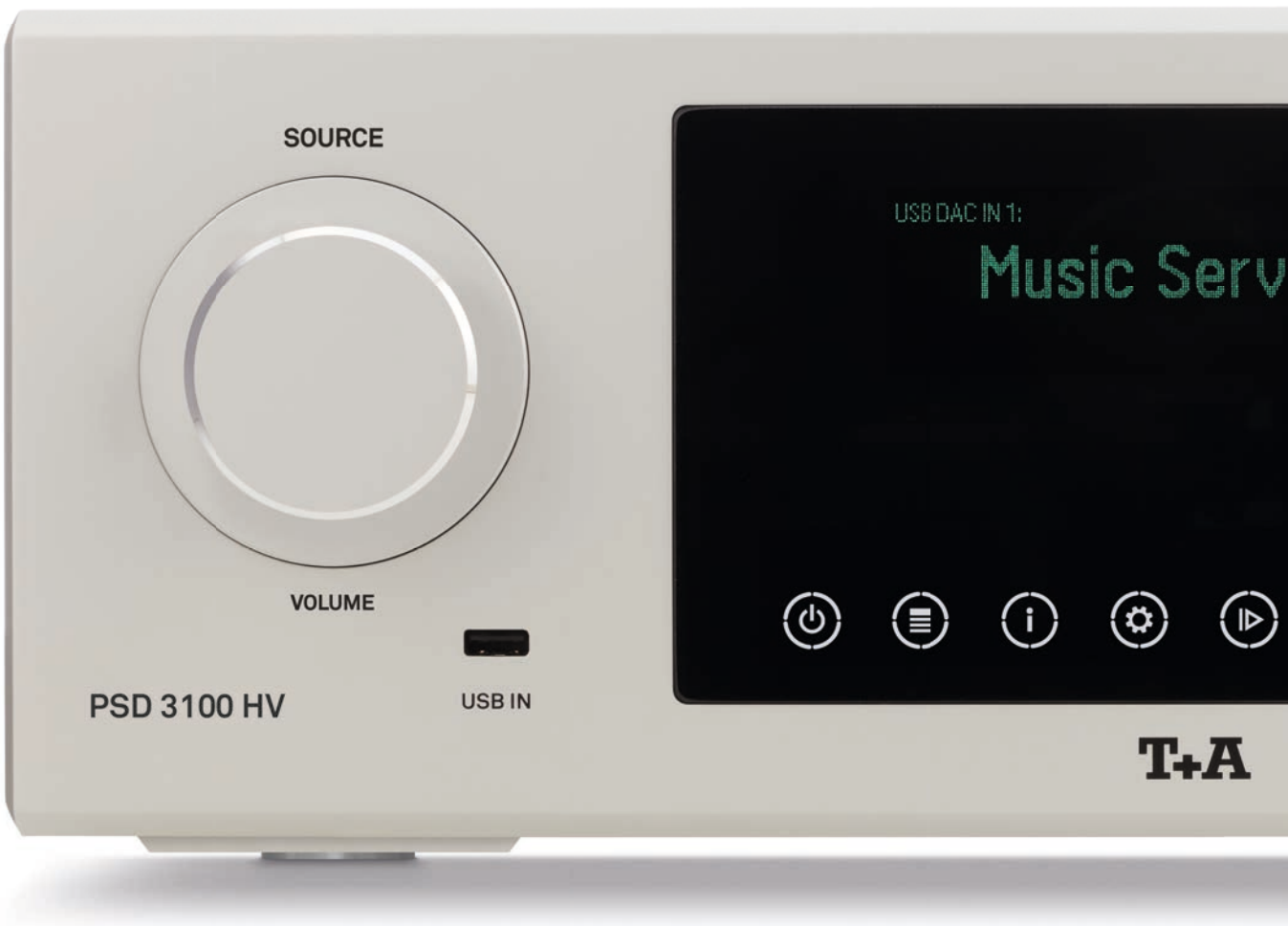
PSD 3100 HV

Pre-amplifier-Streaming-DAC



T+A
Engineering Emotion

PSD 3100 HV
Pre-amplifier-Streaming-DAC

D/A Converter	
PCM	Double-Differential-Quadruple-Converter with four 32-Bit Sigma-Delta D/A-converters per channel. 705,6 / 768 kSps conversion rate
DSD	T+A-True-1Bit DSD D/A-Converter, up tp DSD 512 (22,4 / 24,5 MHz), native bitstream
Inputs	
	AES-EBU, BNC, Coax, TOS-Link, USB DAC, USB host (HDD), HDMI, Antenna, LAN, W-LAN
Features	
	Streaming Client 3rd generation (DSD native streaming up to DSD 256) USB Receiver UAC-3 Standard Relay-volume control, Loudness, Soundcontrol, High Power headphone amplifier

What does the term High-End mean in the year 2023? To what extent is music network-based in today's world? These questions are answered by the PSD 3100 HV, which represents the first step into the world of the HV series multi-source streaming players.
In every respect the PSD 3100 HV sets new standards for network-based music, whether it is its access to millions of pieces of music from the highest-quality streaming services, or from local networks with the new third-generation streaming client, or its two unique and exclusive converter architectures for DSD 512 and PCM 768 files, or its HV pre-amplifier topology and convenient integration in the T+A MusicNavigator app.

Construction

Every T+A device is developed with a single primary aim: the reproduction of music in as natural and uncoloured form as possible. In this aim the design of the D/A converter is of crucial importance: the tiniest negative influence, if not eliminated at this stage, inevitably exerts a seriously harmful effect on sound quality further down the line. We counter these potential losses with a series of ground-breaking in-house developments: de-jitter masterclocking, jitter reduction by a factor of four through the consistent separation (physical and topological) of the digital and analogue sections, and Path Separation Technology for separate PCM and DSD signals.
The PSD 3100 HV is yet another impressive embodiment of our company maxim: pleasure in music brought to life by technology - Engineering Emotion.

Streaming

Our experience with streaming-capable equipment extends back to the year 2007, when we were among the very fi rst High-End manufacturers to rethink digital music in a really consistent manner - by integrating streaming sources into our products. Over more than a decade of innovation we have evolved a global streaming architecture whose focal point is our streaming client. Its network-capable processor board handles a vast range of formats, acting as a bridge to the outside world. High-quality music reproduction from sources such as Tidal, Internet radio and even USB mass storage devices combine effortlessly with convenience and swift operation. The system provides the means of directly processing even DSD and PCM files in differing resolutions via the streaming client, and passing them on to the converters. (Certification of all streaming services is currently in progress).

TIDAL deezer qobuz airable

Spotify HIGH RES AUDIO AirPlay roon ready

Connections & additional sources

The PSD 3100 HV's back panel reflects its versatile nature: analogue input, aerial input, S/P-DIF, TOS Link, AES/EBU, BNC, HDMI and USB inputs cover the full range of digital sources. Internet radio, as well as FM, FM-HD and DAB+ radio, are also present, and show that the PSD 3100 HV can effortlessly become the core of any High-End system, in which every source is able to unfold its maximum potential, because it is not only an excellent streamer and D/A converter, but also a very excellent pre-amplifier. The input stages are discrete Class A preamps in HV technology, the volume control is relay-controlled with balance and loudness, its high-quality XLR and asymmetrical RCA outputs represent the signal bridge to power amplifiers and active loudspeakers, whilst headphones can be connected via a symmetrical 4.4 mm Pentaconn plug utilizing the High-Performance headphone amplifier.

Specifications

Pre-amplifier			
Frequency response +0 /-3dB		0,5 Hz - 300 kHz	
Signal / noise ratio		108 / 112 dB	
THD | Intermodulation | Channel separation		< 0,001 % | < 0,001 % | < 108 dB	
Nominal input sensitivity			
High level input (RCA)		250 mV_{eff} ... 6 V_{eff} / 24 kOhms	
Analogue output RCA | XLR		nom 1 V_{eff}, max 9,5 V_{eff} / 20 Ohms | nom 1,45 V_{eff}, max 19,6 V_{eff} / 40 Ohms	
Headphone output		4.4 mm Pentaconn (6 Ohms)	
Connections			
Digital inputs		1 x AES-EBU 32...192 kHz / 16-24 Bit 4 x S/P-DIF: 1 x Standard Coax, 1 x high quality BNC 32...192 kHz / 16-24 Bit, 2 x optical TOS-Link 32...192 kHz / 16-24 Bit. 1 x USB DAC: Device-Mode up to 768 kSps (PCM) and DSD 512*, supports asynchronous data transfer. *DSD 512 only with Windows PC with appropriate driver 2 x USB Master-Mode for USB-Mass storage (Stick or HDD) 2 x HDMI IN, 1 x HDMI OUT with ARC 1 x IPA (LVDS) LAN, Antenna input for WLAN and FM, 2 x H-Link	
D/A-Converter			
	PCM	Double-Differential-Quadruple-Converter with four 32-Bit Sigma-Delta D/A-Converters per channel. 705,6 / 768 kSps conversion rate	
	DSD	T+A-True-1Bit DSD D/A-Converter, up tp DSD 512 (22,4 / 24,5 MHz), native bitstream	
Upsampling		T+A-Signalprocessor – synchronous upsampling with 4 selectable oversampling algorithms. FIR short, FIR long, Bezier/IIR, Bezier	
Analogue filter		Phase-linear Bessel filter 3rd order, switchable with 60 or 120 kHz cut off frequency	
Frequency response		PCM 44.1 kSps	2 Hz - 20 kHz
		PCM 48 kSps	2 Hz - 22 kHz DSD 64: 2 Hz - 44 kHz
		PCM 96 kSps	2 Hz - 40 kHz DSD 128: 2 Hz - 60 kHz
		PCM 192 kSps	2 Hz - 80 kHz DSD 256: 2 Hz - 80 kHz
		PCM 384 kSps	2 Hz - 100 kHz DSD 512: 2 Hz - 100 kHz
		PCM 768 kSps	2 Hz - 120 kHz
THD | S/N ratio | Channel separation		< 0.001 % | > 117 dB | > 110 dB	
Streaming Client		Streaming client module 3rd generation with Quad Core processor Certification of all streaming services currently in preparation	
Tuner			
Internet Radio		Airable Internet Radio Service (> 11000 Stations).	
FM, FM-HD		87,5 - 108 MHz; sensitivity 1 µV; S/N > 65 dBA.	
DAB, DAB+		168 -240 MHz (Band III); Sensitivity 2,0 µV, S/N > 96 dBA.	
Features		RDS/RDBS, Stationname (PS), Programm type (PTY), Radiotext (RT)	
Bluetooth		A2DP (Audio), AVRCP 1.4 (Control) / aptX® HD, SBC, AAC	
Mains		2 x 110-120 V or 220-240 V, 50-60 Hz. Operation: 30 W digital / 40 W analogue, Standby: < 0,5 W.	
Dimensions (H x W x D), Weight		17 x 46 x 46 cm / 6,7 x 18,1 x 18,1 inch , 26 kg / 57,3 lbs	
Accessories		2x power cord, remote control F 3100, BNC adapter	
Finishes		silver laquer 47 or titanium laquer 64	

Technical modifications reserved

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