INFORMATION

T+A ⊠

K2 - DVD-Receiver

The **K2** and its sister - the **K2 M**, equipped with a Streaming Client - are the latest K-series products, and form the high-performance core of a Hi-Fi or virtual surround system. According to personal preference, they can be used as the basis for a classic stereo system with two loudspeakers or as a virtual surround system with an additional centre loudspeaker and sub-woofer; we deliberately decided to make no provision for rear speakers. Since the K2 is fitted with no fewer than five power amplifiers, each generating a continuous power of more than 150 Watts, it can even be used to provide stereo sound in an adjacent room, with independent volume control. It was always our intention to install the potent output stages of the E-series Power Plant with their superb sound, as they enable the ambitious music and video enthusiast to use the machine with large, power-hungry loudspeakers, making it perfectly possible to fill quite large rooms with superb-quality sound!

Even when designing video equipment, T+A has always placed particular emphasis on superb sound quality, and for this reason the newly developed high-quality DVD mechanism has been carefully optimised to reproduce music from CD to a very high standard of quality, while the D/A converters are first-class Wolfson audiophile units. The picture quality is wonderful, and the sophisticated integral scaler is capable of upscaling DVD data to 1080p, and passing it on via HDMI and YUV outputs; this allows owners to use the unit to exploit the full potential of any modern television set or monitor.

A USB port on the front panel enables LPCM, MP3, photo JPEG and film files to be transferred and reproduced. The integral VHF RDS tuner offers very good reception characteristics and delivers all the radio-text information generated by the transmitting station. Two high-quality analogue inputs are also provided - e.g. for TV and turntable - in addition to tape sockets and a pair of digital inputs.

As an additional feature the **K2 M** offers access to all the new media, since it is equipped with the High-End network circuit board (Streaming Client) utilised by the Music Player of the E-series and R-series. The machine's back-panel USB port gives access to MP3 players and USB media sticks, whilst Internet radio and network music servers can be exploited via LAN or W-LAN, and even iPods can be connected and controlled.

We have deliberately invested tremendous time in developing a simple, logical and intelligent method of operating the **K2**. In spite of its wide-ranging facilities, the machine is simple and intuitive to operate, either using the front-panel controls or the remote control handset which is included as standard.

The superb design of the **K2** has been developed in collaboration with our partner of many years, moll design. The machine's appearance is unique, unmistakable, characteristically T+A and stands out effortlessly from the uniform look of so much mass-produced equipment.

Control elements

The **K2's** control elements are in the classic T+A style, and provide ultra-simple, intuitive control of the machine despite its enormously

wide range of facilities. All the essential functions can be controlled directly on the front panel itself. The system remote control handset is the clearly laid-out F100, which duplicates all the normal operations plus many supplementary functions and text input facilities. Basic settings such as loudspeaker calibration, balance, tone controls and choice of room sound matrix are carried out via a straightforward menu system using the remote control handset. The large-format, high-resolution VFD screen is graphics-capable, and displays data and information in context-sensitive form in multiple script sizes. It also features several levels of brightness.

The USB port on the front panel can be used to transfer and reproduce LPCM, MP3 and photo JPEG files with slide show facilities and film files via the integral DVD player. The DVD mechanism and the decoder reflect the very latest developments, and feature a sophisticated scaler which can upscale image resolution to 1080p. Picture output is via the digital HDMI socket or the ultra high-quality analogue YUV and video outputs. The very highest quality of HD picture can be achieved, limited only by the specification of the monitor or TV set connected to the unit. The DVD-specific menus are displayed on the television or monitor connected to the machine.

The integral headphone socket has its own amplifier, and switches off theloudspeaker outputs completely when in use. Like the K2 M, the K2 is fitted with an iPod dock on the back panel, including control system. As you would expect, the K2 also includes a convenient alarm timer.

The **K2 M** is additionally fitted with the proven network circuit board of the Music Player from the E-series and R-series. This Streaming Client provides a simple means of accessing local networks (optionally via W-LAN or LAN) as well as UPnP services, computers and Internet radio connected to it. T+A has signed a service contract with vTuner Internet Radio Service, permitting purchasers of our Streaming Client products to create free individual programme and favourites lists, which are automatically made available when you select Internet radio. iPods and USB memory sticks (rear audio-USB socket) are also controlled via the Streaming Client.

Circuit points

The circuit points on the machine's back panel reflects the impressive capabilities of the **K2 M**: five loudspeakers can be connected to the high-quality loudspeaker terminals. As in our High-End series of equipment, these terminals are made of gold-plated high-purity brass which is completely devoid of ferro-magnetic materials, and is therefore distortion-free. Loudspeaker pair B provides stereo sound to an adjacent room if required, while loudspeaker pair A and the Centre speaker serve the primary listening room. An output for an active sub-woofer in the main room is also provided in case it is necessary. If the E 2000 socket is used in conjunction with the supplied receiver, and the latter is installed in another room, then the volume can be set to different levels in the two rooms (or zones). A modern, high-performance digital signal processor takes care of all aspects of the audio signal processing task, generating the sound fields for virtual surround mode operations, carrying out the tone settings and setting the cross-over frequencies for the main speakers and sub-woofer (bass management) when appropriate, and processing and controlling the output signals of the loudspeaker channels. The signal processor also carries out the conversion stage on the three analogue inputs, so that these can also be processed digitally. The digital

data streams are converted by means of high-quality 24-bit 192 kHz D/A audio converters made by Wolfson.

The integral amplifiers take the form of high-speed switching output stages (double MOSFETS) which are an in-house development; these circuits deliver continuous power of more than 150 Watts and a maximum current of 25 Amps each - quite sufficient even for large loudspeakers and expansive rooms! The mains power supply has superb stability under load, while a low-dispersion toroidal transformer and high reservoir capacitance maintain ample reserves of energy at all times. Of course, a sophisticated protective circuit monitors all operating modes.
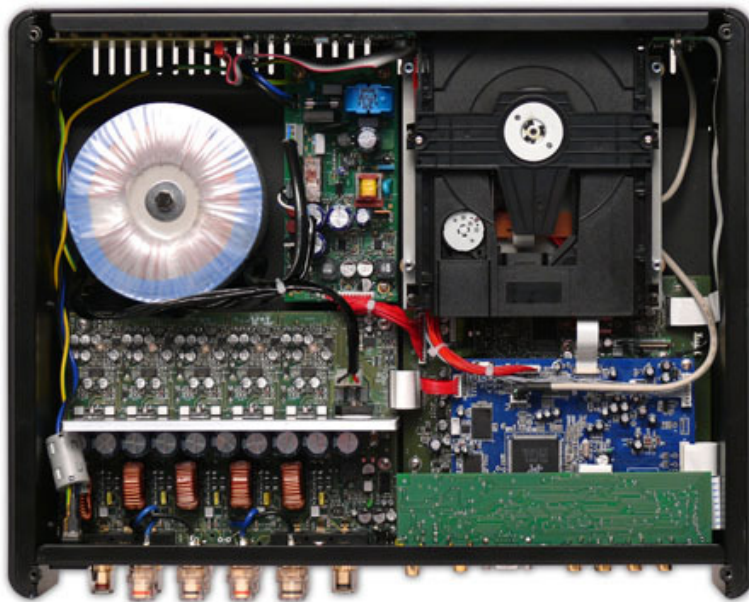
Depending on the television connected to the machine, you can set the picture output via standard video (CVBS) or - even better - via HDMI and YUV, exploiting any resolution you wish. Some Metz and Loewe TV sets can be remote controlled via the K2 if an optional cable is used.

Additional equipment can be connected to the three analogue audio sources (TV, Aux and Tape) and two digital audio sources (optical and Cinch), enabling the K2 to become the all-purpose core unit of your entire system. Since the integral VHF RDS tuner is of very high quality, we strongly recommend the use of an efficient external aerial.

The digital output reproduces all the digital sources, while the RS 232 port can be used to update the K2's firmware and control software.

The additional features of the **K2 M** provide access to new music media via the LAN socket, the W-LAN aerial, and the iPod and USB ports; music from Internet radio or from UPnP servers on the local network is reproduced to the highest standard of quality by the integral Streaming Client; depending on the resolution of the stored music, this can even sound better than the original CD.

Internals

- The mains power supply is equipped with a toroidal transformer for superb stability under load, and provides a generous excess of energy at all times.
- The control circuit board features a VFD screen with full graphics capability, offering a context-sensitive display of all the machine's wide-ranging functions.
- The new DVD mechanism is mounted in floating bearings, and features high-quality dual-laser optics.
- The ultra-modern main circuit board with control processor, digital signal processor and 24-bit 192 kHz D/A converters. All the digital inputs and outputs are integrated into this board, ensuring ultra-short signal paths.
- Five power output stages with modulator, double MOSFET transistors and heat-sink.
- Power amplifiers with reservoir capacitors, chokes and protective circuitry.
- DVD decoder board with 1080p scaler and video processing.
- High-quality audio input and video output board featuring high-speed video op-amps

with 150 MHz bandwidth.

■■ The Streaming Client board is the key to connecting to Internet radio, network, iPod and USB sources.

Specifications

Amplifier section

external inputs	Tape, Aux, TV (2V / 20 kOhm), iPod	
Headphone output	for dynamic headphone > 30 Ohm	
Recording output	1V / 150 Ohm	
Nominal output per channel (Stereo)	150 W into 4 Ohm	95 W into 8 Ohm
Peak output	230 W into 4 Ohm	130 W into 8 Ohm
Total harmonic distortion	< 0,005 %	
Intermodulation	< 0,005 %	
Channel separation	> 65 dB	
Frequency response	1 Hz - 60 kHz	

Operation modes, sound formats

Zone 1	Stereo (2.0 + 2.1),
	3-channel (3.0 + 3.1)
	Virtual Surround
Zone 2	Stereo 2.0
Bassmanagement, cross-over freq.	full-range,
	40, 60, 100, 150 Hz

Tuner section

Tuning frequency range	87,5 MHz - 108 MHz
Input sensitivity	2 uV
Overload margin	> 125 dB
Cross-talk (Stereo)	> 40 dB
RDS-Function	Station name, Radio text, time of day

Streaming Client   only K2 M

Formats	MP3, WMA, (WMDRM 10),
	AAC, FLAC, OGG-Vorbis
Media server	UPnP AV + DLNA-compatible servers,
	vTuner Internet Radio Service
Interfaces	USB 2.0, LAN, W-LAN
iPod dock	Playbaxk of audio and video files from the iPod, the iPod can be controlled and remote controlled

DVD-Player

Mechanism	Linear disc drive with dual-laser system
	(650 + 785 nm)
D/A Converter	24 Bit, 192 kHz
Digital output	SP-DIF, co-ax 0,5V / 75 Ohm,
	LPCM to IEC 958,
	Dolby Digital (AC3),
	dts to IEC 1937
Sound formats	LPCM, MPEG, Dolby Digital, dts as downmix
Video output	Composite (CVBS),
	YUV Progressive,

HDMI 1.2

PAL, NTSC, multi-norm,

format conversion 4:3, 16:9,

Letter Box, Pan Scan

Disk formats

Audio	CD, CD-R, CD/RW, MP3, Hybrid SACD CD Layer
Video	DVD-Video, DVD-R, DVD-RW, VCD, S-VCD
Photo	JPEG, Picture CD
Functions	Playback program, repeat functions, CD-Text, MP3 ID3 v2 Display, Trick modes (slow motion, static picture, pre-view, rotate), camera angle, zoom, image optimisation,
RS 232 Interface	for the control of appropriate equipped Metz or Loewe TV sets
Power consumption	max. 600 W, 0,5 W Standby
Dimensions (H x W x D)	10,7 x 44 x 35,5 cm
Weight	12 kg (26,5 lbs)
Remote control	Remote control handset F100
Features	Remote control handset F100, W-LAN aerial (only K2 M), IR-receiver E2000, clock, alarm function
Finish	black case with silver cover
Design	.molldesign 73525 Schwäbisch Gmünd / Germany www.molldesign.de

We reserve the rights to alter technical specifications

Brand new Stereo power amplifier S