

## 5.1 DVD-Surround-Receiver K6



A finely proportioned case made of solid, three-dimensionally sculpted aluminium accommodates everything required to form the basis of a perfect digital surround system.

- **Signal-processor controlled 5.1 Digitaldecoder**
- **Five 60 W output-stages for Surroundmode**
- **Two 15 W output-stages for a second room**
- **UKW-RDS Tuner**
- **Scart-input for TV, VCR, STB, etc.**
- **Two high level inputs**
- **Analogue and digital input for tape**
- **Zwei digital inputs**
- **Subwoofer-output**

This unit can boast an enormous wealth of features, but lacks the usual incomprehensible jumble of little buttons on the front panel. The secret behind this is a carefully structured operating system which is context-sensitive, making it possible to control this sophisticated piece of equipment using no more than a small remote control handset. The newly developed multi-function screen extends smoothly when the K 6 is switched on, and its biting sharp, clearly legible display supplies all the information you need. The case cover incorporates a refined cooling system based on an intelligently controlled fan; without this the K 6's enormous total power would not be possible.

### K6 - Internal view



Every millimetre of internal space is exploited in order to house the large number of circuit boards required, but they are arranged in an ingenious way aimed at eliminating mutual influence effects between the various sub-assemblies, or at least reducing them to a negligible minimum. Efficient sheet metal shields protect sensitive areas, and ensure excellent results in terms of both lab measurements and sound quality.

### K6 - Screen



The screen was developed specifically for the **K 6** and displays all the functions logically and in a clearly legible form. Although a wealth of information is available, the operating mode of the unit can always be recognised immediately. The system is controlled via the F6 remote control handset, and that is why there are no other controls on the front panel. The drawer is moved by means of a photo-sensor, and a set of knobs for operating the unit in an emergency are concealed under the left-hand front edge of the case.

### **K6 - Connection elements**



Connection elements component-version (CV)



Connection elements eu-version (scart)

The **K 6** can be connected to a maximum of 8 external units in addition to the integral tuner and DVD. 3 Scart and 1 Cinch input are provided for AV units, and RGB, FBAS or S-VHS equipment can be connected to the Scart inputs, although we naturally recommend RGB mode as it guarantees the highest quality.

2 analogue stereo inputs are also available, one of which can be converted to an MM or MC input simply by installing our high-quality PHE phono module. The unit also features inputs for one analogue and one digital tape recorder. To cater for external stereo or surround sources the **K 6** is fitted with one co-axial and one optical input.

## ***K6 - Signal processing***

At the heart of the **K 6** lies the digital signal processor (DSP). It is the processor which plays the role of pre-amplifier, and is responsible for signal processing, tone control and surround decoding. This digital pre-amplifier stage features 8 independent channels, of which 6 (5.1) are designed to provide surround sound in the main listening room while 2 feed an additional pair of loudspeakers, supplying independent stereo sound to an adjacent room. For the latter a stereo downmix is generated automatically when multi-channel program material is to be reproduced. An additional pre-amplifier output is also provided for connecting active loudspeakers.

The D/A conversion system is of crucial significance to the K 6's sound quality, and that is why each individual channel features a 192 kHz/24-bit Sigma-Delta converter of superb quality. In the interests of good dynamics the volume control follows the D/A conversion stage, and takes the classic form of accurate, low-noise, low-distortion analogue volume adjusters. These high-quality level adjusters are also used to adjust the level of the analogue inputs precisely to the optimum value for A/D conversion, which is carried out at a resolution of 20 bits. The digital sources, one internal source (DVD) and up to 3 external sources are fed directly into the digital pre-amplifier.

## ***K6 - Output stages***

The "Overture" output stages take the form of monolithic integrated power OPs. They are manufactured from a single mono-crystal of silicon using a complex process, and that is the key to their outstanding characteristics in terms of both power and measured values. The high performance of the **K 6** from such a small cabinet is due in no small part to the compact format of these components. The unit includes five output stages for surround operation, each rated at 60 W continuous output. For an adjacent room the K 6 provides a stereo output stage with a continuous output of 2 x 15 Watts.

The high overall power level naturally makes heavy demands on the power supply, and for this reason a conventional mains PSU was never considered for the K 6. Instead T + A has broken entirely new ground, and developed a forward-looking, intelligent, regulated mains section which self-adjusts its power absorption to meet the actual requirement, and this approach not only saves a great deal of energy, but also avoids unnecessary heat build-up. However, it is capable of providing up to 500 W of power at its peak.

## ***K6 - Tuner***

The tuner is based on our [T 1210 R](#) and is of exceptional quality. It includes a quadruple tuned front end with regulated Dual Gate MOS input stage which helps it to achieve very high reception sensitivity and excellent selectivity. It is ideally suited to both long-distance reception with a rotary aerial and also the closely packed cable networks. The RDS module stores the station names which it finds, and displays them on the screen. Of course, Radiotext can also be shown on the multi-function screen. 60 memory spots are available, and a well designed Autostore program makes it an easy matter to store a large number of stations.

## ***K6 - DVD***



	8 ohm	45 W	10 W
<i>Peak power per chanel</i>	4 ohm	90 W	20 W
	8 ohm	50 W	15 W
<i>Power bandwidth (+0 -3dB)</i>	5 Hz - 100 kHz		
<i>Frequency response (+0 -3dB)</i>	2 Hz - 150 kHz		
<i>Slew rate</i>	30 V / us		
<i>Damping factor</i>	> 300		
<i>Signal : noise ratio (A-weighted)</i>	> 110 dB		
<i>Total harmonic distortion</i>	< 0.002 %		

**Tuner**

<i>Sensitivity mono</i>	1.5 uV
<i>Sensitivity stereo</i>	45 uV
<i>Signal noise (St/Mo)</i>	68 / 73 dB
<i>Frequency response</i>	5 Hz - 15 kHz
<i>Total harmonic distortion (St/Mo)</i>	0.2 / 0.15 %
<i>RDS Function</i>	Station name, radiotext

**DVD**

<i>Mechanism</i>	Precision aluminium diecast linear drive GaAlAs demi conductor laser: 785 nm / 10mW (VCD / CD) 650 nm / 7mW (DVD)
<i>Formats</i>	CD-DA, Video-CD (1.0, 1.1, 2,0), D-VCD, CD-R single session, CD-RW single session, S-VCD (Chaoji, Shinco, CVD), D-SVCD, DVD Video (SL, DL, DS), DVD-R, DVD+R, DVD+RW 4.7GB Video, Hybrid SACD (CD-Layer only)
<i>Frequency response</i>	20 Hz - 20 KHz
<i>Distortion / intermodulation</i>	< 0,0015 %
<i>Effective System dynamics</i>	97 dB
<i>Signal-noise ratio</i>	109 dB
<i>Signal-noise ratio (unweighted)</i>	106 dB
<i>Channel seperation 1 kHz / 10 kHz</i>	106 dB / 100 dB
<i>Power</i>	110 V or 220/240V / 50 Hz, 550 VA Timer mit Weckfunktion Anschluss für Aktivboxen Kopfhöreranschluss Automatische Einpegelfunktion für Analogeingänge
<i>Dimensions (H x W x D)</i>	12,5 x 56 x 33 cm (Display inside) 15 x 56 x 33 cm (Display outside)
<i>Weight</i>	12 kg
<i>Colours</i>	Silber aluminium Black aluminium
<i>Remote control</i>	incl. F6

*We reserve the right to alter technical specifications*