Cala

Multi Source Audio System

T+A

In Hi-Fi circles T+A is actually a familiar name as manufacturer of very high-quality High-End separate components. Our unique V-series with valve technology, and the classic R-series with its audiophile solid-state design philosophy, reflect the tremendous capabilities of our products. However, these systems are necessarily large and complex, and are not for everyone. For this very reason we have been developing highly successful compact equipment since 1996. These machines are based on the expertise and technology invested in our High-End individual components, but combine all the parts of a system in a single case. We have produced our K-series devices in the form of receivers with CD, DVD and BluRay, while the Caruso is an extremely versatile AV-system which even features integral loudspeakers!

The smallest, most compact - and probably best-looking - stereo receiver that T+A has ever built is called *Cala*, and represents the ideal solution for any music enthusiast who demands high-quality sound from their stereo system, but also appreciates sophisticated design, perfect craftsmanship and compactness.

Although the *Cala* looks small, it is enormously capable and tremendously versatile. Two output stages with a continuous power of 55 Watts effortlessly drive any normal loudspeaker, and an active sub-woofer can also be connected if you prefer to use small speakers such as the *CS Mini*. The machine provides access to all modern music sources: a high-quality FM tuner, a streaming client for Internet radio, network access and facilities for hard discs, memory sticks and iPod, plus a Bluetooth module to A2DP standard. The latter represents a fast, simple method of pairing any mobile audio device to the receiver, and therefore provides extremely convenient audio file playback. There are also two analogue inputs, typically intended for connecting a TV set in order to improve the generally inadequate sound quality.

The *Cala*'s uncluttered front panel is devoid of physical controls, as all its functions are operated using the F 100 system remote control in a logical and intuitive manner. The large-format, high-resolution graphic screen displays all data and information in context-sensitive form in multiple font sizes, and offers user-variable screen brightness. All the signal processing takes place at the digital level thanks to the machine's ultra-modern digital signal processor; we term this concept "Pure Path" technology. It provides a crucial improvement in sound quality, as it eliminates the need for additional conversion of the digital sources, and all data processing is carried out at 24-bit resolution with HD audio quality.
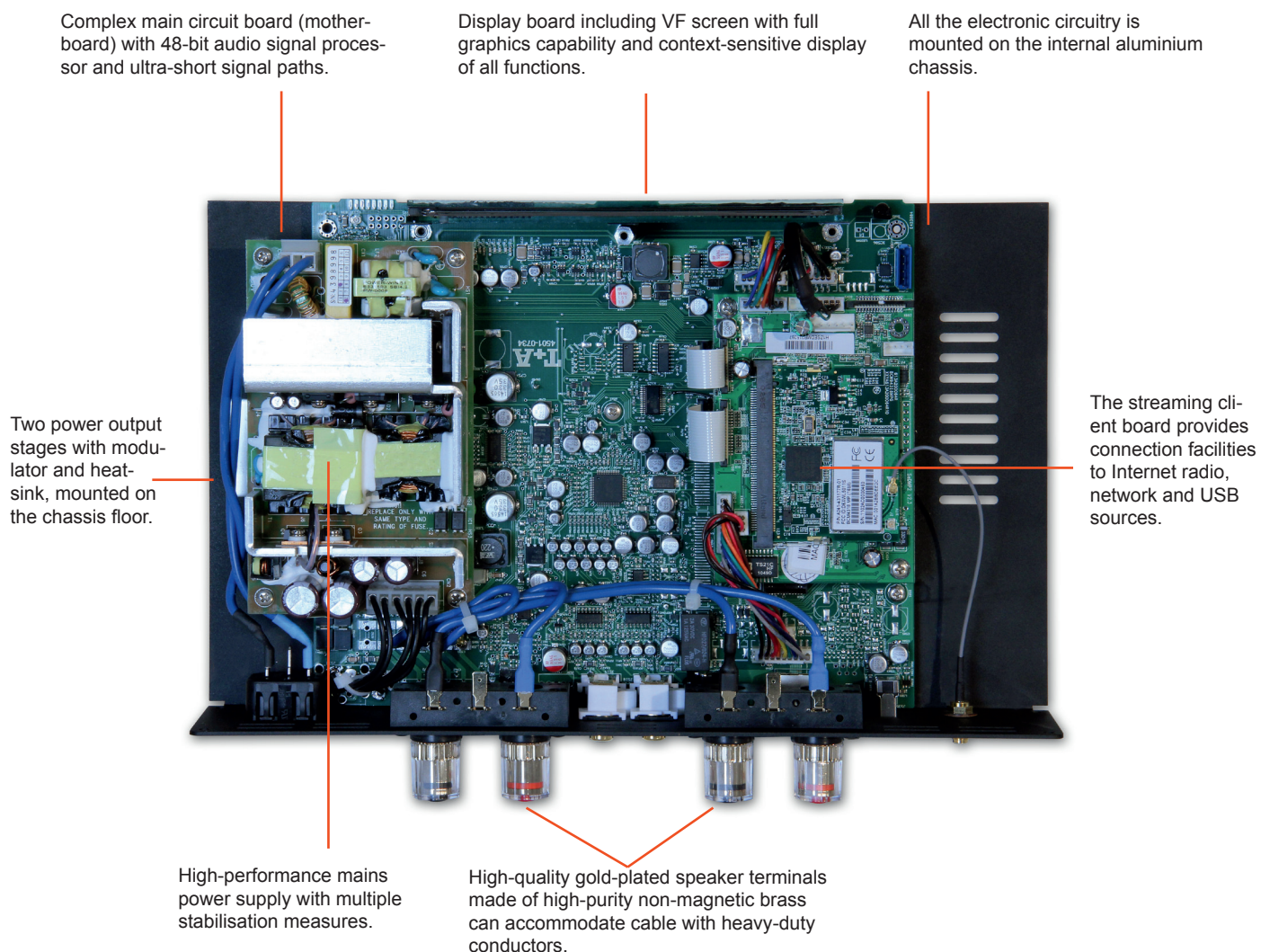

The array of sockets on the back panel demonstrates the *Cala*'s impressive facilities. It includes two analogue inputs, typically for connecting a TV set. Access to new music media is provided by a LAN socket and a WLAN aerial, while the USB port is designed to accept hard discs and memory sticks, or an iPod including control system and battery charging. Since the integral VHF RDS tuner is of very high quality, we recommend the use of a first-class external aerial. The heavy-duty loudspeaker terminals are capable of accommodating cable of large cross-section, and an output for an active sub-woofer is also present.

A fully featured receiver the size of the *Cala*, with its high level of performance and features, is only possible if it implements the latest technologies and components. All the audio signal processing is carried out by a high-performance digital signal processor: it generates the sound fields required to cater for various installed positions, regulates all the tone settings and cut-off frequencies for the main loudspeakers and sub-woofer (bass management) where necessary, processes and controls the loudspeaker channel output signals, and converts the two analogue inputs so that they can also be processed digitally.

The amplifier section consists of high-speed bridged switching output stages with a continuous output of more than 50 Watts - ample even for large loudspeakers and big rooms! An effectively stabilised mains power supply provides ample energy at all times, while - as you would expect - a sophisticated protective circuit monitors all the machine's operating states.

The *Cala* is equipped with our Streaming Client, granting access to the local network (optionally via WLAN or LAN), and all UPnP servers connected to it, including computers and Internet radio. T+A has arranged a service contract with **vTuner Internet Radio Service** which enables purchasers of our streaming client products to create individual station and favourites lists at no charge; these are presented automatically when Internet radio is selected.

Complex main circuit board (motherboard) with 48-bit audio signal processor and ultra-short signal paths.

Display board including VF screen with full graphics capability and context-sensitive display of all functions.

All the electronic circuitry is mounted on the internal aluminium chassis.

Two power output stages with modulator and heatsink, mounted on the chassis floor.

The streaming client board provides connection facilities to Internet radio, network and USB sources.

High-performance mains power supply with multiple stabilisation measures.

High-quality gold-plated speaker terminals made of high-purity non-magnetic brass can accommodate cable with heavy-duty conductors.

The case is made of solid aluminium, and is produced in a single process using a complex extruding tool. It is then blasted with fine glass beads before being anodised. The internal chassis, on which all the electronic circuitry is mounted, is also made of aluminium, while the front panel and top cover consist of high-gloss acrylic.

The *CS Mini* is a small loudspeaker, but only in its physical dimensions. Although just 13 cm wide, 15 cm deep and 22 cm tall, it sounds like a big speaker right up to quite high levels. This is possible because its cabinet is made of solid aluminium, whose walls are much thinner than those of a comparable cabinet made of timber. The result is a substantial effective internal volume and correspondingly good bass response. As with the *Cala* , the whole case is produced as a sophisticated extrusion, including all stiffening elements and mounting lugs, allowing it to exhibit completely flawless external surfaces all round, with their glass bead blasted and anodised finish. The high-quality two-way drive unit arrangement consists of a bass / mid-range driver with large magnet and special cone with good damping, and a 25 mm woven dome tweeter. Combined with a refined cross-over unit with low bass equalisation, these excellent internal units produce an amazingly harmonious and natural sound quality.

The *CS Mini* is extremely versatile: as a small Hi-Fi speaker set up on a shelf or close to a wall, or as the basis for a high-end satellite system in combination with our K-series KW 650 sub-woofer.

These speakers are very efficient, and match the *Cala* in performance and visual terms.

Specifications

Cala

Streaming Client

Formats	MP3, WMA, AAC, FLAC, OGG-Vorbis, LPCM, WAV,
Media server	UPnP AV, vTuner Internet Radio Service 🌐 *vTuner*
	DLNA compatible servers
Interfaces	USB 2.0, LAN, WLAN, iPod via USB, including control system

Bluetooth

	A2DP Bluetooth audio transmission protocol

Tuner section

Reception range	87.5 - 108 MHz
Sensitivity	2 µV
Overload margin	> 125 dB
Stereo crosstalk attenuation	> 40 dB
Functions	RDS, station name, Radiotext, clock, station lists, station memory

Amplifier section

Inputs	2 x Aux, 0.5 V .... 2.75 V / 20 kOhms
Nominal output per channel	55 Watts into 4 Ohms
Total harmonic distortion	< 0.02%
Sound management	DSP controlled sound characteristics
Sound enhancement	Bass extension and linearisation with particular T+A speakers
Bass management	Full-range, 40 Hz, 60 Hz, 100 Hz, 150 Hz
Outputs	SUB Out RCA
Mains connection	Wide-band mains power supply, 100 - 240 V, 50 - 60 Hz
Accessories	F100 system remote control, WLAN aerial, FM aerial
Features	Variable screen brightness, dual-time alarm
Dimensions, H x W x D	9.5 x 30 x 21 cm / 3.7 x 11.8 x 8.3 inch
Weight	4 kg / 8.8 lb
Finishes	Case silver aluminium 43, front and top cover black acrylic 91

CS Mini

Type	Two-way bass reflex
Nominal load	40 Watts
Peak output (4 Ohms)	60 Watts
Frequency range	50 - 30,000 Hz
Bass / mid-range driver	1 x 100 mm
High-frequency driver	1 x 25 mm woven dome
Cut-off frequency	2500 Hz
Dimensions, H x W x D	21.5 x 12.5 x 15 cm / 8.5 x 4.9 x 5.9 inch
Weight	3 kg / 6.6 lb
Finishes	Silver 43, front grille black

Technical modifications reserved