

ATC New Active 10 speaker and CA2 pre-amp

Getting actively involved: a professional combination

PRICE £999/pair, £750 pre-amp

SUPPLIER ATC

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Few loudspeakers that come my way for review find themselves returned unopened. The ultimate dismissal? Well no; I simply mean that this new monitor is so cunningly put together that my usual enthusiasm with screwdriver and Allen keys was subdued once I'd removed the outer base panel. That tentative incursion did, however, give me some useful insight.

The new active version of ATC's compact '10' monitor owes its striking appearance to the award winning SCM 70, three-way design. It is similarly curved in profile, with substantial aluminium extrusions forming the entire outer back panel and the baffle side edge trims. The bulk of the cabinet is made of a dense, laminated MDF composite, with the top and bottom two-layer sandwiches some 38mm thick. The rear panel is narrower than the baffle so that the enclosure has a wedge shaped profile, with its largest panels, the sides, non-parallel.

The aluminium extrusions are very substantial indeed, even the front trims which are some 9mm thick at maximum have a 27mm deep 'key' into the MDF baffle edge. The rear extrusion is heavily finned and contains the last 18mm or so of the side panels. This extrusion forms a necessarily effective heatsink for the on-board power amplifiers which run in Class A up to some two-thirds of their rated power. The outer top panel layer extends over the ends of the fins and has three neat mesh-inset holes to encourage the free flow of air over the fins. The baffle is covered by a very substantial, heavily perforated (see-through) fixed metal grille.

This is a two-way, 10-litre infinite baffle design employing ATC's smallest (125mm) 'soft dome' bass/midrange driver in conjunction with an excellent fabric dome, neodymium magnet based tweeter from the Scandinavian company Vifa. Weighing in excess of 3.5kg this latest version of the ATC driver is a beautiful piece of work. It features a hand-wound, flat OFC wire



Active: the two-way '10 uses ATC's smallest 'soft dome' bass/midrange driver

voice coil to maximise the quantity of copper in the magnetic gap. As usual ATC has opted for a long coil and a short gap to maximise cone excursion capability (in excess of 20mm) and linearity. The doped fabric cone is complemented by a large, prominent central soft dome, the two forming a composite profile developed and refined by ATC over the years. Both units are flush mounted on the baffle, the LF at its centre and the HF above and as close to it as possible.

Active loudspeakers represent the synergistic approach *par excellence* in their matching of drive and driver. Line-level active crossovers permit fine tailoring of the response to suit the characteristics of the units and their cabinet loading, enabling a wide frequency response with minimal phase distortion in the transitional region range and the possibility of enhanced bass 'reach' for any given enclosure type and volume. ATC has included momentary gain

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reduction limiters to prevent damage to the units under extreme drive conditions. Here a 200W amplifier module is dedicated to the bass/midrange driver and 50W to the tweeter. The input is on balanced XLR connectors, reflecting the company's studio heritage but an eminently sensible choice anyway, enabling the use of exceptionally long pre/power cables.

CA2 PRE-AMPLIFIER

Although it is possible to wire an XLR input plug so as to use the SCM10-2 with a conventional unbalanced-output (phono socket-equipped) pre-amplifier (indeed wiring diagrams are provided), the logical partner is a balanced output unit such as ATC's new CA2. Owing much to the company's high-end £3000 SCA2 pre-amplifier, this new model has five line-level inputs as standard plus a separate tape monitor. It, too, is supplied with an infra-red handset. All the inputs are single-ended on gold-plated phono sockets and are labelled CD, AV, Tuner, Aux 1 and Aux 2/Phono. The last of these can be reconfigured to accept the output from an LP pickup cartridge by the addition of an optional (but not inexpensive at £280) RIAA module which is soldered above the main circuit board. Preset jumpers allow a choice of four gain and two load impedance settings, to suit a wide range of cartridges.

Something of a cross between domestic and professional in styling, the CA2 is housed in a silvered steel case with a 12mm thick machined aluminium front panel into which is let a black anodised sub-fascia. There are just five controls: machined bright metal rotary knobs for Level (volume) and Input selection (a continuously rotatable encoder) and pushbuttons for Tape, Mute and Standby. Both rotary controls have double 'O'-ring rubber friction grips. There is no calibration for volume, just a gold pimple on the perimeter of the knob as a visual indicator of the setting. Small green LEDs indicate the selected input, larger ones the Tape monitor and Mute, while a large red one lights in Standby. One final red LED blinks in recognition of an instruction from the handset. The unit is normally left



Pro styling? The CA2's 12mm machined aluminium front panel and black anodised fascia

powered so the mains switch is on the rear panel. The very low output impedance of 10 ohms makes the circuit ideal for driving headphones as well as long cables, so a non-switched 6.35mm jack socket is provided on the rear panel.

ATC's 22-button handset is supplied in the package. Originally specified for the SCA2 it caters for the CA2 as well, although the former has more inputs. Basic CD player controls are included — Play, Stop, Pause, Track, Search and Standby — and will be accepted by any RC5-based player. For the CA2 the handset provides Source selection, Tape monitoring, Volume control, Mute and Standby.

The power supply and line-level circuitry is laid out neatly on a single board. All signal input and output sockets are board mounted so that there are flying leads only from the toroidal mains transformer, the motorised volume control and the separate switch/logic/indicator board mounted behind the fascia. Monolithic IC regulators define the main $\pm 15V$ DC supply while an independent 5V regulator is employed for the logic/display, fed from a separate winding on the transformer. The entire line-level circuit is built with discrete components. Signal ICs are used only on the RIAA board.

Used independently in place of the equivalent in my regular system, the CA2 was clean, crisp and clear. It does all that can be asked without fuss or complaint. Stereo definition is spot on, with no tendency for the image to crowd at high energy levels or lose focus when hushed. The RIAA eq is accurate (the IEC's optional low frequency 'rumble' pole at 7950µs is not included), the result again analytical in the best sense, with no tendency to 'dwell' on surface imperfections. There's everything to enjoy, then, and little to criticise about this pre-amplifier. Its aesthetics may not harmonise with all surroundings but in terms of its sonic behaviour it is well nigh flawless.

So too the New Active 10 given the limitations



of its physique. A smooth, seamless tonal balance has been achieved, with little inherent character. Its marriage of tightly specified amplifiers and superlative drivers in a substantially inert cabinet provides an unequivocally musical result, the equal of any signal source in terms of articulation and dynamic capability — it is something of a revelation to hear a domestic loudspeaker which is patently unconstrained. Classical, jazz, pop or rock, it expresses no preference. Complex images are effortlessly resolved, the sound stage full and stable at any dynamic level, the 'pacing' always tight and crisp. It profits from placement on heavy stands away from the side walls and well away from the rear but otherwise is remarkably unfussy. The bass isn't a match for that available from bigger enclosures but it is surprisingly effective, falling away gracefully below about 70Hz and entirely free of boom.

I've little more to add. Extremely well made and with a performance to equal the most stringent demands, this partnership offers high-end performance at well below typical high-end prices: £750 for the pre-amplifier (RIAA board £280 extra) and £999 per pair for the loudspeakers. All you need add are the source components, some stands and the cabling.

WORDS IVOR HUMPHREYS

TECHNOLOGY: New Active 10 speaker

Balanced input design incorporating separate power amplifiers for each of the two drive units. Compact, closed box enclosure best positioned well away from the room boundaries

KEY FEATURES

- Compact two-way IB enclosure
- Active drive needing a separate power amp
- Capable of very high sound-pressure levels

TECHNOLOGY: CA2 pre-amp

Wide bandwidth (DC-200kHz $\pm 0.1dB$); ultra low distortion. All-discrete line-level signal circuitry. Balanced output stage capable of driving long interconnects.

KEY FEATURES

- No balance or tone controls and no filters
- Five line-level inputs plus tape monitor
- Remote control of all functions