

### New Sony range

Sony recently launched their new 1990/91 range of component audio and ES separates, with a number of new amplifiers, tuners, cassette decks and CD players, plus various video items including televisions and video cassette recorders. There is not space here to describe all of these but details of some of the new hi-fi components will be of particular interest to GRAMOPHONE readers.

There are five new integrated amplifiers: the TAF120B at £99.99 (40 Watts per channel into 8 Ohms, five inputs including a separate tape monitor, simple tone controls and provision for two sets of loudspeakers); the TAF220B at £149.99 (70 Watts per channel with six inputs and a separate record-out selector); the TAF411RB at £169.99 (adding remote control to this—including volume adjustment); the TAF420B at £199.99 (90 Watts per channel plus optional MM/MC phono input); and the TAV501B at £299.99, which is an audio/visual surround-sound model, with 100 Watts per channel main amplifiers plus 30 Watts rear and including effects such as Dolby, Hall and Simulated Surround-Sound with a three-position rear channel digital delay.

The single addition to the tuner range is the STS320LB at £149.99. This is a three waveband design (FM/MW/LW) with 30 presets arranged in three groups of ten. Stations can be given a four-character name which is displayed in place of the frequency. Memory scan (cycles through the presets, stopping for a few seconds on each), a Local/DX switch and IF bandwidth switch are included, and the unit can be remote controlled via optional connections to an appropriate Sony amplifier.

There are no less than nine new cassette decks, including four in the



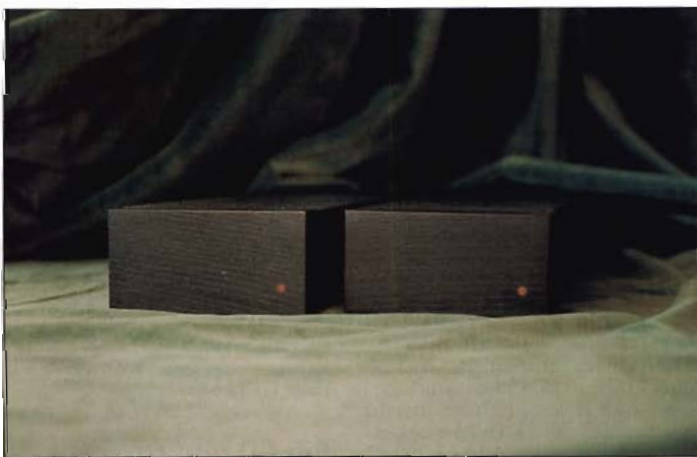
The new Sony TAF420 90 Watts per channel integrated amplifier; this photo shows a pre-release version with a prototype model number

up-market ES range. The base model is the TCFX120B which has a new motor mechanism with soft-touch control, Dolby B and C plus fine bias adjustment and automatic tape type selection. A headphones socket is included and the cost is £89.99. The TCK420B (£129.99) has two motors and adds Dolby HX Pro, logic-controlled operation, the facility to insert a four-second silence between tracks, and automatic music search either forwards or reverse. Use of a separate mains timer is possible and remote control is possible via the optional RMJ701 handset (£19.99). The TCK520B (£169.99) has three motors and a new cassette stabilizer mechanism. The fluorescent display is switchable to show full operational details, linear tape position counter only or nothing at all.

The double decks are the TCW320 (£129.99), offering continuous play and high speed synchro-dubbing and optional remote control; the TCWR620B (£199.99) with two motors per transport plus HX Pro,

“blank skip” (fast winds to the end of a gap longer than ten seconds) and wind-on play (moves on to the end of the tape after the music stops before replaying the reverse side); and the TCWR820B (£349.99) which has six motors, quick acting reverse, independent headphones level control, switchable MPX filter and automatic recording level control. This model is supplied with a remote control handset and can be synchronized with a Sony CD player.

The ES single deck models are the TCRX70ES (£199.99) with three motors, Dolby B, C and HX Pro, cassette stabilizer, linear tape position counter and Sony’s “autofocus” record level circuit; the TCK650ES (£249.99) with three record/replay heads; the TCK850ES (£399.99) with a quartz-lock direct-drive three-motor transport and a “CD Direct In” feature which allows direct connection without an intervening preamplifier; and the TCK950ES (£599.99) which is reviewed by John Borwick on page 646.



### Moth monos

Moth Marketing have introduced a new mono power amplifier to complement their existing Thirty Series of components described in March (page 1727). Capable of a peak current of 30 Amps and thus easily capable of driving awkward loudspeaker loads, a pair of the new amplifiers offers a significant improvement in output level over the

existing 30 Watts stereo design, which of course has a shared power supply; the performance into 4 Ohms is enhanced by almost 6dB. The Mono amplifier has two pairs of output socket/binding posts to enable the ready connection of bi-wired loudspeakers, and costs £399 per pair. Further details from Moth Group, 10 Dane Lane, Wilstead, Beds MK45 3HT:

### Meridian converter

Following on from the development of the 208 CD player (reviewed in July), Meridian have released a stand-alone Bitstream D/A converter, the 203 which can be used with any CD transport (or CD player with a digital output) or DAT machine. Like the 208, the 203 employs the Philips one-bit PDM (Pulse Density Modulation) technique of 256-times oversampling and noise-shaping for its conversion process. Two Bitstream ‘chips’, one per channel are used in Meridian’s preferred differential mode, with passive filtering followed by an operational amplifier mixer. Common-mode noise and distortion signals are thus effectively eliminated, leaving a very high purity output signal. A high performance is claimed with linearity better than 0.2dB at levels down to -120dB and a signal-to-noise ratio greater than 106dB. Sonically this is said to manifest itself in “outstanding resolution of fine detail, accurate presentation of the soundstage, and preservation of musical timbre and dynamics at all signal levels”. The 203 also incorporates Meridian’s new digital clock signal circuit which claims a reduction in jitter of 100

The new ES range CD players all use Sony’s High Density Linear Converter System—their version of the increasingly popular one-bit approach. This uses a pulse length modulation (PLM) process with a clock speed of around 45MHz (1024 times the normal 44.1kHz sampling frequency) to produce a single-bit stream which is followed by gentle filtering to recover the wanted audio signal. Distortion levels of 0.001% (THD plus noise) are possible and in the complementary configuration the circuit can achieve a signal-to-noise ratio of 124dB. The CDPX33ES (£399.99) has independent converters for the two stereo channels, programming for 20 tracks, a headphones socket, fixed and variable outputs plus an optical digital output, custom file edit facilities and a two-mode display plus a “gibraltar” (resin plastic plus calcium carbonate reinforced with glass fibre) chassis. The CDPX55ES (£599.99) adds to this separate mains transformers for the digital and analogue circuits and copper-plated internal surfaces. The top model, the CDPX77ES (£999.99), uses the complementary mode converter system, separate power supplies, physically isolated digital and analogue circuit boards and all controls except the basic functions, on the remote control. The transport is also placed centrally. Geoffrey Horn will review this machine next month. Sony now have extremely sophisticated Editing features such as Peak Search, Multidisc programming, Time Editing, Time Fade, Variable Fade, Disc Memo and Custom Index, full details of which, together with the specifications of the other models in Sony’s new ranges, are available from Sony (UK) Ltd., Sony House, South Street, Staines, Middlesex TW18 4PF.

times compared with the output of a typical CD transport. Automatic sampling frequency detection is used for DAT’s 32kHz and 48kHz, and CD’s 44.1kHz and the 203 has coaxial and optical inputs. As in the 208, advanced four-layer circuit boards are employed. The 203 retails at £495. Meridian Audio Ltd., Eccleston Road, Tovil, Maidstone, Kent ME15 6QP.

### Ruark stands

Ruark Acoustics have introduced a new stand for their Sabre and Broadsword loudspeakers (the latter reviewed in November 1986). The stand has a Medite base which is styled to match the loudspeaker cabinet and on this are mounted four cylindrical metal uprights finished in textured black paint. Spikes are provided to enhance the stability of the stand which is 480mm high. The base is finished in dark walnut or black ash and the stand costs £99.95 per pair. A stand for the Swordsman loudspeaker is to be introduced in the near future. Ruark Acoustics Ltd., Units 2 & 9, Anwood Lodge Industrial Estate, Arterial Road, Rayleigh, Essex SS6 7UA.