

case was there the edgy metallic tail so common in short halls and rooms on digital reverbs.

Plates on the unit have high initial diffusion and brightly colored reflections. The bright plate was especially useful for vocal and percussion applications, and was equally good on guitar sounds.

Chorus 1 produces stereo flanging; the delay knob sets flanging depth while decay sets feedback. Chorus 2 is a chromatic resonator which works wonderfully on piano-type keyboard sounds. Lexicon's two delay programs fared impressively in all applications and the small rooms and gate were great for percussion sounds. Keeping the mix control back on more intense percussion hits worked better when using the small rooms on entire kits.

It's tough to pick what to laud the LXP-1 more for—the way it sounds or what it can do. Perhaps it's best to simply listen. At \$499, you can hardly afford not to. Five stars.

—Dan Daley

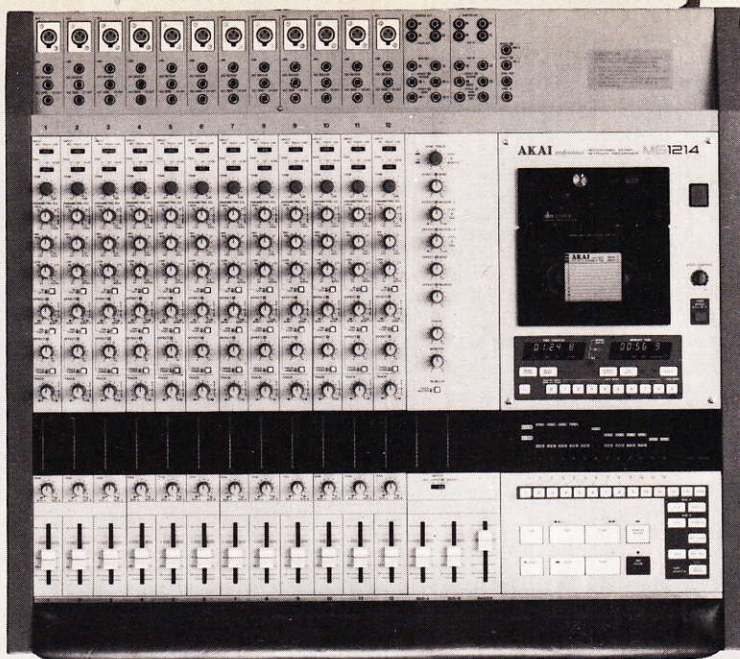
A guide to home studio recorders

HOME STUDIOS ARE ONE OF the fastest-growing segments of the music equipment industry. The availability of inexpensive multi-track recorders is killing the low-end professional studio scene. After all, why should musicians pay \$1,000 to record on someone else's four- or eight-track when they can purchase their own system for the same price?

Most demo tracking and pre-production is now done at home. Be it a simple four-track cassette deck or a full-blown, near-pro quality set-up, the private home studio is now standard equipment for the serious musician.

This month, we'll check out some home studio recorders from major manufacturers. As always, prices quoted are manufacturer's suggested list. Discounts are harder to come by here than for items like guitars or amplifiers, though, since fewer dealers sell home studio recorders. (Less competition means higher prices—that's capitalism in action.)

The **Akai MG 1214** (\$9,000) sits at the extreme high end of the home studio range (so high it could be considered pro gear). This machine



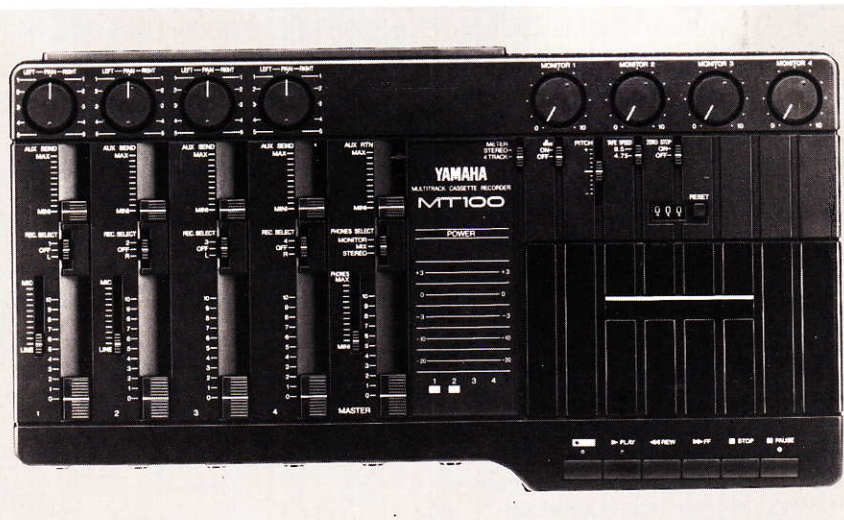
Akai's MG 1214 is no beginner's model. This versatile cassette recorder captures 12 audio tracks for a costly but well-merited \$9,000.

combines a full-function, 12-channel mixer with a 14-track capable of recording 12 audio tracks. The remaining two tracks are for internal control and recording sync or SMPTE Timecode signal (for synchronizing with other machines). Akai's original 1/2" cassette tape format is incorporated, providing either 10 or 20 minutes of recording time, depending on the tape speed chosen.

The MG 1214 provides more punch per square inch than almost anything on the market, with specs like 115dB dynamic range, 94dB signal-to-noise ratio, dbx Type 1 noise reduction and 50Hz-to-20kHz frequency response. Additional features include three-band parametric EQ, two independent effect sends and computer-controlled auto

locator. A great home recorder, it's also perfect for applications such as post-production, live mixing/recording and mobile recording. It's not for everyone (look at the price again) but if you have the means, do check it out.

Fostex has launched a line of home studio products ranging from tiny four-track cassette recorders to its somewhat legendary 16-track 1/2" open-reel machines. The Model 160 Multitracker (\$840) is a straightforward four-track cassette recorder with some very worthwhile features. Designed as a tabletop unit (like other constituents of the Fostex 60 Series), the Model 160's patch points face straight up for easy access and quick repatching. The four inputs, divided into two mic/line and two line-only inputs, can be used



At \$495, Yamaha's MT 100 is a straightforward four-track warranting consideration by any home recording novice.

for simultaneous four-track recording.

Each channel includes a straight-line volume fader, high and low EQ, pan and aux send. A high tape speed ($3\frac{3}{4}$ ips) allows the tape to capture sounds more realistically, with reduced hiss. Frequency response is a respectable 40Hz to 14kHz, with total harmonic distortion of 1.5% at 1kHz, 0dB level in the recorder section.

Now let's say you're in a band that owns a complete PA system with a full mixing console. In many cases, it might not make economic sense to purchase a combination multi-track recorder/mixer; you might not need another mixer. For you, **Peavey** has developed the MCR 4/A (\$999), a four-track cassette recorder easily adaptable to fit within your band's equipment rack.

The dual-speed MCR 4/A includes a level control and LED meter for each channel, zero stop and zero play functions, four-digit LED tape counter, switchable Dolby B/C noise reduction and Dolby defeat for Track 4 (in case you want to record Timecode). Frequency response is rated at 40Hz to 14kHz ± 3 dB while wow and flutter is 0.4%. The conservative design of the MCR 4/A ensures reliability in the rugged conditions where your band usually treads (Have you taken a look at your rehearsal space lately?).

One could argue that **Tascam**, back when the company was known as TEAC, started the whole home studio craze in 1972 with the Model 3340, a $\frac{1}{4}$ " open-reel multi-track often considered the first domestic four-track. That machine and its descendants were the backbone of most home studios for more than a decade; many are still in operation.

In the early '80s, Tascam expanded into the multi-track cassette/mixer field with units like the Model 144 Portastudio. One particularly interesting model in Tascam's current line is the Porta Two (\$949). This four-track cassette unit combines the convenience of Tascam's Ministudio format (small, low-profile design and very basic controls) with a six-input mixer section. All six channels accept microphone, instrument or line-level inputs, and individual channel trim controls help ensure matching levels.

Featured on each channel are a straight-line fader, pan control, effects send, and high and low fixed-point EQ controls. Other features include switchable dbx, $\pm 12\%$ pitch control, master effects return and battery operation for remote use. The Porta Two runs at standard cassette speed



The Tascam Porta Two is a four-track combining the convenience of the manufacturer's Ministudio model with a six-input mixer. It lists for \$949.

($1\frac{7}{8}$ ips) with a frequency response rated at 40Hz to 12.5kHz ± 3 dB (dbx out).

Vestax has made a bold break from the home studio pack with its new MR-66 (\$1,399.50), a six-track cassette recorder. Yes, that's right... six tracks. Why six? Well, besides the obvious more-is-better theory, six tracks are particularly useful for those who record synths and drum machines. If you use a standard four-track, for instance, and record a sync track (to lock up the drum machines and synths to tape), you're left with only three open tracks. With six tracks, you've got room for the sync track plus an extra. For us non-synth-heads, the extra tracks on the MR-66 provide room for layered background vocals, percussion overdubs, double-tracked guitar leads, or a plethora of other possible goodies (Good thinking, Vestax).

Features on the MR-66 include a 6-by-2 line mixer, trim controls, normal and high tape speed, MIDI sync on/off switch, sync level control, switchable dbx noise reduction and a hefty 34-terminal patchbay on the front of the unit. Vestax claims an impressive 20Hz-to-18kHz (± 3 dB) frequency response, with harmonic distortion totalling 0.05% and a signal-to-noise ratio of 95dB (with dbx).

From **Yamaha** comes the delightfully simple MT100 multi-track cassette recorder (\$495). This tiny four-track cassette operates at standard and high speed, with a frequency response of

40Hz to 18kHz (at high speed). It includes an aux send with individual send level controls on each channel and a master aux return, switchable dbx noise reduction, pan control on all channels, monitor level controls and trim controls on two channels to handle the difference between mic and line inputs. An optional FS-1 footswitch permits hands-off punch in/out operation. The beauty of this machine is that it's so simple. Plug in, press record and off you go.

—Richard J. Grula

