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Pioneer SR-202 Reverberation Unit

MANUFACTURER'S SPECIFICATIONS:

Transistors and Diodes: 11 and 2. **Output Voltage,** rms: 330 mV at 1000 Hz (Reverberation time MIN; input level, 200 mV. **Maximum Input Level:** 3.0 V at 1000 Hz (Reverberation time MIN); **Harmonic Distortion:** Less than 0.2% at 1000 Hz (Reverberation time MIN; output level 330 mV. **Frequency Response:** ± 2 dB 20 Hz to 35 kHz (Reverberation time MIN); ± 10 dB 20 Hz to 50 kHz (Reverberation time MAX.) S/N: 65 dB (at 330 mV output). **Reverberation Time:** 1.9 to 3.2 sec. (at 1000 Hz.) **Input Impedance:** 300 k ohms (at 1000 Hz.) **Dimensions:** 11¹³/₁₆" W x 4¹/₂" H x 9¹³/₁₆" W. **Weight:** 8³/₄ lbs. **Price:** \$95.00.

Here is a device that could well become the answer to the problem encountered by the serious enthusiast who has equipped his system for four-channel than three selections to play on the expanded system. Of course, more rock music will be available on records or tapes in the future, but what does he play now? *Anyone* would soon tire of Berlioz Requiem, we imagine.

But suppose the hypothetical enthusiast has equipped his system for four-channel reproduction. What does he do with his present collection of otherwise-good two-channel music? He already has those speakers at the back of his room, and he has nothing to play on them. (Except four versions of the Requiem.)

The SR-202 Reverberation Amplifier is a simple solution. He connects the rear speakers to their amplifiers tied to the output of the SR-202 and he is in business. He introduces a controlled amount of reverberation from any stereo or mono source and effectively doubles the size of his listening room, because he can introduce any desired degree of reverberation to his rear speakers. By suitable switching, he can add a multitude of effects to his reproduction with a minimum of expense or effort.

The SR-202 is a neat, small device which is normally connected between the record output jacks of the receiver or amplifier and the tape monitor jacks—or to one or two tape recorders. With no further connections, the user can add reverberation to the loudspeaker sound without making a tape recording, make a recording without reverberation and add reverb to the loudspeaker sound, add



P. S.
Now supplied
with wood case
(not shown).

reverb to both the recorded sound and the loudspeaker output, record without adding reverb to either the recording or the loudspeaker, or simply feed the sound to the loudspeaker in the normal manner without recording at all. This is the result of the switching and the manner of interconnecting the SR-202 to the system.

The Circuit

The SR-202 Reverberation amplifier consists of an input emitter follower in each channel, with their outputs joined to provide a single signal to drive the spring reverberator unit. The reverberation unit had two outputs, and each is amplified by a two-stage booster amplifier and fed to the output through two switches which provide complete control of the functions of the device. A tapped primary on the power transformer permits operation from any line voltage from 110 to 240, and two a.c. receptacles provide for connection to auxiliary devices, one of them being switched. The d.c. output voltage from the power supply is regulated for consistent operation.

Performance

Response curves on the SR-202 would be somewhat superfluous, since the delay time plays havoc with the response in the 200-600-Hz range. Outside of that, however, the response is fairly smooth up to 20 kHz, as would be expected from a study of the basic principles of operation. The important part of the discussion is that the unit performs as it is expected to do. Reverberation does have the characteristic repetitive quality of any spring-type reverberator, but considering its size and its flexibility, we can only suggest that it is the answer to any user who longs for some signal to feed those so-far-underworked rear speakers. We firmly believe that the SR-202, an extra amplifier, and one or two rear speakers can add a lot to any existing system, even though it is not yet fully converted to four-channel operation.

Available at all AUDIO CLUBS, at special overseas military prices.

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