Craftsmen C250 Solitaire

SPECIFICATIONS (furnished by manufacturer): a compact integrated preamp-control unit and amplifier. Inputs: equalized input for magnetic phono cartridges; three high-level inputs marked for Tuner, TV, and Tape. Controls: combined input selector and phono equalization switch (Tape, TV, Tuner; six phono positions with AES, Lon, RIAA, LP, Eur, or NAB equalization); three-position low-frequency cutoff switch (Flat, 40, 150 cycles); Bass (+15 to -13 db, 50 cycles); Loudness (with concentric uncompensated volume or level-set control); Treble (+15 to -13 db, 10,000 cycles); three-position high-frequency cutoff filter (Flat, 6½, 3 kc); AC power on-off switch. Hum null adjustment under chassis. Outputs: low-impedance output, affected by all adjustments excepting loudness control, to feed tape recorder; 8 or 15 ohms to speaker. Two switched AC power outlets. Rated Power: 30 watts; reserve for 40-watt peaks. Response: 10 to 30,000 cycles, ± 1 db, at 20 watts. Distortion: less than 0.1% FM overall at normal listening levels; 0.5% at 15 watts; less than 2% at 20 watts. Noise: 60 db down on phono channel; 70 db down on others. Dimensions: 4 in. high by 14½ wide by 11½ deep. Tubes: 2-12AX7, 6U8, 6SL7, 2-6L6, 5V4. Price: $86.50. Manufacturer: The Radio Craftsmen, Inc., 4401 North Ravenswood Avenue, Chicago 40, Illinois.

Anyone who doubts that high fidelity is a fast-moving field ought to be convinced by the Craftsmen Solitaire. Four years ago, if you could have found a combination that would do everything this does and do it as well, you'd have had to pay at least three times the price — and it would have been much larger and heavier. This progress has not been reflected only in Craftsmen equipment, needless to say; but the Solitaire is a particularly striking example.

There are four input channels: three are unequalized high-level circuits for tuners, tape playback, and the like; the other, for magnetic phono cartridges, feeds through the preamplifier-equalizer section. Six equalization curves are supplied, and they are well chosen (see Specifications paragraph). As on all Craftsmen units, the terminating resistance on the magnetic phono channel is adjusted to furnish an automatic rolloff of 4 db at 10,000 cycles. An extra resistor is supplied for Pickering cartridges. This rolloff is taken into consideration in the design of the equalizer circuits, and our checks on the test unit showed exceptionally close correspondence with the indicated curves. The theory behind this equalization approach is, apparently, that low values of termination impedance suppress high-frequency cartridge response peaks to some extent. Gain of the phono channel is adequate for low-level cartridges without transformers.

Set below the main rank of front-panel controls are two slide switches for low and high-frequency cutoff filters. The one on the left, next to the bass tone control, is for the lows filter; it has three positions. One position takes the filter out of the circuit completely. The other two give moderately sharp (12 db per octave) cutoffs beginning at 40 or 150 cycles, useful for rumble and hum suppression respectively. Next to the treble tone control, on the right, the high-frequency switch has three positions also: Flat (filter out of the circuit), and cutoffs beginning at 3,000 or 6,500 cycles. Attenuation rate is the same, 12 db per octave. Both filters can shape total response in an entirely different way than tone controls; they serve to limit the range of response to what is useful in any given circumstance, and to eliminate what is not useful (scratch, rumble, hum, or high-frequency distortion). They are effective on all inputs, and are useful surprisingly often in radio reception.

Bass and treble controls have average operating ranges. When set to their indicated flat positions, and with other response-shaping controls effectively off, the total response of our test Solitaire was well within 1 db. The tone controls are marked in db boost and cut, a good idea.

In the very center of the front panel are the loudness and level-set controls, mounted concentrically. Both

The Solitaire — small and inexpensive, versatile and powerful.