

CF-610/620

General Export Model
GEP Model



CF-620

CF-610



Set using ISO screws

SPECIFICATIONS

General

Power Requirements:	AC 100, 110, 120, 127, 220 & 240V with voltage selector
Semiconductors:	43-transistors, 29-diodes and 1-FET
Speaker:	Two lid-speakers, 6 $\frac{1}{2}$ " (16 cm) dynamic Impedance: 8 Ω
Maximum Output:	6W each of L and R channels
Dimensions:	16 $\frac{1}{2}$ "(W) x 12 $\frac{7}{16}$ "(H) x 11 $\frac{3}{4}$ "(D) (420 x 316 x 298 mm) with lid-speakers
Weight:	24 lb 3 oz (11 kg)

Radio Section

Circuit System:	Superheterodyne
Frequency Coverage:	FM 87.5~108 MHz (3.43~2.78 m) AM 530~1,605 kHz (566~187 m)
Intermediate Frequency:	FM 10.7 MHz AM 455 kHz
Antenna System:	FM built-in telescopic antenna AM built-in ferrite bar antenna
Sensitivity:	FM 2.4 μ V (7.5 dB) at S/N 30 dB AM 250 μ V/m (48 dB/m) at S/N 20 dB with built-in ferrite bar antenna 20 μ V (26 dB) at S/N 20 dB with EXT ANTENNA terminal
Selectivity:	FM 40 dB at 98 MHz \pm 400 kHz AM 21 dB at 1,400 kHz \pm 10 kHz
Signal-to-Noise Ratio:	FM 65 dB at 98 MHz with 61 dB input AM 40 dB at 1,000 kHz with 74 dB/m input
Current Drain:	FM 87 mA AM 45 mA
FM Stereo Separation:	35 dB at 400 Hz

Tape Recorder Section

Track System:	4-track cassette stereo
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Tape Speed:	1 $\frac{7}{8}$ ips (4.8 cm/s)
Tape:	Tape cassette
Heads:	Rec./PB head, PP128-3602, 750 Ω /1 kHz Erase head, EF135-36, 640 Ω /80 kHz
Motor:	D-009G
Recording Bias Frequency:	Approx. 85 kHz
Frequency Response:	30~12,000 Hz (NORMAL) 30~13,000 Hz (SPECIAL)
Signal-to-Noise Ratio:	Greater than 46 dB
Flutter and Wow:	Less than 0.22% (WRMS)
Inputs:	Two MIC inputs Impedance; low Maximum sensitivity; 0.2 mV (-72 dB) Two AUX IN inputs Impedance; 100 k Ω Maximum sensitivity; 60 mV (-22 dB) Two PHONO inputs Impedance; 40 k Ω Maximum sensitivity; 1.1 mV (-57 dB)
Outputs:	Two LINE OUT outputs Load impedance; greater than 10 k Ω Output level; 0.775 V (0 dB) with 10 k Ω load Two SPEAKER outputs Load impedance; 8 Ω Output level; 2.8 V (11.2 dB) HEADPHONE output Load impedance; 8 Ω Output level; 30 mV (-28 dB)

SONY®
SERVICE MANUAL

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** The contents described are common to CF-610 and CF-620, and are also common to General Export and GEP Models unless otherwise noted.*

** In West Germany the fm frequency coverage is prescribed within the range between 87.5 MHz and 108 MHz. Check or make the frequency coverage adjustment for the Model. (See page 15.)*

SECTION 1 OUTLINE

1-1. GENERAL DESCRIPTION

The SONY Model CF-610 or CF-620 is the combination model of radio (FM stereo/FM mono/AM) and cassette tape recorder. The model CF-610 is designed for a portable type with the carrying handle-equipped cabinet which is covered with the black leatherette.

The model CF-620 is designed for a family type with the handsome wood-grain cabinet. The models have the following outstanding features.

- a. Variable MONITOR volume control
- b. Automatic gain control circuit for recording
- c. Slide type VOLUME and TONE controls
- d. A special tape such as the SONY SLH tape or a chromium dioxide tape can be used with the TAPE SELECT switch.
- e. TAPE PILOT shows the tape running in the each mode of the record, playback, fast-forward and rewind.
- f. Easy operation with the piano-key type function selector
- g. Miss-erase prevention mechanism
- h. Three digit tape index counter
- i. High sensitivity with the FET (field effect transistor) in the FM front end circuit
- j. Automatic FM Stereo-Mono switching with the INPUT SELECTOR

