

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

- 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

