

FC 30 Technical Specifications (D) : Technical Specifications

PERFORMANCE SPECIFICATIONS

Subcarrier Frequency:

67 kHz (39 to 95 kHz to order)

Subcarrier Frequency Stability:

±0.5% (330 Hz @ 67 kHz, 0° - 50° C)

Subcarrier Harmonic Content:

Less than 0.3%

Subcarrier Output Level:

0.5 to 4.0 V, into 600 Ohm peak-to-peak; adjustable

Subcarrier Output Impedance:

600 Ohm unbalanced, resistive

Subcarrier Envelope Decay:

Greater than 100 µsec from 90% to 10% sub-carrier levels

Modulation Capability:

± 20% of subcarrier frequency

FM Noise:

72 dB below +6 kHz deviation @ 400 Hz (150 µsec de-emphasis)

Audio Input Impedance:

600 Ohm balanced, resistive

Data Input Impedance:

75 Ohm unbalanced resistive, DC coupled

Input Levels:**Audio:**

Adjustable, +10 dBm to -10 dBm for ±6 kHz deviation @ 400 Hz

Data:

Adjustable, 1.0 to 4.0 V p-p for ± 6 kHz deviation (DC coupled)

Preemphasis:**Audio:**

150 µsec standard (75 µsec with internal jumper)

Data:

No pre-emphasis

Frequency Response:**Audio:**

±0.5 dB 10-10,000 Hz exclusive of audio low-pass filter

Data:

±0.5 dB, DC-10,000 Hz

Audio Low-Pass Filter:

Sixth order, -3 dB @ 4.3 kHz, standard (resistor changes for other values)

Data Low-Pass Filter:

Same as FM filter or may be bypassed

Total Harmonic Distortion:

Less than 0.5% throughout AF pass band

Crosstalk SCA To Stereo:

-60 dB or better below 100% modulation of left or right, 75 µsec de-emphasis, using FX50 Exciter

Crosstalk Stereo To SCA:

-60 dB or better below ± 6 kHz deviation of SCA using 150 µsec de-emphasis and FS30 Stereo Generator

Intermodulation Distortion:

Less than 0.5%, 60 Hz / 7 kHz, 1:1 ratio (audio preemphasis and LPF bypassed)

Auto Muting Level:

Adjustable from 10 to 30 dB below program level

Broadcast Electronics

Technical Specifications

Auto Muting Delay:

Adjustable 0.5 to 10.0 seconds

POWER

AC Power Requirements:

97-133 or 194-266 Vac, 50/60 Hz, 7 watts

ENVIRONMENTAL

Operating Temperature Range:

0° to 50° C

Maximum Altitude:

15,000 feet (4,572 M)

MECHANICAL/PHYSICAL

Dimensions:

19"W x 1.75"H x 9"D (48.3 x 4.5 x 22.9 cm)

Net Weight:

4.5 lbs. (2 kg)

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

