

FREQUENCY SHIFT CONVERTER

CFA-2



The Model CFA-2 provides dual diversity or single channel audio to DC conversion of frequency shift keyed signals. Internal plug-in battery supplies are available on special order for current-regulated 10, 20 or 60 ma. loops.

The converter is completely solid state and is contained in a compact 3½" X 19" X 7" space. Selection of keying speeds and discriminator center frequencies is accomplished by the operator at the front panel. In addition, the CFA-2 is configured to retain active service on one channel while a new operating frequency is being checked out on the second channel. This feature makes possible continuous reception capability even during periods of frequency change.

Optional accessories include an internal loop battery supply and input filter panels. The CFA-2 is suitable for rack mounting and is equipped for 115/230 VAC, single phase operation.

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Supersedes 4008A



THE TECHNICAL MATERIEL CORPORATION

AND SUBSIDIARIES

Printed in U.S.A.

TECHNICAL SPECIFICATIONS

OPERATING PARAMETERS

Input Impedance

600 ohms nominal
Balanced, Center Tapped

Input Level

-20 to +30 dbm

Input Limiting

50 db in each channel

**Input Frequency Shift Limits
and Keying Speeds**

2000 Hz Center Frequency or
2550 Hz Center Frequency
In High Speed Position
30 to 340 baud, 200-1000 Hz shift
In Low Speed Position
120 wpm, 200-1000 Hz shift
1000 Hz Center Frequency
Up to 120 wpm, 10-200 Hz shift

Center Frequencies

1000, 2000, or 2550 Hz
Switch Selectable

Output Circuit

Neutral; either side floating or grounded.
Will key 10-75ma into 2K-ohm TTY loop.

Tuning Indicator/Multimeter

Combined zero-center tuning meter and
multimeter to monitor discriminator out-
puts, operating voltages, loop current and
voltages.

Bias Correction

Front panel control to compensate for
mark or space bias.

Frequency Drift Compensation

Automatically compensates for a drift in
the received signal.

ENVIRONMENTAL AND INSTALLATION

Operating Conditions

0 to +50°C, up to 95% relative humidity

Primary Power

115/230 VAC, 50/60 Hz, Single Phase

Size and Weight

3½" high X 19" wide X 16" deep
Approximately 25 lbs.

Loose Items

RF Mating Connectors
Two Copies Operating Manual

OPTIONAL ACCESSORIES

Model A-4347 Power Supply

Solid state; plugs directly into CFA-2 and
provides up to 75 ma of current at less
than 150 VDC.

Model SFP-2 Filter Panel

Eliminates unwanted signals at the input.

Specifications:

Input/Output Impedance: 600 ohms

Insertion Loss: Less than 7db

MARK Filter Bandwidth:

Centered at 2125 Hz.

Flat within 3db to +/-100 Hz

Down minimum 45 db at 340 Hz.

SPACE Filter Bandwidth

Centered at 2975 Hz.

Flat within 3db to +/-125 Hz

Down minimum 45 db at 475 Hz.

Model SFP-3 Filter Panel

Similar to SFP-2 but centered at 2000 Hz.

Model CFA-3 Converter

Single channel audio to DC converter.



THE TECHNICAL MATERIEL CORPORATION

700 FENIMORE ROAD • MAMARONECK, NEW YORK 10543

SPRINGFIELD, VIRGINIA • OTTAWA, CANADA • LUZERN, SWITZERLAND • TEMPE, ARIZONA

(914) 698-4800 • (613) 822-0244 • twx 710-566-1100 • telex 013-446