

## *Model FDA-1050* *FREQUENCY DISTRIBUTION AMPLIFIER*



(Optional front panel BNC's shown)

- Wide Bandwidth
- Independent Output Monitors
- Fundamental and Synthesized Output Options
- Ten Output Channels
- Auto Switch Option for Dual Inputs
- Optional PLL for no-break operation

In applications where a reference signal must be fed to several locations or a number of different signals must be derived from a single reference, the FDA-1050 Frequency Distribution Amplifier provides a simple and versatile solution. The basic unit accepts a single sine wave or modulated time code at any frequency up to 10 MHz and provides up to ten independent, separately monitored, 50 Ohm sine wave outputs.

The Dual Input option allows the FDA-1050 to accept two inputs. When this option is installed the outputs will be automatically derived from the secondary input should the primary input fail.

In applications where no-break switchover is necessary, an optional phase locked loop is incorporated that uses a crystal controlled VCO to provide the output signals. During normal operation, the VCO is locked to the primary reference input.

If the primary reference fails the VCO locks to the secondary reference preventing a momentary loss of output. This option is not applicable to time codes.

The FDA-1050 can also be fitted with a wide range of divider, multiplier and synthesizer option modules. These options enable the FDA-1050 to generate numerous related and non-related outputs from one reference input. For large installations, several distribution amplifiers can be connected in series and/or parallel to provide a comprehensive network of signals at various remote locations.

## *FDA-1050 Specifications*

### Inputs:

Input Frequency:	1 kHz–10 MHz $\pm 2$ db, Sine wave or time code Internal switch to select DC input coupling
Input Level:	0.5 Vpp–5 Vpp
Input Impedance:	50 Ohms Internal switch to select 10 kOhm input impedance
Connectors:	BNC

### Outputs

Connectors:	Rear Panel BNC
Quantity:	Ten channels
Output Amplitude:	1 Vrms
Isolation:	Each output channel is independently buffered
Impedance:	50 Ohms
Harmonic Distortion	Below -30 db
Non-harmonics	Below -60 db
Output protection:	Open/short circuits, over current and over temperature

### Status Indicators

Output Monitors  
Power On

### Environmental

Power:	110 or 220/240 Vac 45–65 Hz at 10 VA
Temperature:	–20°C to +60°C
Humidity:	To 95% non-condensing
Size:	1UX19"X12" deep, rack mount
Weight	Five pounds

MTBF 257,003 per MIL-HDBK 217F Notice 2 at 25°C ground benign

### Options

Front Panel BNC connectors  
Divided/Multiplied/Synthesized Outputs  
Dual Reference input with automatic changeover  
PLL no-break changeover  
Battery Backup  
Alarm status outputs