

Model FDA-1050 FREQUENCY DISTRIBUTION AMPLIFIER



The FDA1050 Frequency Distribution Amplifier provides precision multiple frequency outputs from either a single or a dual input source. The FDA1050 is ideal for applications where a frequency from a master system must be distributed to several local or remote areas or sub systems.

- **Multiple frequency outputs from a single or dual input source**
- **With Dual input option automatically selects a second input source**
- **Up to 10 independently buffered output channels**
- **Wideband circuits allow any frequency distribution up to 10MHz.**
- **Fault sensing and LED status indicator for each output channel**
- **1U high 19 inch rack-mountable chassis**
- **Outputs via back panel**

The FDA1050 is the perfect solution where a accurate frequency feed is required to multiple areas. For example, in the Power/Utilities industry, the FDA1050 is ideal for ensuring a stable frequency feed to multiple installations.

The FDA1050 may be 'daisy-chained' to provide unlimited distribution stations with an accurate frequency feed.

The connection from base station to remote stations is typically via coaxial cable (not supplied). Max distance from base station depends on grade of cable used - a higher grade cable will enable greater distances. Please contact us for further guidance.

Input Options

- Analog, Digital, Timecode or Fibre Optic
- Single source or dual source input.
N.B. With dual input, if the primary signal level falls below a critical level, the FDA1050 automatically selects the backup input

FDA-1050 Specifications

Inputs:

Input Frequency:	2Hz to 15MHz Sine Wave, Square Wave, Timecode or Fibre Optic Input (AC coupled) or place internal jumper to select DC Coupling throughout
Input Level:	1Vrms nominal or 0.5Vpp to 5Vpp
Input Impedance:	50Ω or 75Ω (factory set) Internal jumper to select 10k input impedance Optional Status Input to force selection of backup input
Connectors:	50Ω BNC Socket.

Outputs

Connectors:	10 Independent buffered outputs from an input channel. Dual Input option with automatic selection of a second input The output connections are available via 50Ω BNC Sockets.
Frequency Range:	2Hz to 15MHz (AC coupled) or place internal jumper to select DC Coupling throughout
Output Amplitude:	1Vrms into 50Ω load standard (+13dBm) 2Vrms into 50Ω maximum (+19dBm)
Isolation:	>70dB
Impedance:	50 Ohms
Delay:	30ns
Harmonic Distortion	Below -30 dBc
Non-harmonics	Below -60 dBc
Output protection:	Open/short circuit, over current and over temperature Internal 10MHz Band-pass filter option. Other Band-pass options available

Status Indicators

Primary Power On
LED indicator for each of 10 outputs present
Individual input present indicators for dual input options
Status relay contact c/o for any failure

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