

# FDA1050

## Time & Frequency Distribution Amplifier

The FDA1050 Time & 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.



### Features

- Multiple frequency outputs from a single or dual input source
- With dual input, automatic and manual selection of second input is available
- 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

### Input Options

- Analogue, 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

*Please state preferences when ordering*

### Model Selector / FDA1050 Product Options

Model	No. of Inputs	No. of Outputs	Network Interface
FDA1050	1	10	No
FDA1050-D	2	10	No
FDA1050-N	1	10	Yes
FDA1050-DN	2	10	Yes

### Applications

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.

# FDA1050 Specifications

## Input Specifications

Connection:	50Ω BNC Socket.
Frequency Range:	2Hz to 15MHz Sine Wave, Square Wave, Timecode or Fibre Optic Input (AC coupled) or place internal jumper to select DC Coupling throughout
Input Amplitude:	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

## Output Specifications

Connection:	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)
Output impedance:	50Ω
Isolation:	>70dB
Delay:	30ns
Harmonic Distortion:	< -30 dBc.
Non Harmonic Distortion:	< -60 dB.
Output Protection:	Open/short circuit, over current an over temperature Internal 10MHz Band-pass filter option. Other Band-pass options available
Phase Noise: (Single-Sideband)	1Hz: -120 dBc 10Hz: -140 dBc 100Hz: -150 dBc 1kHz: -150 dBc 10kHz: -150 dBc 100kHz: -150 dBc

## General

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
Power:	110V or 220 VAC 45-65Hz at 10VA
EMC:	CE Compliant
Weight:	2 Kg typical
Physical:	19 inch 1U high rack-mount

## Environment

Operating Temperature :	0°C to +45°C.
Storage Temperature:	-20°C to +60°C.
Humidity:	Up to 95% RH (non condensing)

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