

DIGITALLY TUNED ACTIVE ANTENNA



LPDA-A- WB (Log Periodic Dipole Array – Active Antenna) antenna is designed to operate over the 470-700MHz range consisting two sections: LPDA-P passive antenna section with in-built Band-Pass Filtering and an Active Antenna Booster.

The LPDA-A-WB may be used in an Active or Passive Mode to suit individual applications:

- Active Mode with fixed Bandwidth in the 470-700MHz range with user adjustable gain of 18dB
- Passive Mode when there is no dc present the LPDA-A-WB can be used as a High Gain Passive antenna for *receive* or *transmit* applications with in-built filtering 470-700MHz, passive gain boasting 5dB.

This unique design has a very low loss and a very selective Band-pass filter with fixed bandwidth between 470-700MHz. The booster section uses a **digitally adjustable RF-Attenuator** before the low noise RF Amplifier against RF overload and the **Booster Gain** adjust is after the RF amplification, both **digitally adjustable RF-Attenuators** are independently user adjustable in 1dB steps. The RF Amplifier is an extremely high dynamic range and Low Noise RF amplifier offering a linear gain within the tuning range.

The LPDA-A-WB's unique design offers flexibility as well as additional front-end protection against interfering dirty RF, the booster offers 18dB user adjustable gain to compensate long antenna extension cable losses hence increased distance between the transmitter and the receiver, LPDA-A-WB finds its application in film making, documentaries, fixed installations as in studios, and theatres. Compatible with any UHF wireless receiving systems (Digital or Analogue) providing a directional coverage pattern.

The antennae are constructed using advanced multi-layer PCB designs technique with copper-clad epoxy fiberglass to withstand heavy duty use in harsh environments, providing long life and consistent performance under difficult operating conditions. The booster box is a custom-design machined aluminum, black anodized with water resistant O-ring mounting. Mounting is made easy with integrated thread that directly mounts on to a tripod or with the supplied adaptor it can be mount directly on to a microphone stand. Powering is through coaxial cable power source of 10-18Vdc.

- ✓ Active LPDA with 18dB gain
- ✓ Can be used as an Active, Passive Receive or Passive Transmit
- ✓ No dc- Passive Mode with in-built Band-Pass filtering
- ✓ Extremely high dynamic range RF amplifier
- ✓ Input high selective Band-Pass filter 470-700MHz
- ✓ Independently user adjustable Input Attenuator
- ✓ Independently user adjustable Booster Gain
- ✓ Intuitive OLED display menu
- ✓ Powered through coax cable
- ✓ Integrated mount adaptor
- ✓ CNC machined custom design

TECHNICAL SPECIFICATION

ACTIVE MODE

Frequency Range	470 to 700MHz with in-built Band Pass Filter
Booster Gain	Unity(0dB) to +18dB (user adjustable in 1.0dB steps)
Input Attenuator Range	Unity(0dB) to -20dB (user adjustable in 1.0dB steps)
OIP3	>+41dBm
Bandwidth	230MHz
Selectivity	-30dB@400MHz and -30dB@750MHz min.

PASSIVE MODE

Frequency Range	470 to 700MHz with in-built Band Pass Filter
Passive Gain	+5dB with in-built band Pass Filter – 470-700MHz

CONNECTIONS

RF output	50 Ω Standard BNC-F
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MOUNTING OPTIONS

	3/8"-16 standard tripod mount
	5/8"-27 adaptor supplied

POWERING

External Power	10-18Vdc, through coaxial cable (Reverse power and short circuit protected)
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Current consumption@12Vdc	75mA +/- 10mA
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OUTER CASE

Dimensions	270x290x90mm
Weight	490g

Related Accessories

BNC-RA-M to BNC-RA-M Antenna extension cables (custom lengths)

Related Products

LPDA-POUCH

LPDA-DIV

LPDA-P

LPDA-A-DT V2

DADM226

DADM226-DT

DADM224

DADM224-DT

DADM228

DADM224-2C

DT-BOOST-1

DT-BOOST-2

