ALP690

TECHNICAL DATA

Active Log Periodic Antenna

- **Selectable RF filtering 470-608 MHz or 470-700 MHz**
- **Directional pattern with 4 dBd RF gain**
- **Built-in RF amplifier with adjustable gain for offsetting cable loss**
- **Keypad and membrane switches with LED readout for quick setup**
- **Automatically switches to passive mode when no DC power is present on the coaxial cable**
- **Durable finish and weather tolerant construction for indoor/outdoor use**
- **Skeletal structure reduces wind loading**
- **Versatile mounting options with the supplied mount and optional mounting adapter kit**

The ALP690 is a high-performance LPDA (log periodic dipole array) antenna with a bypassable, built-in RF amplifier for use with wireless microphone receivers in location or studio production. The design delivers +4 dBd of passive gain in a directional pattern to extend operating range, and, when DC power is applied, the amplifier applies gain to overcome loss in long coaxial cable runs. By offering both active and passive operation modes, the ALP690 can be used as a receiver antenna (active or passive) and as a transmitter antenna (passive only).

The antenna is formed with copper traces on a .133" thick glass epoxy high-pressure thermoset plastic laminate material with a durable finish. The skeletal structure reduces wind loading in outdoor use.

The antenna is powered by DC bias inserted on the coaxial cable connected to the 50 ohm BNC jack. This power can be supplied by a Venue Series receiver, an active multicoupler or an inline BIAS-T. When no power is applied, the antenna automatically switches to passive operation. When used in active mode, RF filtering can be selected between 470-608 MHz or 470-700 MHz for operation in different regions.

Power is provided by DC bias on the output connector

RF gain, bandwidth and display brightness are adjusted with a membrane switch keypad and LED display on the control panel.

RF gain is adjustable to match the length of cable in use. The bandwidth is adjustable to serve users' needs in various locations.

Vertical orientation provides a wide horizontal coverage pattern.

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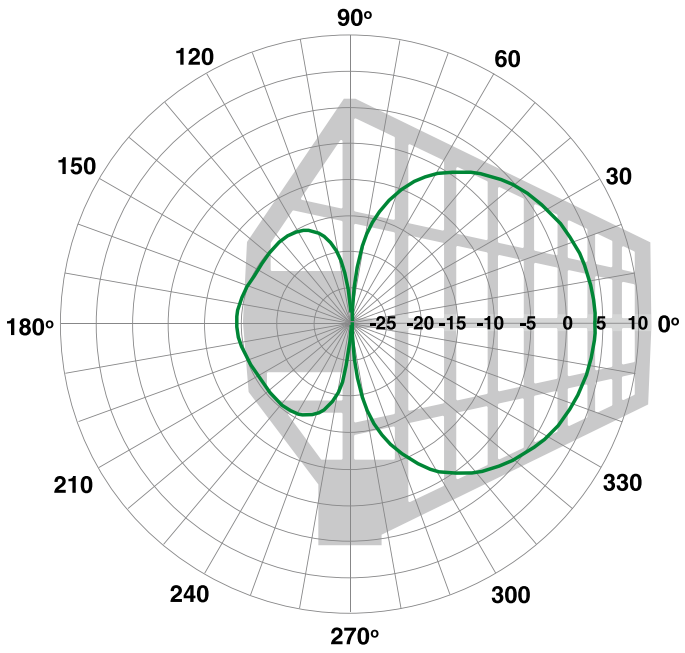
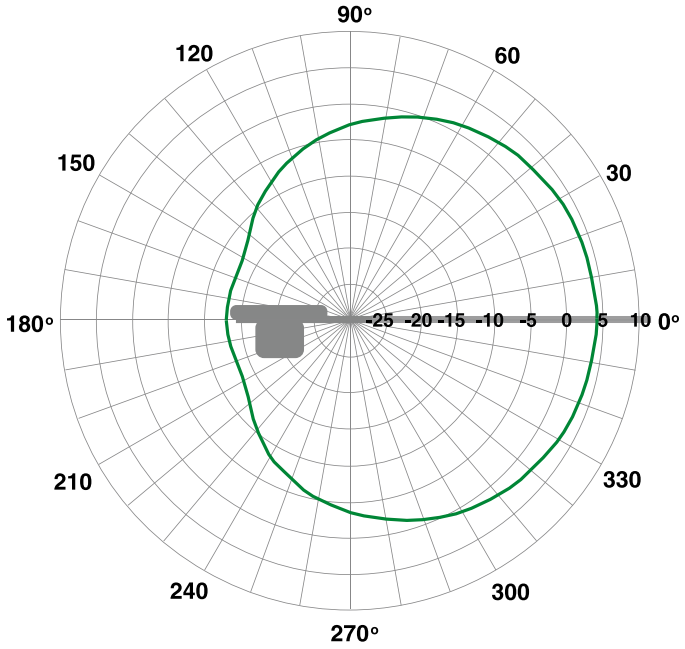
The pickup pattern provides gain toward the shortest elements to increase sensitivity in that direction (the front) to extend operating range, and reduced sensitivity to signals arriving above, below and behind the antenna.



Side view - Vertical pattern



Top view - horizontal pattern

The optional ALPKIT stainless steel mounting kit works with the supplied mounting block for versatile combinations to position the antenna.

Microphone stand adapter, 1 1/2" long. 5/8"- 27 thread on one end, with 3/8"-16 thread in other end. Knurled finish.
(PART # 26313)

Threaded adapter for standard lighting clamps. 1/2" diameter x 6 inch long. 3/8"-16 thread - both ends.
(PART # 26311)

Threaded adapter for photo/video tripod mounting. 1/2" diameter x 1 3/4" long. 3/8"-16 thread on one end, 1/4"-20 on the other.
(PART # 26312)

1/4" - 20 threaded adapter
(PART # 28770)

The mounting block provides 3 threaded sockets for 1/4-20 tripods, 3/8-16 tripods and 5/8-27 microphone stands. The mounting block can be rotated 90 degrees for horizontal or vertical positioning.

Specifications

Pattern Gain:	+7 dBi (isotropic) +4 dBd (over dipole)
Passband:	Passive: 450 - 850 MHz Active: 470 - 608 or 470 - 700 MHz, selectable
RF Amplifier Gain Range:	-6 to +12 dB in 1 dB steps
Third Order Intercept:	+27 dBm @ input; +41 dBm output
Weight:	13 ozs.; 355 grams
Power Requirements:	DC bias on center pin of coaxial cable; 8V to 16V DC; 1.5 W max.; polarity protected

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