

DIVERSITY ANTENNA DISTRIBUTION



Diversity Antenna Distribution Module DADM224 is a custom design, which offers the solution to antenna and power distribution requirements for portable sound bag applications. Designed for where the weight and size matters without sacrificing on performance.

The DADM224 is a 2 IN and 2 x 4 OUT active antenna distribution system with in-built band-pass filtering; the DADM224 eliminates multiple receiver antennas and provides a tidy sound bag solution with improved RF performance.

There are two industry standard BNC input connectors for antenna inputs which enables use of standard low loss RF extension cables, and there 2 x 4 mini RF SMA connectors feeding the diversity receivers.

In applications when remote antenna powering is needed, the DADM offers switchable MHA powering with RED LEDs indicating power ON/OFF status, the MHA powering can be turned ON/OFF through the OLED display menu.

The DADM224 has a very high input signal handling capacity with very low noise figure and offers an outstanding inter-modulation performance when compared to other low power devices available. Each RF input antenna offers user adjustable 16dB gain range, +6dB gain and up to -10dB attenuation to suit varying applications.

The tuning bandwidth is custom designed with a wide-band response to suit varying applications; the DADM224 is compatible with any radio microphone receivers available in the industry.

The DADM is externally powered between 10-18Vdc, the dc input connector is an industry standard 4-pin Hirose and there are 6 x Hirose dc output connectors available for powering any mixer/recorder or auxiliary equipment in any sound bag. Each dc output port can be individually turned ON/OFF through the OLED menu. A green LED indicates power-on status of the system box and the OLED display continuously displays dc input voltage.

Powering for the multiple receivers is simplified by means of offering phantom power at each SMA RF connector; Audio Wireless (AWDR-1) receivers are individually powered through the antenna socket eliminating additional cabling in the sound bag. The phantom power is user selectable and can be turned ON/OFF from the OLED display menu when the DADM is operated with radio microphone receivers of other manufacturers.

Audio Wireless wide tuning range systems are now first choice among freelance sound engineers, hiring companies as well as major broadcasters for all wireless microphone applications.

DADM224

- ✓ One pair of antennae feeds up to four diversity receivers
- ✓ Built-in band-pass filtering and signal splitters
- ✓ User adjustable gain
- ✓ Remote antenna powering
- ✓ 6 x Hirose dc outputs
- ✓ Industry standard connectors
- ✓ Intuitive OLED display menu and LED indicators
- ✓ Single power source solution
- ✓ Master ON-OFF switch
- ✓ Continuous system volts monitoring
- ✓ Powers the AW-Receiver via antenna sockets
- ✓ Soft ON/OFF switch for each individual receiver
- ✓ Soft ON/OFF switch for each individual Remote Antenna powering
- ✓ Soft ON/OFF switch for each Hirose dc output
- ✓ CNC machined aluminium custom design, lightweight and rugged - fits neatly in any sound bag



TECHNICAL SPECIFICATIONS

RF DISTRIBUTION SECTION

Frequency Range	470 to 715MHz
Input impedance	50 Ω
Output Impedance	50 Ω
Gain (each output)	+6dB to -10dB user adjustable
Current consumption	185mA

UHF BANDPASS TYPE

Available Bandwidths	470-715MHz, 470-698MHz, 470-694MHz, 470-660MHz, 470-630MHz
OIP3	> +41dBm
Port to port isolation	> 20dB (min.)
Noise Figure	< 3 dB

CONNECTIONS

RF inputs	2 x 50 Ω Standard BNC sockets
RF/DC outputs to receivers	2 x 4 x 50 Ω mini UHF SMA sockets
Main ON/OFF Switch	Master switch

DC Power OUT

Standard Pinouts
High current mode

6 x 4-pin Hirose sockets individually fused and protected against reverse polarity.
Pin1 (-ve) and Pin4 (+ve)
Pin1&2 (-ve) and Pin3&4 (+ve)

POWERING

External Power
Phantom dc to Receivers
Remote Antenna Powering

Hirose dc output

Total Current Withdraw

10-18V @ 1A (min.)*, reverse power and short circuit protected
(*higher current limit is required if mixer/recorders are powered-max current 4A)
9Vdc (regulated), individually switched ON/OFF
Switchable dc T-bias powering, 12Vdc @ 250mA max, regulated for active antenna powering, short circuit protected
Unregulated incoming volts, switched, individually fused and protected against reverse polarity
4A (max) at High current mode

OUTER CASE

Dimensions
Weight
Related Accessories

190x64x30mm (W x H x D)
400g
8 x SMA to SMA link cables (custom lengths)
2 x BNC to BNC Antenna extension cables (custom lengths)
2 x monopole BNC Antennae
1 x 4-pin Hirose to 4-pin Hirose dc power cable (custom lengths)
1 x LPDA-DIV
2 x LPDA-P
2 x LPDA-A

