

# 902 to 928 MHz 24-Channel FM Audio Transmitter

The PAT900 conforms to FCC Part 15 requirements for unlicensed use and has a range up to approximately 450-900 feet<sup>1</sup>. It transmits excellent quality low noise monoaural audio from any line level source. 24-channels are available to enable operation of multiple units in an area. Use with PAR900M receiver. Multiple receivers may be used with a single transmitter.

# **PAT900**



#### **Features**

- 24-Channel Selection
- Line Level Input
- Point-to-Multipoint
- Modulation Level Indicator LEDs (OK & PEAK)
- Balanced Mic Input
- Crystal Reference Ensures Excellent Frequency Stability
- 30Hz to 20kHz Frequency Response
- Rugged Extruded Aluminum Enclosure
- Antenna, Audio Cable, and AC Adapter Included
- 9 to 12 VDC Operation

# **Typical Applications**

- Wireless "Line-In to Line-Out" Link
- Distribution of Audio Entertainment Content
- DJ Audio
- Wireless PA
- Event Audio
- PC, IPOD, MP3 Audio Distribution

**Product Ordering** 

Model	Matching Receiver			
PAT900	PAR900M			

#### Interface Table

Audio Line In	XLR and RCA (Phono)
Mic In	XLR and 3.5mm
Power In	2.1mm Male
Channel Select	Screwdriver Selectable, 1-24
Monitor Out	3.5mm
Antenna	Full ¼-Wave, Rubber Duck Style



**Specifications** 

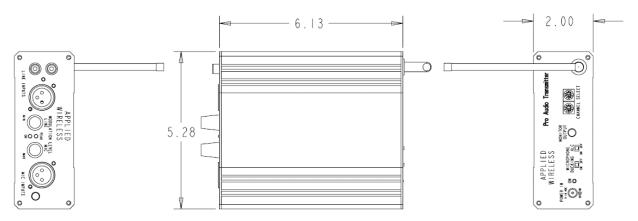
Sym	Parameter	Min	Typical	Max	Unit
DC <sub>in</sub>	Operating Voltage Range	7.5	9	18	Volts
I	Operating Current		120		mA
SNR	Audio Signal to Noise Ratio*		78		dB
	Audio Frequency Response (+/- 2dB)*		30-20K		Hz
THD	Audio Distortion (@ 1KHz, +/- 25KHz Deviation)		0.3%		
	Frequency Stability (over operating temperature range)		+/- 30		ppm
	FM Deviation		+/- 40		KHz
	Harmonic Suppression		-45		dBc
$T_{op}$	Operating Temperature	-20		+70	°C

<sup>\*</sup>Audio performance specifications are "end-to-end" characteristics, when used with Applied Wireless Model PAR900 Receiver.

**Maximum Ratings** 

Sym	Parameter	Value	Unit
DC <sub>in</sub>	DC Supply Voltage	-20 to +20	Volts
T <sub>stg</sub>	Storage Temperature	-50 to +150	°C

### Package Dimensions (inches)



#### <sup>1</sup>Range Performance (when used with PAR900M Receiver)

Receiver Antenna Type	Threshold	Recommended Max.
Standard Omni-Directional Antennas	900 Ft	450 Ft
Flat Panel Antenna (FP915-5)	1300 Ft	650 Ft
Yagi, 10-dB (Y915-10)	1900 Ft	950 Ft

Distances are "Line-of-Sight". Non Line-of-Sight applications will experience reduced range, the amount of reduction based upon the nature of the obstruction(s).

By using the "Recommended Max" in the table above, you allow a 6-dB signal margin for your application. Data in tables is based on actual unobstructed field measurements.

Specifications subject to change without notice or obligation.

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