



VLPFM-1 1W FM Transmitter

The VLPFM-1 is a 1W Stereo FM Transmitter in a wall mount package. The application of this system is for low power FM radio broadcasting, as in, sport stadiums, shopping centers, garage forecourts, large music events, small communities or any other application that requires low power FM broadcasting to FM receivers .

The VLPFM-1 is supplied as a stereo version as standard. The stereo encoder includes audio limiter.

The VLPFM-1 is supplied with built-in mains power supply. External +24V D.C. supply facility available.

The VLPFM-1 is packaged into an indoor wall mount case for ease of installation in any location without the need of a 19" rack or other electronic housing.

TECHNICAL SPECIFICATION

RF SPECIFICATION

Frequency range	87.5 to 108 MHz (F3E/F8E) Internally Selected
RF output power	≥1W (Maximum 2W)
RF spurious emission	<-60dBc
RF harmonics	<-60dBc
Asynchronous AM	<-60dB(filtered 20Hz to 20kHz)
Synchronous AM	<-60dB(filtered 20Hz to 20kHz)
Frequency synthesizer	PLL (direct modulation)
Frequency steps	100kHz
Frequency stability	+/- 5ppm
Frequency deviation	+/- 75kHz Peak
RF output connector	N-Type (female) 50 Ohm
RF monitor connector	BNC 50 ohm

POWER SUPPLY

AC power input	230V/50Hz or 115V/60Hz +10% - 10%
DC power input	+24V battery (Option)

ENVIRONMENTAL

Operating temperature	-10 °C to +45 °C
Operating altitude	<2800 metres
Humidity	<90% (non condensing)

PHYSICAL

Dimensions (mm)	176W x 42D x 290H
Weight	2kg

STEREO OPERATION

AF amplitude response	+/-0.2dB (30Hz to 15kHz)
Stereo separation	>50dB (typical 66dB) 30Hz to 15kHz (decoded)
Mono/Stereo crosstalk	>50dB (30Hz to 15kHz) L+R into L-R
Stereo distortion	<0.1% (typical 0.035%) 30Hz to 15kHz (decoded)
Stereo S/N ratio	>70dB (30Hz to 20kHz) 50us de-emph. (ref. to +/- 75kHz deviation)
Input impedance	600 ohm balanced (XLR)
Deviation sensitivity	+6dBm for +/-40kHz deviation (adj)
Pre-emphasis	50/70us

STEREO LIMITER

Audio limiter sensitivity	10dBm nom. for 62.5kHz deviation
Attack time	< 2mS for increased 10dB I/P step
Decay time	>80mS for decreased 10dB I/P step
Limiter distortion	< 0.35% (10dB into limiting)
Limiter threshold	Internally adjustable

Features

Superior audio performance

Stereo Encoder Included

Wall Mount Configuration for easy indoor installation

A.C. 230 / 115V and D.C. (+24V) operation

RF Monitor O/P

No cooling Required

Mono Filter Optional