

DXMA-7010PP AERONAUTICAL PORTA-PACK



The DXMA-7010PP Millennium VHF Aeronautical Porta-pack Transceiver, like its mobile (MA7010M) counterpart, is a rugged, state of the art DPS (Digital Signal Processor) based unit, which is designed to meet the existing (US) 25 kHz channel spacing and the 8.33 kHz international requirements in the same unit. The MA-7010M features full PC programmability via its microphone jack; this includes programming of its operating frequencies, time out timer, personality, priority channels and scan-mode. Modulation and de-modulation circuit is also DPS based in order to provide consistent long-term performance. The un-modulated carrier output is 10 watts typical (7 minimum) and the unit is equipped with high temperature and High VSWR protection. The MA-7010PP features an array of progress and warning tones for the operator's convenience. The Porta-pack comes standard in a weatherproof carrying case and an 8 amp hour rated gel-cell battery and charging system as standard equipment.

- ▶ Three operating modes:
- ▶ Normal, up to 760Ch.
- ▶ Priority, up to 15 Pri Ch.
- ▶ Scan, 15 groups of 15 Ch.
- ▶ Easy to read wide-angle display
- ▶ IBM® PC programmable (Windows 95 or 98®)
- ▶ Programmable Personality
- ▶ User specific
- ▶ 760 channels @ 25kHz



GENERAL

Operation:	Simplex VHF AM transmit & receive	Frequency Range (at 25 kHz):	118 to 136.975 MHz
Operating Modes:	Normal, priority & scan	Frequency Range (at 8.33 kHz):	Between 118 & 136.9916 Mhz
Channel Bandwidth:	25 kHz and 8.33 kHz	Frequency Stability:	1 ppm
Channel Increments:	8.33 kHz		

CHANNEL SELECTION

Normal Mode:	Up to 760 channels, 25 kHz spacing, 8.33 kHz spacing, or a mixture of both.
Priority Mode:	Up to 15 stored channels to a priority list. Channel selection may be limited to those frequencies in the in the priority list.
Scan Mode:	Up to 15 scan groups each containing up to 15 channel frequency.
Duty Cycle (received):	Continuous
Duty Cycle (transmit):	25% with a maximum transmit time of 5 min. Longer Transmit times, or higher duty cycle, reduces the output power by 6 dB.

OPERATIONAL INFORMATION

Operating Temperature:	Between -20°C and +55°C
Storage Temperature:	Between -40° C & +70° C
Humidity:	Up to 80%, non condensing

DIMENSIONS & WEIGHT

Width,	6.97" (177 mm);	Height,	1.97" (50 mm);	Depth,	8.98" (228 mm);	Weight,	3.85 LBS (1.75 kg)
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POWER SUPPLY

Mobile Input Voltage	13.2 VDC (nominal 12VDC system)	Current Receive:	1A (nominal)
Battery	12V, 8A, Gel Cell	Current Transmit:	5 A (nominal)

RECEIVE CIRCUIT

Sensitivity	-104 dBm at 30% modulation depth for 10 dB (S+N):N
Selectivity	At 25 kHz spacing: < 6 dB @ +/- 8.5 kHz > 70 dB @ +/- 25 kHz
Selectivity	At 8.33 kHz spacing: < 6 dB @ +/- 3 kHz > 60 dB @ +/- 8.33 kHz
Intermodulation Suppression	> 70 dB
Spurious Response Suppression	> 80 dB
Audio Power Output	4 W into 4 ohms loudspeaker (< 10% THD)
Distortion	< 10% THD for 90% modulation depth
RF Input Impedance	50 ohms

TRANSMIT CIRCUIT

Nominal RF Output Power	Adjustable between 5 and 12 w. Normally set at 8W
Spurious	< -46 dBm when more than 1 Mhz from the carrier
Harmonics Outputs	< -36 dBm
Distortion	< 5% THD. RF load impedance 50 ohms Distortion