

# BK Digital

Professional Portable and Mobile Radios

DPH/DMH

- > Meets or Exceeds All APCO Project 25 Digital Radio Standards
- > 400 Channels Programmable for Digital and/or Analog Operation
- > 136 -174 MHz Frequency Range
- > User-Selectable Network Access Codes and/or Code Guards
- > Best Battery Life of any Project 25 Portable Radio
- > Multi-Level Password-Protected Field and Computer Programming Options
- > Optional DES/AES Digital Encryption

- > More Radio for Your Dollar
- > Rock-Solid Reliability
- > Easy to Use, Easy to Customize



 **BK RADIO**



www.relm.com

Relm Wireless Corporation  
 7100 Technology Drive  
 Melbourne, Florida 32904  
 (800) 821-2900  
 International (321) 984-1414

## Specifications

General Specifications	DPHX5102X	DMH
Channels	400	400
Dual Priority Scan	INCLUDED	INCLUDED
TalkBack Scan	INCLUDED	INCLUDED
Nuisance Channel Delete	INCLUDED	INCLUDED
Transmit Time Out Timer	INCLUDED	INCLUDED
Soft Switch Programming	INCLUDED	INCLUDED
DES Digital Encryption	OPTIONAL	OPTIONAL
AES Enhanced Digital Encryption	OPTIONAL	OPTIONAL
Over-the-Air Encryption Re-keying	OPTIONAL	OPTIONAL
Project 25 Trunking Operation	Under Development	Under Development
Tone Code Guard (CTCSS)	INCLUDED	INCLUDED
Digital Code Guard (CDCSS)	INCLUDED	INCLUDED
DTMF Encode	INCLUDED	INCLUDED
DTMFANI	INCLUDED	INCLUDED
Selectable Code Guards	Up to 400 (16 per group)	Up to 400 (16 per group)
Selectable Network Access Codes	Up to 400 (16 per group)	Up to 400 (16 per group)
Talk Group IDs	INCLUDED	INCLUDED
Streamlined Unit-to-Unit Calling	INCLUDED	INCLUDED
Programmable Unit-to-Unit Call-Back	INCLUDED	INCLUDED
Emergency Transmission Mode	INCLUDED	INCLUDED
RX - Automatic Digital/Analog signal detection	INCLUDED	INCLUDED
TX - Automatic Digital/Analog signal generation	INCLUDED	INCLUDED
TX - Selectable Digital/Analog signal generation	INCLUDED	INCLUDED
Operating Voltage	10 V. NOM.	13.5 V. NOM.
Operating Temperature	-30 to 60 °C	-30 to 60 °C
Current Drain	Standby 20 mA Receive 255 mA Transmit 1.5 A	0.5A 1.0A 16.0A
Stability	+/- 2.5 PPM	+/- 2.5 PPM
Channel Increments	5.0/6.25/7.5 kHz	5.0/6.25/7.5 kHz
Operating Frequency Spread	136 - 174 MHz	136 - 174 MHz
Channel Spacing	25/30 and 12.5/15 kHz	25/30 and 12.5/15 kHz
Size - W x D x H (Standard Battery)	2.55 x 1.5 x 6.6 in.	6 x 9.38 x 2.12 in.
Weight	20 oz. (Standard Battery)	5 lbs.
Antenna	Helical Wound, Molded Rubber Flex	50 ? OMA Connector
FCC Type Acceptance	K95DPHX51 Parts 22, 74, 90	K95DMH599

Transmitter Specifications	DPHX5102X	DMH
RF Power Output	2/5 Watts	15 to 50 Watts
Spurious and Harmonics	60 dB	80 dB
Hum and Noise	50 dB	50 dB
Audio Distortion	3%	3%
Audio Response	+1/-3 dB	+1/-3 dB
Modulation	16K0F3E, 11K0F3E 8K10F1D, 8K10F1E	16K0F3E, 11K0F3E 8K10F1D, 8K10F1E

Receiver Specifications	DPHX5102X	DMH
Sensitivity: 12 dB SINAD	-119 dBm	-118 dBm
Selectivity	72 dB (wide) 60 dB (narrow)	75 dB (wide) 70 dB (narrow)
Spurious including Image	75 dB	80 dB
Intermodulation	70 dB	75 dB
Audio Output @ 5% Distortion	500 mW	4 W Internal 10 W External
Audio Response	+1/-3 dB	+1/-3 dB
Audio Input Load	8 Ohms	16 Ohm Internal 8 Ohm External

Specifications subject to change without notice. Measurements made in accordance with applicable TIA/EIA-603-A standards.



Designed and built to APCO Project 25 digital migration standards

400 channels programmable for digital, analog or mixed mode operation

Expanded 136 to 174 MHz operating frequency range

Best between charges battery life of any available P25 Radio

Superior audio quality in both analog and digital environments

Automatic Digital/Analog received signal detection and talkback

Selectable Digital/Analog signal generation

"Quick Call" streamlined unit-to-unit or group calling and automatic unit-to-unit call-back

Multiple password field and PC programming protection

Compatible with existing BK Radio batteries, antennas and other accessories

Optional DES/AES high level digital encryption

Designed to meet MIL-STD 810 C,D,E,F

### > D Series Features