

GENERAL INFORMATION

1.1 INTRODUCTION

This manual contains information about the physical, mechanical, and electrical characteristics of the BK Radio DPH Flex•Mode Series handheld VHF radios.

1.2 DESCRIPTION

The DPH Flex•Mode Series radios are self-contained VHF FM Radios covering the frequency range of 148MHz to 174MHz. The radios are multi-channel and digitally synthesized using a single crystal for frequency control. All models incorporate an EEPROM for the storage of channel frequency, Code Guard™, and Dual Tone Multiple Frequency/Automatic Numeric Identifier (DTMF/ANI) encode information. All models also include low-battery and busy-channel indicators. Toggle switches can be programmed to control hi/low transmit power, channel scan, priority scan, repeater talk-around, group scan, or group select. Status and channel information is displayed over a liquid crystal display on keyboard/display models. Connectors are provided on the side of the unit for an external antenna, microphone, speaker, and other optional accessories. A variety of twist-off battery packs are also available.

DPH Models

DPH Model Number	
DPH51 (5/2Watts)	

Options	
Metal Case	02X
Lexan Case	02S

Specifications are subject to change without notice.

1.3 TECHNICAL CHARACTERISTICS

FREQUENCY:	148-174MHz
POWER SUPPLY:	One rechargeable nickel-cadmium or nickel-metal-hydride battery pack with temperature sensor or one alkaline battery pack
OPERATIONAL FEATURES:	
Dual Priority Scan	Frequency Display
Transmit Time-Out Timer	User Select Scan
Scan Delay	Busy Channel Indicate / Lockout
Tone Code Guard (CTCSS)	DTMF/ANI Encode
Digital Code Guard (CDCSS)	Interstitial Frequency Capability
Nuisance Channel Delete	Soft Switches
TalkBack Scan	Custom Channel Selector
User Channel Guard	
CHANNELS:	400 (25 groups of 16 channels)
FREQUENCY SPREAD:	26 MHz with no degradation
OPERATING TEMPERATURE:	-30° to +60° C
PHYSICAL DIMENSIONS	
Weight:	20 oz. (24 oz. with large battery) 0.6 kilograms (0.7 kg with large battery)
Width:	2.55 in. (64.8 millimeters)
Depth:	1.5 in. (38.1 mm.)
Height:	6.6 in. (167.6 mm.) 7.8 in. (198.1 mm. with large battery)
ANTENNA TYPE:	Helical wound molded rubber flex (standard) BNC Helical wound molded rubber flex (optional)
CHANNEL SPACING:	15/30 and 12.5/25 kHz
CHANNEL INCREMENTS:	2.5/6.25/7.5 kHz
MAX CURRENT DRAIN:	
Transmit 5 watt:	1.4 amps
Receive:	190 mA
Receive standby:	45 mA (battery save off) 15 mA (battery save on)
FCC Identification number:	K95DPH51 (5/2 Watt Models)

Specifications are subject to change without notice.

TRANSMITTER

	<u>25 / 30 kHz</u>	<u>12.5 / 15 kHz</u>
RF OUTPUT POWER DPH51:	5/2 Watts	5/2 Watts
OPERATING FREQUENCY SPREAD:	26 MHz	26 MHz
SPURIOUS AND HARMONICS:	60 dB	60 dB
MODULATION DEVIATION:	5 kHz	2.5 kHz
FM HUM AND NOISE:	50 dB	45 dB
FREQUENCY STABILITY:	±2.5 PPM	±2.5 PPM
AUDIO DISTORTION:	3%	3%
AUDIO RESPONSE (per EIA):	+1 to -3dB	+1 to -3dB
MODULATION CHARACTERISTICS:	16K0F3E	11K0F3E 8K10F1E

RECEIVER

	<u>25 / 30 kHz</u>	<u>12.5 / 15 kHz</u>
SENSITIVITY: 12dB SINAD	0.25μV	0.25μV
OPERATING FREQUENCY SPREAD:	26 MHz	26 MHz
NOISE SQUELCH:	0.18μV	0.18μV
SELECTIVITY:	72 dB	60 dB
IMAGE AND SPURIOUS RESPONSES:	75dB	75dB
INTERMODULATION:	70dB	70 dB
AUDIO RESPONSE (per EIA):	+1dB / -3dB	+1dB / -3dB
AUDIO OUTPUT (@ 5% Dist.):	500mW	500mW

Accessories

A wide variety of optional accessories are available for the DPH handheld radios. Contact your BK Radio dealer for complete information.

License Requirements

This equipment must be licensed by the Federal Communications Commission (FCC) before it may be used. Your BK Radio dealer can assist you in filing the appropriate application for the FCC, and will program each radio with your authorized frequencies and signaling codes.

Service Information

If you need service, contact your local BK Radio dealer equipped to service your radio. If you find it impractical to have service performed by your local dealer, contact BK Radio at the address below:

BK Radio
ATTN: Customer Service
7100 Technology Drive
West Melbourne, FL 32904
Voice (800) 422-6281
FAX (321) 953-7986

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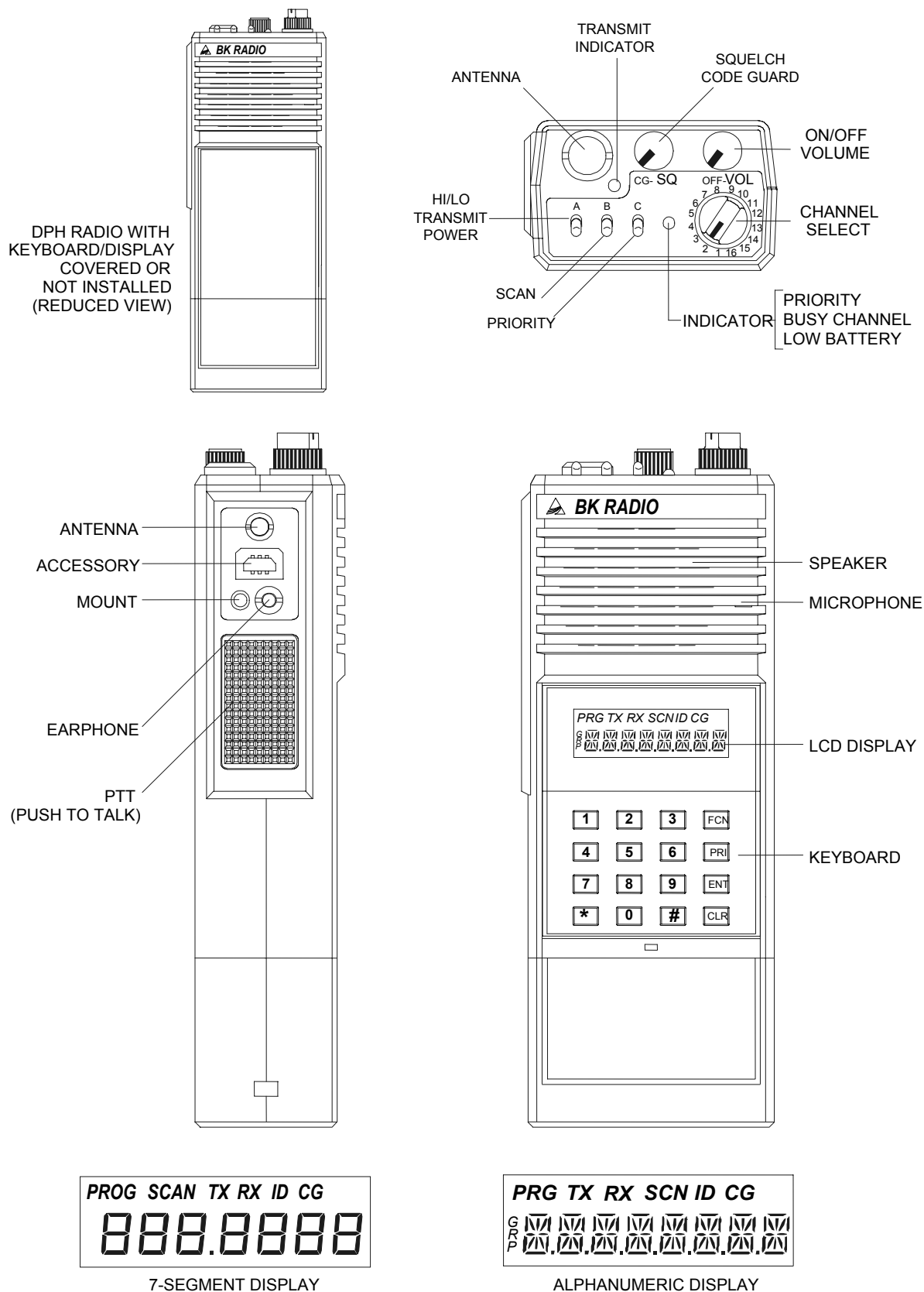


FIGURE 1-1 CONTROLS

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