

# MCS-25 Technical Specifications

Printed in U.S.A. 0500MCS25

## About the microEar:

PHONAK Communications, a division of one of the world's largest hearing aid companies, was instrumental in developing a remarkable silicon chip with a very unconventional blend of technologies. This chip integrates digital and analog techniques to produce a complete all-in-the-ear, narrow-band, crystal controlled, superheterodyne F.M. receiver. The microEar's low power circuitry, low noise pre-amplifiers and adaptive filtering techniques make it possible to achieve this exceptional high level of performance.

## About the BST-25 216 MHz:

COMTEK selected its BST-25 base station to be the preferred transmitter for the microEar VHF receiver because of its comprehensive features and exceptional track-record in the broadcast and film production industry.

- Microcontroller unit sets deviation, modulation, compression and EQ to automatically enhance microEar's performance.
- Compatible with specialized remote antennas.
- Compact and durable all-metal styling.

## microEar VHF (Studio) Specifications:

Operating Radio Frequency:	5 preselected channels for simultaneous operation in the 216-217 MHz band
F.M. Modulation:	5 KHz deviation
Antenna:	Self-contained (no external antenna)
Range:	100 Ft. with full quieting, 300 Ft. maximum ( with COMTEK BST-25 transmitter)
Ultimate Quieting:	58dB S/N related to 100% modulation
Audio Output:	High volume @ 60% modulation 109dB SPL Low volume @ 60% modulation 100dB SPL
Frequency Response:	150 Hz to 5 KHz with COMTEK BST-25 transmitter
Harmonic Distortion:	3% @ 60% modulation @ 1 KHz
Battery Life:	20 hrs with A10 zinc-air type
Dimensions:	17.5 X 11 to 5 mm.
Weight:	1.4 gr. with battery
Squelch:	Automatic

## BST-25 216MHz Specifications:

Operating Radio Frequency:	60 synthesized channels in the 216-217 MHz band Ch. 1-40 for the microEar Ch. 41-60 for COMTEK PR-216
F.M. Modulation:	5 KHz deviation Ch. 1-40 10 KHz deviation Ch. 41-60
Antenna:	Local whip antenna
RF Power Output:	100mW for FCC part 95
RF Stability:	20 ppm XTL controlled Digitally synthesized
Out Band Emissions:	< 55 dB below carrier
Audio Inputs:	Mic 600 $\Omega$ Balanced -50dBV Line 10K $\Omega$ Balanced +10dBV Switched XLR transformer Balanced input
Frequency Response:	80Hz to 8 KHz
Audio Distortion:	> 1% at 80% modulation
Operation Indicators:	VU bar graph meter Ch. and frequency Antenna condition Tuning lock-out
Power:	12V DC with AC adapter
Dimensions:	6.5" X 6.5" X 1.75 " with half or full rack mount

# COMTEK®