

## *BST-25/216 MHz*

### Synthesized Base Station Transmitter



The BST-25/216 MHz is a professional quality, auxiliary base station transmitter designed to operate in the newly assigned 216-217 MHz band under Part 95 of the F.C.C. regulations.

The BST-25/216 MHz transmitter incorporates the latest digital and analog technologies to produce low residual noise, wide dynamic range, and extended frequency response rendering the most natural sound possible from a wireless system.

This transmitter may be used for personal cueing, for tour guide applications, language interpretation, and for assistive listening applications.

#### Unique COMTEK features of the BST-25/216 MHz include:

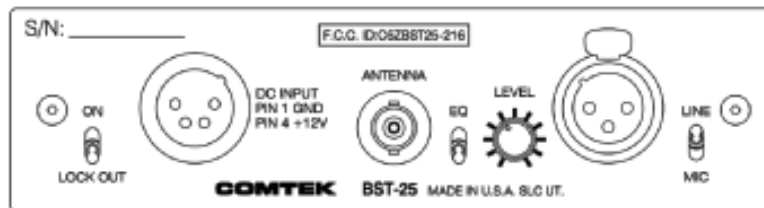
- 57 user-selectable channels in the 216-217 MHz range: 38 standard narrow-band, non-companded channels; 19 high-fidelity narrow-band channels with companded audio processing.
- Single-window, bright LED display for exact frequency and channel, VU bargraph meter, antenna condition and Lock-out indicator.
- Test tone generator for receiver testing and audio level referencing.
- Balanced mic or line level with 60 dB of control range to accommodate any audio level.
- Microcontroller automatically sets the modulation deviation, the audio mode for companding processing, and the EQ when corresponding channels are selected.
- Can be rack-mounted for AC or 12 volt DC power and can accommodate a variety of remote antennas.

# COMTEK®

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# BST-25/216 MHz Specifications

Printed in U.S.A.02102003BST-25/216



BST-25/216 Rear Panel

## Audio Inputs:

- Mic: XLR 600 ohm Balanced -40 dBV (nominal)
- Line: XLR >10 k ohm Balanced 0 dBV (nominal)

## Connectors:

- XLR-3 Female audio input connector for mic and line level input
- XLR-4 Male power input 12 volts
- BNC type RF output connector

## Operation Indicators:

- LED Bargraph VU Meter displays audio input (modulation)
- Two-Digit Alpha Numeric Display shows operating channel
- Five-Digit Numeric Display shows operating frequency
- Antenna Indicator displays deficient antenna condition
- Lock-out Indicator shows tuning has been disabled

## Antenna:

- Telescopic antenna mounts directly into top of transmitter
- BNC RF output connector for optional external antenna

## F.C.C. Compliance:

Type Accepted under Part 95

## Power Compliance:

12 volts DC, 300 mA max

## Frequency Response:

80 Hz to 8 kHz

*Note: Specifications subject to change without notice*

## Audio Distortion:

Less than 1% at 80% modulation

## Modulation Limiter:

Soft compressor type with high (25 dB) linear overload protection, attack time less than 1 ms, recovery time 10 ms

## Audio Gain Control:

Greater than 40 dB

## Test Tone Generator:

400 Hz 0.05% distortion

## Frequency Modulation:

5 kHz and 10 kHz deviation

## RF Output Power:

Set for 100 mW for F.C.C. Part 95

## Frequency Stability:

Better than 20 ppm, digitally synthesized, crystal controlled

## Operating Frequency:

216-217 MHz

## Harmonic and Spurious Emissions:

Better than 55 dB below carrier

## Dimensions:

6 1/2" W x 1 3/4" H x 5 5/8" D

## Weight:

44 oz.

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