PKSOUND"

PRODUCT SPECIFICATION

T10



T10 is a member of the industry's first robotically controlled line source family. Stunning SPL and clarity can be precisely controlled in both the vertical and horizontal planes, offering system operators maximum flexibility in making coverage adjustments after the array is flown. Onboard inclinometers and network-based Auto-Array within PK .dynamics software enable each module to recognize its position and angle within the system, improving accuracy, efficiency of deployment, and safety.

Dual bandpass-loaded 10" transducers manage low-frequency response. The mid-frequency band is supported by two 6.5" midrange transducers affixed to the patented Coherent Midrange Integrator (CMI). A dual-diaphragm high-frequency transducer, coupled directly to an integrated planar waveguide, significantly reduces distortion across the high-frequency band. A 3,000 W Class D amplifier maximizes headroom while maintaining crystal clear audio and exceptional output.

The CMI waveguide seamlessly combines mid and high frequencies, working in tandem with precisely spaced low-frequency apertures for smooth and controlled directivity. It allows for variable adjustability from 60°-120° both symmetrically and asymmetrically so that system designers and technicians can remotely shape the radial directivity of the array relative to the coverage requirements of any event or venue.

Flown straight, the array's directivity is then configured remotely using industrial linear actuators with a duty cycle of up to 109 years. Horizontal angles can be set to over 30 variable positions, allowing for mechanical optimization. Vertical angles are variable with 0.1° accuracy. Finally, a combination of FIR and IIR filters is applied to ensure smooth frequency response throughout the listening area.

Output Capability

Frequency Response....40 Hz-20 kHz Peak SPL.....146 dB

Acoustic Properties

Horizontal Directivity.....60°-120° Robotic Directivity Horizontal Resolution....5° Symmetric & Asymmetric Vertical Adjustment.....0°-12° Robotic Directivity Vertical Resolution......0.1° Increments

Robotic Actuators

Horizontal Thrust........750 N

Vertical Thrust......2,500 N

IP Rating......IP69K (static), IP66 (dynamic)

Duty Cycle.....80,000 Actuations (109 years)

Transducers

High-Frequency......1 x 4" Dual Diaphragm Planar Wave

Amplification

Operating Voltage..... Auto-Switching 100-240 V, 50/60 Hz

Power Consumption....700 W
Network...... Proprietary

Input/Output Connections

Input Selection.....Analog/AES

Audio/Network...... Multipin Amphenol – IP65 Power..... powerCON TRUE1 – IP65

Physical Properties

Max Line Length......24 Modules

Environmental......IP42 (front), IP43 (rear)

Multipin Connector..... IP65

 ${\sf Module\ Construction...Void-Free,\ High-Grade\ Baltic\ Birch}$

Rigging Construction...6061-T6 Aluminum External Coating.......EXL Polyurea

Grill......Powder Coated Aluminum

