## Professional Series

## Key Features:

- Extremely consistent $120^{\circ}$ broadband pattern control featuring JBL's exclusive conical Radiation Boundary Integrator ${ }^{8}$ (RBI ${ }^{\text {TM }}$ ) technology.
- Provides very consistent coverage of listening area.
- Wide coverage requires fewer speakers, reducing the cost of the installed system without sacrificing performance.
- Coaxial design featuring:
- 165 mm ( 6.5 in ) woofer with butyl rubber surround.
- 25 mm ( 1 in ) soft-dome tweeter on 250 mm (10 in) diameter wave guide.
- Slim design ( $142 \mathrm{~mm} / 5.6 \mathrm{in}$ ) for use in spaces with restricted / shallow mounting depths
- 8 ohm and $70 \mathrm{~V} / 100 \mathrm{~V}$ operation.
- Integrated backcan for easy "blind-mount" install. Packaged with grille and tile rails for easy installation.


## Applications:

The Control 47LP is a premium in-ceiling professional loudspeaker designed for applications that require extremely wide bandwidth along with very consistent coverage.

Featuring JBL's exclusive conical Radiation Boundary Integrator ${ }^{\text {® }}\left(\right.$ RBI $^{T M}$ ), the RBI provides a large waveguide for the tweeter while low-frequency sound projects through specially-designed apertures in the RBI, allowing for a seamless integration of coverage between the two coaxiallymounted drivers. The result is extremely consistent sound character with very little variation throughout the listening space. The wide coverage allows for the use of fewer loudspeakers compared to speakers with less consistent coverage control, while at the same time providing better coverage of the area.

The shallow backcan on the Control 47LP enable the system to be installed into areas with shallow or restricted mounting depths. The Control 47LP's 165 mm ( 6.5 in ) woofer features a polypropylene cone and pure butyl-rubber surround for long life. The copper-clad aluminum voice coil wound on a vented aluminum former provides low distortion and high sensitivity. The coaxially mounted $25 \mathrm{~mm}(1 \mathrm{in})$ soft dome features internal damping for smooth extended response and ferrofluid cooling for enhanced power handling and reduced power compression. The result is crisp, clear highs.

Ideal for small and large projects alike, the Control 47LP is switchable for use as either an 8 -ohm low-impedance speaker, or as part of a $70 \mathrm{~V} / 100 \mathrm{~V}$ distributed loudspeaker system.


## Specifications:

| System: |  |
| :---: | :---: |
| Frequency Range (-10 dB $)^{1}$ : $68 \mathrm{~Hz}-20 \mathrm{kHz}$ |  |
| Frequency Response ( $\pm 3 \mathrm{~dB})^{1}: 100 \mathrm{~Hz}-17 \mathrm{kHz}$ |  |
| Power Capacity ${ }^{2}$ : $\begin{aligned} & 150 \text { Watts Continuous Program Power } \\ & 75 \text { Watts Continuous Pink Noise }\end{aligned}$ |  |
| Nominal Sensitivity: 91 dB |  |
| Nominal Coverage Angle ${ }^{3}$ : $120^{\circ}$ conical coverage |  |
| Directivity Factor (Q) ${ }^{3}$ : 6.5 |  |
| Directivity Index (DI) ${ }^{\text {a }}$ : 7.9 dB |  |
| Rated Maximum SPL: 110 dB @ $1 \mathrm{~m}(3.3 \mathrm{ft})$ average, 116 dB peak |  |
| Rated Impedance: 8 ohms (in bypass mode) |  |
| Transformer Taps: $60 \mathrm{~W}, 30 \mathrm{~W}, 15 \mathrm{~W}$, (\& 7.5 W @ 70 V ) |  |
| Transformer Insertion Loss: $\begin{array}{ll}0.76 \mathrm{~dB} @ 60 \mathrm{~W}, 0.70 \mathrm{~dB} @ 30 \mathrm{~W}, \\ & 0.61 \mathrm{~dB} @ 15 \mathrm{~W}, 0.58 \mathrm{~dB} @ 7.5 \mathrm{~W}\end{array}$ |  |
| Transducers: |  |
| LF Driver: 165 mm ( 6.5 in ) with polypropylene cone, butyl rubber surround, copper-clad coil, vented aluminum former. |  |
| HF Driver: 25 mm (1 in) soft dome $\mathrm{w} /$ dampening, ferrofluid-cooled. |  |
| Enclosure: |  |
| Input Connectors: ${ }^{\text {T }}$ | Two removeable locking 2-pin connectors with screwdown terminals. Max wire 12 AWG ( 2.5 mm ). |
| Knockouts: Two (top and side) |  |
| Safety Agency: $\begin{aligned} & \text { S } \\ & \\ & \\ & \\ & \\ & \text { S } \\ & \\ & \text { a } \\ & \end{aligned}$ | Suitable for use in air handling spaces per UL1480, UL2043, NFPA90 \& NFPA 70. S7232/UL Listed, Signaling Speaker. Transformer UL registered per UL1876. In accordance with IEC60849/EN60849. |
| Dimensions: 3 | 305 mm Diameter x 142 mm Depth from back of baffle ( 12 in x 5.6 in) |
| Cutout Size: 28 | 282 mm Diameter (11.1 in) |
| Ceiling Thickness Range: A | Accommodates tiles/drywall up to 70 mm (2.75 in) thick |
| Weight: 4 | $4.3 \mathrm{~kg}(9.5 \mathrm{lb})$ |
| Included Accessories: | C-ring support backing plate, 2 tile support rails (fits both $2 \times 4 \mathrm{ft}$ or $600 \times 1200 \mathrm{~mm}$ tiles), knockout strain relief, cutout template, paint shield, 2 removable locking multipin connectors. |
| Optional Accessories: | MTC-47NC New Construction Bracket MTC-47MR Mud Ring Construction Bracket |

${ }^{1}$ Half-space (flush mounted in ceiling)
${ }_{2}^{2}$ Continuous Pink Noise rating is IEC-sh
${ }^{2}$ Continuous Pink Noise rating is IEC-shaped pink noise with a 6 dB crest factor for 100 hours continuously. Continuous Program power is a conservative expression of the system's ability to handle normal speech and music program material, and is defined as 3 dB above the Continous Pink Noise Rating.
${ }^{3}$ Half-space (in ceiling) average 1 kHz to 16 kHz .
JBL continually engages in research related to product improvement. Changes introduced into existing products without notice are an expression of that philosophy.

## Control 47LP Two-Way 6.5" Coaxial Low Profile Ceiling Loudspeaker

## Beamwidth:



Directivity Index:


## Dimensions:



Frequency Response:
Half-space ( $2 \pi$, mounted in ceiling)


Off-Axis Frequency Response:


## ABI

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