

# The JBL Intellivox ADC Mark II range

Compact loudspeaker arrays for use in 70V / 100V  
Public Address and Voice Alarm (PA/VA) systems



**EN 54-24** Certified for Voice Alarm -  
Emergency Sound Systems

Shaping the future of sound reinforcement

# Analogue Directivity Control (ADC)

The JBL Intellivox ADC Mark II range is intended for use in 70V/100V Public Address and Voice Alarm (PA/VA) systems. As with other Intellivox products the ADC range has been designed to maximise listening comfort and provide highly intelligible speech reproduction even within difficult reverberant spaces.

**EN 54-24**

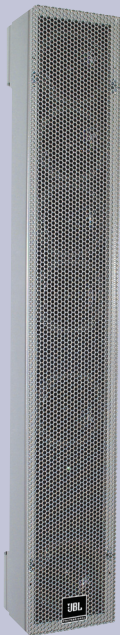
Certified for Voice Alarm -  
Emergency Sound Systems

The revolutionary Digital Directivity Control (DDC) algorithm, pioneered by JBL's Duran Audio group, was used to define a set of passive filters which has been precisely transferred into the analogue domain resulting in the ADC technology.

The Passive filter network provides time alignment for the individual drivers, equalisation of the complete array and creates a constant wavelength line source.

Each array consists of 6 carefully aligned 4" full range loudspeakers housed inside a tough steel enclosure. The specially aligned drivers are highly efficient and have an extended flat frequency response, providing natural and uncoloured reproduction of both spoken word and background music.

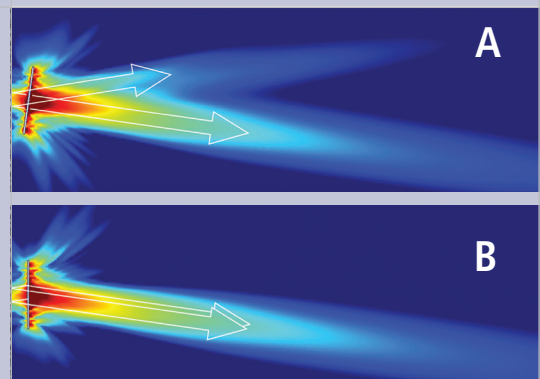
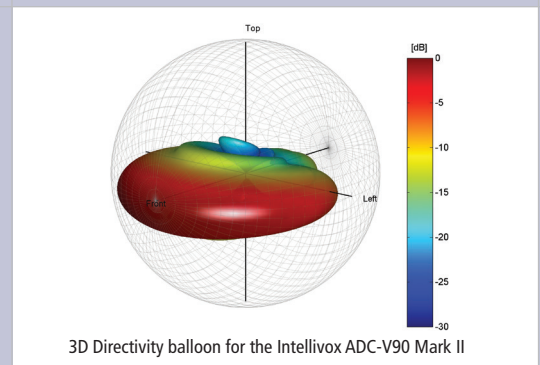
## JBL Intellivox ADC-V90 Mark II



- Transport Hubs
- Places of Worship
- Atriums
- Shopping Centres
- Any reverberant space where high quality speech reproduction is required

To improve intelligibility, the Model V90, utilises a preset vertical opening angle with a -4° steering angle to accurately cover the listening plane when mounted flat to a vertical surface. This results in a reduction of incoherent reflections from the mounting surface.

An additional advantage of vertical or even recessed mounting is that the Model V90 becomes architecturally unobtrusive.



# JBL Intellivox ADC-H90 Mark II



- **Railway Station Platforms**
- **Long, high ceiling corridors**
- **Terminals**

The JBL Intellivox ADC-H90 Mark II is designed for use on platforms and in high ceiling corridors, to minimise spill over a large bandwidth outside the listening area. The precisely defined horizontal dispersion aims the acoustic signal at the listener area, whilst minimising disturbance outside of this locality.

This dramatically improves the listening comfort in surrounding areas of for instance, open platform railway stations.

## Quick Design Guide

The Intellivox ADC-V90 Mark II is designed to provide even coverage up to a distance of 10-15 m. It has a fixed horizontal dispersion of 130° and a vertical opening angle of 30°, which is steered downwards 4° from the acoustic centre.

### Please Note:

Unlike other Intellivox products, the acoustic center of the Intellivox ADC-V90 Mark II is located at the centre of the highest driver in the array.

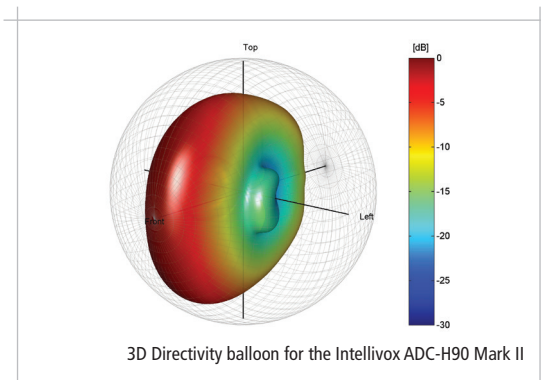
The following table can be used as a guide to correct mounting height\*:

Listener Height	Coverage	Acoustic Centre
seated - 1.2 m	< 15 m	2.5 m from floor
seated - 1.2 m	< 20 m	3.0 m from floor
standing - 1.7 m	< 15 m	3.0 m from floor
standing - 1.7 m	< 20 m	3.5 m from floor

\*This information is only intended as a guide and should not be used in design, installation or specifications without thorough investigation!

The column is designed to be mounted horizontally and can be mechanically aimed according to desired throw.

The Intellivox ADC-H90 Mark II is designed to evenly cover distances up to 10-15 m. It has a fixed vertical dispersion of 130° and a horizontal opening angle of 30°. The focus point for the horizontal beam is at 15 m.



## Installation and Safety Features\*

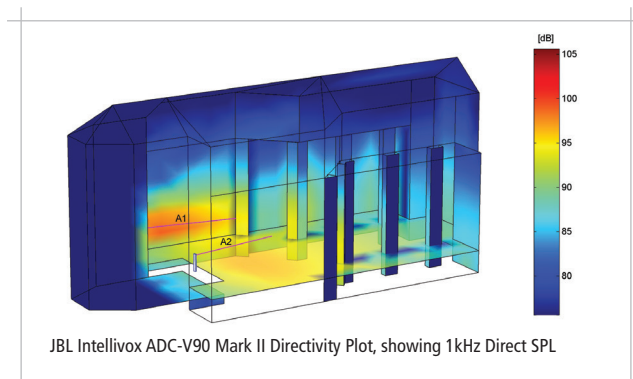
- Cable entry on these loudspeakers is via a recessed PG13.5 gland on the rear of the unit. Once the cable has been passed through the gland the connections and tap selector can be accessed from the front of the unit, making them easy to connect and configure whilst in position.
- A ceramic connector ensures that the terminal will not melt in a fire situation and short out the audio line. To further protect the integrity of the audio line, a thermal fuse is fitted to ensure that the internal wiring is disconnected should the unit be exposed to severe temperatures.
- Threaded bushings allow security screws to be fitted, to prevent the grill from being removed.
- A pilot tone indicator is visible through the front grill of each unit. When a pilot tone is present on the line, the LED will illuminate showing that the connection with the amplifier is intact. This feature has been designed to work with the JBL AXYS® Industry Amp series of 100V line amplifiers. However, it can also be used with 3rd party amplifiers which have the specified pilot tone properties.

\* Common to both Models V90 and H90.

## Predicting the Performance

JBL Professional's Digital Directivity Analysis (DDA) software can be used to predict the performance of both the Model V90 and H90. DDA allows the user to visualise and predict the direct SPL distribution from the array. For more detailed analysis users can transfer the directivity calculated in DDA to CATT-Acoustic®, ODEON® or EASE®.

More information about JBL DDA can be found on our website at [www.jblpro.com](http://www.jblpro.com)



## Short Form Specifications\*

	Intellivox ADC-V90 Mark II	Intellivox ADC-H90 Mark II
<b>Acoustical</b>		
Frequency Range	220 - 10k Hz (+/-3 dB) 120 - 12k Hz (-10 dB)	260 - 11k Hz (+/-3dB) 150 - 14k Hz (-10 dB)
Sensitivity (1 W / 4 m)	80 dB SPL	79 dB SPL
Maximum SPL (100 W / 4 m)	100 dB SPL	99 dB SPL
Coverage	- Horizontal 130° (-6 dB) - Vertical 30° (-6 dB) - Steering Angle Vertical -4° - Typical Throw 15 m	40° (-6 dB) 130° (-6 dB) Horizontal 0° 15 m
<b>Electrical</b>		
Rated Impedance	- 100 W tap 100 Ω - 50 W tap 200 Ω - 25 W tap 400 Ω	100 Ω 200 Ω 400 Ω
Rated Noise Power	100 W <sub>rms</sub> (100 W tap)	100 W <sub>rms</sub> (100 W tap)
Rated Noise Voltage	100 V <sub>rms</sub>	100 V <sub>rms</sub>
Control switches	- Tap setting 100 W / 50 W / 25 W - Highpass filter HPF active / Flat - Correction EQ EQ active / Flat	100 W / 50 W / 25 W HPF active / Flat EQ active / Flat
Pilot tone detection	- Indicator Green LED on front - Frequency range 20k - 23k Hz - Minimum level 6 V <sub>rms</sub>	Green LED on front 20k - 23k Hz 6 V <sub>rms</sub>
Suggested amplifiers	JBL 100 V IndustryAmp series	JBL 100 V IndustryAmp series
<b>Mechanical</b>		
Material	Steel, powder coated	Steel, powder coated
Mounting points	4 x M5 bottom and 4 x M5 top	4 x M5 left and 4 x M5 right
Dimensions (H x W x D)	865 x 134 x 92 mm (34.1" x 5.3" x 3.6")	134 x 865 x 92 mm (5.3" x 34.1" x 3.6")
Standard Colours**	- Enclosure and grill RAL 9007 (grey) or RAL 9010 (white) - Speaker baffle RAL 9011 (black)	RAL 9007 (grey) or RAL 9010 (white) RAL 9011 (black)
Weight	10 kg (22 lbs)	10 kg (22 lbs)

\* Refer to the individual product data sheets for conditions and detailed specifications.

\*\* Optional custom colour matching service available

**EN54-24** Certified for Voice Alarm -  
Emergency Sound Systems



**JBL Professional**  
8500 Balboa Boulevard  
Northridge, CA 91329 U.S.A.

© Copyright 2014 JBL Professional  
[www.jblpro.com](http://www.jblpro.com)