

# K12 FOH model by Blue Acoustic

data 1

The Blue Acoustic K12 is a compact, powered FOH loudspeaker configured in three-way format designed for demanding applications.

The K12 has a +/- 3dB operating range from 52Hz - 20KHz with two independent amplifiers one driving a 12" woofer and the other the 2 x 5" midrange and 1" compression driver.

The K12 is still a compact design and is extremely efficient considering its wide response.

The on-board 2 way Powersoft LiteMod HV module is perfectly matched to the respective frequency bands.

For superior performance we recommend the use of additional bass cabinets.

## Component specifications.

|                    |                                   |
|--------------------|-----------------------------------|
| bass unit          | 316mm (12")                       |
| bass aes power     | 700 watts                         |
| voice coil         | 76mm (3") 8Ω                      |
| magnet             | neodymium                         |
| mid units (2)      | 140mm (5.4")                      |
| mid unit aes power | 131mm (5") x 2                    |
| voice coil         | 200 watts (total wired in series) |
| magnet             | neodymium                         |
| hf unit exit       | 25.4 mm (1") 8Ω                   |
| hf unit aes power  | 40 watts                          |
| voice coil         | 44mm (1.73")                      |
| magnet             | neodymium                         |
| Mid/HF Dispersion  | 90° x 50°                         |

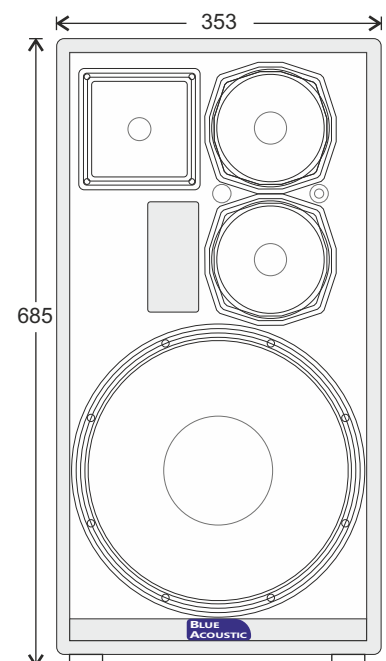
## Cabinet specifications.

|                             |                                   |
|-----------------------------|-----------------------------------|
| handles                     | 3                                 |
| pole mount                  | 35mm vertical and 5° tilt forward |
| build material              | 12mm, 15mm and 18mm birch ply     |
| LF efficiency 1w/1m         | 98dB                              |
| MF efficiency 1w/1m         | 101dB                             |
| HF efficiency 1w/1m         | 108dB                             |
| spl at rated power          | 127 dB                            |
| tml (theoretical max level) | 133 dB                            |
| frequency response          | 50Hz - 20KHz (± 3dB)              |
| high pass filter settings   | see over page                     |
| dimensions                  | 685 h x 353 w x 310 d             |
| weight                      | 23 Kgs (51 lbs)                   |
| foam behind grille          | fitted                            |
| covers (option)             | heavy duty padded slip over       |

\* tml is published for comparative purposes only

## Module specifications.

|                                |                                       |
|--------------------------------|---------------------------------------|
| number of channels             | 2                                     |
| signal input (input and link)  | balanced XLR                          |
| channel 1 - LF                 | 700 watts selected HP filter to 400Hz |
| channel 2 - MF/HF              | 200 watts 400Hz to 20KHz              |
| ac power                       | 110 - 240 volts (50-60Hz)             |
| connectors (mains in and link) | Neutrik Powercon True 1               |
| THD+N                          | < 0.05% 0.1w to full power            |
| damping factor                 | > 10,000 @ 100Hz                      |



The K12 is three-way model (powered 2 way) and has a comprehensive DSP unit within the module to assist with the ultimate control of the acoustic performance.

This Blue Acoustic K12 has four user selectable settings on board which will assist by providing a range of performance options.

These settings are easily selected using the round push button placed between the XLR in and link sockets situated on the upper end of the amplifier module.

## K12 Presets.

With the LF, MF/HF bands amplified individually the operational performance of the Blue Acoustic K12 is more easily predicted.

The four presets operating within the module driving the K12 have therefore been engineered as follows.

### Preset One

Full range performance from 50Hz to 20KHz +/- 3dB.

Examples would be Audio-Visual installations, Church installations, small band PA and music playback systems.

### Preset Two

Full range performance from 50Hz to 20KHz +/- 3dB.

Examples would be similar to Preset One with the benefit of a 2dB wideband dip in the response centred at 875 Hz.

### Preset Three

Designed for use with bass cabinets in larger venues.

For use with Blue Acoustic single 15" or dual 15" bass systems.

### Preset Four

Designed for use with bass cabinets in larger venues.

For use with Blue Acoustic single 18" bass systems.

## K12 installation hardware

We have a number of options for the installation of the Blue Acoustic K12 full range loudspeaker.

The most commonly used brackets are yoke style.

Here, tilt and swivel are available to the installer where the only essential is a secure wall mount position for the bracket.

As an alternative where the installer wishes to provide the support hardware we can insert 10mm nut plates wherever required beneath the cabinet surface.

It is a requirement that at least 250mm of clear air space is maintained at the rear of the K12 cabinet so that cooling of the heatsink is not impaired.

Module rear panel controls

