



CS Series

Permanent Installation Loudspeaker System 固定安裝系統

高度完美 成就經典杰作

Perfect and classical masterpiece



- 專業音響是爲了給使用者提供服務的資本，可靠、耐用以及效果顯著是市場中必然的要求和選擇，因此博聲音響推出了頂級效果的CS系列，這個系列是博聲音響衆多PA系統裏性能最佳，質量最高和使用了最先進的驅動技術代表，象徵着最好的音質，成就完美的產品。
- 新型的釹磁鐵徑向磁路驅動單元代表了當今最先進的喇叭設計，性能更好、效能更高，功率更大，重量更輕，可靠性更強，這些高品質喇叭單元被安裝在用芬蘭樺木膠合板制造的堅固外殼內。
- CS系列音箱采用先進的功率傳輸技術和更佳的專業擴聲性能，外形優雅輕巧的箱體和超卓的聲音使它極之適合對聲音素質有要求的音樂和用于高要求的工程項目，從小型到中型場所至重要的AV和演出擴聲應用。
- Professional audio supplier offers reliable service, long service time and good quality product is the necessary requirement and option in the market. So BOB presents the top CS series, it has the best performance, quality and most advanced driving technology in BOB's PA system. A perfect product with the best sound.
- The new neodymium radial magnetic path driving unit represents the most advanced loudspeaker design: better performance, higher efficiency, bigger power, lighter weight and more reliable. All these high quality units are installed inside the Finland birch plywood enclosure.
- CS series uses advanced power transmission technology to achieve a better PA performance. Elegant and lightweight enclosure and its excellent sound lead to fit all kinds of high-end shows and installation projects that from small or medium size place to important AV and performance application.





Enclosure Design 箱體設計

為了不斷追求完美，博聲音響在板材和表面處理方面不遺餘地提高要求標準。CS系列音箱採用緊湊的弧度對稱多邊形設計，優質的芬蘭全樺木多層膠合板建造箱體，特別定制的樺木膠合板符合聲學設計要求，令到CS系列音箱堅固結實的同時具有良好的聲學特性。為了確保產品的一致性和不易被模仿，博聲音響採用了獨特的音箱組裝技術，榫槽結構、冷粘接、高壓定位等技術和工具令箱體粘結牢固。表面使用環保耐磨的塗料處理。部分高端的產品更是採用極度耐用的彈性防水材料塗層保護，高度耐刮，適用於任何苛刻的環境。

To achieve perfection, BOB spares no effort to improve the standard of sheet material and surface precession. CS series uses compact radians symmetric polygon enclosure design. It is made of high quality multi-layer birch plywood, this kind of birch plywood is specially made to meet acoustical design that leading the enclosure solid and good acoustical character. For consistency and preventing form copy, BOB refused to put the traditional reinforcement material into the cabinet instead of using its special integrated enclosure installation technology such as mortise structure, cold bonding and high pressure positioning etc. to bond the cabinet firmly. Some high-end model is protected by the extremely durable elastic waterproof material coating, highly anti-scratching and hitting, can be applicable to any harsh environment.

Optional Bi-Amp Or Full Range Driving 可選雙功放或全頻驅動

為了讓使用者用更多的使用選擇，全系列CS音箱都可以用單功放或雙功放驅動。祇要撥動安裝在音箱輸入背板上的開關就可以進行轉換。

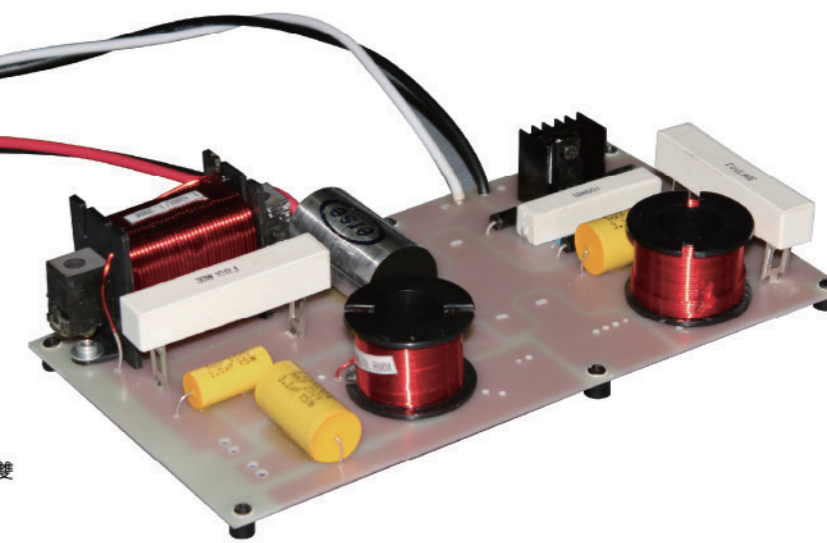
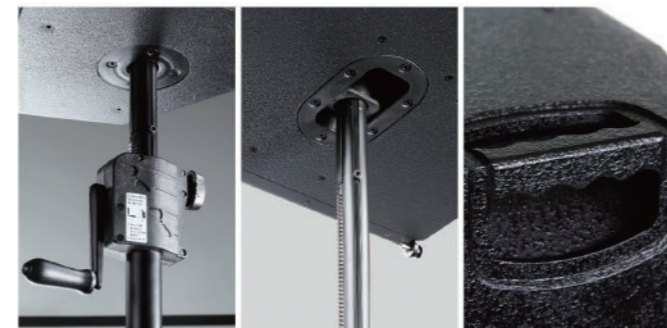
Optional for user, CS series has Full Range or bi-amp driving mode, it can be converted as long as press the switch on the rear panel.



Unapproachable Process Detail 無可匹敵的工藝細節

音箱的頂底部設有符合人體工程學的一體化木質把手，低部裝有1個36mm的支撐底座。用于支架安裝，或與其它型號的超低頻音箱連接。頂底部和背板側面板裝有懸吊用的M8吊裝螺絲。

There are ergonomic handles on both sides of the enclosure that ease to delivery, one 36mm supporting base on top for supporting installation and connecting with other models, M8 suspension screw are installed on front side and back side.



Crossover 分頻器

除了驅動單元本身，分頻網絡對音質的優劣有着舉足輕重的影響。分頻網絡是由電容、電阻、電感等元器件組成，在設計上很難有革命性的突破和改良。但博聲音響的工程師仍不斷努力地去改良優化聲音質量，無源分頻器採用了相鄰頻段之間重疊很少的3階（18dB/倍頻程）斜率濾波器，讓音頻響應曲線更加平直、降低失真和相位幹擾。精細調整的分頻網絡和音箱結合，產生杰出的音質和均勻一致的覆蓋區。

Except driving unit itself, the crossover network has a significant influence on sound quality. Crossover network is composed by capacitor, resister and inductor; it is hardly to make a revolutionary change for such a design, but BOB's engineers are trying their best to optimize the sound quality. Passive crossover uses 3 level (18dB/octave) slope filter which has little overlap between two adjacent frequency segments. It results a flatter audio response curve, lower distortion and phase interference. Combining with smoothly adjusted crossover network and speaker to make fantastic sound and average covering area.





Coaxial Monitor System 同軸單元裝置的反送系統

在CS這個系列裏有兩款同軸配置的全頻反送音箱，同軸技術的驅動單元系統比普通兩分頻音箱系統更具相當多的優勢。博聲音響的工程師把高低頻部分精巧準確地裝嵌在同一單元軸線上解決了時間及相位誤差的問題，從而改善了傳統兩分頻音箱系統的頻散混響帶來的失真效果。高低頻重疊的特性會產生完全輻射的波陣面，因此聲音覆蓋的均勻度更平均。

同軸的技術優勢是軸對稱的指向性在水平和垂直相位都能產生相同的覆蓋模式。作為舞臺返送的CS同軸音箱可以靈活配置在不同舞臺環境下，無論你走近走遠，向左還是向右，同軸系統都能帶給你出色的音質表現與聽覺享受，聲音自然、清晰。

2 models in CS series is coaxial full range speaker, their coaxial driving units have more advantages than the normal 2-way full range ones. BOB's engineer accurately assembled the HF parts to axis in the same unit to solve the time and phase tolerance problem, so that distortion effects which causing by the frequency dispersion and reverberation of normal 2-way full range system has be improved. Lapped character of high and low frequency can make a completely radiated wavefront, so the sound covers more balance.

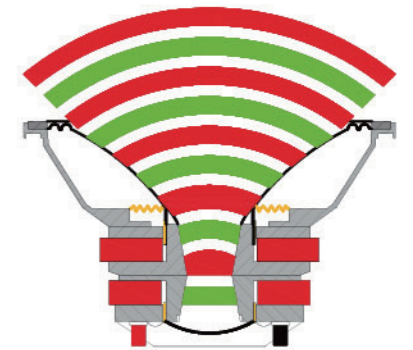
The advantage of coaxial technology is axisymmetric directivity has the same cover mode both in horizontal and vertical phase. As stage monitor speaker, it can be installation under different stage environment, whatever you are left or right on the stage, stand near or far from the stage, the coaxial system brings you excellent sound quality and listening enjoyment, nature and clean sound.

Driving Units 驅動單元

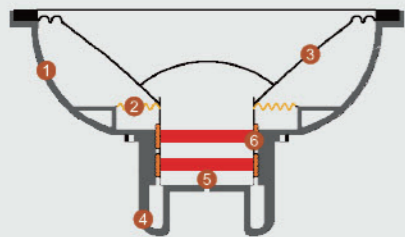
CS系列的低頻驅動單元採用了先進的徑向磁路設計，用專門設計的扁平銅線繞制而成的低頻驅動單元音圈，是非常特別的上下雙音圈結構，這種最新設計可獲得更大的功率處理能力，提供最高的瞬態響應和功率容量，降低了失真和減少了功率壓縮，雙磁鐵和雙音圈使得的散熱面積增大減低燒毀音圈的機會。

高頻壓縮驅動單元採用了由世界知名單元製造公司西班牙拜馬專門為博聲音響設計和製造的高頻驅動器，鈦金屬膜片加上先進的磁路設計，最終能夠產生細膩和自然的高頻音色。

The LF driving units of CS series has an advanced radial magnetic path design. The coil is a special up and down double coils structure that surrounded by designed flat cooper wire. This design can lead a bigger power processing ability, improve the highest transient response and power capacity, and reduce distortion and power compression. Double neodymium and double coils enlarge the radiating surface for prevent the coil from burning down. BEYMA, the world famous loudspeaker supplier in Spain specially design the HF driving unit for BOB, titanium diaphragm and advanced magnetic path design results smooth and nature HF sound.



- 1 鋁合金鑄盆架 Aluminium alloy frame
- 2 超長使用壽命彈波 Durable damper
- 3 高强度大功率紙盆 Strong high power paper cone



- 4 一體化散熱外殼 Integrated sink shell
- 5 雙高效強磁鐵 Double high efficiency magnet
- 6 長衝程大功率雙音圈 Long stroke high power double voice coil

Special Broadband Constant Directing Waveguide Horn 獨有的寬頻恒指向波導號角

聚氨酯壓鑄的橢圓形寬頻恒指向波導號角是博聲音響獨有的設計。由於聲波是呈球形擴散的特性，橢圓形波導號角提供了恒定的波束寬帶和指向性，這種獨特的波導技術消除了因為號角轉角引起的高頻毛刺和失真。由於沒有較大的平直面，所以與傳統的號角相比少了很多頻帶內的共振，避免了傳統矩形號角的弊病。由於具有寬頻帶、低失真、和極少的聲染色，橢圓形寬頻恒指向波導號角這種設計更加具有良好的聲學特性指標，聲音遠比傳統的號角自然。

Polyurethane die-casted oval eternal pointing waveguide horn is BOB's own design. Due to sound-wave's spherical diffusion character, oval waveguide horn can provide constant wave beam broadband and directing, this special waveguide technology eliminate the high frequency burr and distortion which causing by horn's turn angle. Because there is no big flat plate, it has much less resonance in frequency range comparing with traditional horn that throwing out the disadvantage of traditional rectangular horn. Oval broadband constant directing horn design is wide frequency range, low distortion and little acoustic coloring, it has good acoustic characteristics of indicators, more natural sound than traditional horn.



Installation 安裝配件

CS系列所有型號的音箱都配備了各種吊具和支架，安裝工程師可以根據使用需要選配安裝吊具。
All models of CS series provide kinds of spreader and bracket for installation engineer to choose according to all requirements.

