# ตอบสนองความกีได้ดีเยียม



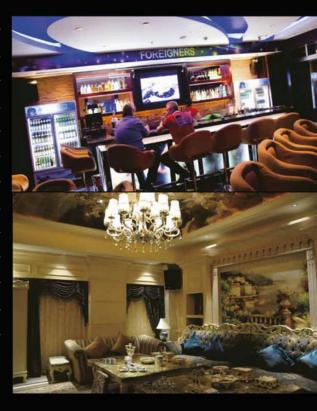




## HT Series

เป็นลำโพงที่มีขนาดเล็กแต่มีพลังงานในการขับคลื่นเสียงออกมาได้อย่างยิ่งใหญ่โดยใช้ไดอะแฟรมตัวใหม่มาใช้ในการขับคลื่นเสียง ออกมาโดยจะทำให้ขยายขีดจำกัดของการขับคลื่นของเสียง บนความถี่และลดการบิดเบือนของเสียงโดยใช้ฮอร์คอมโพสิต มาช่วยเพิ่มองศา ในการส่งคลื่นเสียงในแนวนอน 50-100 องศา และแนวตั้ง 55 องศา ซึ่งช่วยในการควบคุม เสียงภายใต้พื้นที่จำกัด ได้อย่างมีประสิทธิภาพ และยังรักษาสมดุลของเสียงและลดการรบกวนของเสียง รอบข้างได้เป็นอย่างดี และเพิ่มความคมชัดของเสียง ตอบสนองความถี่ได้อย่างดีเยี่ยม และยังสามารถกันน้ำ และกันฝุ่นด้วยเทคโนโลยีโดยการออกแบบโครงสร้างที่มั่นคง สามารถใช้สอยได้หลากหลายรูปแบบ ทั้งแขวนคอในมุม และทิศทางหลากหลายและยังมีการติดตั้งตามที่ต้องการ

Specifications	HT-210	HT-212	HT-215
Туре	Compact tow-way full range	Compact tow-way full range	Compact tow-way full range
Drivers	LF:10 inch bass driver, 3inch voice coil	LF:12 inch bass driver, 3inch voice coil	LF:15 inch bass driver, 3inch voice coil
	HF:1inch exit compression driver	HF:1inch exit compression driver	HF:1inch exit compression driver
	1.4 inch Mylar diaphragm	1.75 inch Mylar diaphragm	1.75 inch Mylar diaphragm
Frequency Range	65Hz-20KHz(-3dB)	55Hz-19KHz(-3dB)	53Hz-19KHz(-3dB)
Power handling capacity	250W AES	400W AES	550W AES
Sensitivty	95dB/1W/1M	97dB/1W/1M	97dB/1W/1M
Maximum SPL	119dB continue, 125dB peak	122dB continue, 128dB peak	123dB continue, 129dB peak
Rated Impedance	8Ω	8Ω	8Ω
Coverage	50 <sup>°</sup> -100 <sup>°</sup> × 55 <sup>°</sup>	50 <sup>°</sup> -100 <sup>°</sup> × 55 <sup>°</sup>	50°-100° × 55°
Fitting	8×M8 hanging point	8×M8 hanging point	8×M8 hanging point
Connectors	2×Neutrik NL4	2×Neutrik NL4	2×Neutrik NL4
Dimensions	300mm(W)×525mm(H)×360mm(D)	350mm(W)×600mm(H)×403mm(D)	430mm(W)×681mm(H)×448mm(D)
Weight	14Kg	21Kg	29Kg















## HT-18B

The HT-18B is a subwoofer. The bass is an 18-inch high-power, high-quality 220-magnet 100mm voice coil speaker. It is mounted in a compact and sturdy 18mm birch plywood case. The low frequency is solid and flexible without the MS4L. The MS5L full-range speaker can easily handle a small literary evening or a medium-sized conference.

Specifications	HT-18B	
Туре	Single 18" subwoofer speaker	
Drivers	18" aluminum alloy basin frame, Ф220mm magnet, Ф100mm voice coil;	
Frequency Range	35Hz-300Hz	
Power handling capacity	500W RMS; 2000W Peak	
Sensitivity	100dB/1W/1m;	
Rated Impedance	8Ω	
Max SPL	127dB RMS, 133dB Peak	
Construction 18mm splint box, black high hardness 4mm hole steel mesh, waterproof and dustproof sponge;		
Dimensions	546mm x 686mm x 653mm	
Net Weight	38Kg	



#### PD-8/PD-10/PD-12/PD-15

PD Series is designed for projects to install high-quality series of speekrs, such as high end club, top KTV foom and other senior housing sites with strict demend to play electronic music .With a new design computer and technology, optimzed design by computer, with high-quality speaker unit matched with tight cabinet structure, it gets smooth frequency response to make the High-freq gentle, Mid-freq clear, Low-freq powerful and elastic, to reach good coverage performance. With special designed subwoofer for PD series, it makes distortion small under high sound pressure, makes the sound full and thick, clear and smooth, so to reach perfech performance for the music. It re-interprete the bar culture.

Specifications	PD-8	PD-10	PD-12	PD-15
Туре	8"Two-way full range speaker	10"Two-way full range speaker	12"Two-way full range speaker	15"Two-way full range speaker
Drivers	LF:1x8" speaker, Φ155mm magnet, Φ50mm voice coil; HF:1x1.4" titanium film driver;	LF:10" speaker, Φ160mm magnet, Φ50mm voice coil; HF:1.75" Mylar Drive	LF:12" bass, Φ180mm magnet, Φ65mm voice coil; HF:1.75" Mylar Drive,Φ44mm voice coil	LF:15" bass, Φ180mm magnet, Φ65mm voice coil; HF:2" Mylar Drive,Φ44mm voice coil
Frequency Range	70Hz-20KHz	65Hz-20KHz	55Hz-19KHz	50Hz-19KHz
Power handling capacity	150W RMS , 600W Peak	250W RMS, 1000W Peak	350W RMS, 1400W Peak	400W RMS, 1600W Peak
Sensitivity	95dB/1W/1m;	97dB/1W/1m	98dB/1W/1m	99dB/1W/1m
MaximumSPL	113dBRMS , 119dB Peak	117dBRMS, 123dB Peak	119dBRMS, 125dB Peak	122dBRMS, 128dB Peak
Rated Impedance	8Ω	8Ω	8Ω	8Ω
Coverage(H x V)	50°-100° x 55°	50°-100° x 55°	50°-100° x 55°	50°-100° x 55°
Fittings	6xM8 fitting point, 38mm standing hole	8xM8 fitting point, 38mm support hole;	12xM8 fitting point, 38mm support hole;	12xM8 fitting point, 38mm support hole;
Construction	15mm Board box, black painting	15mm Board box, black painting	15mm Board box, black painting	15mm Board box, black painting
	4mm Konggang, Water proof treating	8mm Konggang, Water proof treating	8mm Konggang, Water proof treating	8mm Konggang, Water proof treating
Dimensions	290mm x 435mm x 277mm	340mmX525mmX317mm	399mm x 580mm x 360mm	458mm x 690mm x 420mm
Net Weight	11Kg	17Kg	24Kg	28Kg

# profssional System



#### PD-18B

PD-18B is a single 18inch subwoofer system, with a 18inch high power woofer speaker (220mm maganet 100mm voice coil), built in a compact cabinet of 18mm birch plywood. The low frequency is strong and clean, but not losing elasticity. Matching with MS4L or MS5L full range speaker, it can easily meet the sound needs of a small theatrical performance or a middle meeting.

Specifications	PD-18B	
Туре	18" subwoofer speaker	
Drivers	18" aluminum alloy basin frame, Φ220mm magnet, Φ100mm voice coil;	
Frequency Range	40Hz-300Hz	
Power handling capacity	500W RMS; 2000W Peak	
Sensitivity	98dB/1W/1m	
Rated Impedance	8Ω	
Max SPL	126dB RMS, 132dB Peak	
Construction	18mm high-density box, black high- hardness paint; 6mm steel mesh, waterproof and dustproof; 38mm support hole; black spray;	
Dimensions	546mm x 686mm x 653mm	
Net Weight	38Kg	







# ลำโพงอะคุสติค เสียงคมชัด



เป็นลำโพงถูกออกแบบมาสำหรับโครงการที่จะติดตั้งชุดที่มีคุณภาพสูงของลำโพง เช่นห้องบาร์ ห้องที่มีความก้องของเสียง และห้องอื่นๆ สามารถรองรับได้หลายสถานที่ตามความเหมาะสม ด้วยแนวคิดการออกแบบใหม่และเทคโนโลยีที่ดีที่สุด ที่มีคุณภาพสูงสารไทเทเนียมไดอะแฟรม สามารถรับการตอบสนองความถี่ได้อย่างราบรื่น โดยจะได้เสียงที่ออกมามีความชัดเจนกลมกล่อม ที่มีประสิทธิภาพและความยืดหยุ่นของเสียง และตอบสนองความถี่ ลดการบิดเบือนของเสียงได้เป็นอย่างดี

Specifications	HR-12C	HR-15C
Туре	Compact tow-way full range	Compact tow-way full range
Drivers	LF:12 inch bass driver, 3inch voice coil	LF:15 inch bass driver, 3inch voice coil
	HF:1inch exit compression driver	HF:1inch exit compression driver
	1.75 inch titanium diaphragm	1.75 inch Mylar diaphragm
Frequency Range	55Hz-19KHz(-3dB)	55Hz-19KHz(-3dB)
Power handling capacity	400W AES	550W AES
Sensitivty	97dB/1W/1M	98dB/1W/1M
Maximum SPL	122dB continue, 128dB peak	123dB continue, 129dB peak
Rated Impedance	<b>8</b> Ω	<b>8</b> Ω
Coverage	50°-100°× 55°	50°-100° × 55°
Fitting	14×8 $\Omega$ hanging point	14×M8 hanging point
Connectors	2X Neutrik NL4	2×Neutrik NL4
Dimensions	364mm(w)X600mm(H)X387mm(D)	431mm(W)×681mm(H)×3453mm(D)
Weight	21 kg	29Kg







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#### HTL-312

#### Features:

- Single 12 inch two way line array full range speaker
- •MAX SPL: 135dB continuous, 141dB peak
- •outstanding LF effect --- full horn lode design
- •frequency respond --- 52Hz~19KHz(-3dB)
- •100° (-6dB) coverage in horizontal direction for HF/MF
- •Smooth off-axis frequency response---- it is able to reach 120° (-6dB)
- Convenient flyware, optional angle 0°~8°

Dimension

N et Weight

#### Application:

- Large live show, and concert;
- Application for playground, stadium or church;
- Installation for multi-functional hall,

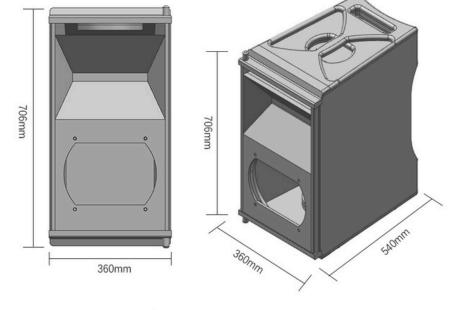
theater, or music hall;

- Use for event, stage, or sport field;
- Installation for theme park, meeting center.

Туре	Single 12 " two-way linear array full-range speaker
Drivers	LF: 1x 12" ferrite bass, 75mm, 3" voice coil;
	HF: 1 x 3" neodymium iron boron treble, 75mm, 3" voice coil;
Frequency R ange:	52Hz -19KHz (-3dB)
Pow er handling capacity	HF:160W RMS, 640W Peak; LF:400W RMS, 2400W Peak
Sensitivity	HF:113dB/1W/1m, LF:106dB/1W/1m
MaximumSPL	HF:135dB Continue,141dB Peak; LF:134dB Continue,140dB Peak;
R ated Im pedanc	HF:16Ω,LF:16Ω
Coverage(H x V)	110° × 8°
Construction	18mm multi-layer birch plywood box, aluminum alloy hanging parts;

lloy hanging parts; black spray plastic; waterproof, dustproof treatment; waterproof socket; 706mm x 360mm x 540mm

36Kg

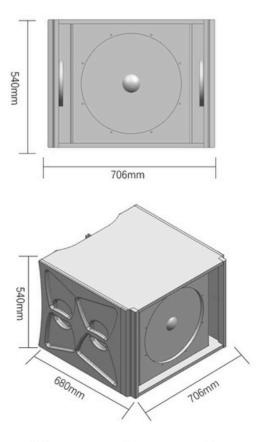




HTL-312SUB is a single 18inch subwoofer speaker, designed to match with HTL-312 line array speaker. HTL-312SUB combines with HTL-310 to make a 3way line array sytem through accurate flyware, in large live show where requires sub-low frequency.

HTL-312SUB uses a 18inch woofer speaker with 5inch voice coil, built in a reflex cabinet with reflex holes at two sides. There is multi reinforcement plate inside the cabinet to reduce resonace, so to get powerful low frequency. The cabinet is made of birch plywood, with hard and environmental black painting. With good design flyware, it is convenient for installation.

Туре	Single 18" Subwoofer, flying model
Drivers	1x18inch speaker, 280mm magnet, 5inch voice coil
Frequency Range	30Hz-300Hz(-3dB)
Pow er handling capacity	700W RMS , 2800W Peak
Sensitivity	103dB/1W/1M
MaximumSPL	131dB Continue , 137dB Peak
R ated Impedanc	8Ω
Construction	18mm multi-layer birch plywood box, aluminum alloy hanging parts;
	black spray plastic; waterproof, dustproof treatment; waterproof socket;
Dimension	706mm x 680mm x 540mm
N et Weight	44Kg







HTL-118 uses a 18inch woofer speaker with 5inch voicecoil, built in a reflex cabinet with reflex holes at twosides. There is multi rein forcement plate inside the cabinet to reduce resonace, so to get powerful low frequency. The cabinet is made of birch plywood, with hard and environmental black painting. With good design flyware, it is convenient for installation.

#### Features:

- single high performance 18"sub woofer Ioudspeaker system.
- ◆ High SPL-maximum SPL 136dB continuous,144dB peak
- ◆ Connectors 2xNeutrik NL4

### Application:

- ★ The main amplifcation theater ,performance places
- ★ Iperformance places
- ★ ISeniorclub, the club main amplification





#### **Specifcations** HTL-118

Type Drivers Frequency Range Power handling capacity Sensitivity

MaximumSPL Rated Impedance Construction

Connectors **Dimensions** Net Weight

Dual 18"inch Subwoofer, speaker

1x18inch woofer speaker 280mm magnet 5inch voice coil

28Hz-350Hz(-3dB)

700W RMS ,1400W Peak

101dB/1W/1M

136dB Continue 144dB Peak

8Ω

13-layer,18mm birch plywood cabinek:

steel.trill with water/dust.proof acoustical spangia

2xNeutrik NL4

600mm x 800mm x 800mm (HxWxD)

71Kg



#### Features:

- 12" 2-way high performance line array loudspeaker
- Maximum SPL:135dB continuous, 141 dB peak(single)
- Outstanding LF effect --- full horn lode design
- Frequency respond--- 45Hz~19KHz +3dB(single)
- 90° (-6dB) coverage in horizontal direction for HF/MF
- Smooth off-axis frequency response--it is able to reach 120° (-10dB)
- Convenient flyware, optional angle 0°~8°

#### Application:

- Large live show, and concert;
- Application for playground, stadium or church;
- Installation for multi-functional hall, theater, or music hall;
- Use for event, stage, or sport field;
- Installation for theme park, meeting center.

Туре
Drivers
Frequency R ange:
Pow er handling capacity
Sensitivity
MaximumSPL
R ated Im pedanc
Coverage(H x V)
5

Dimension N et Weight

Construction

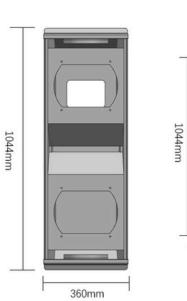
Dual 12 " three-way linear array full range speaker LF: 2 x 12", Φ190mm magnet 75mm voice coil; ferrite unit HF: 1 x 3" neodymium iron boron treble, 75mm voice coil; 45Hz -19KHz (-3dB) HF:160W RMS, 640W Peak; LF:800W RMS, 3200W Peak HF:113dB/1W/1m, LF:106dB/1W/1m

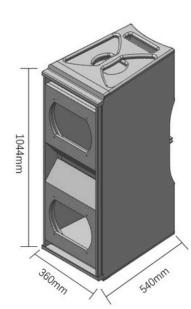
HF:135dB Continue,141dB Peak; LF:134dB Continue,140dB Peak; HF:16 $\Omega$ ,LF:16 $\Omega$ 

110° x 10°

18mm multi-layer birch plywood box, aluminum alloy hanging parts; black spray plastic; waterproof, dustproof treatment; waterproof socket;

1044mm x 360mm x 540mm 57Kg











#### SERIES

ALL WEATHER WATERPROOF SERIES

- Unique design of high sound efficiency coaxial two frequency output high quality unit configuration,
- Unique sound lens high pitch horn, transmission farther, less distortion
- Industrial high strength engineering plastic box, durable, more suitable for all kinds of complex outdoor use
- The built-in dedicated audio transformer can realize the flexible conversion of constant voltage and resistance
- Hidden installation of internal structure unit enhances the durability of horn
- The product conforms to IP65 international standard, and all-weather meets all kinds of outdoor harsh environment



#### **Application**

- Sports venues, outdoor venues and swimming pools
- Theme parks, scenic spots and forest reserves
- Station, school outdoor playground, outdoor field
- Large factories, mines and industrial parks
- Military and police border defense dispersion emergency command
- Airport bird repellent, emergency command in public places

#### Parameter

model	AW - 4T	AW - 6T
Туре	4 "coaxial two division IP65 standard all-weather waterproof speaker	6 "coaxial two division IP65 standard all-weather waterproof speaker
Driver	4.5 "x1 speaker; 0.75" x1 speake	6.5 "x1 speaker; 1" x1 speaker
Frequency Range	90Hz-16KHz(-10dB)	80Hz-16KHz(-10dB)
Power Handling	Rated power (100V): 5W/10W/20W/40W Rated power (70V): 25W/5W/10W/20W/40W; Rated power (8Ω): 40W; Maximum power: 60W	Rated power (100V): 7.5W/15W/30W/60W Rated power (70V): 3.75W/7.5W/15W/30w60W; Rated power (8Ω): 60W; Maximum power (8Ω): 100W
Nominal Impedance	8Ω	8Ω
Sensitivity	92dB±3dB(1W/1M)	92dB±3dB(1W/1M)
Cabinet	Plastic box+aluminum mesh cover+aluminum support	Plastic box+aluminum mesh cover+aluminum support
Dimensions (WxHxD)	240x145x151mm	320X190X201mm
Net Weight	1.82Kg	3.6Kg







Specifications	PDA-12	PDA-15
Туре	12" two-way full-range active speaker	15" two-way full-range active speaker
Drivers	LF: 12" basin frame, Φ190mm magnet, Φ75mm voice coil; HF: 1.75" titanium film driver; Φ 44mm voice coil,	LF:15" basin frame, Φ190mm magnet, Φ75mm voice coil; HF:2" titanium film driver; Φ 44mm voice coil;
Frequency Range	55Hz-19KHz	50Hz-19KHz
Power handling capacity	350W	400W
Sensitivity	98dB/1W/1m	99dB/1W/1m
MaximumSPL	123dB Continue, 129dB Peak	125dB Continue, 131dB Peak;
Rated Impedance	8Ω	8Ω
Coverage(H x V)	50°-100° x 55°	50°-100° x 55°
Construction	18mm box, black spray paint; 8mm hole steel mesh, waterproof	18mm box, black spray paint; 8mm hole steel mesh, waterproof and dustproof
Fittings	12xM8 hanging point, 38mm support hole;	12xM8 hanging point, 38mm support hole;
Dimensions	369mm x 580mm x 334mm	440mm x 675mm x 386mm
Net Weight	21Kg	29Kg;