

PUBLIC ADDRESS & VOICE ALARM SYSTEM

PRODUCT CATALOG

Amplifiers | Speakers | Controllers | Audio Sources | Microphones | Accessories



Extending Leadership Into Acoustic Excellence!

System Sensor is a recognized global leader of fire detection and notification devices, specializing in smoke detection and notification technology. It places a premium on research and development, resulting in products that are reliable, sophisticated and designed for real-world applications. With sales, service and manufacturing facilities throughout the Americas, Europe and Asia, System Sensor's high-quality, innovative products are the most comprehensive in the industry.

The System Sensor Public Address & Voice Alarm products are manufactured by Honeywell Audiovisuals which specializes in acoustics and public address systems. System Sensor range manufactured by Honeywell Audiovisuals provides customers value-for-money for all kinds of occasions, where sound is used for entertainment, emergency, message communication or creating lifestyle environments.

System Sensor Public Address also represents cutting-edge innovation, superior quality and uncompromising safety. No matter whether you are looking for extraordinary sound performance, easy installation and maintenance, cost effectiveness, best-in-class reliability or just one handsome looking design, System Sensor always has a product for your requirement.

With an experienced team of experts researching, developing and testing in our fully equipped anechoic rooms, our loudspeakers adopt internationally recognized industry standards to ensure the high reliability and excellent performance even in extreme conditions, such as fire. Moreover, System Sensor makes it possible for a perfect combination of appealing design, superior sound reproduction and easy installation that are in the best interest of our customers.

The System Sensor Public Address & Voice Alarm portfolio comprises of the Empertech Public Address products which offer complete range of loudspeakers, amplifiers, microphones and other audio accessories and voice alarm controllers are sure to meet all your Public Address & Voice Alarm needs.

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Audio Sources

X-MAP4

X-MAP4 Integrated Audio Player integrates audio sources including CD, MP3, FM and DAB. A high end car audio stereo CD player is installed to provide a stable and reliable CD audio source. DAB technology is exclusively specially introduced to provide various audio source selections to the system. X-MAP4 can also read audio files from most of the typical memory devices via the USB port and SD card slot.

port and SD card slot.
Two line outputs on the rear panel enable playing music to two zones simultaneously.

- USB port
- SD card slot
- DAB/FM signal input
- DAB/FM output
- CD/USB/SD output
- Power port
- RS485 remote control interface



Parameter	Value
Power voltage	~ 220 V, 50 Hz
Power consumption	<13 W
Input	DAB / FM 50 antenna terminal USB port, SD port
Output	Stereo RCA output DAB / FM tuner (910 mV) Stereo RCA output CD / USB / SD (910 mV)
Channel	2
Dimension (W×H×D)	482 × 44 × 252 mm
Package dimension (W×H×D)	520 ×142 × 351 mm
CD-DA Audio	
Output level	850 mV
Frequency response	±1 dB
Distortion	0.08 %
SNR	80 dB
Channel separation	70 dB
MP3/WMA audio	
Frequency response	17 Hz - 127 Hz(-1 dB +2 dB) 127 Hz-10 KHz(±1 dB) 20 KHz(±2 dB)
Distortion	0.15 %
SNR	80 dB
DAB	
Band frequency range	174 MHz - 240 MHz
SNR	60 dB
Distortion	0.2 %
Channel separation	55 dB
Input impedance	50
FM	
Band frequency range	87.5 MHZ - 108 MHz
SNR	48 dB
Distortion Channel concretion	1 %
Channel separation	25 dB

Compact Class-D Mixer Amplifiers



HN-Series

COMPACT CLASS-D MIXER AMPLIFIER WITH AUDIO SOURCE AND PAGING STATION

HN-Series amplifier is highly compact Class-D mixer amplifier solution featuring with integrated audio source, 5 zone selectors, volume control of each input, equalizer and 5 zone paging station.

With precise understanding of the needs of simple applications, HN-series not only provides stable performance of Class-D amplifier, but also increases value from the utilization of each function.

FEATURES

- 3-level priority with mute function
- Advanced protection system includes current limiting, over current and thermal protection
- 7 band graphic equalizer
- Extendable by adding audio mixer and power amplifier with LINK and PRE-AMP
- Compact size and light weight
- 5-zone remote paging microphone
- Telephone paging input and dry contact of chime



Parameter	Value
Input Sensitivity for full output at maximum gain	
Balanced Microphone Channels 1-5	-50 dB ± 3 dB
Balanced Line Channels	-6 dB ± 3 dB
Balanced Microphone Channel 6	-50 dB ~ -6 dB ± 3 dB
RCA Jack	-30 dB ~ 14 dB± 3 dB
Balanced TELE- PAGING/MIC Input	-40 dB ~ 0 dB ± 3 dB
Unbalanced Link-In	-17 dB ± 3 dB
Unbalanced Amp-In	0 dB ± 3 dB
Balanced Remote Paging Station	+18 dB ± 3 dB
Frequency Response	
At 1 W from speaker out tap.100 Hz~10 kHz	+1.5 dB / -3 dB
Graphic Equalizer	
125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz	±12 dB ±3 dB
Signal to Noise Ratio at rated power output	> 75 dB
Crosstalk at all control maximum	-60 dB at 1 kHz
Output Power at THD 0.5%	HN-5120R:120W HN-5240R:240W HN-5300R:300W
Total Harmonic Distortion(THD) at 1 kHz rated power	< 0.5%
Phantom Power	15 VDC
Power Band Width at 1 kHz from speaker out tap	80 Hz ~ 15 kHz with less than 0.5% THD
Operating Temperature/Humidity at non-condensing	$0 \sim 40~^{\circ}\mathrm{C}$ at 95% humidity
Output Voltage and Impedance	
8 Ω	HN-5120R:31 V HN-5240R:44 V HN-5300R:49 V
70 V	HN-5120R:40.8 Ω HN-5240R:20.4 Ω HN-5300R:16.3 Ω
100 V	HN-5120R:83 Ω HN-5240R:41.6 Ω HN-5300R:33.3 Ω
Construction	
Cooling	Convection Cooled
Dimensions (W x H x D)	420 x 88 x 320 mm
Net Weight	HN-5120R:9.76 kg HN-5240R:10.5 kg HN-5300R:10.93 kg

HN-5RCS

5 ZONE REMOTE PAGING STATION

HN-5RCS is specially designed for HN-series amplifier to provide remote control of zone on/off and live paging. Chime can be activated before paging. The robust industrial design enhances the product stability and the low-profile gray color can perfectly match with environment.

FEATURES

- 5 zones high quality live paging
- Zone music on/off
- CHIME on/off
- Output level meter
- MIC volume control
- PTT and lock mode selectable
- Communication failure alert



Parameter	Value
Power consumption	< 6 W
Frequency response	150 ~ 15kHz
Output sensitivity	+18 dBu (Adjustable)
Signal to noise ratio	> 75 dB (With A-Weight)
Non-linear distortion	< 0.5%
Indicator lights	1 power indicator 1 fault indicator 5 signal level indicators 5 zone on/off indicators 1 all on/off indicator 1 talk indicator
Operating conditions	95% humidity, 0°C ~+40°C (0~104°F) (no condensation)
Storage temperature	-10°C ~ +55°C (14°F~131°F)

HN-AS20

INTEGRATED AUDIO SOURCE MODULE

The HN-AS20 is multi-source Tuner/MP3/USB/SD audio source module offering high quality sound reproduction performance of WAV, WMA, MP3, and AAC format audio file from USB and SD player. The assigned function button provides easy control and immediate response to user. HN-AS20 is specially designed for HN-series amplifier. The combination of HN-AS20 and HN-series amplifier makes a best solution for simple applications.



- MPEG 1/2/2.5 Layer2/3(MP3), WMA9 L1/L2 decoder with USB host and SD/MMC controller
- Built-in 64K NOR flash memory for program code storage
- Built-in 32 steps electronic volume control
- Preset EQ (Classic / Pop / Jazz / Rock) with LOUD function
- Recognition file and folder up to 2,000 files and 200 folders
- Available ID3 tag up to 32 characters (File name->Title->Artist->Album)

HN-AS30

INTEGRATED AUDIO SOURCE MODULE

HN-AS30 integrates CD driver, internal virtual memory and radio. HN-AS30 is specially designed for HN-series amplifier. The combination of HN-AS30 and HN-series amplifier makes a best solution for simple applications.

FEATURES

- Automatic and manual mode
- Storage up to 30 channels
- The CD and USB player can read WAV, WMA and MP3 formats with an equalizer
- Built-in 32 steps electronic volume control
- Built-in 64K NOR flash memory for program code storage
- Available ID3 tag up to 32 characters (File name->Title->Artist->Album)



TECHNICAL SPECIFICATIONS

Parameter	Value
Signal to noise ratio	< 70 dB
Frequency response	20 Hz ~ 20 kHz
Total harmonic distortion(THD)	< 0.1%
Supply voltage	DC 12 V
Maximum current consumption	500 mA
Operating temperature/ Humidity at non-condensing	0°~40°C at 95% humidity



Parameter	Value
FM SECTION	
Frequency range	87.5 ~ 108.0 MHz
Channel step	50 kHz
Intermedia frequency	10.7 MHz
Sensitivity	2 UV at 30 dB S/N
Signal to noise ratio	> 60 dB
MW SECTION	
Frequency range	522 ~ 1620 kHz
Channel step	9 kHz
Intermedia frequency	455 kHz
Sensitivity	30 dB
Signal to noise ratio	> 50 dB
CD/MP3/WMA PLAYER SECTION	
Signal to noise ratio	> 50 dB
Frequency response	20 Hz ~ 20 kHz
GENERAL	
Power supply voltage	DC 12 Volts Negative Ground
Max current consumption	1 A
Max output level	2 V

Compact Amplifiers

KB-C30PT/C60PT

30 W/60 W MIXER AMPLIFIER WITH TUNER, MP3 AND USB

The commercial grade mixer amplifiers with built-in MP3 /TUNER are designed to provide a big impact in sound reproduction and to produce the best and highest quality audio.

Highly flexible mixer amplifiers for a wide variety of voice and background music applications such as retail shops, restaurants and bars, service centers, houses of worship, warehouses etc.

- 30W/60W amplifier
- 100V, 70V and 4-16Ohms output 2
- Auxiliary switchable CD/AUX
- 4pin phoenix connector for both balanced mic or Tel in
- 6.35mm jack unbalanced microphone input
- With equalization function
- Music on hold
- Built-in tuner
- Built-in USB port



FRONT PANEL



REAR PANEL

SPECIFICATIONS	KB-C30PT	KB-C60PT
Rated Power Output	30 W	60 W
Speaker Output	100 V (334 ohms), 70 V(164 ohms), 4,8,16 ohms	
S/N Ratio Mics	> 60dB	
S/N Ratio Aux	> 70dB	
Tone Controls	150 Hz, 1 KHz, 6KHz, + 10dB {	AVX inputs : 200mv CD inputs : 500mv
Output	775 Mv , 0dB , XLR and phone jack	
Frequency Response	100 - 20,000 Hz	
THD	< 0.5% at Rated Power	
Power Requirements	220-240V AC or 120V AC	
Dimensions	90(H) x 270(W) x 260(D) mm	
Net Weight	4.3 kg	5.8 kg
Color	Black	

Pre Amplifiers

KB-D11P

9-INPUT MIXER PRE-AMPLIFIER

The KB-D11P is a versatile mixer preamplifier with 9 inputs and 2 outputs. When any one of priority inputs (MIC1, EMC1,EMC2) is activated, provision is made to mute all signal Inputs automatically. Output from the KB-D15E emergency panel to EMC1 provides alarm siren or emergency announcement to be broadcasted over the public address system.



FRONT PANEL



REAR PANEL

FEATURES

- 5 microphone inputs (MIC1-MIC5), 3 ancillary circuit inputs (AUX1, AUX2, AUX3) and 2 emergency inputs (EMC1, EMC2). AUX3 contains one balanced input
- 4 unbalanced outputs and 1 balanced input
- MIC1, MIC2, MIC3, MIC4, MIC5, AUX1, AUX2, and AUX3 respectively has independent knob volume controller
- Function of 7 frequency points balanced
- LCD display volume output, 2 volume controllers for adjusting the output volume
- 3 grades of priority: MIC1>EMC1, EMC2>MIC2, MIC3, MIC4, MIC5, AUX1, AUX2, and AUX3
- Remote volume control and remote power on
- Apply switch of address setting, use decimal system to set the local address, and the range is: 1-99
- Short circuit signal activation, for emergency broadcast

SPECIFICATIONS

Model	KB-D11P	
Input(MIC)	600 Ohms, 5 mV unbalanced	
Input(EMC)	10 Ohms, 330 mV unbalanced	
Input(AUX)	100hms, 330 mV unbalanced 100hms, 10 mV balanced (mic)	
Output	10 KOhms, 0.775 mV(0dB), unbalanced,RCA jack 1 trigger out	
Frequency Response	60Hz~16KHz (±3dB)	
S/N	>70 dB	
THD	<0.1% at 1 KHz	
Muting Function	MIC1 has the highest priority overrides all other Inputs, EMC1 and EMC2 have the second highest priority override other outputs	
Master volume control	32 steps, digital control	
Indicators	power	
Protection	AC Fuse × 0.5 A × 1	
Power Requirements	AC 220 V ± 10% 50-60 Hz	
Power Consumption	10~15 W	
Dimensions	89 (H) × 483 (W) × 350 (D)mm	
Net Weight	5.1 Kg	
Gross Weight	6.3 Kg	

Mixer Amplifiers

KB-S200P/KB-S300P/KB-S600P/KB-S1000P

5-INPUT MIXER AMPLIFIERS

Highly flexible mixer amplifiers for a wide variety of voice and background music applications such as retail shops, restaurants and bars, service centers, houses of worship, warehouses and many more. Main features are:

- 3 microphone and 2 auxiliary inputs
- 1 line output
- 100V, 70V and 4-16 Ohms transformer isolated speaker outputs
- Automatic mute function for paging and announcements
- Individual input gain controls with master volume control
- Bass and treble tone controls
- LED level meter
- Speaker output short circuit protection



FRONT PANEL



REAR PANEL

SPECIFICATIONS	KB-S200P	KB-S300P	KB-S600P	KB-S1000P
Rated Power Output	70 W	130 W	260 W	360 W
Output Regulation	Less than 3 dB (no load to full load))		
Speaker Output	70 ohms (70V) 143 ohms (100V)	38 ohms (70V) 77 ohms (100V)	19 ohms (70V) 39 ohms (100V	14 ohms (70V) 28 ohms (100V)
	Low impedance: 4-16 ohms	Low impedance: 4-16 ohms	Low impedance: 4-16 ohms	Low impedance : 4-16 ohms
Input	MIC 1, 2, 3: 600 ohms, 5-8 mV, unb	palanced, phone jack; AUX 1, 2: 10k of	nms, 300mV, unbalanced, RCA jac	k
Output	600 ohms, >13 V, RCA jack			
Frequency Response	60 - 15,000 Hz, +/- 3dB			
THD	Less than 1% at 1kHz (1/3 Rated P	ower)		
S/N Ratio	Line: 75db, Mic: 60db			
Tone Controls	BASS: 100 Hz (+/- 10dB), TREBLE	: 12k Hz (+/- 10dB)		
Controls	5 input gain, 1 treble, 1 bass, 1 mut	e, and power switch		
Cooling	Internal 12VDC fan, extensive heat	sinking		
Indicators	Power indicator LED, LED output le	evel meter +1db, -5db, -10db, -13db, -	17db	
Protection	AC Fuse: 4A Current limiter, short circuit and the	AC Fuse: 4A rmal protection circuits	AC Fuse: 8A	AC Fuse: 8A
Power Consumption	150 W	300 W	550 W	750 W
Power Requirments	220-240V AC, 50/60 Hz			
Dimensions	89(H) x 483(W) x 366(D) mm			
Built-in Dimensions	2 U rack 19 inch			
Carton Dimensions	185(H) x 520(W) x 435(D) mm			
Net Weight	10.04 kg	11.36 kg	13.68 kg	14.08 kg
Gross Weight	11.72 kg	13.02 kg	15.32 kg	15.70 kg
Finish	Panel: steel plate, black Case: steel plate, black			

Booster Amplifiers

SS-AMP120 SS-AMP240 SS-AMP360

SINGLE CHANNEL POWER AMPLIFIERS

These commercial-grade power amplifiers efficiently deliver up to 240 watts of clean, reliable audio for the most demanding public address and voice alarm applications.

Rugged and over-built to give years of dependable service, they are equipped with massive toroidal power transformers, extensive heat-sinking and fan cooling, protective circuits such as over temperature, short circuit, RFI and soft start.

- 100V, 70V and 4 Ohms transformer isolated speaker outputs
- Balanced XLR input with XLR parallel link-out connector
- 400Hz high pass filter
- Ground Selector Switch : Frame/float
- Adjustable input gain from -12dB to 0dB





SPECIFICATIONS	SS-AMP-120	SS-AMP-240
Rated Power Output	120 W	240 W
Gain Control	-12 dB to 0	
Speaker Output	41 ohms 70V	21 ohms 70V
	83 ohms 100V	41 ohms 100V
	Low impedance: 4 ohm	Low impedance: 4 ohms
Frequency Response	60 - 20K Hz, +/- 3dB	
THD	Less than 1.0% at 1kHz (1/2 Rated	output)
S/N Ratio	Better than 90 dB	
Controls	Volume control and power switch	
Cooling	Internal 12VDC fan, extensive heat sinking	
Power Consumption	260 W	500 W
Power Requirments	220-240V AC, 50/60 Hz 24V DC	
Dimensions	89(H) x 483(W) x 377(D) mm	
Built-in Dimensions	2 U rack 19 inch	
Carton Dimensions	185(H) x 520(W) x 435(D) mm	
Net Weight	13 kg	17.66 kg
Finish	Panel: aluminum, black	
	Case: steel plate, black	

SPECIFICATIONS	SS-AMP360
Rated Power Output	360 W
Output Regulation	Less than 3 dB (no load to full load)
Speaker Output	13.6 ohms 70V
	27.8 ohms 100V
	Low impedance: 4 ohms
Input	Less than 1V, unbalanced, 10 k ohm, XLR and phone jack (unbalanced)
Output	10 k ohm, 1V, XLR and phone jack
Frequency Response	(60 HZ~18 KHZ) (± 3dB)
THD	Less than 0.5% at 1kHz (1/3 Rated Power)
S/N Ratio	> 70 dB
Slew Rate	15V/uS
Controls	Volume control and power switch
Cooling	Internal 12VDC fan, extensive heat sinking
Indicators	Power, Clip, Signal, Protect, and Temp LEDs
Protection	AC Fuse: 15 A Current limiter, short circuit and thermal protection circuits
Power Consumption	485 W
Power Requirements	220 VAC ± 10 % 50 - 60 Hz
Dimensions	89 (H) x 483 (W) x 366 (D) mm
Net Weight	15.5 kg
Gross Weight	17.1 kg
Packing Size	185 (H) X 520 (w) X 435 (D) mm

SS-AMP480 SS-AMP660

POWER AMPLIFIERS

These commercial-grade power amplifiers efficiently deliver up to 660 watts of clean, reliable audio for public address applications.

They are ruggedly to give years of reliable service. They are equipped with toroidal power transformers, extensive heat-sinking, fan cooling and protective circuits.

- 100V, 70V and 4-16 Ohms transformer isolated speaker outputs
- Combination XLR/RCA Line In and Line Out connectors
- LED status indicators
- Speaker output short circuit protection



FRONT PANEL



REAR PANEL

SPECIFICATIONS	SS-AMP480	SS-AMP660
Rated Power Output	480 W	660 W
Damping Factor		< 3 dB(no load to full load)
Speaker Output	Low Impedance:4~16 Ω 480 W, 70 V (10.7Ω) 100 V (21.7Ω) balanced	Low Impedance:4~16 Ω 660 W, 70 V (10.7Ω) 100 V (21.7Ω) balanced
Input	<1 V unbalanced,10 K ohms, XLR and phone jack	<1 V unbalanced,10 K ohms, XLR and phone jack
Output	1V unbalanced XLR and phone jack	1V unbalanced XLR and phone jack
Frequency Response	60 Hz~18 Khz (±3 dB)	60 Hz~18 Khz (±3 dB)
THD	≤0.5 % at 1 KHz, 1/3 (Rated Power)	≤0.5 % at 1 KHz, 1/3 (Rated Power)
S/N Ratio	> 70 dB	> 70 dB
Voltage Rise Rate	15 V/us	15 V/us
Controls	Volume control and power switch	Volume control and power switch
Protection	AC Fuse × 15 A AC FUSE×ACurrent limiter, short circuit and thermal protection circuits	AC Fuse × 15 A AC FUSE×ACurrent limiter, short circuit and thermal protection circuits
Power Consumption	620 W	880 W
Power Requirements	AC 220 V ± 10 % 50-60 Hz	AC 220 V ± 10 % 50-60 Hz
Dimensions	89 (H) × 483 (W) × 366 (D)mm	89 (H) × 483 (W) × 366 (D)mm
Net Weight	18 kg	20.1 kg
Gross Weight	19.7 kg	21.7 kg
Packing Size	185 (H) × 520 (W) × 435 (D)mm	185 (H) × 520 (W) × 435 (D)mm

SS-AMP1000 SS-AMP1500

POWER AMPLIFIERS

When more power is required, these high power amplifiers provide up to 1500 watts into low impedance and 70 / 100 V speaker loads.

They are ruggedly designed to give years of reliable service, they are equipped with toroidal power transformers, extensive heat-sinking, fan cooling and protective circuits.

- 100V, 70V and 4-16 Ohms transformer isolated speaker outputs
- Combination XLR/RCA Line In and Line Out connectors
- LED status indicators
- Speaker output short circuit protection



FRONT PANEL



REAR PANEL

SPECIFICATIONS	SS-AMP1000	SS-AMP1500
Rated Power Output	1000 W	1500 W
Output Regulation	Less than 3 dB (no load to full load)	
Speaker Output	4.9 ohms (70V), balanced	3.3 ohms (70V), balanced
	10.0 ohms (100V), balanced Low impedance: 4-16 ohms, balanced	6.7 ohms (100V), balanced Low impedance: 4-16 ohms, balanced
Input	0.775 v (0dB) unbalanced, 10k ohms, XLR and phone jack	
Output	0.775 v (0dB) unbalanced, 10k ohms	
Frequency Response	50 - 18,000 Hz, +/- 1.5 dB	
THD	≤ 1% at 1kHz, (1/3 Rated Power)	
S/N Ratio	> 105 dB	
Slew Rate	40V/uS	
Controls	Volume control and power switch	
Cooling	Internal 12VDC fan, extensive heat sinking	
Indicators	Power, Clip, Signal, Protect, and Temp LEDs	
Protection	AC Fuse: (25 A) Current limiter, short circuit and thermal protection circuits	AC Fuse: 25A
Power Consumption	1836 W	2654 W
Power Requirements	220 VAC ± 10 % 50 - 60 Hz	
Dimensions	133(H) x 483(W) x 486(D) mm	
Net Weight	32 kg	38 kg
Gross Weight	34 kg	40 kg
Packing Size	(225 (H) X 610 (w) X 585 (D) mm)	

Microphones

KB-500WL

740-820MHZ WIRELESS MICROPHONE SYSTEM

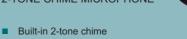
- High carrier frequency for superior reception
- Includes receiver and two microphones, clip and handheld optional
- Dual-channel, user-selectable frequency
- 100 meters service range



KB-500WL
50 Hz-18 kHz+/-3dB
>110dB
<0.5%
>102dB
100 meters
5 to 45 degrees C
740~820 MHz
0.005%
<30 mW
75us
>40dB
UHF
50 kHz
Dynamic
3V battery
75us
45 mA
420(L)*220(W)*44(H)
235 g
2 micro V
600 ohms
0~800 mV
DC 16 V
5 W
3.5 kg

MC-Z20

2-TONE CHIME MICROPHONE



- Red LED indicatorPush to talk switch
- XLR connector



SPECIFICATIONS	MC-Z20
Frequency Response	40 Hz-16 kHz
Sensitivity	-43dB +/-2dB
Impedance	200 ohms
Controls	ON/OFF switch
Cable	10 meters
Power Requirements	12V DC
Dimensions	43 x 20 x 7.5 cm
Net Weight	1.05 kg

MC-Z50

DESKTOP MICROPHONE

- High sensitivity, excellent frequency response
- Attractive black ABS base
- ON/OFF switch
- XLR connector



SPECIFICATIONS	MC-Z50
Frequency Response	50 Hz-15 kHz
Sensitivity	-45dB +/-2dB
Impedance	600 ohms
Controls	ON/OFF switch
Cable	10 meters
Power Requirements	1.5V DC
Dimensions	44.5 x 25 x 6.5 cm
Net Weight	1.11 kg

Speakers

Ceiling Speakers

SS-CP06



SS-CL06E



SS-CL06



SPECIFICATIONS	SS-CP06
Speaker unit	4.5 "
Rated power	3W, 100V line transformer
Transformer power	1.5W-3W
Sensitivity	92 dB
SPL 1m/6 W, 2k Hz	97 dB
Frequency response (-10 dB)	120 Hz ~15K Hz
Dispersion angle (-6 dB)	160°
Dimensions	ø175 x 65mm
Weight	0.56 Kg
Material	ABS
Color	RAL 9003
Hole cutout	ø150 mm

SPECIFICATIONS	SS-CL06E
Speaker unit	4.5
Rated power	6W, 100V line transformer
Transformer power	3W - 6W
Sensitivity	90 dB
SPL 6 W/1m, 2k Hz	98 dB
Frequency response (-10 dB)	80 Hz ~20K Hz
Dispersion angle (-6 dB)	160°
Dimensions	ø180 x 55mm
Weight	0.6 Kg
Material	Steel
Color	RAL 9003
Hole cutout	ø150 mm

SPECIFICATIONS	SS-CL06	5		
Speakers	5"			
Rated Power	6 W			
Input Impedance	1.7 ΚΩ	3.3 KΩ	6.7 KΩ	
Power taps @70V	3 W	1.5 W	0.75 W	
Power taps @100V	6 W	3 W	1.5 W	
Sensitivity	88 dB			
Max SPL	95.8 dB			
Frequency response(effective)	80 Hz ~ 20 KHz			
Dispersion angle	160			
Dimensions	Ø180 × 55 mm			
Hole cut-out size	Ø150 mm			
Weight	0.68 Kg			
Material	Steel			
Color	RAL 9003			

TF-218





ETF-221





ETF-223



SPECIFICATIONS	TF-218
Rated Power	3/6 W
Line Voltage	100 V
Sensitivity	87dB
Max SPL (1m)	94.7 dB
THD	< 3 %
Freq. Response	130Hz ~ 20KHz
Hole Cutting Size	Dia 95 mm
Baffle Size	Dia 103 mm
Installation	Ceiling
Enclosure Material	ABS
Weight	0.42 Kg

SPECIFICATIONS	ETF-221
Rated Power	2.5/5/10 W
Line Voltage	100 V
Sensitivity	89.5 dB
Max SPL (1m)	99 dB
THD	< 3 %
Freq. Response	55 Hz ∼ 20 KHz
Hole Cutting Size	Dia 200 mm
Baffle Size	Dia 230 mm
	Dia 250 mm
Installation	Ceiling
Installation Enclosure Material	
	Ceiling

SPECIFICATIONS	ETF-223
Power	20 W
Input Voltage	100 V
Sensitivity	89.6 dB
Max SPL (1m)	101.6 dB
THD	< 1.8 % at 100 - 8 kHz
Freq. Response	100 Hz ~ 20 KHz
Hole Cutting Size	Dia 204 mm
Product Size	Dia 240 x 151 mm (H)
Installation	Ceiling
Enclosure Material	Rugged thermoplastic
Weight	2 Kg

SS-EVA18

(EVAC Ceiling Speaker with fire dome)



EHB-910B (Black) / EHB-910W (White)

- IP55, Pendant Speaker
- Ideal for station, Hotel, and market.
- Paper cone coated with Damp to produce clear sound.
- Easy installation.
- ABS enclosure.
- With 4 full range speaker.



SPECIFICATIONS	SS-EVA18
Rated Power	3/6 W
Line Voltage	100 V
Sensititvity	88.5 dB
Max SPL (1m)	95.8 dB
THD	< 3 %
Freq. Response	160 Hz ∼ 20 KHz
Hole Cutting Size	Dia 200 mm
Baffle Size	Dia 228 x 133 mm
Installation	Ceiling
Enclosure Material	Metal
Weight	1.57 Kg

SPECIFICATIONS	EHB-910B (Black) EHB-910W (White)
Rated Power	5/10 W
Line Voltage	70/100 V
Sensitivity	92.5 dB
Max SPL (1m)	102 dB
Distortion	< 3 %
Freq. Response	200 Hz ~ 20 KHz
Size	Dia 180 x 700 mm
Installation	Hang
Enclosure Material	ABS
Weight	1.28 Kg
Line Load Resistance	614 ohms
Dispersion Angle	140°

Speakers

Wall Mount Speakers

SS-WM06



EWS-102







EWS-105B

EWS-105W







SPECIFICATIONS	SS-WM06	
Speakers	6.5"	
Rated Power	3 W	6 W
Input Impedance	3.3 Kohm	1.7 Kohm
Power taps @70V	1.5 W	3 W
Power taps @100V	3 W	6 W
Max SPL	104.6 dB	
Sensititvity	96.8 dB	
Frequency response(effective)	160 Hz~20 Khz X 1	110Hz ~ 13KHz
Dispersion angle	150	
Dimensions	260 × 180 × 120 mr	n
Weight	1.08 Kg	
Material	ABS	
Color	Similar RAL9010	

SPECIFICATIONS	EWS-102
Rated Power	10 W
Line Voltage	100 V
Sensitivity	92dB + / - 3db
Max SPL (1m)	101.1 dB
THD	< 5 %
Freq. Response	150 Hz ~ 20 KHz
Size	345 x 240 x 100 mm
Weight	1.68 kg

SPECIFICATIONS	EWS-105B / EWS-105W
Rated Power	25 W
Maximum Power	30 W
Input Voltage/impedance	70 V for H - 25 W / H -25 B
	4 ohm for HR - 25 W / HR - 25 B
	110 V for HI - 25 W / HI - 25 B
Sensitivity	87 dB
Max SPL (1m)	100 dB
THD	< 5 %
Frequency Response	50 Hz - 20 kHz (+ / - 3 dB)
Installation	Wall mounted
Enclosure material	Rugged thermoplastic
Product Size (mm)	320 x 230 x 155
Weight	3.2 kg
Packing Dimensions (mm)	585 x 270 x 380
Speakers	1" TREBLE, 5" BASS

WS-03







HS-267 (IP66)



HS-268 (IP66)



EHS-250 (IP66)





SPECIFICATIONS	WS-03
Rated Power	0.15 W / 1.5 W
Line Voltage	100 V
Sensitivity	89 dB + / - 3 dB
THD	< 3 %
Frequency Response	300 Hz ∼ 6 kHz
Size	130 x 120 x 60 mm
Weight	0.4 kg
Line Load Resistance	589 ohms
Vertical Dispersion	90 degrees
Horizontal dispersion	100 degrees

SPECIFICATIONS	HS-267
Rated Power	15 W / 7.5 W
Line Voltage	70 / 100 V
Sensitivity	98.5 dB
Max SPL (1m)	110.3 dB
THD	< 5 %
Frequency Response	500 Hz∼5 kHz
Dimension	225 X 165 x 240 mm
Weight	1.38 kg
Finish	White

SPECIFICATIONS	HS-268
Rated Power	15 / 30 W
Line Voltage	70 / 100 V
Sensitivity	101.2 dB
Max SPL (1m)	116 dB
THD	< 5 %
Freq. Response	500 Hz ~ 5 kHz
Dimension	285 X 210 X 290 mm
Weight	1.78 kg
Finish	White

SPECIFICATIONS	EHS-250
Rated Power	50 W
Line Voltage	70 / 100 V
Sensitivity	99 ± 3 dB
Max SPL (1m)	114.5 dB
THD	< 5 %
Frequency Response	200 Hz ∼20 kHz
Dimension	363 x 253 x 310 mm
Weight	4 kg
Finish	White
Material	Rugged thermoplastic

EHB-907 (IP66)



HB-D907 (IP66)



SPECIFICATIONS	EHB-907
Туре	uni - directional
Rated Power	5 / 10 / 20 W
Line Voltage	70 / 100 V
Sensitivity	92 dB + / - 3 dB
Max SPL (1m)	106 dB
THD	< 5 %
Frequency Response	150 Hz ~ 16 kHz
Baffle size	Dia 170 x 252 mm
Weight	2.82 kg
Line Load Resistance	589 ohms
Dispersion angle	360°

SPECIFICATIONS	HB-D907
Туре	bi - directional
Rated Power	5 / 10 / 20 W
Line Voltage	70 / 100 V
Sensitivity	92 dB + / - 3 dB
Max SPL (1m)	104.9 dB
THD	< 5 %
Frequency Response	150 Hz - 16 kHz
Baffle size	Dia 170 x 252 mm
Weight	3.4 kg
Line Load Resistance	589 ohms
Dispersion angle	360 degrees

Speakers

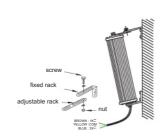
Column Speakers

CS-511H CS-512H CS-513H CS-514H

Features:

The standard indoor / outdoor weatherproof speakers provide hi-fi sound quality. They are suitable for use at garden, swimming pool, stadium and tennis court.

- Installation: wall mount
- Enclosure: Aluminum, metal grille
- 4" full range speakers









CS-513H	CS-514H

SPECIFICATIONS	CS-511H (IP44)	CS-512H (IP44)	CS-513H (IP44)	CS-514H (IP44)
Rated Power	5 W / 10 W	10 W / 20 W	15 W / 30 W	20 W / 40 W
Line Voltage	100 V	100 V	100 V	100 V
Sensitivity	90 dB	92 dB	93 dB	95 dB
Max SPL (1m)	99.5 dB	107 dB	107.7 dB	108 dB
Freq. Response	140 Hz - 20 kHz	140 Hz - 20 kHz	120 Hz - 20 kHz	120 Hz - 20 kHz
Dimensions	270 X 123 X 145 mm	390 x 123 x 145 mm	505 x 123 x 145 mm	620 x 123 x 145 mm
Weight	2.55 kg	4.1 kg	4.35 kg	5.65 kg
Line Load Resistance	614 ohms	448 ohms	345 ohms	256 ohms
Vertical Dispersion	90 degrees	80 degrees	80 degrees	80 degrees
Horizontal Dispersion	90 degrees	90 degrees	90 degrees	256 ohms
Color	Champagne	Champagne	Champagne	Champagne
Materials (enclosure and grille)	Aluminum and iron	Aluminum and iron	Aluminum and iron	Aluminum and iron

CK-311 CK-312 CK-313 CK-314

Features:

The metal case makes it more durable beautiful shape and easy to install suitable for indoor/outdoor application, such as gym and conference room.

- Enclosure: Aluminum, metal grille
- 2.5 "full range speakers with clear sound









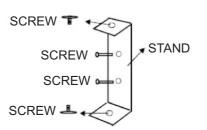
SPECIFICATIONS	CK-311 (IP44)	CK-312 (IP44)	CK-313 (IP44)	CK-314 (IP44)
Rated Power	5 W / 10 W	10 W / 20 W	15 W / 30 W	20 W / 40 W
Line Voltage	100 V	100 V	100 V	100 V
Sensitivity	88 dB	88 dB	90 dB	91 dB
Max SPL (1m)	97 dB	102.3 dB	105.8 dB	108.6 dB
Dimensions	261 X 75 X 105 mm	402 x 75 x 105 mm	550 x 75 x 105 mm	690 x 75 x 105 mm
Weight	1.22 kg	1.98 kg	2.74 kg	3.52 kg
Line Load Resistance	640 ohms	486 ohms	358 ohms	448 ohms
Vertical Dispersion	90 degrees	90 degrees	90 degrees	80 degrees
Horizontal Dispersion	100 degrees	110 degrees	110 degrees	110 degrees
Color	White	White	White	White
Materials (enclosure and grille) Aluminum and iron	Aluminum and iron	Aluminum and iron	Aluminum and iron
Freq. Response	180 Hz - 20 kHz	-	_	-

Speakers

Hi-fidelity Speakers

EWS-206W/4 EWS-206W/5 EWS-206W/6 EWS-206W/8

- High sound quality with natural fidelity
- Elegant design with ABS plastic
- Switch for output power selection
- Easy mounting with flexible bracket
- Available in Black or white





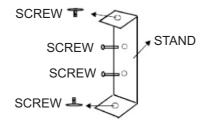




SPECIFICATIONS	EWS-206W/4	EWS-206W/5	EWS-206W/6	EWS-206W/8
Power	5/10/20 W	10/20/40 W	15/30/60 W	20/40/80 W
Line Voltage	100V/8 ohm	100V/8 ohm	100V/8 ohmV	100V/8 ohm
Distortion	Less than 3% at 100-8KHz	Less than 3% at 100-8KHz	Less than 3% at 100-8KHz	Less than 3% at 100-8KHz
Frequency Response	80 Hz-20 KHz	80 Hz-20 KHz	80 Hz-20 KHz	80 Hz-20 KHz
Product Size	250 x 160x 145 mm	302 x 172x 165 mm	202 x 193x 344 mm	261 x 275x 455 mm
Installation	Wall mounted	Wall mounted	Wall mounted	Wall mounted
Enclosure material	ABS	ABS	ABS	ABS
Weight	1.5 Kg	3.4 Kg	3.80 Kg	7.46 Kg
Dispersion Angle	90 degrees x 80 degrees	90 degrees x 80 degrees	90 degrees x 80 degrees	90 degrees x 80 degrees
Speakers	20mm x1 (TREBLE) 4"x1(BASS)	25mm x1 (TREBLE) 5.2"x1(BASS)	25mm x1 (TREBLE) 6.5"x1(BASS)	25mm x1 (TREBLE) 8"x1(BASS)
Sensitivity	85.2 dB	86.5 dB	87.7 dB	87.9 dB
Max SPL (1m)	97.2 dB	100.4 dB	104 dB	105 dB

EWS-206B/4 EWS-206B/5 EWS-206B/6 EWS-206B/8

- High sound quality with natural fidelity
- Elegant design with ABS plastic
- Switch for output power selection
- Easy mounting with flexible bracket
- Available in Black or white







SPECIFICATIONS	EWS-206B/4	EWS-206B/5	EWS-206B/6	EWS-206B/8
Power	5/10/20 W	10/20/40 W	15/30/60 W	20/40/80 W
Line Voltage	100V/8 ohm	100V/8 ohm	100V/8 ohmV	100V/8 ohm
Distortion	Less than 3% at 100-8 KHz	Less than 3% at 100-8 KHz	Less than 3% at 100-8 KHz	Less than 3% at 100-8 KHz
Frequency Response	80 Hz-18 KHz	80 Hz-18 KHz	80 Hz-18 KHz	80 Hz-18 KHz
Product Size	250 x 160x 145 mm	302 x 172x 165 mm	202 x 193x 344 mm	261 x 275x 455 mm
Installation	Wall mounted	Wall mounted	Wall mounted	Wall mounted
Enclosure material	ABS	ABS	ABS	ABS
Weight	1.45 Kg	3.4 Kg	3.80 Kg	7.46 Kg
Dispersion Angle	90 degrees x 80 degrees	90 degrees x 80 degrees	90 degrees x 80 degrees	90 degrees x 80 degrees
Speakers	20mm x1 (TREBLE) 4"x1(BASS)	25mm x1 (TREBLE) 5.2"x1(BASS)	25mm x1 (TREBLE) 6.5"x1(BASS)	25mm x1 (TREBLE) 8"x1(BASS)
Sensitivity	85.2 dB	86.5 dB	87.7 dB	87.9 dB
Max SPL (1m)	97.2 dB	100.4 dB	104 dB	105 dB

Accessories

VC-05R / VC-05RF



VC-30W / VC-30WF



VC-60W / VC-60WF



VC-120W / VC-120WF

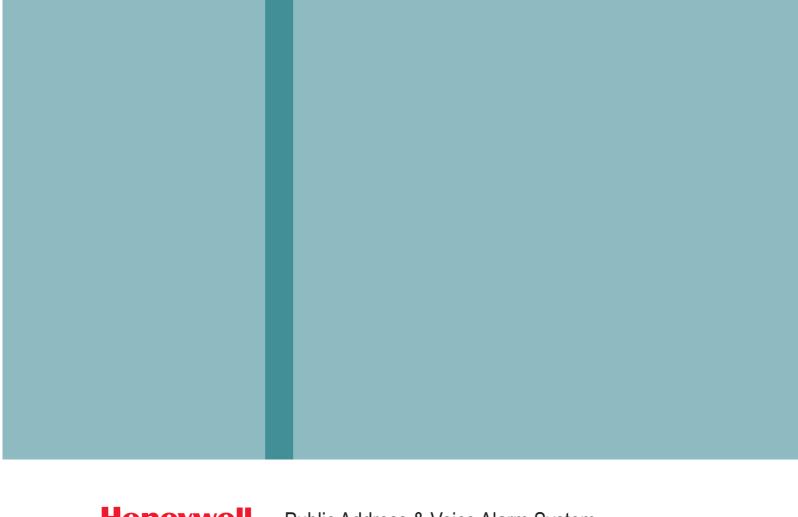


MODEL	VC-05R	VC-05RF
Туре	5 - step resistive, mono	
Power Rating	6 watts	
24 VDC Override	No	Yes
Attenuation	Step 1: OFF Step 2: - 4 dB Step 3: - 1 dB Step 4: - 0.5 dB Step 5: 0 dB	
Frequency Response	20 Hz - 20 kHz	
Dimensions	86 (W) x 86 (H) x 50 (D) mm (V C -305 R) 115 (W) x 70 (H) x 48 (D) mm	

MODEL	VC-30W	VC-30WF	
Туре	5 - step auto transformer, mono		
Power Rating	30 wat	30 watts	
24 VDC Override	No	Yes	
Attenuation	Step 1: OFF Step 2: - 17 dB Step 3: - 11 dB Step 4: - 4.5 dB Step 5: 0 dB		
Frequency Response	20 Hz - 20 kHz		
Dimensions	86 (W) x 86 (H) (VC-3030W) 115 (W) x 70 (H)		

MODEL	VC-60W	VC-60WF
Туре	5 -step auto transformer, mono	
Power Rating	60 watts	
24 VDC Override	No	Yes
Attenuation	Step 1: OFF Step 2: - 18 dB Step 3: - 11 dB Step 4: - 5 dB Step 5: 0 dB	
Frequency Response	20 Hz - 20 kHz	
Dimensions	86 (W) x 86 (H VC - 3060 W) 115 (W) x 70 (H	H) x 70 (D) mm H) x 74 (D) mm

MODEL	VC-120W	VC-120WF	
Туре	5 - step auto transformer, mono		
Power Rating	120 w	120 watts	
24 VDC Override	No	Yes	
Attenuation	Step 1: OFF Step 2: - 17 dB Step 3: - 11 dB Step 4: - 5.5 dB Step 5: 0 dB		
Frequency Response 20 Hz - 2		20 kHz	
Dimensions	86 (W) x 86 (H) x 50 (D) mm		
Transformer Dimensions	70 (W) x 70 (H (VC - 3120 W) 115 (W) x 70 (H	H) x 28 (D) mm H) x 74 (D) mm	



Public Address & Voice Alarm System

EMPERTECH

Empertech Public Address Systems