

# UNIVERSAL SPEAKERS

## BS-1110W

Full Range Speaker System



## BS-1120W

2-Way Speaker System



### DESCRIPTION

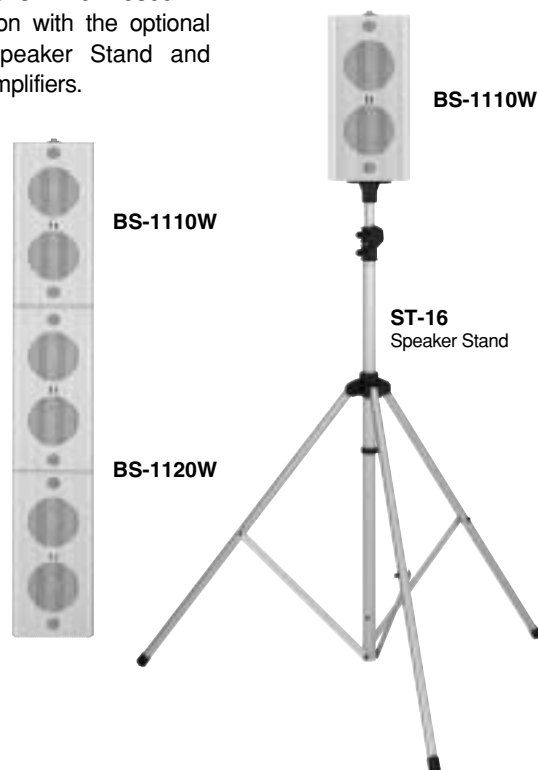
Developed under the concept of "Universal" use, TOA's BS-1110W and BS-1120W are column speakers (with speakers arrayed in a vertical line), which makes it possible to create unique sound spaces featuring a wide horizontal spread of sound that remains tightly focused in the vertical plane. Their simple, tasteful design harmonizes well with virtually any building interior, making them a perfect choice for use in such gathering places as religious facilities and school auditoriums.

The BS-1110W's narrow enclosure features two 12cm dynamic cone speakers rated for an input of 10W. The BS-1120W features four built-in 12cm dynamic cone speakers and a 2.5cm balanced tweeter to cover a wide frequency range of 150 – 20,000Hz for clear and powerful sound reproduction (20W rated input and 1W/1m sound pressure level of 93dB).

The speakers' rear panel-mounted rotary switches permit selection of line voltage, impedance (HIGH/LOW) and wattage (BS-1110W: 5/10W; BS-1120W: 10/20W). Handy push-in connectors are used for the speaker line input terminals to facilitate wiring and permit cascade system configurations. Rated power output can also be increased by inter-connecting the BS-1110W with the BS-1120W.

The BS-1110W and BS-1120W can be mounted directly to wall surfaces without the need of extra mounting hardware, and their supplied or optionally available mounting hardware can be used to mount them to either walls or ceilings. Their supplied mounting hardware permits the speakers to be mounted either vertically or horizontally to change the speaker coverage area or meet the spatial requirements of their intended use and type of installation.

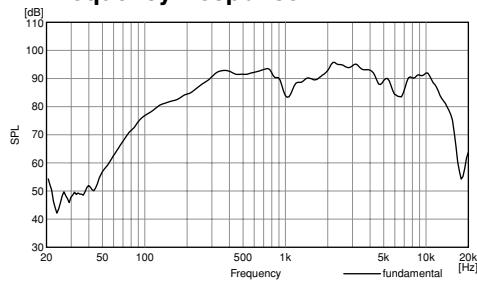
The BS-1110W, in particular, can be mounted directly to wall surfaces, either vertically or horizontally, without requiring special mounting hardware (or using its optional mounting hardware), facilitating use in a wider range of applications. The BS-1110W also transports easily for convenient touring PA applications when used in conjunction with the optional ST-16 Speaker Stand and mobile amplifiers.



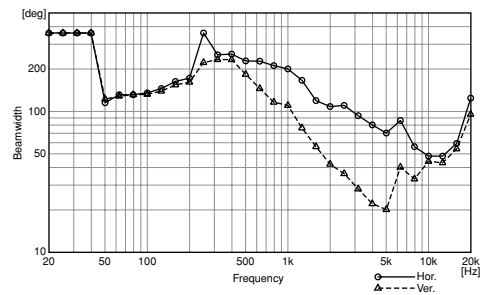
# BS-1110W

## CHARACTERISTIC DIAGRAMS

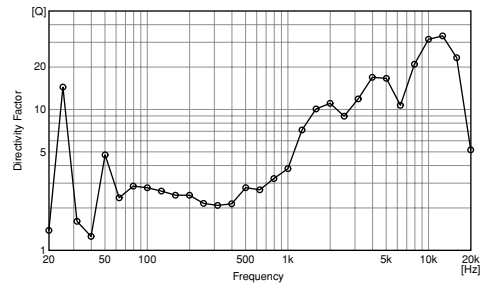
**Frequency Response**



**Beamwidth vs. Frequency**

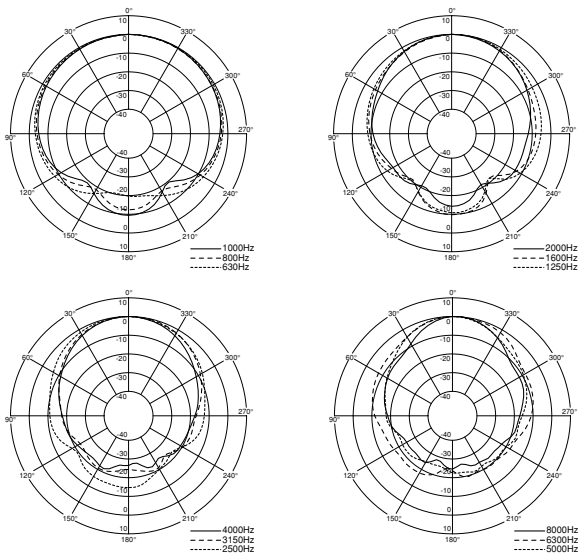


**Directivity Factor vs. Frequency**

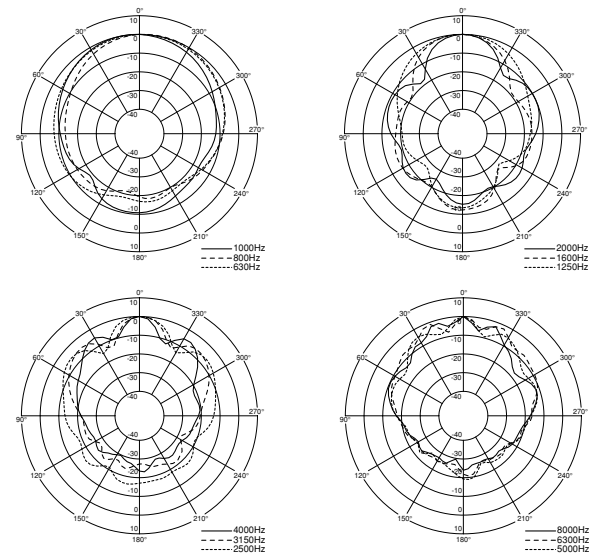


**Polar Response**

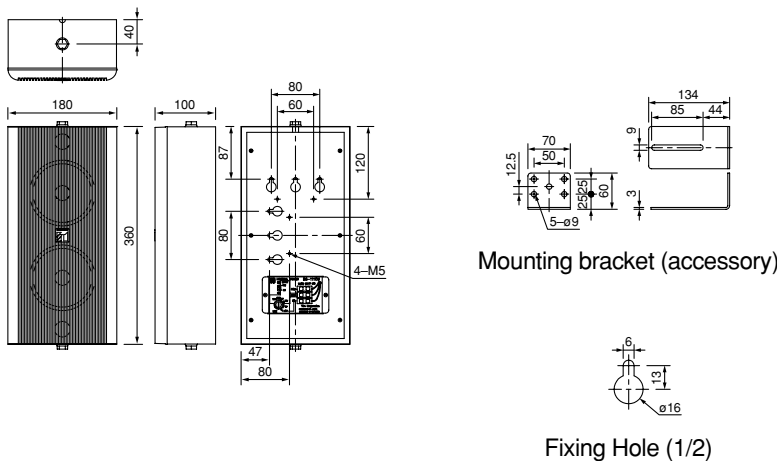
horizontal



vertical

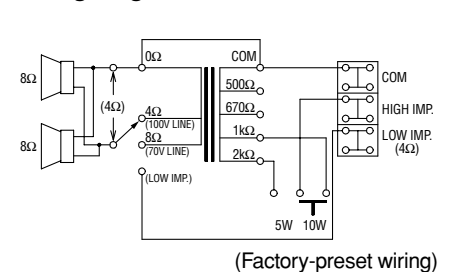


## APPEARANCE AND DIMENTIONAL DIAGRAM



Unit: mm

**Wiring Diagram**

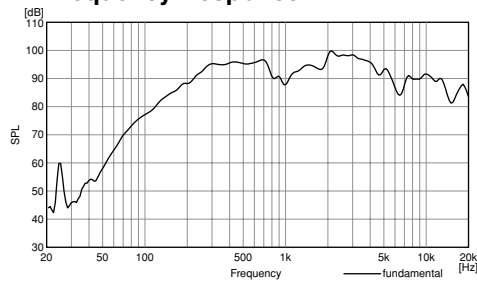


(Factory-preset wiring)

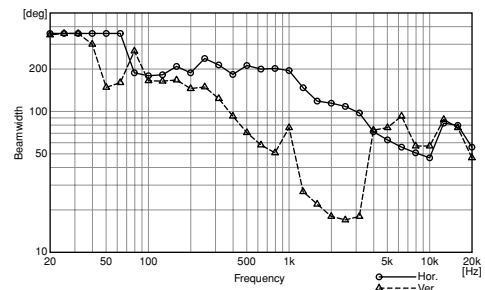
# BS-1120W

## CHARACTERISTIC DIAGRAMS

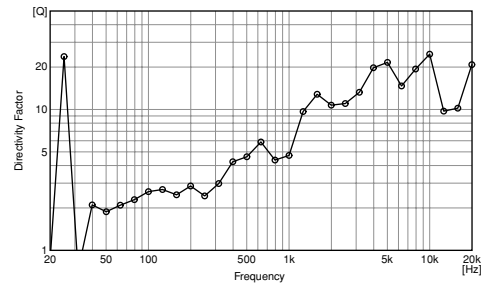
Frequency Response



Beamwidth vs. Frequency

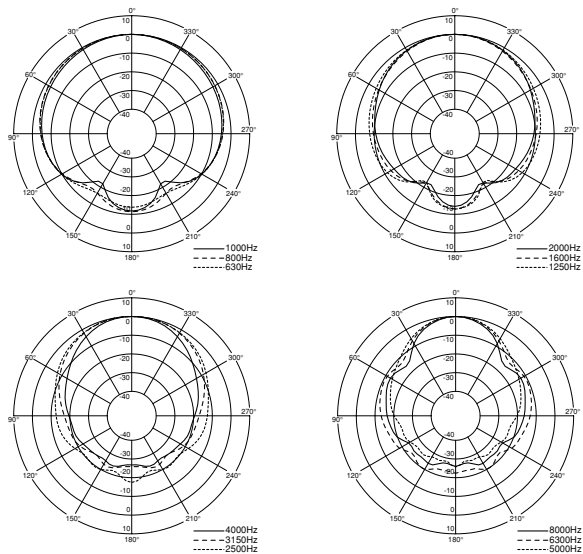


Directivity Factor vs. Frequency

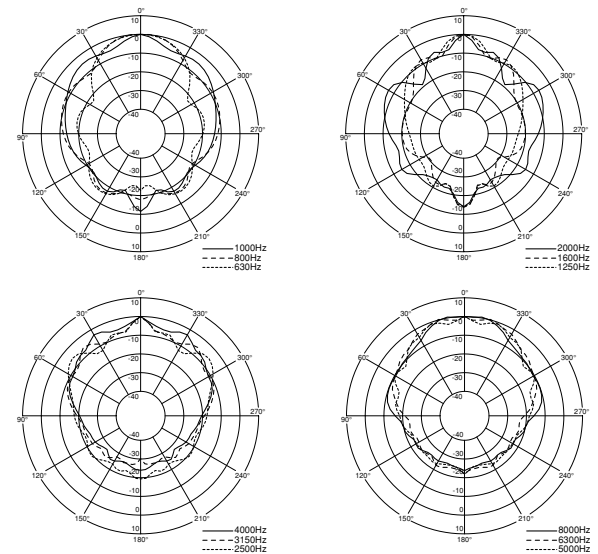


Polar Response

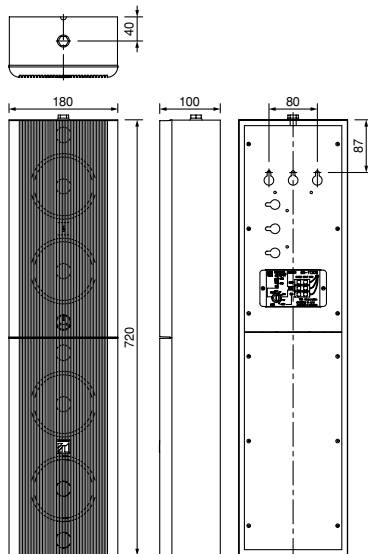
horizontal



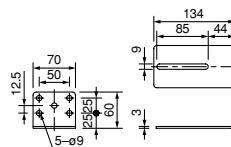
vertical



## APPEARANCE AND DIMENTIONAL DIAGRAM



Mounting bracket (accessory)

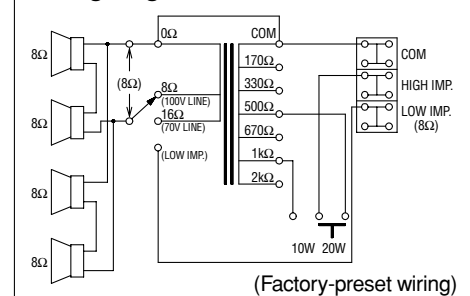


Fixing Hole (1/2)



Unit: mm

Wiring Diagram



## SPECIFICATIONS

	BS-1110W	BS-1120W
<b>Rated Input</b>	10W	20W
<b>Rated Impedance</b>	100V LINE: 1k $\Omega$ (10W), 2k $\Omega$ (5W) 70V LINE: 500 $\Omega$ (10W), 1k $\Omega$ (5W), 4 $\Omega$ (10W)	100V LINE: 500 $\Omega$ (20W), 1k $\Omega$ (10W) 70V LINE: 250 $\Omega$ (20W), 500 $\Omega$ (10W), 8 $\Omega$ (20W)
<b>Sensitivity</b>	90dB (1W/1m)	93dB (1W/1m)
<b>Frequency Response</b>	150 – 14,000Hz	150 – 20,000Hz
<b>Speaker Component</b>	12cm dynamic cone-type speaker x 2	12cm dynamic cone-type speaker x 4 Balanced dom tweeter x 1
<b>Applicable Cables</b>	600V Vinyl-insulated cable (IV wire or HIV wire) Solid copper wire: $\phi$ 0.8 – $\phi$ 1.2mm 7-core twisted copper wire: 0.75 – 1.25mm <sup>2</sup>	
<b>Connection</b>	Push-in connector (Bridging connections possible.)	
<b>Operating Temperature</b>	–10°C to +50°C	
<b>Finish</b>	Enclosure: Plywood vinyl coating, white (RAL 9010 PURE WHITE) Front: ABS resin, white (RAL9010 PURE WHITE) Rear: Steel plate, white (RAL9010 PURE WHITE)	
<b>Dimensions</b>	180 (W) x 360 (H) x 100 (D) mm	180 (W) x 720 (H) x 106 (D) mm
<b>Weight</b>	2.9kg (unit only)	5.1kg (unit only)
<b>Accessory</b>	Mounting bracket x 2	
<b>Option</b>	Applicable bracket: YS-301, SP-410, WCB-12W, TMB-1W Applicable stand: ST-16	Applicable bracket: YS-301

## OPTIONS

### YS-301

In-Wall/Ceiling  
Mounting Bracket



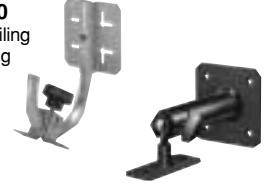
### TMB-1/TMB-1W

Table Mounting Bracket



### SP-410

Wall/Ceiling  
Mounting  
Bracket



### WCB-12/WCB-12W

Wall/Ceiling Mounting  
Bracket



### ST-16

Speaker Stand

## INSTALLATION EXAMPLES

BS-1110W				BS-1120W	
<p>• Direct</p>	<p><b>YS-301</b> In-Wall/Ceiling Mounting Bracket</p>	<p><b>WCB-12/WCB-12W</b> Wall/Ceiling Mounting Bracket</p>	<p><b>ST-16</b> Speaker Stand</p>	<p>• Direct</p>	<p>• With Supplement Bracket</p>
<p>• With Supplement Bracket</p>	<p><b>SP-410</b> Wall/Ceiling Mounting Bracket</p>	<p><b>TMB-1/TMB-1W</b> Table Mounting Bracket</p>			