# WALL SPEAKER







### FS-30N/52N/60N/100N

FS Series is designed for high quality, professional sound reproduction which is ideal for BGM playback and paging. With the high quality transformer can minimize losses during long distance transfer Using the mounting bracket with safety hook can be installed to the correct speaker orientation.





#### **FEATURES**

- Full-range (30N, 60N, 100N) or 2Way (52N) speaker system
- Use for high impedance and low impedance (Slide Switch)
- Screw terminals for easy installation
- High quality transformer for long-distance installation
- Optimized port design by high-strength ABS injection enclosure
- High-density sound-absorbing material for the removal of internal resonance
- The high-strength powder coated Grille and sound

- Black/White Version
- Safety hook considering the user's safety
- High strength articulated wall-mounting bracket (Optional Bracket, FSB-3)
- Horizontal and vertical adjustments and mechanism design for a rigid fixing

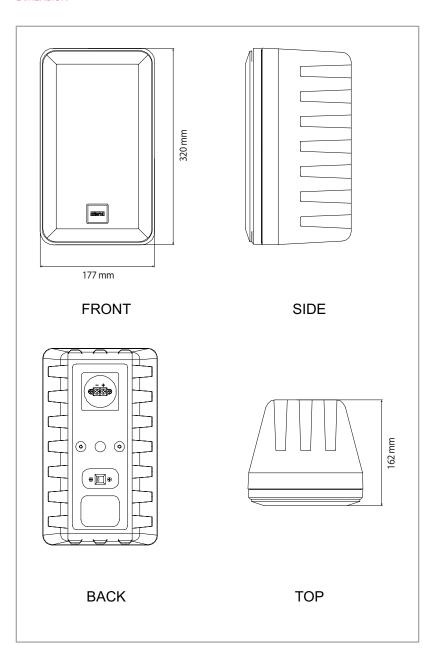
Model		FS-30N	FS-52N	FS-60N	FS-100N
Туре		5.25" Full-range Wall	5.25" 2Way Wall Mount	5.25" Full-range Wall	Dual 5.25" Full-range Wall
		Mount Speaker	Mount Speaker Speaker Mount Speaker		Mount Speaker
Driver		5"	5" WF, 1" Dome TW	5"	5"
Power Handling (AES)		30W	50W	60W	100W
Innut Dower	100V	30W	50W	60W	100W
Input Power	70V	-	-	-	-
	100V	330Ω	200Ω	167Ω	100Ω
Impedance	70V	-	-	-	-
	LOW	8Ω	8Ω	8Ω	8Ω
Power Selection		Slide Switch	Slide Switch	Slide Switch	Slide Switch
Frequency Response(-10d	Frequency Response(-10dB)		76Hz ~ 20kHz	97Hz ~ 16.5kHz	-
Frequency Range(-20%)		60Hz ~ 20kHz	60Hz ~ 20kHz 65Hz ~ 20kHz 69Hz ~ 19.2kHz		100Hz ~ 12KHz
Sensitivity (1W/1m, 1kHz)	*1	90dB	90dB 86dB 90dB		90dB
Maximum SPL[Cont] *1		105dB	103dB	108dB 110	
Naminal Diamenian (Us) ()	1kHz	195° x 101°	187° x 144°	199° x 101°	199° x 101°
Nominal Dispersion(HxV)	4kHz	97° x 29°	80° x 34°	109° x 32°	109° x 32°
Input Connector		2P Screw Terminal	2P Screw Terminal	2P Screw Terminal	2P Screw Terminal
Enclosure Material		ABS GF 20% (V0)	ABS GF 20% (V0)	ABS GF 20% (V0)	ABS GF 20% (V0)
Enclosure Color		Black/White	Black/White	Black/White	Black/White
Grille Material	Grille Material		Metal Grille	Metal Grille	Metal Grille
Grille Color		Black/White	Black/White	Black/White	Black/White
Weights (Net)		2.77kg	2.77kg 3.23kg 3kg		3.8kg
Dimensions (Net, WxHxD, mm)		177 x 302 x 163	177 x 302 x 163	177 x 302 x 163	177 x 302 x 163
Weather Resistant		-	-	-	-
Flame Resistant		-	-	-	-
Certification		-	-	-	-
Included Accessories		Knuckle Bracket,	Knuckle Bracket,	Knuckle Bracket,	Knuckle Bracket,
iliciaded Accessories		Safety Wire	Safety Wire	Safety Wire	Safety Wire

### FS-30N/52N/60N/100N Wall Speaker



#### TECHNICAL DATA

#### **DIMENSION**

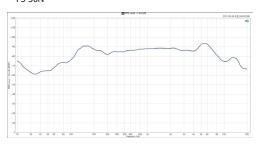


# Wall Speaker FS-30N/52N/60N/100N

#### **TECHNICAL DATA**

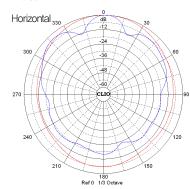
#### FREQUENCY RANGE

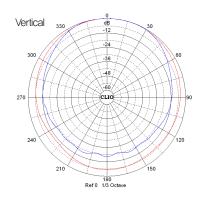
#### • FS-30N



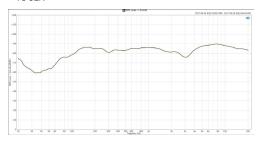
#### POLAR PATTERN (1kHz)

#### • FS-30N

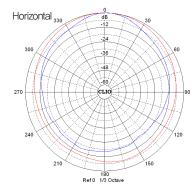


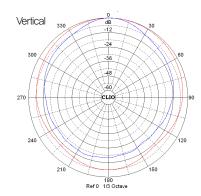


#### • FS-52N

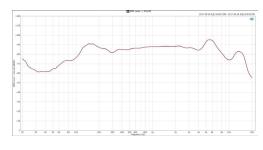


#### • FS-52N

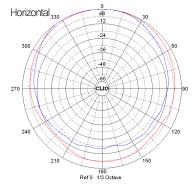


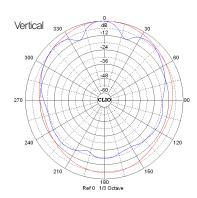


#### • FS-60N

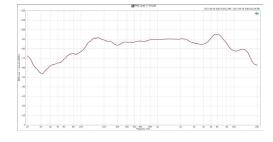


#### • FS-60N

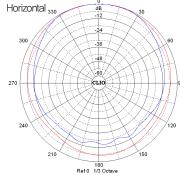


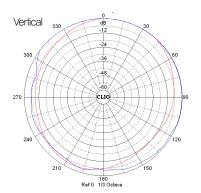


#### • FS-100N



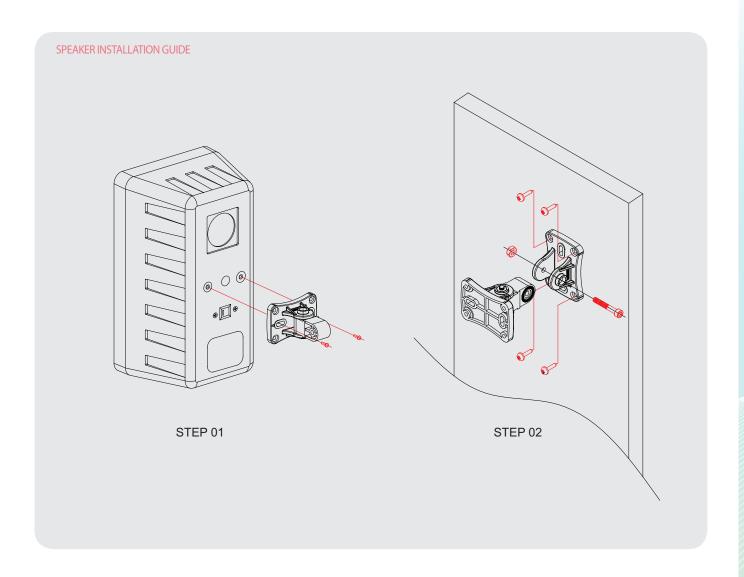
• FS-100N





### FS-30N/52N/60N/100N





### WS-15T/30T/50T/80T

WS Series is professional compact indoor/outdoor loudspeaker for background/foreground music. It can be used in various applications from small-sized venues to mid/large-sized venues. It can be installed with steel-made durable U bracket or rotatable Knuckle bracket by user's demand.



#### **FEATURES**

- A Selection of Line-up
- 70V/100V multi-tap transformer
- Compact size with high power Depending on the sizes, the series provides high output just with a small unit using 1Way Full-range (WS-15T) or 2Way Passive (WS-30T/50T/80T) speaker system.
- Asymmetric horn for the optimized sound system.
- Weather resistant design
- Sound quality of professional audio
- Easy installation

Model		WS-15T	WS-30T WS-50T		WS-80T		
Туре		2.5" Full-range Wall Mount Speaker	4" 2Way Passive Wall Mount Speaker	5" 2Way Passive Wall Mount Speaker	6.5" 2Way Passive Wall Mount Speaker		
Driver		2.5"			WF : 6.5", TW : 13mm		
Power Handling (AES	)	15W	30W	50W	80W		
1 1 2	100V	15W	30/15W	50/25W	80/40W		
Input Power	70V	-	-	-	-		
	100V	660Ω	330/660Ω	200/400Ω	125/250Ω		
Impedance	70V	-			-		
	LOW	8Ω	8Ω	8Ω	8Ω		
Power Selection		By Terminal	By Terminal	By Terminal	By Terminal		
Frequency Response(-10dB)		120Hz ~ 20kHz	108Hz ~ 20kHz	94Hz ~ 20kHz	80Hz ~ 20kHz		
Frequency Range(-20	)%)	111Hz ~ 20kHz	83Hz ~ 20kHz	69Hz ~ 20kHz	60Hz ~ 20kHz		
Sensitivity (1W/1m, 1kHz)		79dB	84dB	87dB	86dB		
Maximum SPL[Cont]		90dB	95dB	104dB	105dB		
				Asymmetric Horn			
Nominal Dispersion(H	HxV)	90°	Vertical Coverage : upward +20°, downward -40° (On Axis)				
Input Connector		3P Screw Terminal	4P Screw Terminal	4P Screw Terminal	4P Screw Terminal		
Enclosure Material		ABS	ABS	ABS	ABS		
Enclosure Color		Black/White	Black/White	Black/White	Black/White		
Grille Material		Metal Grille	Metal Grille	Metal Grille	Metal Grille		
Grille Color		Black/White	Black/White	Black/White	Black/White		
Weights (Net)		0.89kg	1.68kg	2.34kg	3.58kg		
Dimensions (Net, WxHxD, mm)		92 x 120 x 114	139 x 210 x 129	173 x 250 x 150	210 x 311 x 169		
Weather Resistant		IP54	IP54	IP54	IP54		
Flame Resistant		-	-	-	-		
Certification		-	-	-	-		
Included Accessories		Knuckle Bracket Safety Wire	Knuckle or U Bracket Safety Wire	Knuckle or U Bracket Safety Wire	Knuckle or U Bracket Safety Wire		

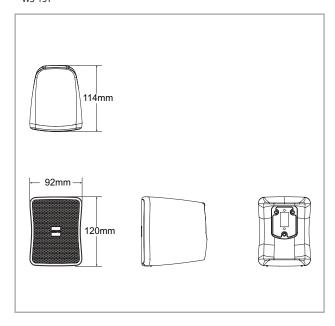
# WS-15T/30T/50T/80T Wall Speaker



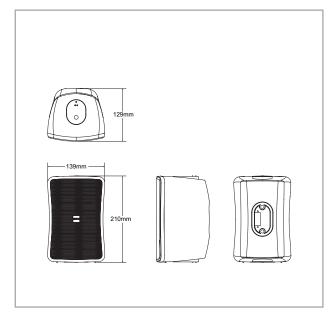
#### TECHNICAL DATA

#### **DIMENSION**

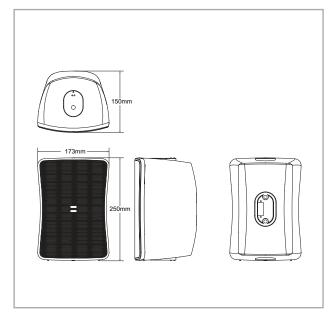
• WS-15T



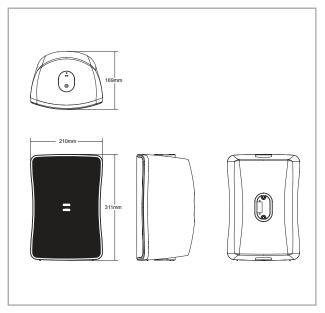
• WS-30T



• WS-50T



• WS-80T

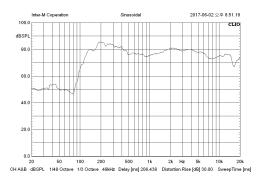


### WS-15T/30T/50T/80T

#### **TECHNICAL DATA**

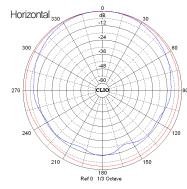
#### **FREQUENCY RANGE**

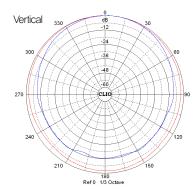
#### • WS-15T



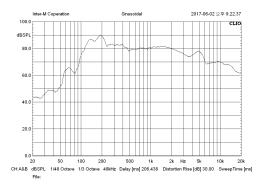
#### POLAR PATTERN (1kHz)

#### • WS-15T

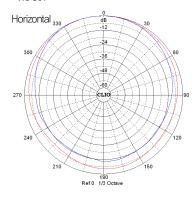


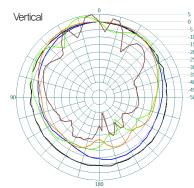


#### • WS-30T

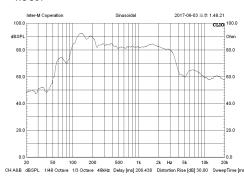


#### • WS-30T

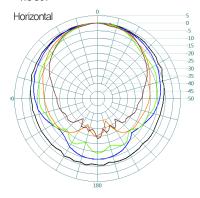


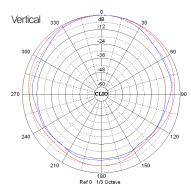


#### • WS-50T

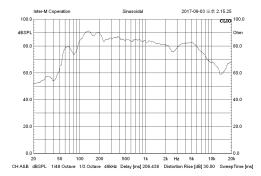


• WS-50T

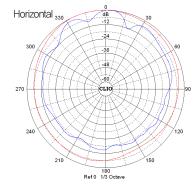


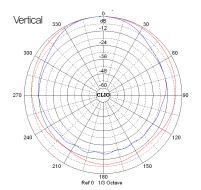


#### • WS-80T



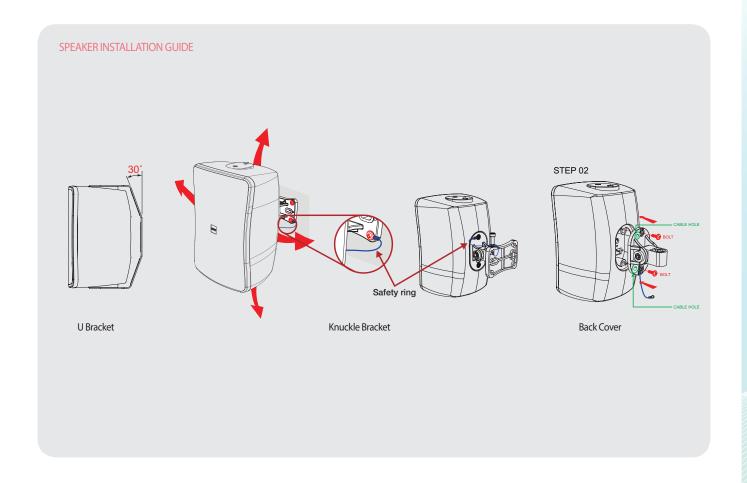
• WS-80T





# WS-15T/30T/50T/80T Wall Speaker





### WS-203/210/230(I/B)

WS 200 series is providing a natural and smooth sound with a variety of it fits to any places that announcements and BGM required such as schools, government office, hotels and etc. And it ensures the quality and durability by acquiring KS certification in the Korea's first.



#### **FEATURES**

- High quality speaker driver
- Stylish and sleek design
- Easy installation
- Outdoor speaker
- High reliability
- WS-203/210 : 1Way Speaker system (6.5" Full-range, adapt SUB-CONE)
- WS-230 : 2Way Speaker system (6.5" Full-range, adapt SUB-CONE)

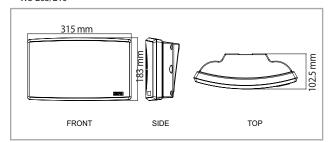
Model		WS-203	WS-210	WS-230
Туре		6.5" Full-range Wall Speaker (Sub Cone)		
Driver		6.5"		6.5" WF + 13mm TW
Power Handling (AES)		3W 10W		30W
In an at Danner	100V	3/2/1W	10/5/3W	30/20/10W
Input Power	70V	-	-	-
	100V	3.3kΩ / 5kΩ / 10kΩ	1kΩ / 2kΩ / 3.3kΩ	330Ω / 500Ω / 1kΩ
Impedance	70V	-	-	-
	LOW	-	-	-
Power Selection		-	-	-
Frequency Response(-10dB	3)	155Hz ~ 20kHz	145Hz ~ 20kHz	135Hz ~ 20kHz
Frequency Range(-20%)		123Hz ~ 20kHz	84Hz ~ 20kHz	99Hz ~ 20kHz
Sensitivity (1W/1m, 1kHz) *1		91dB	92dB	93dB
Maximum SPL[Cont] *1		96dB	102dB	108dB
Namainal Diamaraian (UVV)	1kHz	142° x 191°	138° x 190°	148° x 190°
Nominal Dispersion(HxV)	4kHz	48° x 50°	46° x 46°	51° x °52
Input Connector		Bi-Wired	Bi-Wired Bi-Wired	
Enclosure Material		HIPS (V0)	HIPS (V0)	HIPS (V0)
Enclosure Color		Black/Ivory	Black/Ivory	Black/Ivory
Grille Material		Jersey	Jersey	Jersey
Grille Color		Black/Ivory	Black/Ivory	Black/Ivory
Weights (Net)		1.1kg	1.2kg	2.2kg
Dimensions (Net, WxHxD, mm)		315 x 183 x 103	315 x 183 x 103	315 x 183 x 124
Weather Resistant		-	-	-
Flame Resistant		-	-	-
Certification		KS	KS	KS
Included Accessories		Anchor bolt x 1	Anchor bolt x 1	Anchor bolt x 1
*4 · At flags tool				

# WS-203/210/230(I/B) Wall Speaker

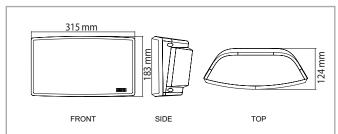
#### **TECHNICAL DATA**

#### **DIMENSION**

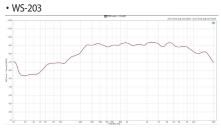
• WS-203/210

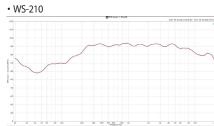


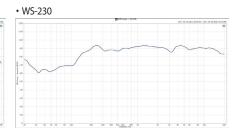
• WS-230



#### **FREQUENCY RANGE**

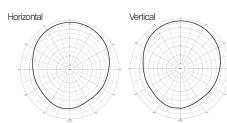






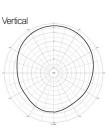
#### **POLAR PATTERN**

• WS-203

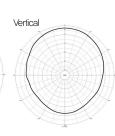




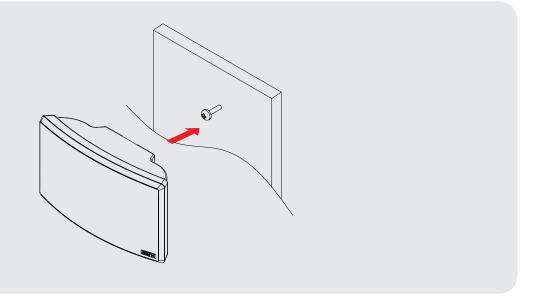
• WS-210







#### SPEAKER INSTALLATION GUIDE





### SWS-03/03A/10/10A(I/B)

SWS series is providing a natural and smooth sound with a variety of It fits to any places that announcements and BGM required such as schools, government office, hotels and etc. And it ensures the quality and durability by acquiring KS certification in the Korea's first.





#### **FEATURES**

- High quality speaker driver produce detail and rich sound
- Stylish and sleek design wall speaker
- Harmonized with general structure when installed
- Sound volume adjustable with attenuator (SWS-03A/10A)

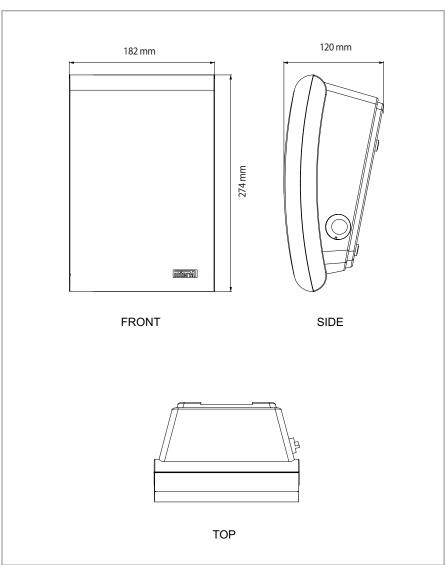
Model		SWS-03	SWS-03A	SWS-10	SWS-10A
Туре		6.5" Full-range Wall	6.5" Full-range Wall	6.5" Full-range Wall	6.5" Full-range Wall
		Speaker	Speaker	Speaker	Speaker
Driver		6.5"	6.5" 6.5" 6.5"		6.5"
Power Handling (AES)		3W	3W	10W	10W
In much Dance	100V	3/2/1W	3/2/1W	10/5/3W	10/5/3W
Input Power	70V	-	-	-	-
	100V	3.3kΩ / 5kΩ / 10kΩ	3.3k/5k/10kΩ	1kΩ / 2kΩ / 3.3kΩ	1k/2k/3.3kΩ
Impedance	70V	-	-	-	-
	LOW	-	-	-	-
Power Selection		-	Rotary Switch	-	Rotary Switch
Frequency Response(-10dB)		143Hz ~ 14.7kHz	z ~ 14.7kHz 143Hz ~ 14.7kHz 145Hz ~ 12.6kHz		145Hz ~ 12.6kHz
Frequency Range(-20%)		114Hz ~ 20kHz	114Hz ~ 20kHz	20kHz 117Hz ~ 17.4kHz 117H	
Sensitivity (1W/1m, 1kHz) *1		89dB	89dB 90dB		90dB
Maximum SPL[Cont] *1		94dB	94dB 100dB		100dB
	1kHz	171° x 131°	171° x 131°	178° x 129°	178° x 129°
Nominal Dispersion(HxV)	4kHz	50° x 49°	50° x 49°	49° x 49°	49° x 49°
Input Connector		4P Screw Terminal	4P Screw Terminal 4P Screw Terminal		4P Screw Terminal
Enclosure Material		HIPS	HIPS	HIPS	
Enclosure Color		Black/Ivory	Black/Ivory	Black/Ivory	Black/Ivory
Grille Material		Jersey	Jersey	Jersey	Jersey
Grille Color		Black/Ivory	Black/Ivory	Black/Ivory	Black/Ivory
Weights (Net)		1.10kg	1.10kg 1.34kg		1.34kg
Dimensions (Net, WxHxD, mm)		182 x 274 x 120	182 x 274 x 120		182 x 274 x 120
Weather Resistant		-	-	-	-
Flame Resistant		-	-	-	-
Certification		-	-	-	-
Included Accessories		Anchor bolt x 1	Anchor bolt x 1	Anchor bolt x 1	Anchor bolt x 1

### SWS-03/03A/10/10A(I/B) Wall Speaker



#### **TECHNICAL DATA**

#### **DIMENSION**

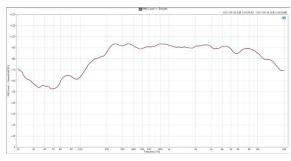


## Wall Speaker SWS-03/03A/10/10A(I/B)

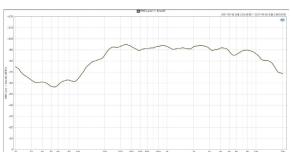
#### **TECHNICAL DATA**

#### **FREQUENCY RANGE**

• SWS-03

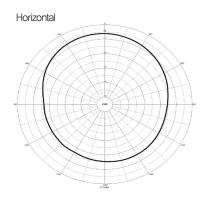


#### • SWS-03A

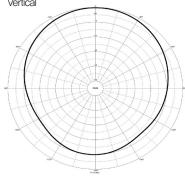


#### POLAR PATTERN (1kHz)

• SWS-03/03A

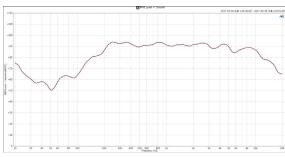


Vertical

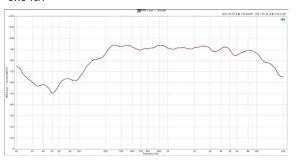


#### FREQUENCY RANGE

• SWS-10

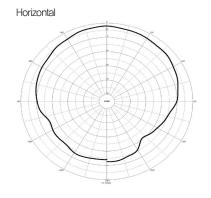


• SWS-10A

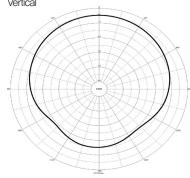


#### POLAR PATTERN (1kHz)

• SWS-10/10A

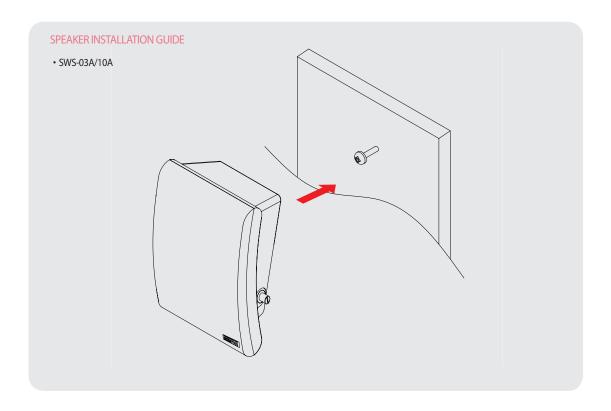


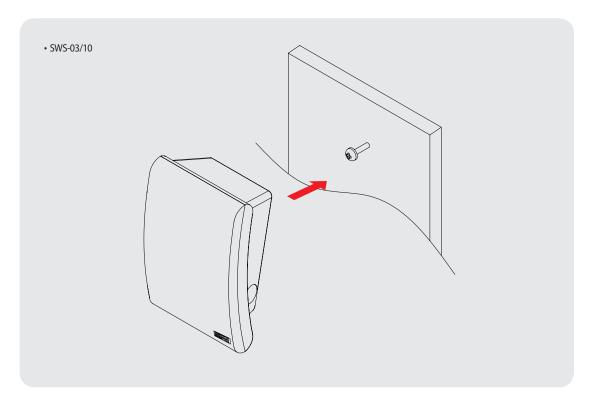




### SWS-03/03A/10/10A(I/B) Wall Speaker







### IWS-10/10A(I/B)

IWS series is providing a natural and smooth sound with a variety of It fits to any places that announcements and BGM required such as schools, government office, hotels and etc. And it ensures the quality and durability by acquiring KS certification in the Korea's first.



#### **FEATURES**

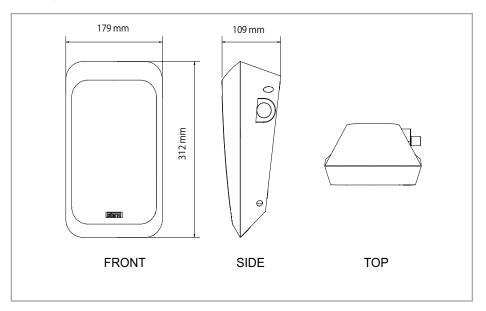
- High quality speaker driver
- Stylish and sleek design wall speaker
- A design adopted in modern sense
- Sound volume adjustable with attenuator (IWS-03A/10A)

Model		IWS-10	IWS-10A	
Type		6.5" Full-range Wall Speaker	6.5" Full-range Wall Speaker	
Driver		6.5"	6.5"	
Power Handling (AES)		10W	10W	
	100V	10W / 3W	10/3W	
Input Power	70V	-	-	
	100V	1kΩ / 3.3kΩ	1k/3.3kΩ	
Impedance	70V	-	-	
	LOW	-	-	
Power Selection		-	Rotary Switch	
Frequency Response(-10dB)		150Hz ~ 15kHz	150Hz ~ 15kHz	
Frequency Range(-20%)		120Hz ~ 17.9kHz	120Hz ~ 17.9kHz	
Sensitivity (1W/1m, 1kHz) *1		90dB	90dB	
Maximum SPL[Cont] *1		100dB	100dB	
Name in al Diamagaia m (U.A.)	1kHz	180° x 171°	180° x 171°	
Nominal Dispersion(HxV)	4kHz	75° x 100°	75° x 100°	
Input Connector		3P Screw Terminal	3P Screw Terminal	
Enclosure Material		HIPS	HIPS	
Enclosure Color		Black/Ivory	Black/Ivory	
Grille Material		Jersey	Jersey	
Grille Color		Black/Ivory	Black/Ivory	
Weights (Net)		1.1kg	1.1kg	
Dimensions (Net, WxHxD, mm)		179 x 312 x 109	179 x 312 x 109	
Weather Resistant				
Flame Resistant		-	-	
Certification		-	-	
Included Accessories		Anchor bolt x 1	Anchor bolt x 1	
******				

# IWS-10/10A(I/B) Wall Speaker

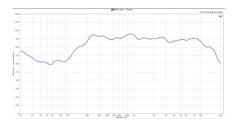
#### TECHNICAL DATA

#### **DIMENSION**

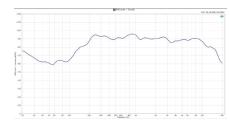


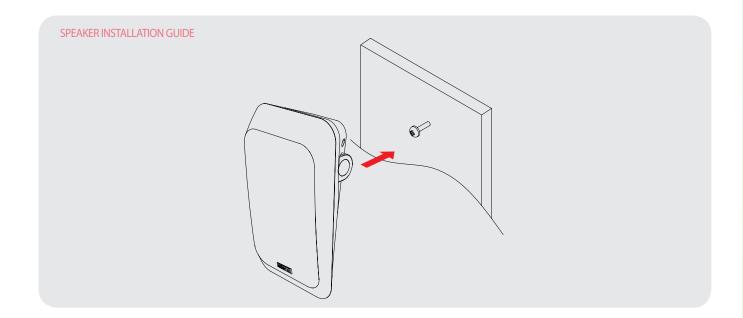
#### FREQUENCY RANGE

• IWS-10



• IWS-10A





The CI series elegant and stylish speaker design is manufactured from a precision-machined and acoustic tuned. It is full-range with a uniform frequency response pristine sound quality. The CI Series speakers are ideal for BGM playback and also offer precise voice reproduction. Articulated mounting bracket offers ease of installation with precision speaker orientation.



#### **FEATURES**

- Compact vented enclosure
- Coaxial dual-cone driver
- High-output drivers
- Moisture & Dust proof
- Optimized sound quality on music playback & voice intelligibility
- Circuit protection
- High quality transformer

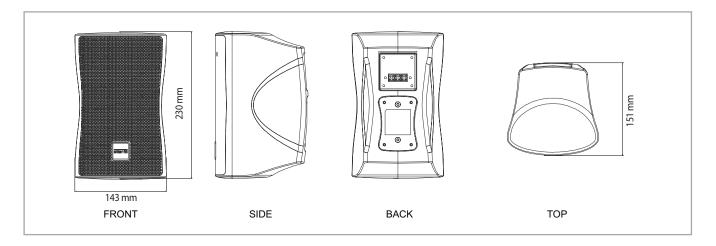
- Articulated mounting bracket
- Rotatable logo plate

Model		CI-20T	CI-30T
Туре		4" Full-range Wall Mount Speaker	4" Full-range Wall Mount Speaker
Driver		4"	4"
Power Handling (AES)		20W	30W
In must Device	100V	20W	30W
Input Power	70V	-	-
	100V	500Ω	333Ω
Impedance	70V	-	-
	LOW	8Ω	8Ω
Power Selection		By Terminal	By Terminal
Frequency Response(-10dB)		94Hz ~ 16kHz	96Hz ~ 20kHz
Frequency Range(-20%)		67Hz ~ 19kHz	70Hz ~ 20kHz
Sensitivity (1W/1m, 1kHz)		83dB	83dB
Maximum SPL[Cont]		96dB	98dB
Ni-main-l Diam-ami-m (III-A)	1kHz	204° x 206°	205° x 203°
Nominal Dispersion(HxV)	4kHz	100° x 115°	100° x 110°
Input Connector		3P Screw Terminal	3P Screw Terminal
Enclosure Material		V0	V0
Enclosure Color		Black/White	Black/White
Grille Material		Metal Grille	Metal Grille
Grille Color		Black/White	Black/White
Weights (Net)		1.54kg	1.58kg
Dimensions (Net, WxHxD, mm)		143 x 230 x 151	143 x 230 x 151
Weather Resistant		IP34	IP34
Flame Resistant		0	0
Certification		KS	KS
Included Accessories		Knuckle Bracket, Safety Wire	Knuckle Bracket, Safety Wire
			· · · · · · · · · · · · · · · · · · ·



#### TECHNICAL DATA

#### **DIMENSION**

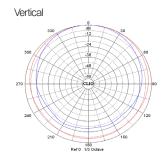


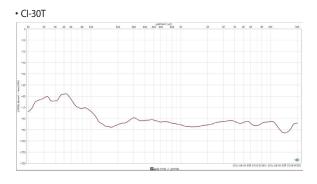
#### FREQUENCY RANGE

# • CI-20T

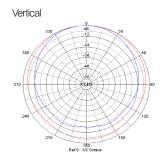
#### POLAR PATTERN (1kHz)











GS-20(B/W) is optimized High quality wall speaker for monitoring the broadcasting.

It is tuned to play the entire frequency range for BGM playback and precise voice reproduction, and designed by the 2Way circuit applicable to various environments.

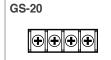




#### **FEATURES**

- 4" 2Way speaker system
- High quality matching transformer
- Contains a premium grade speaker driver
- Best reliability
- The beautiful and graceful cabinet design
- Easy installing and convenience

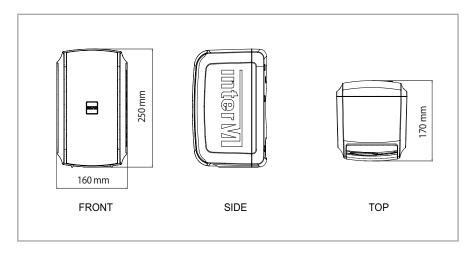
Input terminal



Model		GS-20		
Туре		5" 2way Wall Mount Speaker		
Driver		5" WF, 0.45" TW		
Power Handling (AES)		20W		
Input Dower	100V	20W		
Input Power	70V	<u>-</u>		
	100V	500Ω		
Impedance	70V	-		
	LOW	16Ω		
Power Selection		By Terminal		
Frequency Response(-10dB)		82Hz ~ 20kHz		
Frequency Range(-20%)		59Hz ~ 20kHz		
Sensitivity (1W/1m, 1kHz)		82dB		
Maximum SPL[Cont]		95dB		
Naminal Diamanian (U.A.)	1kHz	221° x 195°		
Nominal Dispersion(HxV)	4kHz	62° x 75°		
Input Connector		4P Screw Terminal		
Enclosure Material		ABS UL 94 HB		
Enclosure Color		Black/White		
Grille Material		ABS UL 94 HB		
Grille Color		Black/White		
Weights (Net)		1.8kg		
Dimensions (Net, WxHxD, mm)		160 x 250 x 170		
Weather Resistant		-		
Flame Resistant		-		
Certification		-		
Included Accessories		Knuckle Bracket, Safety Wire		

#### TECHNICAL DATA

#### **DIMENSION**



#### FREQUENCY RANGE

#### POLAR PATTERN (1kHz)



