

Public Address System



Mixer Amplifier

> Package Amplifier

ZA-230W **30W**



Model	ZA-230W
Power Source	220V AC or 12V DC
Rated Output	30W
Frequency Response	50Hz - 20kHz, ± 3 dB
Input	MIC 1-3 : -60dB* (1.0mV), 600 Ω , Unbalanced, Phone Jack AUX : -24dB* (60mV), 10k Ω , Unbalanced, RCA pin jack
Output	Speaker Out : Floating Balanced; High Impedance : 330 Ω (100V); Low Impedance: 4 Ω (11V)
Tone Control	Bass: -10dB at 100Hz, Treble: -10dB at 10kHz
Muting	MIC 1 overrides other Mic inputs and AUX input with 0-30dB attenuation, by MIC 1 input
Dimensions	350(W) x 100 (H) x 240(D)mm
Weight	3.5kg

*0dB = 1V

> Mixer Power Amplifier

ZA-2128M **120W** x 2



ZA-2128S-AS
ZA-2248S-AS

120W
240W



Model	ZA-2128M	ZA-2128S-AS	ZA-2248S-AS
Power Source	220V AC or 24V DC		
Rated Power Output	2 x 120W	120W	240W
Output	High Impedance (100V): 2 x 83Ω Low Impedance (4Ω): 2 x 22V Rec Out: 0dB, 600Ω, Unbalanced, RCA Pin Jack Pre Amp Out: 2 x 0dB, 600Ω, Unbalanced, RCA Pin Jack	High Impedance (100V): 83Ω Low Impedance (4Ω): 22V Rec Out: 0dB, 600Ω, Unbalanced, RCA Pin Jack Pre Amp Out: 0dB, 600Ω, Unbalanced, RCA Pin Jack	High Impedance (100V): 42Ω Low Impedance (4Ω): 31V Rec Out: 0dB, 600Ω, Unbalanced, RCA Pin Jack Pre Amp Out: 0dB, 600Ω, Unbalanced, RCA Pin Jack
Frequency Response	50Hz - 20kHz (±3dB)		
Input	MIC 1: -60dB*, 600Ω, Balanced, Phone Jack, Echo MIC 2-3: -60dB*, 600Ω, Balanced, Phone Jack MIC 4-5: -60dB*, 600Ω, Balanced, Phone Jack AUX 1-3: -10dB*, 10kΩ, Unbalanced, RCA Pin Jack PWR AMP IN: 2 x 0dB*, 10kΩ, Unbalanced, RCA Pin Jack	MIC 1: -60dB*, Balanced, 600Ω, Phone Jack, Echo MIC 2-5: -60dB*, Balanced, 600Ω, Phone Jack AUX 1-3: -10dB*, Unbalanced,10kΩ, RCA Pin Jack PWR AMP IN: 2 x 0dB*, Unbalanced,10kΩ, RCA Pin Jack	
Phantom Power	ON or OFF for Mic 1 with switch setting (+21VDC)		
Tone Control	Bass: ±10dB at 100Hz/Treble: ±10dB at 10kHz		
Dimensions	420(W) x 144(H) x 361(D) in mm		
Weight	19.3kg	13kg	14.5kg

*0dB = 1V

> Mixer Power Amplifier

ZA-1240SS-AS **240W**
ZA-1360SS-AS **360W**



Model	ZA-1240SS-AS	ZA-1360SS-AS
Power Req.	220 - 230V AC, 50/60Hz	
Rated Output	240W	360W
Frequency Response	50Hz - 18kHz (± 3 dB)	
Input	MIC1-3: -52dBV, 600 Ω , Unbalanced, Phone Jack AUX1,2: -10dBV, 10k Ω , Unbalanced, RCA Pin Jack	
Output	DIRECT LINE: 4-16 Ω , 42 Ω (100V) Speaker Selector: 5-zone selector (all zones simultaneously selectable) & 1 all call PRE OUT: 0dB*, 600 Ω , Unbalanced, RCA pin jack	DIRECT LINE: 4-16 Ω , 28 Ω (100V) Speaker Selector: 5-zone selector (all zones simultaneously selectable) & 1 all call PRE OUT: 0dB*, 600 Ω , Unbalanced, RCA pin jack
Tone Control	Bass: ± 10 dB at 100Hz & Treble: ± 10 dB at 10kHz	
Dimensions	420(W) x 110(H) x 384(D) in mm	
Weight	12.8kg	14.6kg

*0dB = 1V

> Mixer Power Amplifier

ZA-2030

30W

ZA-2060

60W

ZA-2120

120W

ZA-2240

240W



> Power Amplifier

ZP-2240

240W



Model	ZA-2030	ZA-2060	ZA-2120	ZA-2240	ZP-2240
Power Req	220 - 240V AC or 24V DC				
Power Consumption	34W (AC operation EN 60065)	72W (AC operation EN 60065)	124W (AC operation EN 60065)	238W (AC operation EN 60065)	
Rated Output	30W	60W	120W	240W	
Frequency Response	50Hz - 20kHz (±3dB)				
Input	MIC 1-3: -60dB*, 600Ω, Balanced, Phone Jack AUX 1,2: -20dB*, 10kΩ, Unbalanced, RCA Pin Jack				Line in: 0dB*, 10kΩ, Balanced, Screw terminal 100V Line in: 40dB*, 330kΩ unbalanced, screw terminal Power remote control: Make Contact
Output Speaker Out High Impedance Low Impedance (4Ω) Rec Out	Balanced (floating) 330Ω(100V), 170Ω(70V) 11V 0dB,600Ω,Unbalanced, RCA Pin Jack	Balanced (floating) 170Ω(100V), 83Ω(70V) 15.5V 0dB,600Ω,Unbalanced, RCA Pin Jack	Balanced (floating) 83Ω(100V), 42Ω(70V) 22V 0dB,600Ω,Unbalanced, RCA Pin Jack	Balanced (floating) 42Ω(100V), 21Ω(70V) 31V 0dB,600Ω,Unbalanced, RCA Pin Jack	Balanced (floating) 42Ω(100V), 21Ω(70V), 4Ω (31V)
Phantom Power	DC + 21V (MIC1)				-
S/N Ratio	Over 60dB				
Tone Control	Bass: ±10dB at 100Hz/ Treble: ±10dB at 10kHz				
Muting	MIC1 : Mutes other input signals by 0-30dB attenuation				-
Dimensions	420(W) x 101(H) x 280(D)in mm		420(W) x 101(H) x 360(D)in mm		
Weight	5kg	7kg	10.8kg	13.2kg	

Digital Power Amplifier

> 2-Channel Power Amplifier

ZA-D500



Model	ZA-D500
Power Source	220 - 240V AC, 50/60Hz
Number of Channels	2
Frequency Response	20 - 20.000Hz, ±1 dB
Input	2 channels, +4dBm* (1.23V on the position of the maximum volume control), 10kΩ, Electronically balanced, XLR connector. Parallel switch ON/OFF CH 1 (ON: Parallel, OFF: each CH)
Output	2 channels: 250W x 2 (4Ω), 170W x 2 (8Ω), 1 channel: 500W (8Ω), BRIDGE
Dimensions	420(W) x 59.5(H) x 345(D) in mm
Weight	4.9kg

*0dB = 1V

Mixer Amplifier

> Mixer Amplifier with MP3

ZA-2120MPU

120W

ZA-2240MPU

240W



Model	ZA-2120MPU	ZA-2240MPU
Power Source	220 - 240V AC or 24-30V DC	
Rated Output	120W	240W
Frequency Response	50 - 20.000Hz (±3dB)	
Input	MIC1,2: -60dBV (1.0mV), 600Ω, Balanced, Phone Jack AUX 1,2: -20dBV (100mV), 10kΩ, Unbalanced, Phone Jack, RCA Pin Jack	MIC1-3: -60dBV (1.0mV), 600Ω, Balanced, Phone Jack AUX 1,2: -20dBV (100mV), 10kΩ, Unbalanced, Phone Jack, RCA Pin Jack
Output	Speaker Out: Balanced (floating); High Impedance: 83Ω (100V), 42Ω (70V); Low Impedance: 4Ω (22V); Rec Out: 0dBV (1.0V), 600Ω, unbalanced, RCA Pin Jack	Speaker Out: Balanced (floating); High Impedance: 42Ω (100V), 21Ω (70V); Low Impedance: 4Ω (31V); Rec Out: 0dBV (1.0V), 600Ω, unbalanced, RCA Pin Jack
Tone Control	Bass: ±10dB at 100Hz, Treble: ±10dB at 10kHz	
Dimensions	420(W) x 101(H) x 360(D) in mm	
Muting	MIC1: Mutes other input signal by 0-30dB attenuation	
MP3 Player	USB Slot & SD Card Slot	

*0dB = 1V

Car Amplifier

ZA-250S



Model	ZA-250S
Output	25W Rated
Power Requirements	DC14V
Input	Mic 600Ω unbalanced. Aux: 10kΩ unbalanced
Speaker Output	4Ω-8Ω
Frequency Response	100 - 10.000Hz ±3dB
Standard Accessories	Dynamic microphone 600Ω unbalanced
Signal Sound	Sirene
Dimensions	178(W) x 50(D) x 144(H) in mm
Weight	1.1kg

> Digital Mixer Amplifier

ZA-6224D-AS



> Remote Controller



Z-RC03-AS

Equipped with 2 Ethernet RJ-45 ports.

Maximum cable length is 200m (656.17ft)

Can be connected by Category 5 twisted pair cable for LAN.

Model	ZA-6224D-AS
Power Source	220 - 240V AC, 50/60Hz
Power Output	240W x 2 channels (100V, 42Ω, rated output)
Amplification System	Class D, Output transformerless galvanic isolated output
Frequency Response	50Hz - 20kHz, ±3dB (at 1/3 rated output, rated load, from power amplifier input)
Input	MIC 1: -50dB* (24V phantom powered)/ -60dB* (phantom power OFF) 600Ω, electronically-balanced, φ6.3mm phone jack (3P : balance) MIC 2-4: -66dB*, 200Ω, electronically-balanced, XLR-3-31 type and φ6.3mm phone jack (3P : balance) (either one usable) MIC 5-6: -60dB*, 600Ω, electronically-balanced, XLR-3-31 type and φ6.3mm phone jack (3P : balance) (either one usable) AUX 1: -10dB*, 10kΩ mixed monaural, unbalanced, RCA pin jacks (1 pair) AUX 2: -20dB*, 10kΩ mixed monaural, unbalanced, φ3.5mm mini jack (3P: stereo) Power amplifier input: 0dB*, 10kΩ, unbalanced, RCA pin jacks (1 each for ROOM and OUTSIDE outputs)
Output	Speaker Output: 2 zones, 100V(42Ω), galvanic isolated balanced, M4 screw terminal Recording Output: 0dB*, 600Ω monaural, unbalanced, RCA pin jacks (1 pair) Effect Bus Output: 0dB*, 600Ω monaural, unbalanced, RCA pin jacks (1 pair) Preamplifier Output: 0dB*, 600Ω monaural, unbalanced, RCA pin jacks (1 each for ROOM and OUTSIDE outputs)
Phantom Power	ON/OFF switchable for MIC 1 and XLR-3-31 type connectors of MIC 2-6
Controls	6 Microphone volume controls, 2 AUX volume controls, 1 ROOM output switch, 1 ROOM volume control, 1 OUTSIDE output switch, 1 OUTSIDE volume control, 1 Effect control (0 to 100%) of Effect bus, 1 Effect preset type selection switch (DOME/HALL/DELAY/PLATE), 1 Effect Room size/Delay time selection switch (OFF/small/middle/large), 1 Effect output selection switch (OFF/ON), 1 MIC 5-6 effect switch, 1 Low EQ control (±15dB, 80Hz) for MIC 1-6, 1 Mid EQ control (±15dB, 2.5kHz) for MIC 1-6, 1 High EQ control (±15dB, 12kHz) for MIC 1-6, 1 Speaker EQ (ZH-5025BM/ZH-652MD) switch for OUTSIDE output 1 Power Switch, 1 Phantom switch for MIC1, 1 Phantom switch for MIC 2-6 (XLR-3-31)
Selectable EQ Setting	8 selectable speaker EQ for ROOM output: 1. ZS-F2000BM/WM/BMWP/WMWP 2. ZS-1030B/W 3. ZS-HS1200BT/WT 4. ZS-HS1500BT/WT 5. ZS-102C/ZS-202C 6. ZS-203/ZS-403/ZS-603CB/CW 7. ZS-S60CW 8. ZS-S240CW + ZT-200
Dimensions	420(W) x 99.8(H) x 360.6(D) in mm (16.54" x 3.93" x 14.2")
Weight	6.1kg (13.45lb)

*0dB = 1V

Wireless Amplifier

> Wireless Amplifier

ZW-G810CU (with Cassete Player and MP3 unit)



> Compact, tough and very portable

Model	ZW-G810CU
Power Requirement	220V AC (198-242)50/60Hz, Dry Cells - 8pcs (R20P or"Dsize), External DC 10-16V
Power Consumption	AC: 44W ; DC: 1200mA
Rated Output	AC: 15W (Max.20W), DC: 6W
Frequency Response	±3dB (70-10.000Hz)
Distortion	Under 3% at rated output
Input	Mic 1,2,3 (Cable Mic): -54dBv, 600Ω ; AUX: -20dBv, 600Ω
Output	External Speaker: 8-16Ω / over 20W at rated input; "Internal speaker and external speaker" or "External speaker only" (by selectable switch)
S/N Ratio	More than 70dB at rated output
Antenna	Rod Antenna
Internal Speaker	20cm mechanical 2-way speaker
Cassete Deck	Reproduction System : Non Reverse (one way) Usable Tape : Normal Tape Wow and Flutter: 0.3% Wrms Fast forward, rewind time : Approx. 100sec (C-60tape) Recording method : AC bias
MP3 Unit	USB Type: 1.1 and 2.0 Capacity: Max 32GB (FAT 16 & FAT32) Format File : MP3 and WMA
Ambient Temperature	AC: -10~ +40°C ; DC: 0~ + 40°C
Finish	ABS resin, light grey
Dimensions (WxHxD)	366(W) x 456(H) x 197(D) in mm
Weight	Approx. 8.3kg (battery excluded)
Accessories	External Speaker plug : 1x Battery AA : 2x Single pole plug : 1x Dust cover : 1x Mic hand held / Tuner : ZM-G500 / ZTU-G500 (2SET)

* the design and specifications are subject to change without notice for improvement.

* specifications are measured on 220V AC

> UHF Wireless Tuner Module

ZTU-G500



> Wireless Microphone

ZM-G500



Model	ZTU-G500
Receiving Frequency	488.00; 500.40; 491.03; 503.60; 495.14; 505.76Mhz
Antenna Input	50Ω
Local Oscillation	X-tal Control
Output Level	0dB

Model	ZM-G500
Microphone Element	Dynamic Microphone Unit, Cardioid Characteristic
Frequency Range	488.00; 500.40; 491.03; 503.60; 495.14; 505.76MhzMhz
Battery	AA x 2
Finish	Aluminum Casing Body with Black Rubber Painting

Wireless Amplifier

> Wireless Meeting Amplifier

ZW-G10CB-AS



Model	ZW-G10CB-AS
Power Source	AC In: 220-240V, 50/60Hz; DC In: 12V 1A, Max.18V; DC: 12V/2.3Ah (Rechargeable Battery)
Output Power	20W Max
Frequency Response	60Hz-20kHz, ± 3 dB
Inputs	Mic 1&2: -40dB* Unbalanced 5k Ω , 2 Pole-Phone Jack; AUX in: -20dB*, Unbalanced 10k Ω , RCA Pin Jack
Outputs	Audio Out: -25dB*, Unbalanced 40k Ω , RCA Pin Jack; Speaker Out: 8- 16 Ω , RCA Pin Jack
Source	Handheld Microphone, Frequency Range 180 - 200MHz; RF Power Output <10mW; Body Pack Microphone (can be used with Tieclip Mic or Headset Mic), Frequency Range 180 - 200MHz; RF Power Output <10mW; USB Player (support up to 32GB), recording function, Type of File (MP3 file and Wav file) SD/MMC Card Player (support up to 32GB), recording function, Type of File (MP3 file and Wav file) Bluetooth Connection, Class 2, Freq. : 2400 - 2483.5MHz, CH : 0-78, Max. RF Transmit Power +4dBm; Cassette Player, recording function FM Radio (88-108Mhz)
Control	2 Microphone Gain Controls; 1AUX Gain Controls; 1 MP3 Gain Controls; 1 Echo Controls; 1 Tone Controls; 1 Power ON/OFF Switch
Battery Life	Approx. 5 Hours, Continuous Music
Charging Time	12Hours, 12V/2.3Ah, Lead Acid Battery, 1 pcs
Speaker	6" Cone (150mm), 4 Ω , Full Range
Dimensions	234(W) x 341(H) x 180(D) in mm
Weight	3.8kg
Accessory	Power Cord (1.5m) x 1; Remote Control x 1; and inside the battery type CR2025 3V x 1; Handheld Wireless Mic x 1; Body Pack Wireless Mic x 1; Headset Mic x 1; Tieclip Mic x 1

*0dB: 1V; Specification are measured on 220V AC

Accessories

> Attenuator

ZV-064

ZV-303



Model	ZV-064	ZV-303
Input Capacity	6W	30W
Level Control	4step; 0(OFF), 1,2,3	
Color	Off-white, Printing: Black	
Dimensions	70(W) x 120(H) x 59(D) in mm	70(W) x 180(H) x 59(D) in mm
Weight	190g	

Horn Speaker

> Paging Horn Speaker

ZH-610S | ZH-610SM

ZH-615S | ZH-615SM

ZH-625S | ZH-625SM



Model	ZH-610S	ZH-610SM	ZH-615S	ZH-615SM	ZH-625S	ZH-625SM
Rated Input	10W		15W		25W	
Rated Impedance	8Ω	100V Line: 10W, 5W, 3W, 1W	8Ω	100V Line: 15W, 10W, 5W, 3W	8Ω	100V Line: 25W, 15W, 10W, 5W
Sound Pressure Level (1W/1m)	≥107dB		≥ 109dB		≥ 110dB	
Frequency Response	315Hz - 12.500Hz		280Hz - 12.500Hz		297 - 9.000Hz	
Dimensions	172(W) x 161(H) x 188(D) in mm		222(W) x 179(H) x 234(D) in mm		285(W) x 227(H) x 277(D) in mm	
Weight	1kg	1.2kg	1.1kg	1.3kg	1.7kg	2.1kg

> Horn Speaker

ZH-615R | ZH-615RM



Model	ZH-615R	ZH-615RM
Rated Input	15W	
Rated Impedance	8Ω	100V Line: 670Ω (15W), 1kΩ(10W), 2kΩ(5W), 3.3kΩ(3W)
Sound Pressure Level (1W/1m)	110dB	
Frequency Response	280 - 12.500Hz	
Dimensions (φ x D)	196 x 240mm	196 x 234mm
Weight	1.1kg	1.3kg

> Horn Speaker

ZH-5025B/5025BM



Model	ZH-5025B	ZH-5025BM
Rated Input	25W	
Rated Impedance	16Ω	100V line: 25W, 15W, 10W, 5W
Sound Pressure Level (100W/1m)	108dB	
Frequency Response	200 - 6.500Hz	
Dimensions (φ x D)	550 x 477mm	
Weight	3.9kg	4.2kg

> Reflex Horn Speaker

ZH-652T



Model	ZH-652T
Driver	ZH-652D-AS
Dimensions (φ x D)	500 x 357mm
Weight	2.7kg

> Driver Unit

ZH-652D-AS



Model	ZH-652D-AS
Horn	ZH-652T
Rated Input	50W
Power Rated Impedance	16Ω
Sound Pressure Level (1W/1m)	110dB
Frequency Response	150 - 6.000Hz (when operated with JIS C5504 standard horn)
Dimensions (φ x D)	139 x 106mm
Weight	2kg

Column Speaker

> Metal Case Column Speaker

ZS-102C

ZS-202C



Model	ZS-102C	ZS-202C
Rated Input	10W	20W
Rated Impedance (100V Line)	1kΩ(10W), 2kΩ(5W)	500Ω(20W), 1kΩ(10W)
Sound Pressure Level (1W/1m)	90dB	93dB
Frequency Response	150 - 10.000Hz	
Speaker Components	2 units 12cm cone-type	4 units 12cm cone type
Dimensions	167(W) x 335(H) x 141(D) in mm	167(W) x 580(H) x 141(D) in mm
Material	Extruded Aluminum casing with punched net grille	
Weight	3.4kg	5.1kg



ZS-203CB

ZS-403CB

ZS-603CB

ZS-203CW

ZS-403CW

ZS-603CW

Model	ZS-203CB	ZS-203CW	ZS-403CB	ZS-403CW	ZS-603CB	ZS-603CW
Rated Input	20W		40W		60W	
Rated Impedance (100V Line)	500Ω(20W), 1kΩ(10W), 2kΩ(5W), 4kΩ(2.5W)		250Ω(40W), 500Ω(20W), 1kΩ(10W), 2kΩ(5W)		170Ω(60W), 330Ω(30W), 670Ω(15W), 1.3kΩ(7.5W)	
Rated Impedance (70V Line)	500Ω(10W), 1kΩ(5W), 2kΩ(2.5W), 4kΩ(1.3W)		250Ω(20W),500Ω(10W), 1kΩ(5W), 2kΩ(2.5W)		170Ω(30W), 330Ω(15W), 670Ω(7.5W), 1.3kΩ(3.8W)	
Sound Pressure Level (1W/1m)	90dB		93dB		95dB	
Frequency Response	150 - 16.000Hz					
Speaker Components	10cm(4") cone type x 2		10cm(4") cone type x 4		10cm(4") cone type x 6	
Dimensions	135(W) x 250(H) x 128(D) in mm		135(W) x 498(H) x 128(D) in mm		135(W) x 746(H) x 128(D) in mm	
Weight (Unit only)	1.9kg		3.5kg		5.5kg	

> Slim Array Speaker

ZS-S60CW (a)

- > 90° horizontal x 0° vertical directivity angle
- > Low and high impedance selectable by rotary switch
- > Stackable up to 2 units for wider coverage

ZS-S240CW-AS (b)

- > 100° horizontal x 5° vertical directivity angle
- > Use the MT-S0601 matching transformer for high impedance application when driven with a single amplifier
- > Stackable up to 2 units for wider coverage
- > 2-way speaker, with tweeters aligned at the foreground to the side, enabling less disruption to the sound quality of the woofers, while maintaining the unit slim



Model	ZS-S60CW	ZS-S240CW-AS
Type	Bass reflex type	
Max.Input Power	120W	240W
Rated Input	60W	-
Rated Impedance	100V line: 167Ω (60W), 330Ω (30W), 500Ω (20W), 1kΩ(10W); low impedance: 8Ω	8Ω
Sound Pressure Level (1W/1m)	95dB	94dB
Frequency Response	180Hz-15kHz	95Hz-20kHz
Speaker Components	8cm (3") cone-type x 9	Low Frequency: 10cm (4") Cone Type Woofer x 8; High Frequency: 2.5cm (1") Balanced Dome Tweeter x 24
Dimensions	100(W) x 883(H) x 130(D) in mm	160(W) x 950(H) x 262(D) in mm
Weight	8.2kg	17kg

Universal Speaker

> 2-Way Universal Speaker

ZS-1030B/W



Model	ZS-1030B	ZS-1030W
Rated Input	30W	
Rated Impedance	8Ω	
	100V line: 330Ω(30W), 500Ω(20W), 670Ω(15W), 1kΩ(10W), 2kΩ(5W) 70V line: 170Ω(30W), 250Ω(20W), 330Ω(15W), 500Ω(10W), 1kΩ(5W)	
Sound Pressure Level (1W/1m)	90dB	
Frequency Response	70 - 20.000Hz	
Speaker Component	12cm dynamic speaker + 2.5cm dome tweeter	
Dimensions	196(W) x 290(H) x 150(D) in mm	
Weight	2.5kg	

Foreground Music Speaker System

ZS-F1000B/W

ZS-F1000BM/WM

ZS-F1000BMWP/WMWP

ZS-F1300B/W

ZS-F1300BM/WM

ZS-F1300BMWP/WMWP

ZS-F2000B/W

ZS-F2000BM/WM

ZS-F2000BMWP/WMWP



Model	ZS-F1000B/W	ZS-F1300B/W	ZS-F2000B/W
Rated Input	90W (continuous program)	150W (continuous program)	180W (continuous program)
Rated Impedance	8Ω		
Sound Pressure Level (1W/1m)	87dB	90dB	92dB
Frequency Response	85 - 20.000Hz, -10dB installation in 1/2 free sound field	80 - 20.000Hz, -10dB installation in 1/2 free sound field	65 - 20.000Hz, -10dB installation in 1/2 free sound field
Speaker Component	Low: 10cm cone, High: Balanced dome tweeter	Low: 13cm cone, High: Balanced dome tweeter	Low: 20cm cone, High: 2,5cm dome tweeter
Dimensions	130(W) x 202(H) x 131(D) in mm	162(W) x 250(H) x 161(D) in mm	244(W) x 373(H) x 235(D) in mm
Weight	1.8kg (including the supplied brackets)	3.1kg (including the supplied brackets)	6.5kg (including the supplied brackets)

Model	ZS-F1000BM/WM	ZS-F1000BMWP/WMWP	ZS-F1300BM/WM	ZS-F1300BMWP/WMWP	ZS-F2000BM/WM	ZS-F2000BMWP/WMWP
Rated Input	15W		30W		60W	
Rated Impedance (100V Line)	100V Line: 670Ω(15W), 2kΩ(5W), 3.3kΩ(3W), 10kΩ(1W)		100V Line: 330Ω(30W), 1kΩ(10W), 3.3kΩ(3W), 10kΩ(1W)		100V Line: 170Ω(60W), 330Ω(30W), 670Ω(15W), 3.3kΩ(3W)	
Rated Impedance (70V Line)	330Ω(15W), 670Ω(7.5W), 2kΩ(2.5W), 3.3kΩ(1.5W), 10kΩ(0.5W)		170Ω(30W), 330Ω(15W), 1kΩ(5W), 3.3kΩ(1.5W), 10kΩ(0.5W)		83Ω(60W), 170Ω(30W), 330Ω(15W), 670Ω(7.5W), 3.3kΩ(1.5W)	
Sound Pressure Level (1W/1m)	87dB		90dB		92dB	
Frequency Response	85 - 20.000Hz, -10dB installation in 1/2 free sound field		80 - 20.000Hz, -10dB installation in 1/2 free sound field		65 - 20.000Hz, -10dB installation in 1/2 free sound field	
Speaker Component	Low: 10cm cone, High: Balanced dome tweeter		Low: 13cm cone, High: Balanced dome tweeter		Low: 20cm cone, High: 2,5cm dome tweeter	
Dimensions	130(W) x 202(H) x 131(D) in mm		162(W) x 250(H) x 161(D) in mm		244(W) x 373(H) x 235(D) in mm	
Weight	2kg (including the supplied brackets)		3.6kg (including the supplied brackets)		7.4kg (including the supplied brackets)	
Dust/ Water Protection	-	IPX4	-	IPX4	-	IPX4

Ceiling Speaker

> Flush Mount Ceiling Speaker

ZS-645R



ZS-646R



Model	ZR-645R	ZR-646R
Rated Output	6W	
Impedances	100V Line: 1.7kΩ (6W), 3.3kΩ (3W), 6.7kΩ (1.5W), 13kΩ (0.8W) 70V Line: 1.7kΩ (3W), 3.3kΩ (1.5W), 6.7kΩ (0.8W), 13kΩ (0.4W)	
Frequency Response	100-12.000Hz	
Sound Pressure Level (1W/1m)	90dB	
Speaker Component	12cm dynamic speaker	
Dimensions (φ x D)	191 x 83mm	191 x 84mm
Speaker Mounting Hole	φ 150mm	
Weight	610g	620g

> Flush Mount Ceiling Speaker

Z-2852C

Z-2322C

Z-2352C



Z-122C



Z-2352SC



Z-1522SC



Model	Z-2852C	Z-2322C	Z-2352C	Z-122C	Z-2352SC	Z-1522SC
Rated Input	60W	30W			6W	
Rated Impedance (100V line)	170Ω(60W), 330Ω(30W), 670Ω(15W), 3.3kΩ(3W)/ 16Ω,8Ω (low impedance connection)	330Ω(30W), 1kΩ(10W), 3.3kΩ(3W), 10kΩ(1W)/ 16Ω, 8Ω (low impedance connection)			1.7kΩ(6W), 3.3kΩ(3W), 10kΩ(1W)/ 16Ω,8Ω (low impedance connection)	
Sound Pressure Level (1W/1m)	91dB	90dB			89dB	88dB
Frequency Response	60-20.000Hz	70-20.000Hz			80-20.000Hz	65-18.000Hz
Speaker Component	16cm cone	12cm cone			12cm cone	10cm cone
Dimensions (φ x D)	280 x 227mm	230 x 200mm	230 x 229mm		230 x 154mm	155 x 117mm
Weight	5.1kg	3.7kg			1.5kg	1kg

> Ceiling Mount Speaker

ZS-1860-AS



ZS-2360-AS



ZS-2852

ZS-2869



Model	ZS-1860-AS	ZS-2360-AS	ZS-2869	ZS-2852
Speaker Component	5"(12cm) cone-type	6"(16cm) cone-type	8"(20cm) double cone type	
Rated Input	6W(100V), 3W(70V)			15W(100V), 15W(70V)
Rated Impedance (100V Line)	1.7kΩ(6W), 3.3kΩ(3W), 6.7kΩ(1.5W),13kΩ(0.8W)			670Ω(15W), 1kΩ(10W), 2kΩ(5W), 3.3kΩ(3W)
Rated Impedance (70V Line)	1.7kΩ(3W), 3.3kΩ(1.5W), 6.7kΩ(0.8W),13kΩ(0.4W)			330Ω(15W), 670Ω(7.5W), 1kΩ(5W), 2kΩ(2.5W), 3.3kΩ(1.5W)
Sound Pressure Level (1W/1m)			94dB	96dB
Sensitivity	94dB (1W/1m) (330Hz-3.3kHz, pink noise)			
Frequency Response	55-20.000Hz	45-20.000Hz	40-20.000Hz	45-20.000Hz
Finish	Frame: Steel plate, white*, paint; Grille: steel net, white*, paint		Baffle: Steel plate, off-white, paint; Grille: surface-treated steel plate net, offwhite, paint	
Dimensions	φ 180 x 5mm (exposed section) + 65(D)mm	φ 200 x 5mm (exposed section) + 71(D)mm	φ 280 x 92mm	
Weight	590g	900g	1.4kg	1.6kg

* RAL 9016 equivalent

> Box Speaker

ZS-062



> Wide-range paging speaker for voice paging, background music and tone signaling distribution

Model	ZS-062
Rated Input (100V line)	6W
Frequency Response	100 - 12.000Hz
Sound Pressure Level (1W/1m)	90dB
Speaker Component	12cm Dynamic Speaker
External Dimensions	290 (W) x 214(H) x 150(D) in mm
Weight	2.1 kg
Material	Enclosure: Wood, Grille: Cloth
Color	Enclosure: Light Gray, Grille: Light Gray

Compact Satellite Speaker System

> Compact Satellite Speaker System

ZS-BS301B/W

> Subwoofer

ZS-FB601B/W



Model	ZS-BS301B/W
Total Input	120W, channel x 2
Rated Impedance	6Ω, channel x 2
Sensitivity	83dB (Pink noise 330Hz - 3.3kHz; 1W,1M) L channel or R channel only +2 satellite
Frequency Response	40Hz - 20kHz (L or R channel Subwoofer + 2 satellite)
Speaker Feature	Subwoofer x 1pc, Satellite speaker x 4pc
Mounting	Floorstanding, on wall or on ceiling
Input Connector	Push-in terminals
Total Weight	13.9kg (without bracket)
Subwoofer	ZS-FB601B/W
Sensitivity	85dB (1W,1m) (L channel or R channel)
Frequency Response	40 - 190Hz (-10dB below SPL) (L channel or R channel)
Speaker Component	16cm (6") 2-Speaker
Dimensions	210(W) x 390(H) x 563(D) in mm
Weight	11.5kg (without bracket)

Microphone

> Unidirectional Microphone

ZM-260



(a)

ZM-320



(b)

ZM-420



(c)

ZM-520



(d)

[a,b,c]

> Reproduce high sound clarity for use with other sound system equipment

> Cable can be detached for easy storage

[d]

> Consist of a magnetic switch by reduce noise caused by switch contact

Model	ZM-260	ZM-320	ZM-420	ZM-520
Type	Dynamic Microphone			
Directivity	Unidirectional			
Rated Impedance	600Ω			
Frequency Response	100Hz - 12kHz	100Hz - 12kHz	80Hz - 13kHz	50Hz - 16kHz
Switch	Short-Off Circuit type, slide switch			Short-Off Circuit type, Magnetic slide switch
Dimensions (φ xD)	55 x 178mm	52 x 183mm	53 x 181mm	50 x 176mm
Weight	420g (without cable)	304g (without cable)	280g (without cable)	232g (without cable)
Accessories	Microphone Holder (W5/16"18 threads)			
Connection Cable	φ 5mm x 7,5m, 1- core shielded cable (unbalanced), 3P XLR type connector to phone plug		φ 6mm x 7,5m, 1- core shielded cable (unbalanced), 3P XLR type connector to phone plug	

> Unidirectional Microphone

ZM-270



- > Special coating on microphone body for a non-slip grip

Model	ZM-270
Type	Moving Coil Microphone
Directivity	Unidirectional
Rated Impedance	600Ω
Frequency Response	100 - 15.000Hz
Switch	Short-Off Circuit type, slide switch
Dimensions (φ xD)	47 x 178mm
Weight	315g (without cable)
Accessories	Microphone Holder (W5/16" 18 threads)
Connection Cable	5m

ZM-222



Model	ZM-222
Type	Moving Coil Microphone
Directivity	Unidirectional
Rated Impedance	600Ω, Unbalanced
Frequency Response	100Hz - 10kHz
Cable	1-core shielded cable
Cable Length	2m (when extended)
Talk Switch	Short-off type with lock
Dimensions	44(W) x 160(H) x 38(D) in mm
Weight	200g
Accessories	Microphone Holder x 1, Metal Fitting x 1, Tapping Screw (4 x16)x2

> Tie Clip Microphone

ZM-361-AS



- > Compact electret condenser microphone element
- > Design for best performance & convenience
- > Allowing easy microphone position adjustment

Model	ZM-361-AS
Type	Electret Condenser Microphone
Rated Impedance	2kΩ, unbalanced
Sensitivity	-35dB (1kHz, 0dB = 1 V/Pa)
Frequency Response	100 - 18.000Hz
Cable Length	7m
Connector Output	1/4" Unbalanced Phone Plug 6.3
Dimensions	89.5(W) x 19(D) x 38(H) in mm (microphone body)
Weight	153g (without battery)
Power Source	1Pc x 1.5V "AA" Size Batery (R6S or UM-3U)

ZM-370HS-AS



Model	ZM-370HS-AS
Type	Electret Condenser Microphone
Directivity	Unidirectional
Rated Impedance	2.5kΩ, Unbalanced
Frequency Response	50Hz - 12kHz
Cable Length	10m
Dimensions	89.5(W) x 38(H) x 19(D) in mm
Weight	142g (without battery)
Battery	1pc x AA (R6S or UM-3U)

Microphone

ZM-660D

ZM-660P



Model	ZM-660D	ZM-660P
Type	Moving Coil Microphone	
Directivity	Unidirectional, Dynamic type	
Rated Impedance	600Ω, Balanced	600Ω, Unbalanced
Frequency Response	100 - 10kHz	
Remote Control	500mA or less than 30V DC	-
Output	φ 5.0 (φ 0.2"), 4 -conductor cable (2-shielded) cable (2.5m (98.43") with 5 Pin Din plug	φ 4.5 (φ 0.18"), 2 -conductor cable (1-shielded) cable (2.5m (98.43") with Mono phone plug
Talk Switch	Short-off type with lock	1-push switch, 1 short-off type with lock
Dimensions	100(W) x 215(H) x 150(D) in mm	
Weight	440g	

> Gooseneck Microphone

ZM-380-AS

ZM-380C-AS



Model	ZM-380-AS	ZM-380C-AS
Element	Condenser Microphone	Condenser Microphone (with 4-Tones Chime (Up/Down)
Polar Pattern	Cardioid	
Rated Impedance	750Ω, Balanced	600Ω, Balanced
Rated Sensitivity	-39dB ±1dB (1kHz, 0dB = 1V/Pa)	-41dB ±3dB (1kHz, 0dB = 1V/Pa)
Power	3V DC (2 x "AA Batteries) or phantom power (9-52V)	6V DC (4 x "AA Batteries) or DC adapter (9-24V)
Frequency Response	50-16kHz	50-18kHz
Output Connector	XLR-3-32 Equivalent	XLR-3-32 Equivalent RJ45 : Audio output, power supply, contact output
Operating Temperature	0°C - 40°C (32°F -104°F)	
Dimensions	110(W) x 145(L) x 532(H) in mm	
Weight	550g (excludes batteries)	558g (excludes batteries)

> Condenser Microphone

ZM-300-AS



Model	ZM-300-AS
Power Source	AA (R6S or UM-3U) battery x 1pc (1.5VDC)
Type	Electret Condenser Microphone
Polar Pattern	Hyper Cardioid
Rated Impedance	2200Ω (at 1kHz), Unbalanced
Frequency Response	50Hz -18kHz
Cable Microphone	φ 6.0mm x 7500mm, 1 - core shielded cable
Connector	XLR Type female with 1/4" (6.3mm) phone plug
Talk Switch	Short-off, slide switch
Dimensions	φ 49 (W) x 181(H)mm (Microphone Body)
Weight	254g (Microphone Only)
Accessory	Cable Microphone (7.5m)...1
Weight	550g (excludes batteries)

Megaphone

- > Anti-bacterial treatment for all models (mouth/ microphone and handle)
- > High durable ABS or ASA resin construction
- > Wide frequency range for enhanced audio quality
- > Polyimide speaker diaphragms
- > Long-lasting battery life
- > Compact and lightweight
- > Neodymium magnets for high audio performance
- > Extended audible range

> Hand Grip Megaphones

ZR-510

ZR-510S

ZR-510W



Model	ZR-510	ZR-510S	ZR-510W
Rated Output	6W		
Power Source	12V DC R6P (SUM-3)/ "AA" Batteries 8pcs		
Audible Range	Approx.250m	Talk: Approx.250m, Siren: Approx.315m	
Outer Horn Diameter	160mm		
Length	260mm		
Weight	620g		650g

> Hand Grip Megaphone

ZR-1015

ZR-1015S



Model	ZR-1015	ZR-1015S
Rated Output	15W	
Power Source	9V DC R14P (SUM-2)/"C" Batteries 6pcs	
Audible Range	Approx.315m	Talk: Approx.315m; Siren: Approx.500m
Outer Horn Diameter	210mm	
Length	319mm	
Weight	970g	980g

> Shoulder Megaphones

ZR-2015

ZR-2015S

ZR-2015W



Model	ZR-2015	ZR-2015S	ZR-2015W
Rated Output	15W		
Power Source	9V DC R14P (SUM-2)/"C" Batteries 6pcs		
Audible Range	Approx.400m	Talk: Approx.400m, Siren: Approx.500m	Talk: Approx.400m, Whistle: Approx.500m
Sirene Mode	-	Push to Talk, override the sirene signal	Push to Talk, override the whistle signal
Outer Horn Diameter	210mm		
Length	310mm		
Weight	970g	980g	980g
Microphone Weight	130g(cable excluded)		

> Hand Grip Megaphones

ZR-3215



Model	ZR-3215
Rated Output	15W
Power Source	9V DC R14P (SUM-2)/"C" Batteries 6pcs
Audible Range	Approx.400m (JEITA)*
Dimensions	210(W) x 291(H) x 381(D) in mm (when attaching the microphone)
Weight	Body: 1,15kg (without batteries and microphone); microphone:150g

*JEITA : Japan electronics and information technology industries association

