

Amplifiers

A-3200D Series

Latest addition to the TOA amplifier range, the **A-3200D digital series** promises **high-performance** and **cost-efficiency**.



Key Functions: • Bluetooth • MP3 • Zone Selection • FM Radio • Equalizer

Ideal for: • Broadcasting • Paging • Background music

»» Digital Mixer Amplifier with MP3

A-3212DM **120W**
A-3224DM **240W**
A-3248DM **480W**



Model	A-3212DM	A-3224DM	A-3248DM
Power Source	100 – 240 V AC, 50 / 60 Hz		
Rated Output	120 W	240 W	480 W
Power Consumption (EN60065)	44 W	62 W	99 W
Frequency Response	(AC operation at 1/8 maximum output without clip) 50 Hz – 20 kHz		
Total Harmonic Distortion	Under 1% at 1 kHz, 1/3 rated power		
Input	MIC 1: 1 mV (-60 dBV), 600 Ω, Balanced, phone jack, selectable to RJ45 MIC 2 - 3: 1 mV (-60 dBV), 600 Ω, Balanced, phone jack MIC 4: 1 mV (-60 dBV), 600 Ω, Balanced, phone jack, selectable to AUX 1 AUX 1: 100 mV (-20 dBV), 10 kΩ, Unbalanced, RCA pin jack, selectable to MIC 4 AUX 2: 100 mV (-20 dBV), 10 kΩ, Unbalanced, RCA pin jack MP3: LED Display, Support USB, SD/MMC card (up to 32GB), Bluetooth, Radio FM, Record		
Output	Speaker out: Speaker output in screw type terminal Direct Line (Selectable): 83 Ω (100 V) or 4 Ω Rec out: 0 dBV, 600 Ω, Unbalanced, RCA pin jack	Speaker output in screw type terminal 42 Ω (100 V) or 4 Ω 0 dBV, 600 Ω, Unbalanced, RCA pin jack	Speaker output in screw type terminal 21 Ω (100 V) or 4 Ω 0 dBV, 600 Ω, Unbalanced, RCA pin jack
Phantom Power	DC +21 V (MIC 1)		
S/N Ratio	Over 60 dB		
Tone Control	Bass: ±10 dB at 100 Hz / Treble: ±10 dB at 10 kHz		
Muting	MIC 1: Mutes other input signals by 0 – 30 dB attenuation		
Ventilation	Natural Air Cooling	Fan Cooling	
Finish	Panel: ABS resin, Black / Case: Steel Plate, Black		
Dimensions (W x H x D)	420 x 100.9 x 357 mm		
Weight	4.6 kg	4.9 kg	5.0 kg



»» Digital Mixer Amplifier with MP3 and Zones

A-3212DMZ **120W**

A-3224DMZ **240W**

A-3248DMZ **480W**



Model	A-3212DMZ	A-3224DMZ	A-3248DMZ
Power Source	100 – 240 V AC, 50 / 60 Hz		
Rated Output	120 W	240 W	480 W
Power Consumption (EN60065)	44 W	62 W	99 W
Frequency Response	50 Hz – 20 kHz		
Total Harmonic Distortion	Under 1 % at 1 kHz, 1/3 rated power		
Input	MIC 1: 1 mV (-60 dBV), 600 Ω, Balanced, phone jack, selectable to RJ45 MIC 2 - 3: 1 mV (-60 dBV), 600 Ω, Balanced, phone jack MIC 4: 1 mV (-60 dBV), 600 Ω, Balanced, phone jack, selectable to AUX 1 AUX 1: 100 mV (-20 dBV), 10 kΩ, Unbalanced, RCA pin jack, selectable to MIC 4 AUX 2: 100 mV (-20 dBV), 10 kΩ, Unbalanced, RCA pin jack MP3: LED Display, Support USB, SD/MMC card (up to 32GB), Bluetooth, Radio FM, Record		
Output	Speaker output: Speaker output in screw type terminal Direct Line (Selectable): 83 Ω (100 V) or 4 Ω Rec out: 0 dBV, 600 Ω, Unbalanced, RCA pin jack Zone Selection: 5 zone selector (all zones simultaneously selectable)	Speaker output in screw type terminal 42 Ω (100 V) or 4 Ω 0 dBV, 600 Ω, Unbalanced, RCA pin jack 5 zone selector (all zones simultaneously selectable)	Speaker output in screw type terminal 21 Ω (100 V) or 4 Ω 0 dBV, 600 Ω, Unbalanced, RCA pin jack 5 zone selector (all zones simultaneously selectable)
Phantom Power	DC +21 V (MIC 1)		
S/N Ratio	Over 60 dB		
Tone Control	Bass: ±10 dB at 100 Hz / Treble: ±10 dB at 10 kHz		
Muting	MIC 1: Mutes other input signals by 0 – 30 dB attenuation		
Ventilation	Natural Air Cooling	Fan Cooling	
Finish	Panel: ABS resin, Black / Case: Steel Plate, Black		
Dimensions (W x H x D)	420 × 100.9 × 357 mm		
Weight	4.6 kg	4.9 kg	5.0 kg

»» Digital Mixer Amplifier with MP3 and EQ

A-3248DME **480W**



Model	A-3248DME
Power Source	100 – 240 V AC, 50 / 60 Hz
Rated Output	480 W
Power Consumption (EN60065)	99 W (AC operation at 1/8 maximum output without clip)
Frequency Response	50 Hz – 20 kHz
Total Harmonic Distortion	Under 1 % at 1 kHz, 1/3 rated power
Input	MIC 1: 1 mV (-60 dBV), 600 Ω, Balanced, phone jack, selectable to RJ45 MIC 2 - 5: 1 mV (-60 dBV), 600 Ω, Balanced, phone jack AUX 1 - 2: 100 mV (-20 dBV), 10 kΩ, Unbalanced, RCA pin jack MP3: LED Display, Support USB, SD/MMC card (up to 32GB), Bluetooth, Radio FM, Record
Output	Speaker output: Speaker output in screw type terminal Direct Line (Selectable): 21 Ω (100 V) or 4 Ω Rec out: 0 dBV, 600 Ω, Unbalanced, RCA pin jack
Phantom Power	DC +21 V (MIC 1)
S/N Ratio	Over 60 dB
Tone Control	±10 dB at 80 Hz, 315 Hz, 1 kHz, 3.15 kHz, 8 kHz
Muting	MIC 1: Mutes other input signals by 0 – 30 dB attenuation
Ventilation	Fan Cooling
Finish	Panel: ABS resin, Black / Case: Steel Plate, Black
Dimensions (W x H x D)	420 × 100.9 × 357 mm
Weight	5 kg

»» Digital Mixer Amplifier

A-3224D **240W**

A-3248D **480W**



Model	A-3224D	A-3248D
Power Source	100 – 240 V AC, 50 / 60 Hz	
Rated Output	240 W	480 W
Power Consumption (EN60065)	62 W	99 W
	(AC operation at 1/8 maximum output without clip)	
Frequency Response	50 Hz – 20 kHz	
Total Harmonic Distortion	Under 1 % at 1 kHz, 1/3 rated power	
Input	MIC 1: 1 mV (-60 dBV), 600 Ω, Balanced, phone jack, selectable to RJ45 MIC 2 - 3: 1 mV (-60 dBV), 600 Ω, Balanced, phone jack MIC 4: 1 mV (-60 dBV), 600 Ω, Balanced, phone jack, selectable to AUX 1 AUX 1: 100 mV (-20 dBV), 10 kΩ, Unbalanced, RCA pin jack, selectable to MIC 4 AUX 2: 100 mV (-20 dBV), 10 kΩ, Unbalanced, RCA pin jack	
Output	Speaker out: Speaker output in screw type terminal Direct Line (Selectable): 42 Ω (100 V) or 4 Ω Rec out: 0 dBV, 600 Ω, Unbalanced, RCA pin jack	Speaker output in screw type terminal 21 Ω (100 V) or 4 Ω 0 dBV, 600 Ω, Unbalanced, RCA pin jack
Phantom Power	DC +21 V (MIC 1)	
S/N Ratio	Over 60 dB	
Tone Control	Bass: ±10 dB at 100 Hz / Treble: ±10 dB at 10 kHz	
Muting	MIC 1: Mutes other input signals by 0 – 30 dB attenuation	
Ventilation	Fan Cooling	
Finish	Panel: ABS resin, Black / Case: Steel Plate, Black	
Dimensions (W x H x D)	420 × 100.9 × 357 mm	
Weight	4.9 kg	5.0 kg

»» Digital Booster Amplifier

P-3248D **480W**

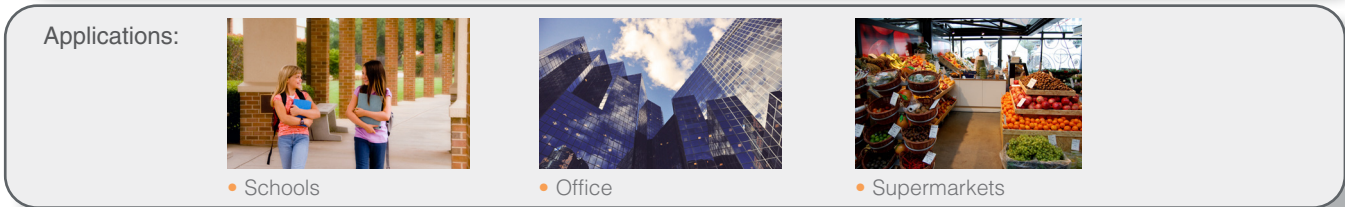


Model	P-3248D
Power Source	100 – 240 V AC, 50 / 60 Hz or 24 V DC
Rated Output	480 W
Power Consumption (EN60065)	99 W (AC operation at 1/8 maximum output without clip)
Frequency Response	50 Hz – 20 kHz
Total Harmonic Distortion	Under 1 % at 1 kHz, 1/3 rated power
Input	Line In: 0 dBV, 10 kΩ, Balanced, Screw Terminal 100 V Line In: 40 dBV, 30 kΩ, Unbalanced, Screw Terminal
Output	Speaker out: Speaker output in screw type terminal Direct Line (Selectable): 21 Ω (100 V) or 4 Ω Loop out: 0 dBV, 10 kΩ, balanced, screw terminal
Control	Remote power control, screw terminal / Remote master volume bypass, screw terminal
S/N Ratio	Over 70 dB
Tone Control	Bass: ±10 dB at 100 Hz / Treble: ±10 dB at 10 kHz
Ventilation	Fan Cooling
Finish	Panel: ABS resin, Black / Case: Steel Plate, Black
Dimensions (W x H x D)	420 × 100.9 × 351.3 mm
Weight	5.2 kg



A-3500D Series

- Key Features**
- TOA class D amplifiers for maximum efficiency
 - Emergency and Priority Paging
 - 2 - channel Zone Selector
 - Remote Zone Control
 - 4 microphone inputs and 1 auxillary input



- »» Digital Mixer Amplifiers
- A-3506D** 60W
 - A-3512D** 120W
 - A-3524D** 240W
 - A-3548D** 480W



Model	A-3506D	A-3512D	A-3524D	A-3548D
Power Source	100 – 240 V AC, 50 / 60 Hz			
Rated Output	60 W	120 W	240 W	480 W
Power / Current Consumption	96 W (rated output) 40 W (based on EN62368)	171 W (rated output) 48 W (based on EN62368)	314 W (rated output) 70 W (based on EN62368)	601 W (rated output) 113 W (based on EN62368)
Frequency Response	200 mA or less (when power switch is OFF) 50 Hz – 20 kHz ±3 dB (1/8 rated output)			
Distortion	1 % or less at 1 kHz, rated power (20 kHz LPF (AUX-0025))			
Tone Control	Bass: ±10 dB at 100 Hz / Treble: ±10 dB at 10 kHz			
S/N Ratio	88 dB or more (Master volume: min.) 76 dB or more (Master volume: max.) 55 dB or more (INPUT 1 - 6) 72 dB or more (INPUT 7) (A-weighted)			
Audio Input	INPUT 1, 2: -60 dBV (MIC) / -20 dBV (LINE) selectable, 600 Ω, electronically-balanced, removable terminal block (5 pins) / ø6.3 mm phone jack (2P) Note: MIC inputs are equipped with phantom power (24 V DC, ON/OFF switchable). INPUT 3: -60 dBV, 600 Ω, electronically-balanced, ø6.3 mm phone jack (2P) INPUT 4: -60 dBV (MIC) / -20 dBV (LINE) selectable, 600 Ω, electronically-balanced, ø6.3 mm phone jack (2P) INPUT 5: -20 dBV, 10 kΩ, unbalanced, RCA pin jack x 2 PWR AMP IN: 0 dBV, 600 Ω, unbalanced, RCA pin jack			
Audio Output	Speaker out: Low impedance (8 - 16 Ω) High impedance (DIRECT, ZONE 1/ZONE 2: 100 V / total 170 Ω), removable terminal block (6 pins) (ZONE 1 / ZONE 2 is selectable, Max. 60 W per output)	Low impedance (4 - 16 Ω) High impedance (DIRECT, ZONE 1/ZONE 2: 100 V / total 83 Ω), removable terminal block (6 pins) (ZONE 1 / ZONE 2 is selectable, Max. 120 W per output)	Low impedance (4 - 16 Ω) High impedance (DIRECT, ZONE 1/ZONE 2: 100 V / total 42 Ω), removable terminal block (6 pins) (ZONE 1 / ZONE 2 is selectable, Max. 240 W per output)	Low impedance (4 - 16 Ω) High impedance (DIRECT, ZONE 1/ZONE 2: 100 V / total 21 Ω), removable terminal block (6 pins) (ZONE 1 / ZONE 2 is selectable, Max. 480 W per output)
Rec out: Line out 1, 2:	0 dBV, 600 Ω, unbalanced, RCA pin jack 0 dBV, 600 Ω, unbalanced, RCA pin jack (interlock with zone selection is possible)			
Control Input	2 channels, no-voltage make contact input, open voltage: 35 V DC or less, short-circuit current: 10 mA or less, removable terminal block (5 pins) REMOTE VOLUME: Removable terminal block (4 pins) ZONE CONTROL IN: No-voltage make contact input, open voltage: 35 V DC or less, short-circuit current: 10 mA or less, removable terminal block (4 pins)			
Control Output	POWER REMOTE OUT: Open collector output, withstand voltage: 30 V DC or less, control current: 25 mA or less, removable terminal block (4 pins) EMERGENCY OUT: Open collector output, withstand voltage: 30 V DC or less, control current: 25 mA or less, removable terminal block (4 pins) ZONE CONTROL OUT: Open collector output (polarized), withstand voltage: 30 V DC or less, control current: 25 mA or less, removable terminal block (4 pins)			
Indicators	5-point LED output level meter, Power indicator LED, Priority indicator LED, Emergency indicator LED, Thermal protection indicator LED, Over current protection indicator LED, Zone 1 indicator LED, Zone 2 indicator LED			
Operating Temperature	-10 °C to +40 °C			
Operating Humidity	85 %RH or less (no condensation)			
Finish	Panel: ABS resin, Black / Case: Surface-treated Steel Plate, Black, Paint			
Dimensions (W x H x D)	420 x 96.1 x 313.1 mm			
Weight	4.9 kg			5.1 kg
Accessory	Power cord (2 m) x 1, Audio Input removable terminal plug (3.81 mm, 5 pins) x 2, Control I/O removable terminal plug (3.81 mm, 4 pins) x 2 Remote Control removable terminal plug (3.5 mm, 4 pins) x 1 Speaker Out removable terminal plug (5 mm, 6 pins) x 1, Volume Control Cover x 4			
Option	Rack Mounting Bracket: MB-25B, Perforated Panel: PF-013B			

A-3600D Series

- Key Features**
- 4 selection of power amplifier output
 - TOA class D amplifiers for maximum efficiency
 - Feedback Suppressor (Dynamic feedback filters)
 - Speaker EQ (3 points equalizer)
 - Assignable input priorities
 - Built-in pre-announce chime
 - IP protocol available



»» Digital Mixer Amplifiers

- A-3606D** 60W
- A-3612D** 120W
- A-3624D** 240W
- A-3648D** 480W

Model	A-3606D	A-3612D	A-3624D	A-3648D
Power Source	100 – 240 V AC, 50 / 60 Hz			
Rated Output	60 W	120 W	240 W	480 W
Power / Current Consumption	96 W (rated output) 40 W (based on EN62368)	171 W (rated output) 48 W (based on EN62368)	314 W (rated output) 70 W (based on EN62368)	601 W (rated output) 113 W (based on EN62368)
Frequency Response	200 mA or less (when power switch is OFF) 50 Hz – 20 kHz ±3 dB (1/8 rated output)			
Distortion	1 % or less at 1 kHz, rated power (20 kHz LPF (AUX-0025))			
Tone Control	Bass: ±10 dB at 100 Hz / Treble: ±10 dB at 10 kHz			
S/N Ratio	88 dB or more (Master volume: min.) 76 dB or more (Master volume: max.) 55 dB or more (INPUT 1 - 6) 72 dB or more (INPUT 7) (A-weighted)			
Audio Input	INPUT 1, 2: -60 dBV (MIC) / -20 dBV (LINE) selectable, 600 Ω, electronically-balanced, removable terminal block (3 pins) Note: MIC inputs are equipped with phantom power (24 V DC, ON/OFF switchable). INPUT 3, 4: -60 dBV, 600 Ω, electronically-balanced, removable terminal block (3 pins) Note: Equipped with phantom power (24 V DC, ON/OFF switchable). INPUT 5, 6: MIC (BUS 1) / LINE (BUS 2) selectable MIC: -60 dBV, 600 Ω, electronically-balanced, removable terminal block (3 pins) LINE: -20 dBV, 10 kΩ, unbalanced, RCA pin jack x 2 INPUT 7: -20 dBV, 10 kΩ, unbalanced, RCA pin jack x 2 PWR AMP IN: 0 dBV, 600 Ω, unbalanced, RCA pin jack			
Input Bus	INPUT 1 - 4: BUS 1 INPUT 5, 6: BUS 1 / BUS 2 selectable INPUT 7: BUS 2			
Audio Output	Speaker out: Low impedance (8 - 16 Ω) High impedance (DIRECT, ZONE 1/ZONE 2: 100 V / total 170 Ω), removable terminal block (6 pins) (ZONE 1 / ZONE 2 is selectable, Max. 60 W per output)	Speaker out: Low impedance (4 - 16 Ω) High impedance (DIRECT, ZONE 1/ZONE 2: 100 V / total 83 Ω), removable terminal block (6 pins) (ZONE 1 / ZONE 2 is selectable, Max. 120 W per output)	Speaker out: Low impedance (4 - 16 Ω) High impedance (DIRECT, ZONE 1/ZONE 2: 100 V / total 42 Ω), removable terminal block (6 pins) (ZONE 1 / ZONE 2 is selectable, Max. 240 W per output)	Speaker out: Low impedance (4 - 16 Ω) High impedance (DIRECT, ZONE 1/ZONE 2: 100 V / total 21 Ω), removable terminal block (6 pins) (ZONE 1 / ZONE 2 is selectable, Max. 480 W per output)
Rec out: Line out 1, 2:	0 dBV, 600 Ω, unbalanced, RCA pin jack 0 dBV, 600 Ω, unbalanced, RCA pin jack (interlock with zone selection is possible)			
Control Input	4 channels, no-voltage make contact input, open voltage: 35 V DC or less, short-circuit current: 10 mA or less, removable terminal block (4 pins) REMOTE VOLUME: Removable terminal block (4 pins) ZONE CONTROL IN: No-voltage make contact input, open voltage: 35 V DC or less, short-circuit current: 10 mA or less, removable terminal block (4 pins)			
Control Output	POWER REMOTE OUT: Open collector output, withstand voltage: 30 V DC or less, control current: 25 mA or less, removable terminal block (4 pins) EMERGENCY OUT: Open collector output, withstand voltage: 30 V DC or less, control current: 25 mA or less, removable terminal block (4 pins) ZONE CONTROL OUT: Open collector output, withstand voltage: 30 V DC or less, control current: 25 mA or less, removable terminal block (4 pins)			
Chime	1 - note, 2 - note, or ascending 4 - note chime, or None selectable with switch setting			
Indicators	5-point LED output level meter, Power indicator LED, LAN Connect indicator LED, Priority indicator LED, Emergency indicator LED, Thermal protection indicator LED, Over current protection indicator LED, CPU RUN indicator LED, Error indicator LED, Zone 1 indicator LED, Zone 2 indicator LED			
Operating Temperature	-10 °C to +40 °C			
Operating Humidity	85 %RH or less (no condensation)			
Finish	Panel: ABS resin, Black / Case: Surface-treated Steel Plate, Black, Paint			
Dimensions (W x H x D)	420 x 96.1 x 313.1 mm			
Weight	5.0 kg			5.2 kg
Accessory	Power cord (2 m) x 1, Audio Input removable terminal plug (3.81 mm, 3 pins) x 6, Control I/O removable terminal plug (3.81 mm, 4 pins) x 4 Remote Control removable terminal plug (3.5 mm, 4 pins) x 2 Speaker Out removable terminal plug (5 mm, 6 pins) x 1, Volume Control Cover x 4			
Option	Rack Mounting Bracket: MB-25B, Perforated Panel: PF-013B			



A-2000 Series

»» Digital Mixer Power Amplifier

A-2030D 30W

A-2120D 120W

A-2060D 60W

A-2240D 240W



Model	A-2030D	A-2060D	A-2120D	A-2240D
Power Source	220 – 240 V AC, 50 / 60 Hz			
Rated Output	30 W	60 W	120 W	240 W
Power Consumption	12 W	16 W	30 W	48 W
Frequency Response	(AC operation at 1/8 maximum output without clip) 50 Hz – 20 kHz (±3 dB)			
Distortion	Under 1% at 1 kHz, 1/3 rated power			
Input	MIC 1 – 3: -60 dBV, 600 Ω, Balanced, Phone jack / AUX 1, 2: -20 dBV, 10 kΩ, Unbalanced, RCA pin jack			
Output	Speaker out: Balanced (Floating) High Impedance: 330 Ω (100 V) Rec out: 0 dBV, 600 Ω, Unbalanced, RCA pin jack	Speaker out: Balanced (Floating) High Impedance: 170 Ω (100 V) Rec out: 0 dBV, 600 Ω, Unbalanced, RCA pin jack	Speaker out: Balanced (Floating) High Impedance: 83 Ω (100 V) Rec out: 0 dBV, 600 Ω, Unbalanced, RCA pin jack	Speaker out: Balanced (Floating) High Impedance: 42 Ω (100 V) Rec out: 0 dBV, 600 Ω, Unbalanced, RCA pin jack
Phantom Power	DC +21 V (MIC 1)			
S/N Ratio	Over 60 dB			
Tone Control	Bass: ±10 dB at 100 Hz / Treble: ±10 dB at 10 kHz			
Muting	MIC 1: Mutes other input signals by 0 – 30 dB attenuation			
Indicator	Power LED, Signal LED, Peak LED			
Dimensions (W x H x D)	420 × 100.6 × 280.3 mm			
Weight	4 kg	4.6 kg		4 kg

»» Digital Mixer Power Amplifier

A-2120DT 120W

A-2240DT 240W



Model	A-2120DT	A-2240DT
Power Source	220 – 240 V AC, 50 / 60 Hz	
Rated Output	120 W	240 W
Power Consumption	34 W	48 W
Frequency Response	(AC operation at 1/8 maximum output without clip) 50 Hz – 20 kHz (±3 dB)	
Distortion	Under 1% at 1 kHz, 1/3 rated power	
Input	MIC 1 – 3: -60 dBV, 600 Ω, Balanced, 3P XLR / AUX 1, 2: -20 dBV, 10 kΩ, Unbalanced, RCA pin jack	
Output	Speaker out: Balanced (Floating) High Impedance: 83 Ω (100 V) Rec out: 0 dBV, 600 Ω, Unbalanced, RCA pin jack	Speaker out: Balanced (Floating) High Impedance: 42 Ω (100 V) Rec out: 0 dBV, 600 Ω, Unbalanced, RCA pin jack
Tones	6 tones contact trigger (Chime, Bell, Evac, Siren, Lockdown, All Clear)	
Phantom Power	DC +21V (MIC 1)	
S/N Ratio	Over 60 dB	
Tone Control	Bass: ±10 dB at 100 Hz / Treble: ±10 dB at 10 kHz	
Muting	MIC 1: Mutes other input signals by 0 – 30 dB attenuation Tones will mute other Input Functions	
Indicator	Power LED, Signal LED, Peak LED	
Dimensions (W x H x D)	420 × 100.6 × 280.3 mm	
Weight	4 kg	



Applications:

- Schools
- Retail Shops
- Offices
- Factories
- Houses of Worship
- Large function rooms



» Mixer Power Amplifier

A-2030 30W

A-2120 120W

A-2060 60W

A-2240 240W



Model	A-2030	A-2060	A-2120	A-2240
Power Req.	110 – 120V AC (L Version) / 220 – 240V AC (H Version) or 24V DC			
Rated Output	30 W	60 W	120 W	240 W
Frequency Response	50 Hz – 20 kHz (±3 dB)			
Input	MIC 1 – 3: Phone jack / AUX 1, 2: RCA pin jack			
Output	34 W (EN60065), 78 W (AC operation at rated output), 2 A (DC operation at rated output)	72 W (EN60065), 150 W (AC operation at rated output), 4 A (DC operation at rated output)	124 W (EN60065), 260 W (AC operation at rated output), 8 A (DC operation at rated output)	238 W (EN60065), 520 W (AC operation at rated output), 15A (DC operation at rated output)
Phantom Power	DC +21 V (MIC 1)			
S/N Ratio	Over 60 dB			
Tone Control	Bass: ±10 dB at 100 Hz / Treble: ±10 dB at 10 kHz			
Muting	MIC 1: Mutes other input signals by 0 – 30 dB attenuation			
Dimensions (W x H x D)	420 x 100.9 x 280.3 mm			420 x 100.9 x 360.3 mm
Weight	5 kg	7 kg	10.8 kg	13.2 kg

» Booster Amplifier

P-2240 240W



Model	P-2240
Power Req.	220 – 240V AC or 24 - 30 V DC
Rated Output	240 W
Power Consumption	238 W (EN60065), 520 W (AC operation at rated output), 15 A (DC operation at rated output)
Frequency Response	50 Hz – 20 kHz (±3 dB)
Input	Line in: 0 dBV, 10 kΩ, Balanced, Screw terminal, distance between barriers: 8.3 mm 100V line in: 40 dBV, 330 kΩ Speaker line in: 40 dBV, 330 kΩ, Unbalanced, Screw Terminal, distance between barriers: 8.3 mm Power remote control: Make contact
Output	Loop out: 0 dBV, 10 kΩ, balanced, screw terminal, distance between barriers: 8.3 mm Speaker out: Balanced (floating), 42 Ω (100 V), 21 Ω (70 V) (High Impedance) 4 Ω (31 V) (Low Impedance)
S/N Ratio	Over 60 dB
Tone Control	Bass: ±10 dB at 100 Hz / Treble: ±10 dB at 10 kHz
Dimensions (W x H x D)	420 x 100.9 x 351.3 mm
Weight	13.2 kg

» Mixer Power Amplifier

A-2128M 120W x 2



Model	A-2128M
Power Supply	220 V AC, 50 / 60 Hz, or 24 V DC
Power Consumption	AC: 520W (Rated output); AC: 286W (operation at EN60065); DC: 20 A (Rated output)
Rated Output	2 x 120W
Frequency Response	50 Hz - 20 kHz (±3 dB)
Distortion	Less than 1 % at 1 kHz, 1/3 rated power
Input (Sensitivity, Impedance, Connector)	(Rear) MIC 1: 1.0 mV (-60 dBV), 600 Ω, Balanced, 2 Pole-Phone Jack, Echo (Rear) MIC 2-5: 1.0 mV (-60 dBV), 600 Ω, Balanced, 2 Pole-Phone Jack (Rear) AUX 1-3: 300 mV (-10 dBV), 10 kΩ, Unbalanced, 2 RCA Pin Jack
Speaker Outputs	100 V x 2, 4 Ω x 2
PRE AMP OUT	1.0 V (0 dBV), 600 Ω x 2, Unbalanced, 2 RCA Pin Jack
PWR AMP IN	1.0 V (0 dBV), 10 kΩ x 2, Unbalanced, 2 RCA Pin Jack
REC OUT	1.0 V (0 dBV), 600 Ω x 2, Unbalanced, 2 RCA Pin Jack
Phantom Power	DC +21 V (MIC 1)
Noise Level (S/N)	More than 80 dB at All Volume Control Full CCW More than 50 dB at All Volume Control Full CW
Output Regulation	Less than 3 dB no load to full load
Controls	(Front) 5 Microphone Gain Controls, 3 AUX Gain Controls, 8 Bass Tone Controls, 8 Treble Tone Controls, 1 Echo Level Control, 2 Master Controls, 2 Output Channel ON/OFF switch (CH1, CH2), Power ON/OFF switch
Tone Controls	Bass: ±10 dB at 100 Hz; Treble: ±10 dB at 10kHz
LED Indicators	Output CH x 2, Signal x 2, Peak x 2, Power ON x 1
Finish	Front Panel: Aluminum painting Grey; Case: Steel Plate, Grey
Dimensions (W x H x D)	420 x 144 x 361 mm
Weight	19.3 kg



Digital Power Amplifiers

Multi-Channel Digital Power Amplifiers



MULTICHANNEL
POWER AMPLIFIER
DA-1000F / DA-1250D

» DA-1000 Series Multi-Channel Power Amplifier

DA-1000F
DA-1250D



Model	DA-1000F	DA-1250D
CE and Non-CE	Non-CE	
Power Source	100-240 V AC, 50 / 60 Hz	
Amplification System	Class D	
Power Consumption	2000 W*1	1100 W*1
Input	CH 1-4 : 20 kΩ (balanced) / 10 kΩ (unbalanced), 0.775 / 1.0 V / 32 dBV, XLR-F connector LINK CH 1-4 : XLR-M connector	CH 1-2 : 20 kΩ (balanced) / 10 kΩ (unbalanced), 0.775 / 1.0 V / 32 dBV, XLR-F connector LINK CH 1-2 : XLR-M connector
Output	SPEAKER 1-4 : 4 channels : 650 W x 4 (8 Ω)*3, 1000 W x 4 (4 Ω)*3 2 channels(BRIDGE) : 2000 W x 2 (8 Ω)*3 NL4 SPEAKON connector	SPEAKER 1-2 : 2 channels : 700 W x 2 (8 Ω)*2, 1250 W x 2 (4 Ω)*3 1 channel(BRIDGE) : 2500 W x 1 (8 Ω)*3 NL4 SPEAKON connector
Frequency Response	20 Hz to 20 kHz (+/-3 dB)	20 Hz to 20 kHz (+/-3 dB)
Total Harmonic Distortion	≤0.1 %	≤0.15 %
S/N Ratio	≥100 dB	
LED Indicator	Protect (Red)/ Clip (Red)/ -5dB (Green) / -10dB (Green) / -20dB (Green) / Signal (Green) / Power (Green)	Protect (Red)/ Clip (Red)/ -5dB (Green) / -10dB (Green) / -20dB (Green) / Signal (Green) / Power (Green)
Cooling	Air flow from front to rear	
Operating Temperature	0 °C to +35 °C	
Operating Humidity	80 % RH or less (no condensation)	
Finish	Case : plated steel sheet, black	
Dimensions (W x H x D)	483 x 89 x 461 mm	483 x 89 x 305 mm
Weight	9.2 kg	6.1 kg
Accessory	Power Cable x 1	Power Cable: ER type x 1, UK type x 1

*1 2/3 rated, 8Ω/CH

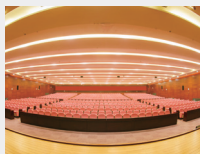
*2 The power is tested under the condition of 40ms burst 1kHz sin wave and 1% THD.

*3 The power is tested under the condition of 20ms burst 1kHz sin wave and 1% THD.

Applications:



• Houses of Worship



• Halls/Theaters



• Stadiums



• Arenas

»» 4-Channel Power Amplifier

DA-550F 550W x 4

DA-500FH 500W x 4

DA-250F 250W x 4

DA-250FH 250W x 4



Model	DA-550F	DA-500FH	DA-250F	DA-250FH
Power Source	220 – 240 V AC, 50 / 60 Hz			
Number of Channels	4			
Total Output (all channels driven)	-	-	680W (1kHz, 8Ω)	1,000W (1kHz, 4Ω)
Power Output	4 x 550W (4Ω) / 4 x 350W (8Ω) / 2 x 1100W (8Ω, bridged)	4 x 500W (100V, 20Ω)	4 x 250W (4Ω) / 4 x 170W (8Ω) / 2 x 500W (8Ω, bridged)	4 x 250W (70V / 100V)
Power Consumption	480W (EN standard)	460W (EN standard)	200W (EN standard)	
Frequency Response	20 Hz – 20kHz, -3dB, +1 dB	50 Hz – 20kHz, -2 dB, +1 dB	20Hz – 20kHz, ±1 dB	50 Hz – 20kHz, -3dB, +1 dB
Distortion	0.1% (1kHz)			
S/N Ratio (A weighted)	100 dB			
Input Impedance	10kΩ (electronically balanced)		10kΩ (unbalanced), 20kΩ (balanced)	
Controls	Volume control, LEDs: Indicator for each channel: input, output, peak, protection, power-on			
Connection	Input: Detachable terminal block (3 pins), XLR-3-31, Output: screw terminals (M4)		Inputs: Removable terminal block (electronically balanced), Outputs: Screw terminals (M4). For AWG 14-22	
Protection Circuit	Overheat, short circuit, overload, unusual DC voltage output		Amplifier section: DC output, overheat protection, load shorting, overload current, maximum output; Power supply section: overheat protection, AC rush current	
Finish	Front: Aluminum, alumite process, black / Case: plated steel sheet			
Dimensions (W x H x D)	482 x 88.4 x 404.2 mm		482 x 44 x 401.8 mm	
Weight	9 kg		6.8kg	

»» Dual-Channel Power Amplifier

DA-250D 250W x 2

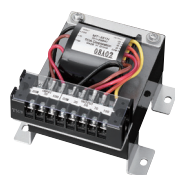
DA-250DH 250W x 2



Model	DA-250D	DA-250DH
Power Source	220 – 240 V AC, 50 / 60 Hz	
Number of Channels	2	
Power Output	2 x 250W (4Ω) / 2 x 170W (8Ω)	2 x 250W (100V line, 40Ω)
Power Consumption	120W (EN standard)	
Frequency Response	20Hz – 20kHz, ±1dB	50Hz – 20kHz, -3dB, +1 dB
Distortion	0.1% (1kHz)	
S/N Ratio (A weighted)	100 dB	
Input Impedance	10kΩ (electronically balanced)	
Controls	Volume level control (per channel), LEDs: Power, Indicator for each channel: input, output, peak, protection	
Connection	Input: Detachable terminal block (3 pins), XLR-3-31 / Output: screw terminals (M4)	
Protection Circuit	Overheat, short circuit, overload, unusual DC voltage output	
Finish	Front: Aluminum, alumite process, black Case: plated steel sheet	
Dimensions (W x H x D)	482 x 44 x 401.8 mm (EIA standard rack)	
Weight	5.3kg	

»» Matching Transformer for DA-500FH, DA-250FH and DA-250DH

MT-251H



Capacity: 0 - 250 W
Primary Side: 100 V line, 70 V line
Secondary Side: 100 V line, 70 V line, 50 V line, 35 V line
Frequency Response: 30 Hz - 18 kHz (+0 dB, -3 dB)
Connection Terminal: M3 Screw Terminal, distance between barriers: 6.6 mm
Dimensions (W x H x D): 108 x 80 x 122 mm
Weight: 2.4 kg



Mixer Power Amplifiers

»» Digital Mixer Amplifier

MX-6224D **240W x 2**



Model	MX-6224D
Power Source	220V – 240V AC, 50 / 60Hz
Power Output	240W x 2 channels (100V, 42Ω, rated output)
Power Consumption	150W (according to IEC60065), 650W (at rated output, both channels)
Frequency Response	50Hz - 20kHz, ±3 dB (at 1/3 rated output, rated load, rom power amplifier input)
Distortion	Less than 1% THD (at 1 kHz, 1/3 rated output power)
Input	MIC 1: -50 dBV (24V phantom powered)/ -60 dBV (phantom power OFF), 600Ω, electronically-balanced, ø 6.3mm phone jack MIC 2-4: -66 dBV, 200Ω, electronically-balanced, XLR-3-31 type and ø 6.3mm phone jack (either one usable) MIC 5-6: -60 dBV, 600Ω, electronically-balanced, XLR-3-31 type and ø 6.3mm phone jack (either one usable) AUX 1: -10 dBV, 10kΩ mixed monaural, unbalanced, RCA pin jacks (1 pair) AUX 2: -20 dBV, 10kΩ mixed monaural, unbalanced, ø 3.5 mm mini jack (3P: stereo) Power amplifier input: 0 dBV, 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: 0 dBV, 600Ω monaural, unbalanced, RCA pin jacks (1 pair) Effect bus output: 0 dBV, 600Ω monaural, unbalanced, RCA pin jacks (1 pair) Preamplifier output: 0 dBV, 600Ω monaural, unbalanced, RCA pin jacks (1 each for ROOM and OUTSIDE outputs)
S/N Ratio	60 dB or more (all volume controls: min.)
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 (ROOM/ROOM+OUTSIDE), 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 (TC-631M, TC-651M) switch for OUTSIDE output, 1 Speaker EQ (BS-1030B, BS-1030W) switch for ROOM output, 1 Power switch, 1 Phantom switch for MIC 1, 1 Phantom switch for MIC 2 – 6 (XLR-3-31)
Indicators	SLEEP indicator, Output Level meters (2 points, -20 dB and 0 dB) for ROOM and OUTSIDE, Protection indicators for ROOM and OUTSIDE amplifiers, Output indicators for ROOM and OUTSIDE, EFFECT indicator for MIC 1 – 6
Dimensions (W x H x D)	420 x 99 x 364.8mm
Weight	6.5kg

»» Remote Controller for MX-6224D

RC-03



Model	SX-200RM
Power Source	5 V DC (supplied from MX-6224D)
Current Consumption	120 mA (max)
Terminal	RJ-45 connector
On/Off Control Switches	1 ROOM, 1 OUTSIDE, 1 Effect
Indicators	CONNECTION indicator, Output ON/OFF for ROOM and OUTSIDE, EFFECT ON/OFF
Connection Cable	CAT5-STP, CAT5-UTP

Max. Cable Length	200 m
Finish	Plated Steel sheet, paint, white (RAL 9016 equivalent), paint
Dimensions (W x H x D)	86 x 87.2 x 55.3mm
Weight	380g
Accessory	Sticker for Arabic indication x 1

»» Mixer Amplifier

A-5006 **60W**

A-5012 **120W**



Model	A-5006	A-5012
Power Source	100 - 240 V AC, 50 / 60 Hz	
Rated Output	60 W	120 W
Power/ Current Consumption	106 W (rated output), 20 W (based on cULus standards) Max. 2 A	207 W (rated output), 39 W (based on cULus standards) Max. 3 A
Frequency Response	50 Hz - 20 kHz (1/8 output)	
Distortion	1 % or less (1 kHz, rated output)	
Input	INPUT 1, 2: MIC -60 dBV, LINE -20 dBV, MIC/LINE selectable 2.2 kΩ, electronically-balanced, removable terminal block (5 pins) INPUT 3, 4: LINE -20 dBV, 10 kΩ, unbalanced, RCA pin jack	
Output	SPEAKER: 4 Ω, 70 V (83 Ω), 100 V (170 Ω) removable terminal block (5 pins)	Speaker: 4 Ω, 70 V (42 Ω) , 100 V (83 Ω) removable terminal block (5 pins)
S/N Ratio	MIC 1, 2: 50 dB or more, LINE 1 - 4: 70 dB or more (A-weighted)	
Function	Equalizer: 5 points settable on each input (High-pass filter x 1, Parametric equalizer x 4), FBS: settable on input 1 and 2, Compressor: settable on input 1 and 2, Mute: MANUAL/AUTO/OFF settable on each input, Equalizer: 10 points settable on output (Through, Low-pass filter, Parametric equalizer, High-pass filter), Speaker parametric equalizer: 5 points settable on each output	
Finish	Panel: PS resin, black, Case: Surface-treated steel plate, black. paint	
Dimensions (W x H x D)	210 x 52.5 x 375 mm	
Weight	3.6 kg	3.9 kg

»» Matrix Amplifier

MA-725F**250W x 2**

Model	MA-725F
Power Source	100 – 240 V AC, 50 / 60Hz
Power Consumption	1350 W (rated output)
Frequency Response	20Hz – 20kHz (-3 dB / +1 dB, LPF OFF)
Total Harmonic Distortion	1% or less, at 1kHz, rated output
Input	Priority 1-2: Mic -60dB/Line -10dBV selectable, 2.2k Ω , electronically-balanced, removable terminal block
	Line In 1-4: -10dBV, 10k Ω , unbalanced, 2 RCA jacks (Stereo summing)
Output	Speaker 1-4: 70V (20 Ω), 100V (40 Ω), removable terminal block
	Line Out 1-4: 0dBV, 600 Ω , unbalanced, RCA jack
	MOH: 0dBV, 600 Ω , transformer balanced, removable terminal block
DSP Preset	16 presets in 4 banks at each output channel, selectable
S/N Ratio	Mic: 60dBV or more, Line: 75dBV or more (A-weighted)
Muting	Manual mute / Automatic mute
Mute Hold Time	50ms - 10 seconds, adjustable
Priority Level	PRIORITY 1 > PRIORITY 2 > LINE 1-4
Control	Power: ON/OFF switch, Power remote terminal
	Priority 1-2: MIC/LINE selector switch, Gain control, Assign switch, Auto mute switch, Mute sense control, Manual mute terminal, Mute hold time control, Priority mix switch
	Line In 1-4: Gain control, Assign restriction switch
	Output 1-4: LINE IN 1-4 selector switch, Output gain control, 70 V/100 V selector switch, HPF switch, DSP bank selector switch, DSP preset selector switch
	Remote 1-4: Remote control connector (RJ-45), Remote link switch
Operating Temperature	0 °C to 40 °C degree
Operating Humidity	35 % to 80 %RH (no condensation)
Finish	Panel: Aluminum, hair line, black; Case: Steel plate, black, paint
Dimensions (W x H x D)	420 x 107.6 x 350 mm
Weight	7.6 kg
Accessories	Power Cord (2m) x1, Removable Terminal Plug (5 Pins x 2, 3 Pins x 1, 2 Pins x 4); Rack Mounting Bracket x 2, Bracket Mounting Screws x 4, User Manual x 1

»» Dual Channel Digital Mixer Amplifier

A-9500D2**500W x 2**

Model	A-9500D2
Power Source	220-240 V AC, 50 / 60Hz
Power Consumption	220 W
Audio Input	Max. 8 channels, modular construction *1
Speaker Output 1, 2	100 V, 500 W, 20 Ω , M4 screw terminal
Module Slot	Analog Input (slot 1-8): -10 dBV, 10 k Ω , unbalanced
	Digital Input (slot 1-4): 24 bit / 48 kHz
	MIX Output (slot 1-8): -14 dBV, 330 Ω (CH1 pre-fader output), unbalanced
	Digital Output (slot 5-7): 24 bit / 48 kHz Power Supply (Slot 1-8): +24 V, -24 V, + 6 V DC
Digital Audio Signal Ref. Level	-20 dB FS
Frequency Response	20 Hz – 20 kHz, +1, -3 dB
Total Harmonic Distortion	0.3 %
S/N Ratio	At input short, 20 Hz – 20 kHz, ALL FLAT or OFF setting Output volume min.: 85 dB Output volume max.: 61 dB (input 1 volume: 0 dB, other inputs: OFF)
Crosstalk	Above 60 dB (at 20 kHz)
Tone Control	Bass: +/-12 dB (at 100 Hz) / Treble: +/-12 dB (at 10 kHz)
Parametric EQ	10 bands, Freq: 20 Hz – 20 kHz, 31 points, Various range: +/- 12 dB, Q: 0.3 – 5
Speaker Equalizer	10 (PC software has 30 TOA speaker presets)
High-pass Filter	-12 dB/oct, Variable frequency range: 20 Hz - 20 kHz, 31 points
Compressor	Depth: 1 - 5
Delay	0 – 40 ms (1 ms steps), maximum 40 ms (CH1 + CH2), mixer mode only
Scene Memory	32
Auxiliary Function	Key Lock Function
Control Input/Output	RS-232C**2, D-sub connector (9P, female)
	Control input: 4 inputs, no-voltage make contact input, open voltage: 3.3 V DC, short-circuit current: under 1 mA, removable terminal block (14 pins) Control output: 4 outputs, open collector output, withstand voltage: 27 V DC, control current: 50mA, removable terminal block (14 pins)
	Remote volume: 2 channels, connect a 10 k Ω /linear taper variable resistor or Input 0 – 10 V DC, removable terminal block (14 pins)
Finish	Panel: Aluminium, hair-line, black; Case: Surface-treated steel plate, black, paint
Dimensions (W x H x D)	420 x 107.6 x 415 mm
Weight (without modules)	9.6 kg

(*1) Factory slot 1 is already installed D-001T module, other modules must be purchased separately.

(*2) Allowing it to be controlled by a control system such as AMX and Creston through RS-232C port.

Please refer to Page 54 for 9000 Series modules.

»» Package Amplifier

A-230 **30W**



Model	A-230
Power Source	220 – 230V AC, 50 / 60 Hz or 12 V DC
Rated Output	30 W
Frequency Response	50 Hz – 20 kHz
Input	MIC 1 – 3: phone jack / AUX: RCA pin jack
Output	Speaker out: High impedance: 330 Ω (100 V), Low impedance: 4 Ω (11 V)
S/N Ratio	60 dB or more (MIC 1 – 3), 70 dB or more (AUX)
Tone Control	Bass: -10 dB at 100 Hz / Treble: -10 dB at 10 kHz
Muting	MIC 1 overrides other Mic inputs and AUX inputs with 0 – 30 dB attenuation, attenuation by MIC 1 input
Dimensions (W x H x D)	350 x 105 x 240 mm
Weight	3.5 kg

»» School Digital Amplifier

SA-60D **60W**



Model	SA-60D
Power Source	220 – 240V AC, 50 / 60 Hz
Rated Output	60 W
Power Consumption	100 W (rated output), 18 W (EN 60065)
Frequency Response	20 Hz – 20 kHz
Distortion	1 % or less
Input	MIC 1, 2: -52 dBV, 600 Ω, unbalanced, ø6.3 phone jack (2P) AUX 1, 2: -20 dBV, 10 kΩ, unbalanced, RCA pin jack
Output	Speaker out: Low impedance (2 x 8 Ω or 1 x 4 Ω), Push-in terminal
S/N Ratio	MIC 1, 2: 60 dB or more / AUX 1, 2: 70 dB or more
Protection	Power Supply Thermal Shut down Power Amplifier Thermal Shut down Power Amplifier Over Current Each protection will be restored automatically
Indicator	Power LED (Blue)
Finish	Case: Steel Plate, Off-White, Paint / Knob: ABS resin, Black
Dimensions (W x H x D)	210 x 70.6 x 180 mm
Weight	1.6 kg

Mobile Amplifiers

»» Mobile Amplifier

CA-115
CA-130
CA-160



Model	CA-115	CA-130	CA-160
Power Source	Standard voltage: 14 V DC, Operating range: 10 - 16 V DC (12 V battery used)		
Power Consumption	3 A or less (rated output)	5 A or less (rated output)	9 A or less (rated output)
Rated Output	15 W (35 W max.)	30 W (60 W max.)	60 W (120 W max.)
Output Impedance	4 Ω (BRN), 8 Ω (ORG), Common (WHT) Changeable by changing lead wire connections		
Distortion	5 % or less (1 kHz rated output)		
Frequency Response	100 Hz - 10 kHz		
Input	Mic 1, 2: 600 Ω, 4 mV, Phone jack AUX: 100 kΩ, 500 mV, Phone jack		
Finish	Front Panel: ABS resin, Black ; Case: Zinc plated steel sheet		
Dimension (W x H x D) (Mounting Device excluded)	178 x 50 x 132 mm	178 x 50 x 144 mm	178 x 50 x 170 mm
Weight	0.9 kg	1.1 kg	1.2 kg
Accessory	Microphone Holder x 1, Mounting Bracket x 1, Mounting Screw x 1, Fuse (4A) x 1, Connection Cord x 1 set	Microphone Holder x 1, Mounting Bracket x 1, Mounting Screw x 1, Fuse (8A) x 1, Connection Cord x 1 set	Microphone Holder x 1, Mounting Bracket x 1, Mounting Screw x 1, Fuse (12A) x 1, Connection Cord x 1 set
Accessory Microphone	Uni-directional Dynamic Microphone with talk switch, Impedance: 600 Ω, Sensitivity: -53 dB (1 kHz, 0 dB = 1 V/Pa)		

Portable Wireless Amplifiers

»» Portable Amplifier

WA-1830M
WA-1830MB



Model	WA-1830M	WA-1830MB
Power Source	100-240 V AC, 50 / 60 Hz; DC: 12 V, 2.3 Ah (Rechargeable battery* not included)	100-240 V AC, 50 / 60 Hz; DC: 12 V, 2.3 Ah (Rechargeable battery included)
Power Consumption	AC: 55 W (rated output) ; AC: 11 W (operation at EN60065)	
Rated Output	AC: 30 W ; DC: 10 W	
Applicable Tuner Unit	WTU-4800 (Optional)	
Battery Life	-	Approx. 5 hours continuous music
Battery Charging Time / Type	-	12 hours / 12 V, 2.3 Ah x 1 pc Lead Acid Battery
Frequency Response	50 Hz - 15 kHz, ± 3 dB	
Distortion	Under 5% (rated output)	
Input	Wired mic: -45 dB*, 600 Ω, Unbalanced, 6.3 mm phone jack External Input: -20 dB*, 10 kΩ, Unbalanced, RCA jack	
Output	External speaker: 4 - 16 Ω / over 30 W of rated input External Output: 0 dB*, 1 kΩ, Unbalanced, 6.3 mm phone jack	
Other Feature	Internal or External Speaker selection switch	
S/N Ratio	Over 60 dB (rated output)	
Antenna	Internal antenna (PCB Antenna)	
Internal Speaker	2-way speaker system: 20cm full-range speaker and tweeter - Extension Type file is: MP3, WMA, WAV, AAC, FLAC	
MP3 Player	- Max. supported storage size of the medium (stick): 32GB. (FAT16/FAT32) - Source: USB, SD/MMC, BLUETOOTH, FM, REC, AUX - We do not guarantee that it can support all kinds of USB/SD	
Operating Temperature	-10 °C to +50 °C	
Finish	ABS resin, Black	
Dimensions (W x H x D)	298 x 460 x 200 mm	
Weight	5.3 kg	6.2 kg
Accessories	Power cord (YA-301) x 1, Dust Cover x 1, Screw Driver x 1, Remote Control x 1	

Reference dimension of battery: 178 W x 60 H x 34 D mm



**Please refer to specification sheet for detailed information.