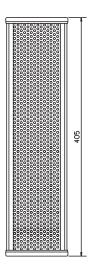


## COLUMN SPEKERS CS-212 / CS-212WP

- Body in extruded aluminum, white color
- Metal front protection grille. Equipped with line transformer for 25V/70V/100V constant voltage systems
- Six-position rotary dial for adjusting the sound power
- 4 wide band speaker of 70mm diameter
- With plastic cone speaker only for weather-pfoof (for CS-212WP)

### CS-212/212WP







**CS-212** (IP44) **CS-212WP** (IP44)

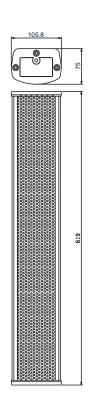
MODEL	<b>CS-212</b> (INDOOR)	CS-212WP(OUTDOOR)
Input power:	RMS I2W/MAX 24W	RMS I2W/MAX 24W
Output power:	1.5, 3, 6, 12W	1.5, 3, 6, 12W
Speaker:	4 wide band speakers of	4 wide band speakers of
-	70mm diameter	70mm diameter
	(2.5" paper cone speaker)	(2.5" plastic cone speaker)
Input voltage:	25, 70, 100V	25, 70, 100V
Impedance:	100V- 6.6K $\Omega$ /3.3K $\Omega$ / 1.66K $\Omega$ /833 $\Omega$	100V-6.6K $\Omega$ /3.3K/ 1.66K $\Omega$ /833 $\Omega$
-	70V-3.26K $\Omega$ /I.63K $\Omega$ / 816 $\Omega$ /408 $\Omega$	70V-3.26K $\Omega$ /1.63K $\Omega$ / 816 $\Omega$ /408 $\Omega$
	25V-416 $\Omega$ /208 $\Omega$ / 104 $\Omega$ /52 $\Omega$	25V-416 $\Omega$ /208 $\Omega$ / 104 $\Omega$ /52 $\Omega$
Frequency response:	250Hz~20kHz (-10dB)	250Hz~20kHz(-10dB)
S.P.L:	94dB (IW/M)	94dB (IW/M)
Material:	Aluminum	Aluminum

## **COLUMN SPEAKERS**

## **CS-220 / CS-220WP**

- Body in extruded aluminum, White color
- Metal front protection grille.
- Equipped with line transformer for 25V/70V/100V constant voltage systems
- Four-position rotary dial for adjusting the sound power
- With plastic cone speaker only for weather-proof (for CS-220WP)

#### CS-220/220WP



Unit: mm



**CS-220** (1P44) **CS-220WP** (1P44)

MODEL	<b>CS-220</b> (INDOOR)	CS-220WP(OUTDOOR)
Input power:	RMS 20W/MAX 40W	RMS 20W/MAX 40W
Output power:	2.5, 5, 10, 20W	2.5, 5, 10, 20W
Speaker:	7 wide band speakers of	7 wide band speakers of
-	70mm diameter	70mm diameter
	(2.5" paper cone speaker)	(2.5" plastic cone speaker)
Input voltage:	25, 70, 100V	25, 70, 100V
Impedance:	100V-4K $\Omega$ / 2K $\Omega$ / 1K $\Omega$ / 500 $\Omega$	$100V-4K\Omega/2K\Omega/1K\Omega/500\Omega$
•	70V-2K $\Omega$ / IK $\Omega$ / 500 $\Omega$ / 250 $\Omega$	70V-2K $\Omega$ / IK $\Omega$ / 500 $\Omega$ / 250 $\Omega$
	25V-250 $\Omega$ / I25 $\Omega$ / 62 $\Omega$ / 3I $\Omega$	25V-250 $\Omega$ / 125 $\Omega$ / 62 $\Omega$ / 31 $\Omega$
Frequency response:	250Hz~20kHz (-10dB)	250Hz~20kHz (-10dB)
S.P.L:	94dB (IW/M)	94dB (IW/M)
Material:	Aluminum	Aluminum

## COLUMN SPEAKERS CS-315 / CS-320 / CS-330

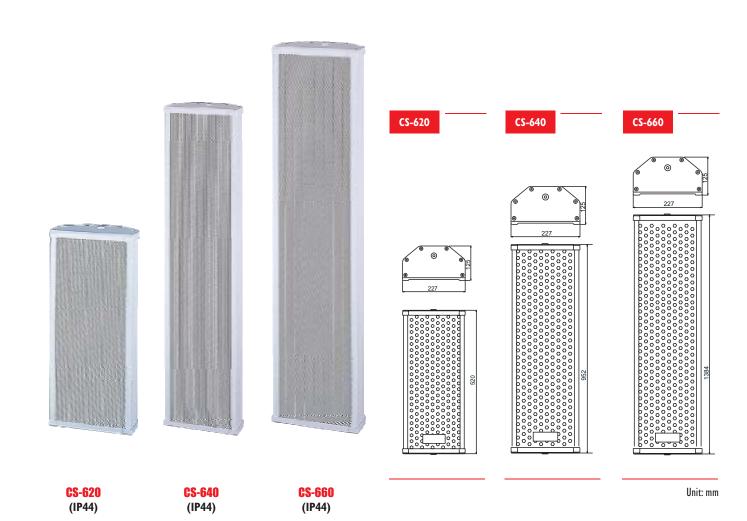
- Body in white color extruded aluminum
- Metal front protection grille
- Two way system speakers equipped with line transformer for 25V/70V/100V constant voltage
- Five-position rotary dial for adjusting the sound power
- This series specially has high efficency paper cone speaker



MODEL	CS-315	CS-320	CS-330
Input power:	RMS I5W/MAX 30W	RMS 20W/MAX 40W	RMS 30W/MAX 60W
Output power:	1, 2, 3.75, 7.5, 15W	1.25, 2.5, 5, 10, 20W	2, 3.75, 7.5, 15, 30W
Speaker:	3 wide band speakers (5×7" oval) and	4 wide band speakers (5×7" oval) and	6 wide band speakers (5×7" oval) and
-	I High efficency paper cone speaker	2 High efficency paper cone speakers	2 High efficency paper cone speakers
Input voltage:	25, 70, 100V	25, 70, 100V	25, 70, 100V
Impedance:	100V-10K $\Omega$ /5K $\Omega$ /2.67K $\Omega$ /	100V-8K $\Omega$ /4K $\Omega$ /2K $\Omega$ /	100V-5K $\Omega$ /2.67K $\Omega$ /1.33K $\Omega$ /
	I.33K $\Omega$ /670 $\Omega$	IK $\Omega$ /500 $\Omega$	670 $\Omega$ /330 $\Omega$
	70V-4.9K $\Omega$ /2.5K $\Omega$ / 1.3K $\Omega$ /	70V-3.9K $\Omega$ /2K $\Omega$ /1K $\Omega$ /	70V-2.45K $\Omega$ /I.3K $\Omega$ /645 $\Omega$ /
	650 $\Omega$ /320 $\Omega$	490 $\Omega$ /245 $\Omega$	326 $\Omega$ /163 $\Omega$
	25V-625 $\Omega$ /312 $\Omega$ /166 $\Omega$ /	25V-500 $\Omega$ /250 $\Omega$ /125 $\Omega$ /	25V-312 $\Omega$ /166 $\Omega$ /83.5 $\Omega$ /
	<b>83.5</b> Ω / <b>41.5</b> Ω	<b>62.5</b> Ω / <b>31.3</b> Ω	$41.5 \Omega / 20.8 \Omega$
Frequency response:	180Hz~20kHz(-10dB)	160Hz~20kHz(-10dB)	150Hz~20kHz(-10dB)
S.P.L:	97dB (IW/M)	98dB (IW/M)	99dB (IW/M)
Material:	Aluminum	Aluminum	Aluminum

## COLUMN SPEAKERS CS-620 / CS-640 / CS-660

- Body in extruded aluminum, white color
- Metal front protection grille
- Equipped with line transformer for 50V/70V/100V constant voltage system
- 3-position selection for adjusting the sound power specifically developed for speech applications, indoor, these are popular for churches & other reverberant public buildings.

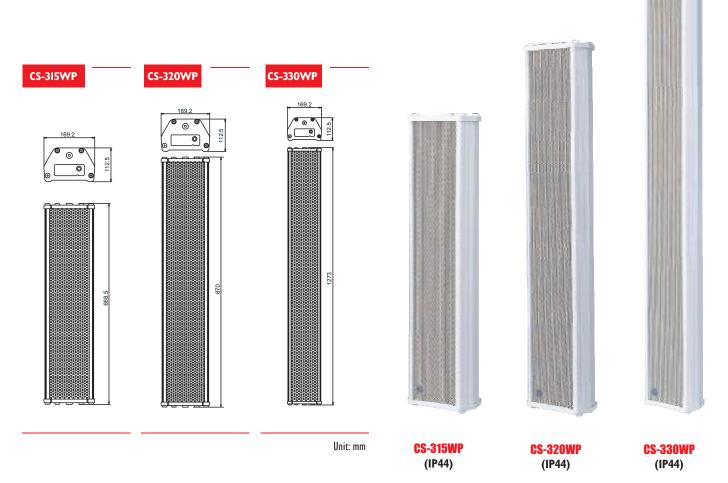


MODEL	CS-620	CS-640	CS-660
Input power:	RMS 20W	RMS 40W	RMS 60W
Output power:	5, 10, 20W	10, 20, 40W	15, 30, 60W
Speaker:	2 wide band 6.5"	4 wide band 6.5"	6 wide band 6.5"
•	paper cone speakers	paper cone speakers	paper cone speakers
Input voltage:	50, 70, 100V	50, 70, 100V	50, 70, 100V
Impedance:	$100V-2K\Omega/IK\Omega/500\Omega$	100V-IK $\Omega$ / 500 $\Omega$ / 250 $\Omega$	100V-666 $\Omega$ / 333 $\Omega$ / 166.5 $\Omega$
•	70V-IK $\Omega$ / 500 $\Omega$ / 245 $\Omega$	70V-500 $\Omega$ / 250 $\Omega$ / 122.5 $\Omega$	70V-333 $\Omega$ / 166.5 $\Omega$ / 81.5 $\Omega$
	50V-500 $\Omega$ / 245 $\Omega$ / 125 $\Omega$	50V-250 $\Omega$ / 122.5 $\Omega$ / 62.5 $\Omega$	50V-166.5 $\Omega$ / 81.5 $\Omega$ / 41.5 $\Omega$
Frequency response:	125Hz∼15kHz (-10dB)	125Hz∼15kHz(-10dB)	125Hz~15kHz(-10dB)
S.P.L:	99dB (IW/M)	IOOdB (IW/M)	I03dB (IW/M)
Material:	Aluminum	Aluminum	Aluminum



## WEATHER-PROOF COLUMN SPEAKERS CS-315WP / CS-320WP / CS-330WP

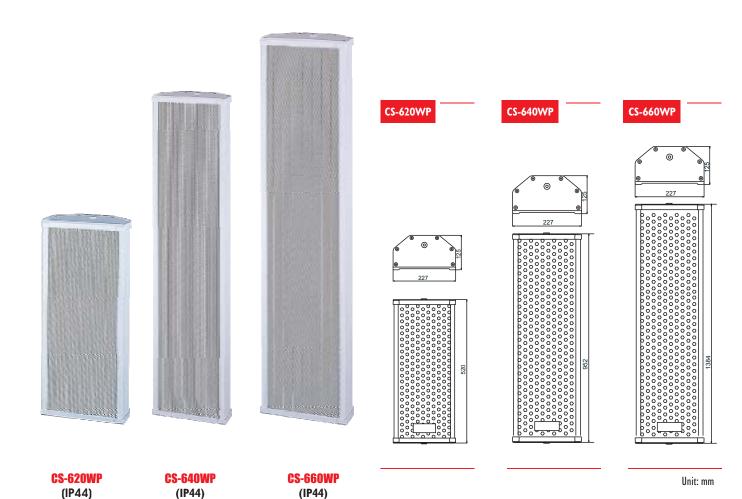
- Body in white color extruded aluminum
- Metal front protection grille
- Equipped with transformer for 25V/70V/100V constant voltage
- Five-position rotary dial for adjusting the sound power
- With plastic cone speaker only for weather-proof



MODEL	CS-315WP	CS-320WP	CS-330WP
Input power:	RMS I5W/ MAX 30W	RMS 20W/ MAX 40W	RMS 30W/ MAX 60W
Output power:	I, 2, 3.75, 7.5, I5W	1.25, 2.5, 5, 10, 20W	2, 3.75, 7.5, 15, 30W
Speaker:	3 wide band speakers	4 wide band speakers	6 wide band speakers
•	plastic cone speaker	plastic cone speaker	plastic cone speaker
	for weather-proof	for weather-proof	for weather-proof
Input voltage:	25, 70, 1000	25, 70, 100V	25, 70, 100V
Impedance:	100V-10K $\Omega$ /5K $\Omega$ /2.67K $\Omega$ /	100V-8K $\Omega$ /4K $\Omega$ /2K $\Omega$ /	100V-5K Ω /2.67K Ω /1.33K Ω /
•	I.33K $\Omega$ /670 $\Omega$	IK $\Omega$ /500 $\Omega$	670 $\Omega$ /330 $\Omega$
	70V-4.9K $\Omega$ /2.5K $\Omega$ / 1.3K $\Omega$ /	70V-3.9K $\Omega$ /2K $\Omega$ /1K $\Omega$ /	70V-2.45K $\Omega$ /I.3K $\Omega$ /645 $\Omega$ /
	650 $\Omega$ /320 $\Omega$	490 $\Omega$ /245 $\Omega$	326 $\Omega$ /163 $\Omega$
	25V-625 $\Omega$ /312 $\Omega$ /166 $\Omega$ /	25V-500 $\Omega$ /250 $\Omega$ /125 $\Omega$ /	25V-312 $\Omega$ /166 $\Omega$ /83.5 $\Omega$ /
	83.5 $\Omega$ /41.5 $\Omega$	62.5 $\Omega$ /31.3 $\Omega$	41.5 $\Omega$ /20.8 $\Omega$
Frequency response:	180Hz∼20kHz (-10dB)	160Hz∼20kHz (-10dB)	150Hz∼20kHz(-10dB)
S.P.L:	97dB (IW/M)	98dB (IW/M)	99dB (IW/M)
Material:	Aluminum	Aluminum	Aluminum

## WEATHER-PROOF COLUMN SPEAKERS CS-620WP / CS-640WP / CS-660WP

- Body in extruded aluminum, white color
- Metal front protection grille
- Equipped with line transformer for 50V/70V/100V constant voltage system
- 3-position selection for adjusting the sound power specifically developed for speech applications, indoor, these are popular for churches & other reverberant public buildings.
- With plastic cone speaker only for weather-proof



MODEL	CS-620WP	CS-640WP	CS-660WP
Input power:	RMS 20W	RMS 40W	RMS 60W
Output power:	5, 10, 20W	10, 20, 40W	15, 30, 60W
Speaker:	2 wide band 6.5"	4 wide band 6.5"	6 wide band 6.5"
	plastic cone speakers	plastic cone speakers	plastic cone speakers
	for weather-proof	for weather-proof	for weather-proof
Input voltage:	50, 70, 100V	50, 70, 100V	50, 70, 100V
Impedance:	100V-2K $\Omega$ / IK $\Omega$ / 500 $\Omega$	100V-1K $\Omega$ / 500 $\Omega$ / 250 $\Omega$	100V-666 $\Omega$ / 333 $\Omega$ / 166.5 $\Omega$
	70V-IK $\Omega$ / 500 $\Omega$ / 245 $\Omega$	70V-500 $\Omega$ / 250 $\Omega$ / 122.5 $\Omega$	70V-333 $\Omega$ / 166.5 $\Omega$ / 81.5 $\Omega$
	50V-500 $\Omega$ / 245 $\Omega$ / 125 $\Omega$	50V-250 $\Omega$ / 122.5 $\Omega$ / 62.5 $\Omega$	50V-166.5 $\Omega$ / 81.5 $\Omega$ / 41.5 $\Omega$
Frequency response:	125Hz∼15kHz(-10dB)	125Hz∼15kHz(-10dB)	125Hz∼15kHz(-10dB)
S.P.L:	99dB (IW/M)	100dB (IW/M)	103dB (IW/M)
Material:	Aluminum	Aluminum	Aluminum



## **AUDIO PROCESSORS**

- 78 SMX-281
- 79 PEQ-1131H / PEQ-1215H
- 80 PEQ-2231H
- 81 SFB-4010
- 82 SAD-152 / SAD-252
- 83 SCL-2020
- 84 SCX-203S / SCX-P234
- 85 PSA-31500
- 86 PSA-21500
- 87 RTA-15 / RTA31
- 88 DLM206
- 89 SM-62U
- 90 SM-82U
- 91 SM-122U
- 92 SM-204U
- 93 XM-6/XM-6D
- 94 XM-8/XM-8D
- 95 XM-12 / XM-12D / XM-12DA
- 96 XM-16 / XM-16D / XM-16DA
- 97 XM-20 / XM-20D / XM-20DA
- 98 XM-24/XM-24D
- 99 XM-12D USB
- 100 DJM-412
- 101 DMB-8/700 USB

## **PRE-AMPLIFIERS**

## **SMX-281**

#### **FEATURES**

- Chime signal
- I. Automatic priority.
- 2. Permissible external chime remote and P. T. T remote
- Master I, 2 output
- Independent DIN jack for P. T. T remote (7 pin)
- Two band treble/bass control per output
- Signal indicator per.
- Permissible phantom MIC for all input.
- Automatic priority for MIC 2-3.
- Independent line input with RCA pin jack (line 7-9)
- Selective MIC input of H. P.F
- Selective master output per input signal (L, L + R, R)
- Recording output.
- LED indicator for master-output.





SMX-281

MODEL	SMX-281	
Power consumption:	10.5W	
Power supply:	AC 115V/ 230V 50Hz/60Hz, DC 24V	
Input sensitivity / impedance:	MIC: -50dBv (2.45mV)/5k $\Omega$ BAL; Line: -10dBv (245mV)/5k $\Omega$ BAL; Line: RCA in: -10dBv (245mV)/10K $\Omega$ UNBAL	
Output level/ impedance:	Master I, 2: $+4$ dBv (1.23V)/200 $\Omega$ BAL; REC: 550mV/10k $\Omega$ UNBAL	
Frequency response:	Less than -IdB (20Hz~20kHz)	
S/N ratio:	MIC: More than 60dB; Line: More than 60dB	
T.H.D:	MIC: More than 0.5%; Line: More than 0.3%	
Cross-talk:	MIC: More than 50dB ;Line: More than 50dB	
Dimensions (W×D×H):	483 × 200 × 44 mm (19" × 7.9" × 1.7")	
Weight (Approx.):	4.1kg (9.04 lbs)	

## **EQUALIZERS**

## PEQ-1131H / PEQ-1215H

The PEQ-series graphic equalization is designed to provide exact equalization permanently.

It is suitable for musicians, performers, studio engineers, and sound contractors.

The PEQ-series can be used wherever modification of the frequency contour of a sound or sound system is needed. A graphic equalization offers a solution to many common sound problems. Also, creative experimentation on the part of the user can produce some nice results.

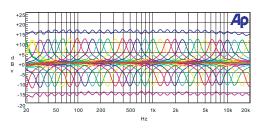


PEO-1131H (W/ Hi-Low Pass)

PEQ-1215H (W/ Hi-Low Pass)

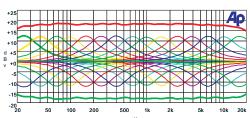
#### PEQ-II3IH

03/24/01 11:13:36 N=-6dB OUT=0dB BAL. RANGE=12dB



#### PEQ-I2I5H

03/24/01 08:56:18 IN=-6dB OUT=0dB BAL. RANGE=12dB



MODEL	PEQ-1131H	PEQ-1215H
Туре:	I×31, I/3 octave, (IU size)	2×15, 2/3 octave, (1U size)
Slider type:	20mm with positive center	20mm with positive center
Power consumption:	15 W (MAX.)	15 W (MAX.)
Power supply:	AC 100V-120V, 60Hz; AC 200V-240V, 50Hz	AC 100V-120V, 60Hz ; AC 200V-240V, 50Hz
Inputs and outputs:	_ XLR, 6.3 $arphi$ TRS and RCA jack	$\_$ XLR, 6.3 $arphi$ TRS and RCA jack
Inputs impedance:	20k $\Omega$ (BAL.) I5k $\Omega$ (UNBAL.)	20k $\Omega$ (BAL.) I5k $\Omega$ (UNBAL.)
High pass filter:	40Hz (12dB/oct)	40Hz (12dB/oct)
Low pass filter:	I6kHz (I2dB/oct)	l6kHz (l2dB/oct)
Max. Input level:	+ l 8 d B v	+ 18dBV
Outputs impedance:	< 600 Ω	$\leq$ 600 $\Omega$
Max. Output level:	+ l6dBV	
T.H.D:	0.02% (at IkHz, all slider at center)	0.02% (at IkHz, all slider at center)
Frequency response:	20Hz to 50kHz, -3dB (all slider at center)	20Hz to 50kHz, -3dB(all slider at center)
S/N ratio:	93dB	93dB
Control range:	$\pm$ 6dB or I2dB selectable	±6dB or 12dB selectable
Dimensions (W $\times$ D $\times$ H):	$483 \times 220 \times 44$ mm (19" $\times 8.7$ " $\times 1.7$ ")	$483 \times 220 \times 44$ mm (19" $\times 8.7$ " $\times$ 1.7")
Weight (Approx.):	2.9kg (6.39 lbs)	2.8kg (6.17 lbs)

## **EQUALIZERS**

## PEQ-2231H

#### **FEATURES**

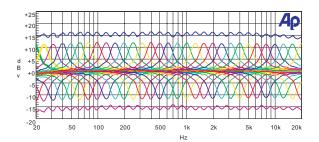
- Control range 6dB/I2dB selectable.
- Signal bypass function.
- With a switchable Hi-Low pass-filters.
- Balanced XLR, TRS and RCA input and output connect.
- Signal clip pilot
- The ground "LIFT" switch is used to disconnect the signal ground from the chassis earth ground.
- Line voltage selectable (AC 115V/230V).



PEQ-2231H (W/ Hi-Low Pass)

#### PEQ-223IH

03/24/01 11:13:36 IN = -6dB OUT = 0dB BAL. RANGE = 12dB



MODEL	PEQ-2231H
Type:	2×31, 1/3 octave, (2U size)
Slider type:	20mm with positive center
Power consumption:	15 W (MAX.)
Power supply:	AC 100V-120V, 60Hz ; AC 200V-240V, 50Hz
Inputs and outputs:	XLR, 6.3 $arphi$ TRS and RCA jack
Inputs impedance:	20k $\Omega$ (BAL.) I5k $\Omega$ (UNBAL.)
High pass filter:	40Hz (12dB/oct)
Low pass filter:	I6kHz (I2dB/oct)
Max. Input level:	+ 18dBV
Outputs impedance:	$<$ 600 $\Omega$
Max. Output level:	+ l6dBV
T.H.D:	0.02% (at IkHz, all slider at center)
Frequency response:	20Hz to 50kHz, -3dB (all slider at center)
S/N ratio:	93dB
Control range:	±6dB or 12dB selectable
Dimensions (W $\times$ D $\times$ H):	$483 \times 200 \times 88.8 \text{mm} (19" \times 7.9" \times 3.5")$
Weight (Approx.):	5.2kg (11.46 lbs)



## **FEEDBACK SUPPRESSOR**

#### SFB-4010

#### **FEATURES**

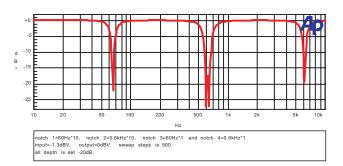
- Electronic balanced circuit is adopted in order to reduce external hum pick up from signal line.
- The bandwidth of the notch filter, eliminating.
- The 4 stage notch filters. The interference factor for the quality of sound in audition.
- Convenient function to adjust nominated frequency response by level indicator, when controlling depth on each filter.
- Buit-in 24V DC terminal for DC power use.
- Bypass is in/out switch of notch circuit.



SFB-4010

#### SFB-4010

#### NOTCH FILTER FREQUENCY RESPONSE



MODEL	SFB-4010
Power consumption:	10W
Input/impedance:	OdBv/I5k $\Omega$ (BAL.)
Ouput/impedance:	0dBv/600 Ω (BAL.)
Frequency response:	20Hz to 50kHz (±3dB)
S/N ratio:	>70dB
T.H.D.:	0.1% at IkHz
Notch depth:	OdB to -20dB
Notch filter frequency:	60Hz∼6kHz(variance)
Dimensions (W $\times$ D $\times$ H):	483 × 200 × 44 mm (19" × 7.9" × 1.7")
Weight (Approx.):	3.0kg (6.61 lbs)

## **AUDIO DISTRIBUTORS AMPLIFIERS**

#### **SAD-152 / SAD-252**

#### **FEATURES**

#### **Balanced** input

High efficiency electronic balanced circuit is adopted in order to reduce external hum pick up from signal line.

#### Input mode switch

This model is able to distribute the sound signal input to output at 1:10 or 2:5 by mono and stereo selector switch.

#### Level control and peak LED per channel

Capable of adjusting each output volume and in case of excessive input LED lamp warns distortion status.

#### Balanced output and minimize the DC hum

Sound output is possible whether or of the output unit polarity is grounded and the direct current noise is minimized a 15V power source motivates the operation of circuit.

#### Use of emergency battery (SAD-I52 ONLY)

You can operate this model by using emergency battery for unexpected AC power failure. (Built in DC 24V terminal)



SAD-152



SAD-252

MODEL	SAD-152	SAD-252
Power consumption:	6W	6W
Power supply:	AC 115V/ 230V 50Hz/ 60Hz, DC 24V	AC 115V/ 230V 50Hz/ 60Hz
Input sensitivity/impedance:	0.775V (OdBm) / I5k $\Omega$ ; XLR Jack Balanced	0.775V (OdBm)/ I5k $\Omega$ ; XLR Jack Balanced
Output level / impedance:	0.775V (OdBm) / 60k $\Omega$ ; XLR Jack Balanced	0.775V (OdBm) / $60$ k $\Omega$ ; XLR Jack Balanced
Frequency response:	Less than -0.5dB (20Hz~20kHz)	Less than -0.5dB (20Hz~20kHz)
S/N ratio:	More than 92dB	More than 92dB
T.H.D:	More than 0.05% (20Hz~20kHz)	More than 0.05% (20Hz~20kHz)
Cross-talk:	More than 75dB	More than 75dB
Dimensions (W $\times$ D $\times$ H):	483 × 235 × 44mm (19" × 9.3" × 1.7")	483 × 200 × 44mm (19" × 7.9" × 1.7")
Weight (Approx.):	3.0kg (6.61 lbs)	3.0kg (6.61 lbs)



## **COMPRESSOR / EXPANDER / LIMITER**

#### **SCL-2020**

**Compressor/ Expander/ Limiter** 

IU, 2 channel compressor/expander unit with gate function.

Peak limiter to protect from clipping. **Frequency response:** 20-20kHz.

T.H.D: Less than 0.05%. S/N ratio: More than 94dB.

Inputs/outputs/key in & key out via jack connector.

Compressor/expander

Threshold: 40dBu to +20dBu. Compression ratio:  $1:1 - \alpha:1$ . Attack time: 0.1-200 msec. Release time: 50 msec -4 sec

Gate (Downward expander)/Peak Limiter

**Gate threshold:**  $\alpha$  to -10dBu.

**Peak limiter threshold:** 10dB above to compressor threshold level.



**SCL-2020** 

MODEL	SCI-2020	
Audio input:	Type: $1/4''$ jack; Impedance: 60 k $\Omega$ balanced; Nominal Operating Level: $+4$ dBu/-10 dBu;	
•	Max. Input level: +21 dBu balanced and unbalanced; CMR @ IKHz: +40dB	
Audio output:	Type: $1/4''$ jack; Impedance: $>$ 40 k $\Omega$ balanced; Max. Output level: $+21$ dBu; Bandwidth: 20Hz to 20kHz. $+0$ , $-1$ dB	
•	T.H.D @ $+4$ dBu: 0.05% typ.; T.H.D @ $+2$ 0dBu: 0.1% typ.; IMD (SMPTE) @ $+1$ 0dBu: 0.01% typ.	
	Noise & Hum, unity gain: <-93dBu; Noise & Hum, fully off: <-97dBu;	
Compressor section:	Type: Interactive compressor; Threshold: Variable from $-40$ dB to $+20$ dB; Ratio: Variable from 1:1 to LIM;	
·	Attack: Variable from 0.1 to 200ms/20dB; Release: Variable from 0.05ms to 4 s/20dB; Output level: From -20 to $\pm$ 20dB	
Gate section:	Type: Interactive Expander / Gate ; Impedance: Variable from off to $\pm$ 15dB	
Dynamic enhancer section:	Type: Dynamically controlled frequency correction; Process: Variable from off to 6; CMR @ IKHz: < 60dB	
Function switches:	IN / OUT: Bypass switch; Auto: Programme-dependent attack and release time	
Indicators:	CLOSE LED for the Expander/ Gate; 8 element Gain Reduction meter; Led indicator for AUTO function; and COMPRESSOR status	
Power supply:	See the label on the apparatus	
Physical:	Dimensions (W $\times$ D $\times$ H): 483 $\times$ 200 $\times$ 44mm (19" $\times$ 7.9" $\times$ 1.7")	
-	Weight (Approx.): 3.0kg (6.61 lbs)	
	Crosstalk @ 20kHz: < -85dBu	

## **ACTIVE CROSSOVERS**

## **SCX-203S**



CGA-5U36

(3-way stereo + subwoofer)

#### **SCX SERIES CROSSOVER**

Offering a variety of options for any live sound reinforcement amplifier configuration, the SCX series makes state-of-the-art crossover technology affordable.

#### **FEATURES**

Crossovers provide precise frequency dividing for multi-amplified speaker applications, and are valuable tools in many professional live sound applications.

- Single rack space (IU)
- Shielded internal power supply with AC voltage select switch ( $\sim$ 115V/60Hz or  $\sim$ 230V/50Hz)
- Phase inversion switches
- Low-cut subsonic filters for low frequency driver protection
- Servo-balanced XLR inputs/outputs
- State-variable Linkwitz Riley 24dB/octave filters
- Switchable constant directivity horn equalization circuit for use with horns requiring a high frequency boost
- Allows low summing of all or any of the low outputs
- Peak LED indicators
- Mute switches
- Designed for the most precise accurate control
- Top audio performance with high slew rate circuitry and over 115dB dynamic range for clear transparent sound

### **SCX-P234**



#### SCX-P234

(2-way/3-way stereo,4-way mono)

#### **FEATURES**

- Unit with only a standard rack.
- Easily operated servo-balanced XLR input and output connectors.
- Linkwitz/riley 24dB/octave filters present the popular performance.
- Phase inversion switches offer a way for maintaining the just right phase.
- Each mute switch does the real role to mute the relative channel signal.
- Limiters run for better sound tune.
- 25Hz subsonic filter can be switched.
- LF sum output connectors for the low band signal.
- Constant directivity CD horn equalization.
- Power selector with ~115V/60Hz or ~230V/50Hz.

## **STEREO POWER AMPLIFIERS**

## **PSA-31500**

These rugged fan-cooled, 2-channel, 2-RU amps provide high-Value performance and power in a strong, compact chassis. The series comprise five models: the PSA-3I500.

#### **FEATURES**

- Independent, user-defeatable clip limiters. Fully selectable low-frequency filtering; choice of 30Hz. Stereo (dual-channel), parallel-input, or bridged mono operating modes.
- Balanced XLR inputs, 1/4" (6.3mm) TRS, and output barrier strip 3-speakon.
- Front panel LED indicators for signal and clip.



PSA-31500

MODEL	PSA-31500
Stereo mode:	8 $\Omega$ , 0.05% THD, 575W $ imes$ 2 ; 4 $\Omega$ , 0.05% THD, 750W $ imes$ 2 ; 2 $\Omega$ , 0.05% THD, 1400W $ imes$ 2
Bridge mono mode:	8 $\Omega$ , 0.05% THD, I500W ; 4 $\Omega$ , 0.05% THD, 2500W
Total harmonic distortion:	< 0.05% 20Hz-20kHz
Frequency response:	20Hz-20kHz, +0/-1dB at 10dB below rated output power -3dB points: ; 5Hz and 50kHz
Dynamic headroom:	2dB@ 4Ω
Distortion:	IMD (SMPTE) < 0.015%
Noise (below rated output):	100dB
Cross-talk:	More than 75dB
Voltage gain:	32dB
Input impedance:	<b>20</b> k $\Omega$ Balanced; 10k $\Omega$ Unbalanced
Connectors:	Input: Active balanced; XLR and 1/4" (6.3mm)TRS; Output: 3-speakon
Cooling:	Continuously variable speed fan, back to front air flow.
Power supply:	AC: 110-120V, 60Hz ; AC: 220-240V, 50Hz
Dimensions (W $\times$ D $\times$ H):	$483 \times 400 \times 89$ mm (2 rack space) (19" × 15.7" × 3.5") (rack mounting to rear support ears)
Weight (Approx.):	19kg (41.89 lbs)

## **STEREO POWER AMPLIFIERS**

## **PSA-21500**

This new line stereo power amplifier is designed for the Public Address systems with the high power outputs. With its best performance of the IO5dB S/N ratio and over 400 damping factor, etc, the audio signal can be reproduced lively and accurately.

#### **FEATURES**

- Compact construction for long term operation
- Sophisticated protection circuit
- LED indicates the operating status
- Speakon and binding-posts outputs
- 2U size for rack mounting
- Balanced XLR I/4" (6.3mm) TRS inputs





PSA-21500

MODEL	PSA-21500
Stereo mode:	8 $\Omega$ , $<$ 1% THD, 750W $\times$ 2; 4 $\Omega$ , $<$ 1% THD, 1125W $\times$ 2;
Bridge mono mode:	$8\Omega$ , $<$ 1% THD, 2250W
Total harmonic distortion:	< 0.05% 20Hz-20kHz
Power consumption:	2250W
Frequency response:	20Hz- $20$ kHz, $+0$ /- $0.5$ dB, at $1$ W power output
Sensitivity:	I.I Vms for rated power
S/N ratio (A-wtg.):	100dB
Slew rate:	> 40V/us
Damping factor:	>400
Voltage gain:	38dB
Cross-talk:	> 80dB
Input connectors:	XLR connector and 1/4" TRS jack
Input impedance:	$20$ K $\Omega$ balanced input, $10$ K $\Omega$ unbalanced input
Output connectors:	Speakon socket and binding posts
Gain controls:	2×41 detent potentiometers
Cooling system:	Aluminum heatsink and two fans with variable speed
Protection:	Temperature, DC voltage, Short circuit and Power on/off
Power supply:	Available for 120 or 220-240VAC 50/60Hz
Dimensions (W $\times$ D $\times$ H):	$483 \times 460 \times 88$ mm rack mountable, 2U (19" $\times$ 18.1" $\times$ 3.5")
Weight (Approx.):	24.0kg (52.91 lbs)



## **GRAPHIC EQ WITH REAL TIME ANALYZER**

## **RTA15 / RTA31**



RTAI5/ RTA3I with Line in, Mic. in, white & pink noise generator, I5/3I band EQ with real time analyzer, high-pass/ low pass filter, delay, volume control and bypass functions.

It provides precise audio signal control to fixed sound installation, live performance and studio applications.

- Frequency Response: 20Hz $\sim$ 20kHz( $\pm$ 0.5dB)
- Dynamic range: > 115dBu
- Input section: Digital AES/EUB (RTA31 only)
- Type: balanced XLR and I/4" unbalanced
- Impedance: IM  $\Omega$  / Stereo; 500k  $\Omega$  /Mono
- Digital processing:24-bit sigma-delta converters
- 7 segment for parameters setting and function select 3 x 7 LED array for 31-band EQ and L&R level display
- USB user interface for PC software control



#### **RTA 31**

MODEL	DTAIC / DTAO1
MODEL	RTA15 / RTA31
Frequency Response:	20Hz~20kHz, ±0.5dB
Dynamic Range:	>115dBu
Distortion (THD.):	< 0.01% at 1kHz (-10dBy)
Channel Separation:	100dB, 20Hz~20kHz
Input Section:	Digital: AES / EBU (RTA31 only)
Туре:	Balanced XLR and 1/4" unbalanced
Sensitivity:	-20dBu
Max. Input level:	+20dBu
Impedance:	IM $\Omega$ / Stereo ; 500k $\Omega$ / Mono
Output Section:	Digital: AES / EBU (RTA31 only)
Type:	Balanced XLR and 1/4" unbalanced
Max. Output level (bypass):	+20dBu
Impedance:	<500 Ω
Digital Processing	24-bit sigma-delta converters 48kHz Sampling Rates
Bypass:	Relay controlled Hard-bypass when Power OFF Bypass EQ, Volume and Delay when select function
Display:	7-segment for parameters setting and function select 3 x 7 LED array for 31-band EQ and L&R Level Display
Control:	9 buttons for different DSP functions selection 3ns for RTA and L/R channel setting
	USB user interface for PC software control
Power Supply:	AC 110~240V, 50 / 60 Hz ; AC 220~240V, 50 / 60Hz
Dimensions (W $\times$ D $\times$ H):	$483 \times 210 \times 40$ mm ( $19" \times 8.3" \times 1.6"$ )
Weight (Approx.):	2.2kg (4.85 lbs)

## DIGITAL SIGNAL PROCESSOR FOR SPEAKER MANAGEMENT DLM206



DLM206 is 2 In/6 Out digital signal processor for speaker management.

There are input gain, 8 bands parametric equalizer and delay functions for input section.

For output sections, it has input selection, 5 band parametric equalizer, crossover, delay, gain, limiter and mute functions. It has uer-friendly design at the front panel and it can be operated easily from connecting with computer.

- Frequency Response: 20Hz $\sim$ 20kHz(+-0.5dB)
- Dynamic range: > 115dBu
- Input section: Digital AES/EUB
- Type: balanced XLR, xdnxigi igy:-20dBu
- Impedance: IM  $\Omega$  / Stereo; 500k  $\Omega$  /Mono
- Output section: six channel.
- Digital processing:24-bit sigma-delta converters
- 9 buttons for different DSP functions selection
   4/6 buttons for different DSP functions selection
- USB user interface for PC software control



#### **DLM 206**

MODEL	DM206
Frequency Response:	20Hz~20kHz, ±0.5dB
S/N Ratio:	>115dBu
Distortion (THD.):	< 0.01% at 1kHz (-10dBv)
Cross-talk:	< 100dB below full scale
Input Section:	Digital: AES / EBU
Type:	Balanced XLR
Sensitivity:	-20dBu
Max. Input level:	+20dBu
Impedance:	IM $\Omega$ / Stereo ; 500k $\Omega$ / Mono
Output Section:	Six Channels
Type:	Balanced XLR
Max. Output level (bypass):	+20dBu
Impedance:	<500 Ω
Digital Processing	24-bit sigma-delta converters 48kHz Sampling Rates
Bypass:	Bypass all the DSP function
Display:	16 x 2 LED Display for parameters setting and function select; 7 x 8 LED for Input and Output Level Display
Control:	9 buttons for different DSP functions selection; 4/6 buttons for different DSP functions selection
	USB user interface for PC software control
Power Supply:	AC 110~240V, 50 / 60 Hz ; AC 220~240V, 50 / 60Hz
Dimensions (W $\times$ D $\times$ H):	483 × 210 × 40mm (19" × 8.3" × 1.6")
Weight (Approx.):	DLM204: 2.3kg (5.06 lbs); dlm206: 2.5kg (5.5 lbs)

## **COMPACT MIXERS**

#### **SM-Series**

There are total 6-Channel inputs for SM-62U mixing console: 2 mono MIC inputs, and 2 stereo line inputs. With USB interface + DSP Preset function.

#### **SM-62U**

- 2 MIC inputs, 2 stereo inputs, I AUX stereo inputs, I RCA 2-track input and I RCA 2-track output.
- Mono channels: Low-distortion MIC pre-amp with high dynamic range / Balanced XLR and TRS inputs / 3-Band EQ on each channel / +48V phantom power for dynamic mic. input.
- ullet STEREO channels: Low-distortion MIC pre-amp with high dynamic range / Balanced TRS inputs / 3-band EQ on each channel / +48V phantom power for dynamic mic. input.
- I AUX sends.
- Built-in 16 different digital effects sending signal to AUX sends or main mix bus.
- I AUX stereo inputs for aux returns.
- 4 segment signal level meters, use PHONES / C. ROOM LEVEL to change PHONES / CTRL-ROOM output signal.
- With USB INTERFACE you can record and playback.





SM-62U

MODEL	SM-62U		
Mono input channels:		Main mix section:	
Microphone input:	Electronically balanced, XLR-F	Max. output:	+22dBu un-balanced 1/4" jacks
Frequency response:	IOHz to 55kHz, ±3dB	AUX adjust range:	Off to $+10dB$
Distortion (THD+N):	$< 0.01\%$ at $+ 0$ dB, 22Hz $\sim$ 22kHz	Hum & Noise:	<-90dB @ 20Hz~22kHz, Ichannel & MAIN level: 0dB, the other:
Gain range:	OdB to -50dB		minimum
Phantom power:	+ 48V with switch control	Channel Crosstalk:	<-80dB @ 0dB 20Hz~22kHz, MAIN level: 0dB, the other: minimum
Gain range: Max. input: SNR: Impedances:	OdB to -40dB +22dB > 90dB line input: Electronically balanced JACK	DSP section: A/D and D/A converters: Type of effects:	24bit HALL,ROOM, VOCAL, PLATE, STEREO DELAY, REV + DELAY, REV + CHORUS
Sensitivity range: Microphone input:	+20dB to -20dB 1.5KΩ	Controls:	16 preset selector; Mute switch & Foot-switching & CLIP LED
All other input:	IOK $\Omega$ or greater / Tape out: IK $\Omega$	USB INTERFCACE:	
All other out:	120 Ω	Version:	Fully compliant with USB1.1
		Sampling rate:	8kHz, 16kHz, 32kHz, 11.023kHz, 22.05kHz, 44.1kHz and 48kHz
		Dimensions (W x D x H):	213 x 265 x 70mm (8.4" x 10.4" x 2.8")
		Weight (Approx.):	2.4 kg (5.3 lbs)

## **COMPACT MIXERS**

#### **SM-Series**

There are total 8-Channel inputs for SM-82U mixing console: 4 mono MIC inputs, and 2 stereo line inputs. With USB interface +DSP Preset function.

### **SM-82U**

- 4 MIC inputs, 2 stereo inputs, 2 AUX stereo inputs, 1 RCA 2-track input and 1 RCA 2 -track output.
- Mono channels: Low-distortion MIC pre-amp with high dynamic range / Balanced XLR and TRS inputs, low cut filters 75Hz 18dB / oct on each channel / 3-Band EQ on each channel / +48V phantom power for dynamic mic. input.
- STEREO channels: Balanced TRS inputs / 3-band EQ on each channel.
- SOLO, PFL switches, PEAK LED and high-quality 45mm fader on each channel.
- 2 AUX sends: AUXI are configured as switchable PRE / POST, AUX2 / DFX for internal DSP & discrete output.
- Built-in 256 different digital effects sending signal to AUX sends or main mix bus.
- 2 AUX stereo inputs for aux returns.
- 12 segment signal level meters, use PHONES / C. ROOM LEVEL to change PHONES / CTRL-ROOM output signal.
- With USB INTERFACE you can record and playback.





SM-82U

MODEL	SM-82U		
Mono input channels:		Main mix section:	
Microphone input:	Electronically balanced, XLR-F	Max. output:	+22dBu un-balanced I/4" jacks
Frequency response:	IOHz to 55kHz, ±3dB	AUX adjust range:	Off to + I0dB
Distortion (THD+N):	$<$ 0.01% at $+$ 0dB, 22Hz $\sim$ 22kHz	Hum & Noise:	<-90dB @ 20Hz~22kHz, Ichannel & MAIN level: 0dB, the other:
Gain range:	OdB to -50dB		minimum
Phantom power:	+48V with switch control	<b>Channel Crosstalk</b>	<-80dB @ 0dB 20Hz~22kHz, MAIN level: 0dB, the other: minimum
Stereo input channels:	- 10 ID	DSP section:	- No.
Mic. Gain range:	OdB to -40dB	A/D and D/A converters:	
Max. input:	+22dB	Type of effects:	HALL, ROOM, VOCAL, PLATE, PLATE REVERBS, REVERBS, MONO &
SNR:	>90dB		STEREO DELAY, CHORUS, FLANGER, VIBRATO, REV $+$ DELAY,
Impedances:	line input: Electronically balanced JACK		REV + CHORUS, $REV + FLANGER$ , $REV + VIBRATO$
Line Sensitivity range:	+20dB to -20dB	Controls:	16 preset selector; Mute switch & Foot-switching & CLIP LED
Microphone input:	$I.5K\Omega$		
All other input:	IOK $\Omega$ or greater / Tape out: IK $\Omega$	USB INTERFCACE:	
All other out:	I20 Ω	Version:	Fully compliant with USB1.1
		Sampling rate:	8kHz, 16kHz, 32kHz, 11.023kHz, 22.05kHz, 44.1kHz and 48kHz
		Dimensions (W x D x H):	250 x 312 x 73mm (9.8" x 12.3" x 2.9")
		Weight:	2.7 kg (6 lbs)



## **MIXING CONSOLE**

#### **SM-Series**

There are total I2-Channel inputs for SM-I22U mixing console: I2 mono MIC inputs, and 2 stereo line inputs. With USB interface + DSP Preset function.

### **SM-122U**

- 12 MIC inputs, 2 stereo inputs, 3 AUX stereo inputs, 1 RCA 2-track input and 1 RCA 2 -track output.
- Mono channels: Low-distortion MIC pre-amp with high dynamic range / Balanced XLR and TRS inputs / 3-Band EQ on each channel / +48V phantom power for dynamic mic. input.
- $\bullet$  STEREO channels: Balanced TRS inputs / +4/-10dB signal level controls / 4-band EQ on each channel.
- 8 CHANNEL INSERT and MAIN MIX INSERT.
- ALT 3/4 OUTPUTS and LEVEL control.
- ALT 3/4, PFL switches, PEAK LED and high-quality 60mm fader on each channel.
- 3 AUX sends: AUXI/2 are configured as switchable PRE / POST, AUX3 / DFX for internal DSP & discrete output.
- Built-in 256 different digital effects sending signal to AUX sends or main mix bus.
- 3 AUX stereo inputs for aux returns.
- 12 segment signal level meters, use C. ROOM SOURCE to change PHONES / CTRL-ROOM output signal.
- With USB INTERFACE you can record and playback.





SM-122U

MODEL	SM-122U		
Mono input channels		Main mix section	
Microphone input	Electronically balanced, XLR-F	Max. output	+22dBu un-balanced I/4" jacks
Frequency response	IOHz to 55kHz, ±3dB	AUX adjust range	Off to $+10dB$
Distortion (THD+N)	$< 0.01\%$ at $+ 0$ dB, 22Hz $\sim$ 22kHz	Hum & Noise	<-90dB @ 20Hz~22kHz, Ichannel & MAIN level: 0dB, the other:
Gain range	OdB to -50dB		minimum
Phantom power	+48V with switch control	Channel Crosstalk	<-80dB @ 0dB 20Hz~22kHz, MAIN level: 0dB, the other: minimum
-		Fader range:	Off to + IOdB
Stereo input channels Gain range		DSP section A/D and D/A converters	24bit
Gain range	OdB to -50dB	, ,	
Max. input	+22dB	Type of effects	HALL, ROOM, VOCAL, PLATE REVERBS, MONO&STEREO DELAY, CHORUS,
SNR	>90dB		FLANGER, VIBRATO, REV $+$ DELAY, REV $+$ CHORUS, REV $+$ FLANGER,
Impedances	Electronically balanced JACK		REV + VIBRATO
Sensitivity range	-10 dB / + 4 dB	Controls	16 preset selector; Mute switch & Foot-switching & CLIP LED
Microphone input	$1.5$ K $\Omega$		
All other input	$IOK\Omega$ or greater	USB INTERFCACE	
All other out	I20 Ω	Version	Fully compliant with USB1.1
Tape out:	IKΩ	Sampling rate	8kHz, 16kHz, 32kHz, 11.023kHz, 22.05kHz, 44.1kHz and 48kHz
·		Dimensions (W x D x H)	394 x 395 x 83mm (15.5" x 15.6" x 3.3")
		Weight (Approx.)	5.1 kg (11.3 lbs)

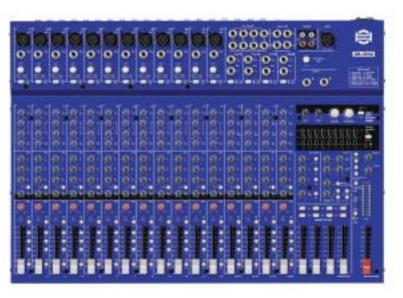
## **MIXING CONSONE**

#### **SM-Series**

There are total 20-Channel inputs for SM-204U mixing console: I2 mono MIC inputs, and 4 stereo line inputs. With USB interface + DSP Preset function.

#### **SM-204U**

- 12 MIC inputs, 4 stereo inputs, 4 AUX stereo inputs, 1 RCA 2-track input and 1 RCA 2 -track output.
- Mono channels: Low-distortion MIC pre-amp with high dynamic range / Balanced XLR and TRS inputs, low cut filters 75Hz 18dB / oct on each channel / 3-Band EQ on each channel / +48V phantom power for dynamic mic. input.
- STEREO channels: Balanced TRS inputs /+4/-10dB signal level controls /4-band EQ on each channel.
- I2CHANNEL INSERT and MAIN MIX INSERT.
- 4 SUBGROUP OUTPUS and LEVEL control.
- IMONO OUTPUTS and LEVEL control.
- MUTE, MIX, SUB switches, PEAK LED and high-quality 60mm fader on each channel.
- 4 AUX sends: AUX1/2 are configured as PRE, AUX3 is configured as switchable PRE / POST, AUX4 / DFX for internal DSP & discrete output.
- Built-in 256 different digital effects sending signal to AUX sends or main mix bus.
- 4 AUX stereo inputs for aux returns.
- 9-band EQ with ± 15dB level.
- 12 segment signal level meters, use C. ROOM PHONES to and PHONES to change CTRL-ROOM / PHONES output signal.
- With USB INTERFACE you can record and playback.



SM-204U

MODEL	SM-204U		
Mono input channels		Main mix section	
Microphone input	Electronically balanced, XLR-F	Max. output	+22dBu un-balanced I/4" jacks
Frequency response	IOHz to 55kHz, ±3dB	AUX adjust range	Offto+IOdB
Distortion (THD+N)	$<$ 0.01% at $+$ 0dB, 22Hz $\sim$ 22kHz	Hum & Noise	<-90dB @ 20Hz~22kHz, Ichannel & MAIN level: 0dB, the other:
Gain range	OdB to -50dB		minimum
Phantom power	+48V with switch control	Channel Crosstalk	<-80dB @ 0dB 20Hz~22kHz, MAIN level: 0dB, the other: minimum
		Stereo graphic EQ	±15dB@9 bands(63, 125, 250, 500, 1K, 2K, 4K, 8K, 16KHz)
Stereo input channels		DSP section	
Gain range	OdB to -50dB	A/D and D/A converters	24bit
Max. input	+22dB	Type of effects	HALL, ROOM, VOCAL, PLATE REVERBS, MONO&STEREO DELAY, CHORUS,
SNR	>90dB		FLANGER, VIBRATO, REV $+$ DELAY, REV $+$ CHORUS, REV $+$ FLANGER,
Impedances	Electronically balanced JACK		REV + VIBRATO
Sensitivity range	-10dB / + 4dB	Controls	16 preset selector; Mute switch & Foot-switching & CLIP LED
Microphone input	$1.5$ K $\Omega$		
All other input	IOK $\Omega$ or greater	USB INTERFCACE	
All other out	120 Ω	Version	Fully compliant with USB1.1
Tape out:	IK ()	Sampling rate	8kHz, 16kHz, 32kHz, 11.023kHz, 22.05kHz, 44.1kHz and 48kHz
-		Dimensions (W x D x H)	578 x 410 x 90mm (22.8" x 16.1" x 3.5")
		Weight (Approx.)	8.1 kg (18 lbs)



## **MIXERS**

## **XM-6 Series**

## **XM-6 / XM-6D**

There are total 6-Channel inputs for the XM-6/XM-6D mixing console: 2 mono MIC inputs, and 2 stereo Line Inputs. DSP Preset Functions:

- 00∼09: Echo
- 10∼19: Echo+Verb
- 20~29: Tremolo
- 30~39: Plate
- 40~49: Chorus
- 50∼59: Vocal
- 60~69: Rotary70~79: Small Room
- 80∼89: Flanger+Verb
- 90∼99: Large Hall



XM-6D

MODEL	XM-6/6D
Common features:	Extremely high headroom offering enough dynamic range
	Extra low distortion pre-amp section
	Better performance with excellent noise figures
	High quality potentiometers/faders with smooth feel
	Robust construction for long time operation
Main section:	• 2-Track inputs, assignable to Main Mix bus or Control Room/Headphone output
	I stereo AUX Returns can be used as the additional line inputs
	8-segment LED ladder for output level display
	Main Mix source matrix: 2-Track
	<ul> <li>Control Room source matrix: Main Mix, and 2-Track</li> </ul>
	Balanced TRS outputs
	Built-in DSP module, with 100 presets (only XM-6D)
Each mono channel:	<ul> <li>Gold plated XLR connector and 1/4" Jack are both provided for the Mic signal inputs</li> </ul>
	• Up to 40dB range Trim control
	• 3 band EQ with the sophisticated center frequency
	I AUX send buses for external effects or monitoring
	Peak LEDs on each channel
Each stereo channel:	Only Left input for mono application
	• 3 band EQ with the sophisticated center frequency
	I AUX send buses for external effects or monitoring
	Peak LEDs on each channel
Physical:	• Dimensions (W $\times$ D $\times$ H): 178 $\times$ 295 $\times$ 70mm (7" $\times$ 11.6" $\times$ 2.8")
	• Weight: 2.0kg (4.41 lbs)

## **MIXERS**

## **XM-8 Series**

## XM-8 / XM-8D

There are total 8-Channel inputs for the XM-8/XM-8D mixing console: 4 mono MIC inputs, and 2 stereo Line Inputs. DSP Preset Functions:

- 00∼09: Echo
- 10∼19: Echo+Verb
- 20~29: Tremolo
- 30~39: Plate
- 40~49: Chorus
- 50∼59: Vocal
- 60∼69: Rotary
- 70∼79: Small Room
- 80~89: Flanger + Verb
- 90~99: Large Hall



XM-8D

MODEL	XM-8/8D	
Common features:	Extremely high headroom offering enough dynamic range	
	Extra low distortion pre-amp section	
	Better performance with excellent noise figures	
	<ul> <li>High quality potentiometers/faders with smooth feel</li> </ul>	
	Robust construction for long time operation	
Main section:	2-Track inputs, assignable to Main Mix bus or Control Room/	<ul> <li>Balanced XLR outputs and un-balanced TRS outputs</li> </ul>
	Headphone output	<ul> <li>Built-in DSP module, with 100 presets (only XM-8D)</li> </ul>
	<ul> <li>2 stereo AUX Returns can be used as the additional line inputs</li> </ul>	<ul> <li>Foot switch for the remote control of the effect</li> </ul>
	<ul> <li>12-segment LED ladder for output level display</li> </ul>	
	Main Mix source matrix: 2-Track	
	<ul> <li>Control Room source matrix: Main Mix, and 2-Track</li> </ul>	
Each mono channel:	Gold plated XLR connector and 1/4" Jack are both provided for	<ul> <li>2 AUX send buses for external effects or monitoring</li> </ul>
	the Mic signal inputs	<ul> <li>AUX2 can be switched between post-fader and pre-fader</li> </ul>
	Up to 40dB range Trim control	<ul> <li>Peak LEDs on each channel</li> </ul>
	<ul> <li>Low Cut switch at 75Hz, with 18dB/Oct slope</li> </ul>	
	<ul> <li>Insert facility for extra signal processing</li> </ul>	
	<ul> <li>3 band EQ with the sophisticated center frequency</li> </ul>	
Each stereo channel:	Only Left input for mono application	
	<ul> <li>3 band EQ with the sophisticated center frequency</li> </ul>	
	<ul> <li>2 AUX send buses for external effects or monitoring</li> </ul>	
	Peak LEDs on each channel	
Physical:	• Dimensions (W×D×H): 275×353×80mm (10.8"×13.9"×3.2")	
	• Weight: 3.4kg (7.50 lb)	



## **MIXER / SWITCHING POWER MIXER**

## **XM-12 Series**

## XM-12 / XM-12D / XM-12DA

There are total I2-Channel inputs for the XM-I2/XM-I2D/XM-I2DA mixing console: 4 mono MIC inputs, and 4 stereo Line Inputs.

#### **DSP Preset Functions:** • 00∼09: Echo

- 10∼19: Echo+Verb
- 20~29: Tremolo
- 30~39: Plate
- 40~49: Chorus
- 50∼59: Vocal
- 60~69: Rotary • 70~79: Small Room
- 80~89: Flanger+Verb
- 90~99: Large Hall



XM-12DA

MODEL	XM-12/12D/12DA	
Common features:		
	<ul> <li>Extremely high headroom offering enough dynamic range</li> </ul>	
	Extra low distortion pre-amp section	
	Better performance with excellent noise figures	
	<ul> <li>High quality potentiometers/faders with smooth feel</li> </ul>	
Main section:	Robust construction for long time operation	Built-in DSP module, with 100 presets (only XM-12D/12DA)
	<ul> <li>2-Track inputs, with its independent level control, assignable to Main</li> </ul>	<ul> <li>Foot switch for the remote control of the effect (only XM-I2D/I2DA</li> </ul>
	Mix bus or Control Room/Headphone output	Built-in power amplifier (only XM-I2DA)
	<ul> <li>2 stereo AUX Returns can be used as the additional line inputs</li> </ul>	$ullet$ RMS 300W/Ch@4 $\Omega$
	<ul> <li>12-segment LED ladder for output level display</li> </ul>	EIAJ 700W/Ch $@4\Omega$
	<ul> <li>Main Mix source matrix: ALT3-4, and 2-Track</li> </ul>	(only XM-I2DA)
	<ul> <li>Control Room source matrix: Main Mix, ALT3-4, and 2-Track</li> </ul>	
Each mono channel:	<ul> <li>Balanced XLR outputs and un-balanced TRS outputs</li> </ul>	<ul> <li>2 AUX send buses for external effects or monitoring</li> </ul>
	<ul> <li>Gold plated XLR connector and I/4" Jack</li> </ul>	<ul> <li>AUXI can be switched between post-fader and pre-fader;</li> </ul>
	are both provided for the Mic signal inputs	and AUX2 can also be changed to pre-fader
	<ul> <li>Up to 40dB range Trim control</li> </ul>	<ul> <li>Peak LEDs on each channel</li> </ul>
	<ul> <li>Low Cut switch at 75Hz, with 18dB/Oct slope</li> </ul>	<ul> <li>Mute/ALT3-4 output bus option</li> </ul>
	<ul> <li>Insert facility for extra signal processing</li> </ul>	<ul> <li>PFL Solo function for level setting of each channel</li> </ul>
	Warm, natural 3 bands EQ, with the MID center frequency sweepable	
Each stereo channel:	<ul> <li>Only Left input for mono application</li> </ul>	<ul> <li>AUXI can be switched between post-fader and pre-fader;</li> </ul>
	ullet Operating level switch: $+$ 4dBu for professional	and AUX2 can also be changed to pre-fader
	equipment inputs, and — IOdBV for Hi-Fi	<ul> <li>Peak LEDs on each channel</li> </ul>
	<ul> <li>4 band EQ with the sophisticated center frequency</li> </ul>	<ul> <li>Mute/ALT3-4 output bus option</li> </ul>
	2 AUX send buses for external effects or monitoring	<ul> <li>PFL Solo function for level setting of each channel</li> </ul>
Physical:	• Dimensions (W $\times$ D $\times$ H): XM-12 / XM-12D: 420 $\times$ 310 $\times$ 90 / 45mm	
	XM-12DA: $427 \times 425 \times 138 / 96$ mm (16.8"	•
	<ul> <li>Weight: XM-12 / XM-12D: 5.1kg (11.24 lbs); XM-12DA: 10.6kg (23.37 lbs</li> </ul>	

## **MIXER / SWITCHING POWER MIXER**

## **XM-16 Series**

## XM-16 / XM-16D / XM-16DA

There are total I6-Channel inputs for the XM-I6/XM-I6D/XM-I6DA mixing console: 8 mono MIC inputs, and 4 stereo Line Inputs. **DSP Preset Functions:** 

- 00∼09: Echo
- 10∼19: Echo+Verb
- 20~29: Tremolo
- 30~39: Plate
- 40∼49: Chorus
- 50∼59: Vocal
- 60∼69: Rotary
- 70~79: Small Room
- 80~89: Flanger + Verb
- 90∼99: Large Hall





XM-16D

MODEL	XM-16/16D/16DA		
Common features:	<ul> <li>Extremely high headroom offering enough dynamic range</li> <li>Extra low distortion pre-amp section</li> <li>Better performance with excellent noise figures</li> </ul>	<ul> <li>High quality potentiometers/faders with smooth feel</li> <li>Robust construction for long time operation</li> </ul>	
Main section:	<ul> <li>2-Track inputs, with its independent level control, assignable to Main Mix bus or Control Room/Headphone output</li> <li>2 stereo AUX Returns can be used as the additional line inputs</li> <li>12-segment LED ladder for output level display</li> <li>Main Mix source matrix: ALT3-4, and 2-Track</li> <li>Control Room source matrix: Main Mix, ALT3-4, and 2-Track</li> </ul>	• Built-in DSP module, with 100 presets (only XM-16D/16DA) • Foot switch for the remote control of the effect (only XM-16D/16DA) • Built-in power amplifier (only XM-16DA) • RMS 300W/Ch@4 $\Omega$ EIAJ 700W/Ch @4 $\Omega$ (only XM-16DA)	
Each mono channel:	<ul> <li>Balanced XLR outputs and un-balanced TRS outputs</li> <li>Gold plated XLR connector and I/4" Jack are both provided for the Mic signal inputs</li> <li>Up to 40dB range Trim control</li> <li>Low Cut switch at 75Hz, with 18dB/Oct slope</li> <li>Insert facility for extra signal processing</li> <li>Warm, natural 3 bands EQ, with the MID center frequency sweepable</li> </ul>	<ul> <li>2 AUX send buses for external effects or monitoring</li> <li>AUXI can be switched between post-fader and pre-fader; and AUX2 can also be changed to pre-fader</li> <li>Peak LEDs on each channel</li> <li>Mute/ALT3-4 output bus option</li> <li>PFL Solo function for level setting of each channel</li> </ul>	
Each stereo channel:	<ul> <li>Only Left input for mono application</li> <li>Operating level switch: + 4dBu for professional equipment inputs, and - 10dBV for Hi-Fi</li> <li>4 band EQ with the sophisticated center frequency</li> <li>2 AUX send buses for external effects or monitoring</li> </ul>	<ul> <li>AUXI can be switched between post-fader and pre-fader; and AUX2 can also be changed to pre-fader</li> <li>Peak LEDs on each channel</li> <li>Mute/ALT3-4 output bus option</li> <li>PFL Solo function for level setting of each channel</li> </ul>	
Physical:	<ul> <li>Dimensions (W × D × H): XM-16 / XM-16D: 420 × 436 × 86mm (16.5" × 17.2" × 3.4")</li> <li>Weight (Approx.): XM-16 / XM-16D: 6.4kg (14.10 lbs)</li> </ul>		

## **MIXER / SWITCHING POWER MIXER**

## XM-20 Series

## XM-20 / XM-20D / XM-20DA

There are total 20-Channel inputs for the XM-20/XM-20D/XM-20DA mixing console: I2 mono MIC inputs, and 4 stereo Line Inputs. DSP Preset Functions:

- 00∼09: Echo
- 10∼19: Echo+Verb
- 20~29: Tremolo
- 30~39: Plate
- 40~49: Chorus
- 50∼59: Vocal
- 60~69: Rotary70~79: Small Room
- 80∼89: Flanger+Verb
- 90∼99: Large Hall



#### XM-20D

MODEL	XM-20/20D/20DA	
Common features:	<ul> <li>Extremely high headroom offering enough dynamic range</li> <li>Extra low distortion pre-amp section</li> <li>Better performance with excellent noise figures</li> </ul>	<ul> <li>High quality potentiometers/faders with smooth feel</li> <li>Robust construction for long time operation</li> </ul>
Main section:	<ul> <li>2-Track inputs, with its independent level control, assignable to Main Mix bus or Control Room/Headphone output</li> <li>2 stereo AUX Returns can be used as the additional line inputs</li> <li>12-segment LED ladder for output level display</li> <li>Main Mix source matrix: ALT3-4, and 2-Track</li> <li>Control Room source matrix: Main Mix, ALT3-4, and 2-Track</li> <li>Balanced XLR outputs and un-balanced TRS outputs</li> </ul>	• Built-in DSP module, with 100 presets (only XM-20D/20DA) • Foot switch for the remote control of the effect (only XM-20D/20DA) • Built-in power amplifier (only XM-20DA) • RMS 300W/Ch@4 $\Omega$ EIAJ 700W/Ch @4 $\Omega$ (only XM-20DA)
Each mono channel:	<ul> <li>Gold plated XLR connector and 1/4" Jack         are both provided for the Mic signal inputs</li> <li>Up to 40dB range Trim control</li> <li>Low Cut switch at 75Hz, with 18dB/Oct slope</li> <li>Insert facility for extra signal processing</li> <li>Warm, natural 3 bands EQ, with the MID center frequency sweepable</li> </ul>	<ul> <li>2 AUX send buses for external effects or monitoring</li> <li>AUXI can be switched between post-fader and pre-fader; and AUX2 can also be changed to pre-fader</li> <li>Peak LEDs on each channel</li> <li>Mute/ALT3-4 output bus option</li> <li>PFL Solo function for level setting of each channel</li> </ul>
Each stereo channel:	<ul> <li>Only Left input for mono application</li> <li>Operating level switch: +4dBu for professional equipment inputs, and -10dBV for Hi-Fi</li> <li>4 band EQ with the sophisticated center frequency</li> <li>2 AUX send buses for external effects or monitoring</li> </ul>	<ul> <li>AUXI can be switched between post-fader and pre-fader; and AUX2 can also be changed to pre-fader</li> <li>Peak LEDs on each channel</li> <li>Mute/ALT3-4 output bus option</li> <li>PFL Solo function for level setting of each channel</li> </ul>
Physical:	<ul> <li>Dimensions (W × D × H): XM-20 / XM-20D: 540 × 420 × 90 / 45mm XM-20DA: 645 × 425 × 138 / 96mm (25.4"</li> <li>Weight (Approx.): XM-20 / XM-20D: 7.6kg (16.76 lbs); XM-20DA: 14.2kg</li> </ul>	× 16.7" × 5.4" / 3.8")

## **MIXER / SWITCHING POWER MIXER**

## **XM-24 Series**

## XM-24 / XM-24D

There are total 24-Channel inputs for the XM-24/XM-24D mixing console: 16 mono MIC inputs, and 4 stereo Line Inputs. DSP Preset Functions:

- 00∼09: Echo
- 10∼19: Echo+Verb
- 20~29: Tremolo
- 30~39: Plate
- 40~49: Chorus
- 50∼59: Vocal
- 60∼69: Rotary
- 70~79: Small Room
- 80~89: Flanger + Verb
- 90~99: Large Hall



XM-24D

MODEL	XM-24/24D	
Common features:	<ul> <li>Extremely high headroom offering enough dynamic range</li> <li>Extra low distortion pre-amp section</li> <li>Better performance with excellent noise figures</li> </ul>	High quality potentiometers/faders with smooth feel     Robust construction for long time operation
Main section:	<ul> <li>2-Track inputs, with its independent level control, assignable to Main Mix bus or Control Room/Headphone output</li> <li>2 stereo AUX Returns can be used as the additional line inputs</li> <li>12-segment LED ladder for output level display</li> <li>Main Mix source matrix: ALT3-4, and 2-Track</li> </ul>	<ul> <li>Control Room source matrix: Main Mix, ALT3-4, and 2-Track</li> <li>Balanced XLR outputs and un-balanced TRS outputs</li> <li>Built-in DSP module, with 100 presets (only XM-24D)</li> <li>Foot switch for the remote control of the effect (only XM-24D)</li> </ul>
Each mono channel:	<ul> <li>Gold plated XLR connector and I/4" Jack are both provided for the Mic signal inputs</li> <li>Up to 40dB range Trim control</li> <li>Low Cut switch at 75Hz, with I8dB/Oct slope</li> <li>Insert facility for extra signal processing</li> <li>Warm, natural 3 bands EQ, with the MID center frequency sweepable</li> </ul>	<ul> <li>2 AUX send buses for external effects or monitoring</li> <li>AUXI can be switched between post-fader and pre-fader; and AUX2 can also be changed to pre-fader</li> <li>Peak LEDs on each channel</li> <li>Mute/ALT3-4 output bus option</li> <li>PFL Solo function for level setting of each channel</li> </ul>
Each stereo channel:	<ul> <li>Only Left input for mono application</li> <li>Operating level switch: +4dBu for professional equipment inputs, and -10dBV for HIFI</li> <li>4 band EQ with the sophisticated center frequency</li> <li>2 AUX send buses for external effects or monitoring</li> </ul>	<ul> <li>AUXI can be switched between post-fader and pre-fader; and AUX2 can also be changed to pre-fader</li> <li>Peak LEDs on each channel</li> <li>Mute/ALT3-4 output bus option</li> <li>PFL Solo function for level setting of each channel</li> </ul>
Physical:	<ul> <li>Dimensions (W × D × H): 649 × 436 × 86mm (25.6" × 17.2" × 3.4")</li> <li>Weight (Approx.): 8.9kg (19.62 lbs)</li> </ul>	



## **MIXING CONSOLE**

## XM-12D USB



This is total I2 channel inputs for new XM-I2D USB mixing console: 4 Mono MIC inputs, and 4 Stereo Line inputs, 2 Stereo AUX RETURN inputs, I RCA input, Built in USB port with direct MP3 player + DSP Preset function.

#### **DSP Preset Functions:**

- 00∼09: Echo
- 10∼19: Echo+Verb
- 20∼29: Tremolo
- 30~39: Plate
- 40~49: Chorus
- 50∼59: Vocal
- 60∼69: Rotary
- 70∼79: Small Room
- 80~89: Flanger + Verb
- 90~99: Large Hall



**USB Player** 





XM-12D USB

MODEL	XM-12D USB
Mono channels:	Balanced gold plated XLR and 1/4" TRS jack, INSRT socket
	Gain range: OdB~40dB, with switchable 75Hz 18dB/Oct low cut function
	3-band EQ with mid sweep(100Hz~8kHz)
	2 AUX send bus, AUX SEND I can be switched before/after faders
	AUX send 2 can be switched before faders
	Mute/ALT 3-4, Peak LEDs, PFL Solo function on each channel
	Phantom power: '+44~49V with switch control
Stereo input channels:	Balanced I/4" TRS jack
•	+4dBu/- $10$ dBV selector on each stereo channel
	Warm, natural 4-band fixed frequency EQ on each stereo channel
	2 AUX send bus, AUX SEND I can be switched before/after faders
	AUX send 2 can be switched before faders
	Mute/ALT 3-4, Peak LEDs, PFL Solo function on each channel
Mzin mix section:	Support USB 1/F MP3 player and 2-Track input assignable to Main Mix,
	Control Room/Phones outputs
	Highly accurate 12-segment bar graph meters
	Main mix matrix: ALT3-4 and 2-Track assignable to main mix bus
	Ctrl Room matrix: Main Mix, ALT3-4 and 2-Track(USB)
	Balanced XLR and unbalanced TRS output
DSP section:	Built-in 24 bit digital effect processor,100 preset(10preseter*10variation)
	Mute switch & Foot-switch with LED indicator
USB Player section:	USB port with direct MP3 player
	Only support MP3 format music playback
	Freq. response:20Hz~20kHz; S/N Ratio: >90dB
	Distortion(at IkHz):<0.04%
Dimensions (W $\times$ D $\times$ H):	420 x 310 x 45mm (16.5" x 12.2" x1.8")
Weight (Approx.):	5.1Kgs (11.24 lbs)

## **DJ MIXER**

## **DJM-412**

This is a PRE-AMP DJ MIXER series which has excellent performance and complete function that it makes your performance incisive and vivid.

#### Features:

- 4 space rack design; XLR I/4" combo Mic input
- 4 band master EQ and dual LED master an cue meter
- 3 band EQ per channel to control low level, mid level and high level frequency
- Push button CUE per channel with green LED indicator allowing CUE mix
- Talk over feature with sensitivity control T. BNC lamp port
- 1/4" headphone input; Selectable crossfader
- 2 band Mic EQ & Volume controls booth and zone outputs
- Front RCA AUX input for MP3 players, computers or any other audio source
- 5 lines, 2 MIC, 3 phone/ AUX convertible RCA inputs
- Master (XLR and I/4"), record, booth & send RCA output, I/4" zone output





**DJM-412** 

MODEL	DJM-412
Inputs:	Mic.: -55dB; Line / AUX: -10dB; Phono: -50dB (for output 1.0V)
S /N ratio:	Mic: 78dB; Line / AUX: 88dB; Phono: 80dB
Equalizer:	±10dB at 60, 800, 6.3k, 15kHz
Frequency response:	Mic.: 80-18kHz (±0.5dB)
. , .	Line / AUX: 20-22kHz (±0.5dB)
	Phono: $\pm 1$ dB for controlled attenuation of -3dB at 20Hz to reduce rumble and feedback
Outputs:	Line: 9V RMX (Max.)
	Headphone Amp.: $0.5W$ at $47 \Omega$
	Distortion: less than 0.05%
Controls (Front):	I. Fader-Start cross-fader with front panel controls
	2. Split / blend cue options
	3. 4-band ±10dB EQ for each channel
	4. Power switch
	5. Stereo meter for each channel
	6. Cues on each channel with cue / send rear output for sampling and booth cue monitor
	7. Neutrik " Combo" connector (1/4 or XLR plug) for DJ Mic.
	8. Front panel BNC light connector
Controls (Rear):	1. Stereo RCA input for CHI ~ 4
controls (near).	2. Balance output
	3. Master booth zone rec. Output-RCA
	4. AC select 115V / 230V input
Power consumption:	10W typical
i ower consumption.	17W with full headphone output
Dimensions (W $\times$ D $\times$ H):	480 x 180 x 108mm (19" x 7.1" x4.3")
Weight (Approx.):	4.7 Kgs (10.36 lbs)

## **CLASS-D POWERED BOX MIXER**

## NEW

## **DMB-8.700 USB**

SEIKAKU introduces the new cool shape powered mixers DMB series

This series is designed by the latest technologies which includes 8 main channels, 3 bands EQ, 2x350W RMS load at 4 ohms, 100 DSP effects and lots great functions It is easy to be carried to everywhere through included shoulder strap and easy to set up by its all-in-one design

#### Features:

- CLASS-D 2 x 350W RMS load at 4 ohms
- 6 MIC and 2 Stereo inputs
- DSP module with 100 presets
- USB port with direct MP3 player
- 7 band stereo graphic EQ for MAIN
- 3 bands EQ, Left / Right balanced control, volume control monitor level and effect adjustment for each channel
- 48V phantom, -20dB PAD for CHI~CH4
- Accurate output level indicator
- High efficiency switching mode power supply
- Perfect over-temperature, overload and shortcircuit protections for post digital power amplifier





**DMB-8.700 USB** 

MODEL	DMB-8.700 USB		
Input		Mid bell:	±15dB@2.5kHz
Input Impedance	Mic $2k\Omega$ Balanced ;Line $10k\Omega$ Balanced	Low-shelving:	±15dB @80Hz
Input Gain:	Mic + 40dB; Line $+25dB$	7-band EQ:	63Hz, 125Hz, 500Hz,
CMR at IkHz Line (20Hz-20kHz):	>60dB		1.5kHz, 3.5kHz, 8kHz, 15kHz
Frequency response:	Mic to Mix 20Hz-20kHz ± 3dB	DSP section	
Signal / Noise Ratio (20Hz-20kHz):	Mic EIN ref. 150 $\Omega$ -110dBu	A/D and D/A converters:	24Bit
System Noise (20Hz-20kHz)		DSP resolution:	24Bit
Summing Noise:	-90dBu	Type of effects:	Echo, Echo $+$ Verb, Tremolo, Plate,
Line to Mix Noise:	-86dBu		Chorus, Vocal, Rotary, Small Room,
Distortion at IkHz:	Mic to Mix (+30dB unity gain,		Flager + Verb, Large Hall
	+20 dBu output) Typ 0.03%	Presets:	100
Crosstalk at lkHz:	channel to channel > -80dB;	Controls:	100-Position PRESET selector, Clip LED,
	Mix to Mix>-80dB; Channel to Mix>-80dB		MUTE SWITCH with LED indicator
Fader Attenuation:	>100dB	Power Amplifier	
Output		Stereo Mode:	RMS: 350W x $2@4\Omega$ ; 180W x $@8\Omega$
Output Impedance:	All Line Outputs 120 $\Omega$ Balanced	Mono Mode:	RMS: 600W x 2 $@8\Omega$
All Outputs on I/4" jacks:	+22dBu	Power supply	
Headphones:	$+$ 22dBu $/$ 600 $\Omega$	USA / Canada:	100-120 VAC~60Hz
Equaliser		Europe:	220-240 VAC~50Hz
Hi-shelving:	±15dB@12kHz	U.K. / Australia:	240 VAC~50Hz

## INTELLIGENT P.A. SYSTEM (APS SERIES)



103 APS-2313DE / APS-2315DE

104 APS-2316DE / APS-2210DE

105 APS-600E

106 APS-1E/APS-2E

107 APS-3E / APS-4E

108 APS-5E



## APS SERIES SPEAKER MONITOR

## **APS-2313DE**

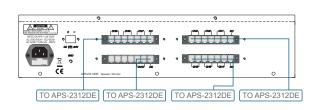
#### SPECIFICATION

- With DC 24V function.
- 10-channel inputs.
- Built-in monitor speaker with volume control.
- LED display input level.
- Each monitor channel equipped with LED display.

# O' & &



#### **APS-2313DE**



MODEL	APS-2313DE
Power Supply:	AC 110~120V / 220~240V
	60Hz / 50Hz; DC 24V
Power Consumption:	≤2W
Monitor Channel:	10 Channels
Input Voltage:	MAX 120V audio voltage
Output Power:	MAX 6W at 8 $\Omega$
Dimensions	483 × 88 × 370mm
(Wx H x D):	$(19" \times 3.5" \times 14.6")$
Weight:	6.5Kg (14.33 lbs)

## **DIGITAL RECORDER**

## **APS-2315DE**

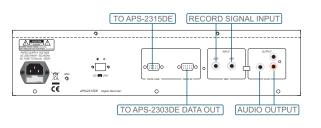
#### **SPECIFICATION**

- With DC 24V function.
- Built-in music and bell programs specific for school broadcast.
- I MIC and I LINE inputs, I output.
- Up to 24 minute digital recording IC for voice file, supplied 8-channel controls, each of them can REC./PLAY adjust level separately.
- Rewriting, recording, playing and rewind functions are available.
- Three chimes are available.
- LED indicator monitor the level of recording/playing.
- Manual control or link up the APS-2303DE for remote control.





#### **APS-2315DE**



MODEL	APS-2315DE	
Power Supply:	AC 110~120V / 220~240V, 60Hz / 50Hz; DC 24V	
Power Consumption:	<10W	
Input Sensitivity:	MIC: -52dBV/600 \(\Omega\) unbalanced; AUX: -22dBV/10kC	
	unbalanced	
Output Level:	0dBV 600 Ω	
Frequency Response:	50~4kHz	
S/N ratio:	MIC>60dB; AUX>75dB	
Program Channel:	8 channels	
Recording Time:	MUSICI: 6 mins; MUSIC2: 5 mins; MUSIC3: 4 mins;	
	MUSIC4: 3 mins; MUSIC5: 2 min; MUSIC6: 2 mins;	
	MUSIC7: I min; MUSIC8: I min;	
Dimension (W×H×D):	483 × 88 × 370mm (19" × 3.5" × 14.6")	
Weight (Approx.):	6.5Kg (14.33 lbs)	

## **PROFESSIONAL TUNER**

## **APS-2316DE**

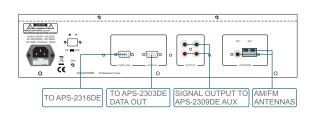
#### **SPECIFICATION**

- With DC 24V function.
- AM/FM band.
- Micro computer chip control, Digital tuning system.
- Touch button to control, LCD display.
- 20 radio-station memory function .
- Manual storage & automatic searching function.
- Level indicator & data memory function.
- Intelligent control via connecting the APS-2303DE.





**APS-2316DE** 



MODEL	APS-2316DE
Power Supply:	AC 110~120V / 220~240V
	60Hz / 50Hz; DC 24V
Receiver Range:	FM: 87~108MHz / AM: 522~1611KHz
Input Sensitivity:	FM: I6dBu; AM: 49dBu
Tuner Frequency step:	FM: 50KHz; AM: 9KHz
S/N ratio:	FM: Mono: 76dB, Stereo: 70dB / AM: 40dB
MID Frequency:	FM: 10.7MHz; AM: 9KHz
Output Level:	Iv/0dB/10k $\Omega$
Dimension (W x H x D):	483×88×370mm (19"×3.5"×14.6")
Gross Weight:	9.2kg (20.28 lbs)
Net Weight:	7.5kg (16.53 lbs)

## **HIGH POWER P.A. AMPLIFIER**

### **APS-2210DE**

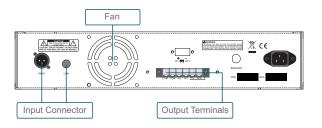
#### SPECIFICATION

- With DC 24V function.
- One Balanced XLR & one 6.3  $\phi$  stereo input sockets.
- High power output, rated power is AC 360W, THD 1%; DC 210W, THD 1%.
- LED indicators for CLIP/ PROT/ SIG.
- Low impedance  $4\Omega$  and high voltage of 70V/100V outputs.
- Provide with speaker protection circuit & signal compressor circuit.
- Connector :balanced XLR & I/4" TRS.





**APS-2210DE** 



MODEL	APS-2210DE
Power Supply:	AC 100~120V / 220~240V 60 / 50Hz; DC 24V
Input Connector:	Balanced XLR and 1/4"TRS
Input Impedance:	<b>20k</b> Ω
Input Sensitivity:	3dBu
Output Voltage/Impedance:	$0-4\Omega / 0-8\Omega ; 0-70V(13.6\Omega) / 0-100V(27.8\Omega)$
Output Power:	210W RMS; 300W MAX
Distortion:	1%
Frequency Response:	18Hz-18KHz -3dB
S/N ratio:	>80dB(unweighted), >100 dB(A weighted);
	>95dB(unweighted), >110 dB(A weighted)
Dimension(W×H×D):	483×88.8×400mm (19"×3.5"×15.7")
Gross Weight:	20.3kg (44.75 lbs)
Net Weight:	17.5kg (38.58 lbs)

## APS SERIES HIGH POWER P.A. AMPLIFIER

## **APS-600E**

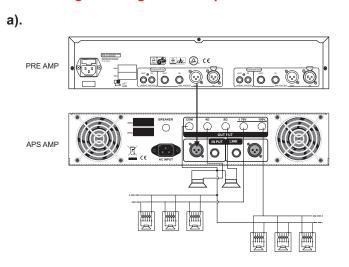
#### **SPECIFICATION**

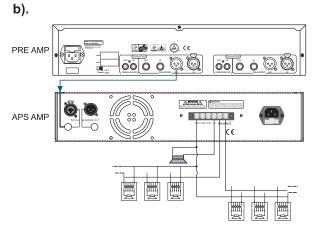
- High power output, RMS 600W
- LED indicators for POWER, SIGNAL, CLIP, PROT and TEMP
- One balanced XLR & one 6.3  $\phi$  input port
- ullet Low impedance  $4\Omega \, ullet \, 8\Omega$  and high voltage of 70V/100V output
- Functions of signal compressing, speaker protection, temperature and short circuit protection
- Built-in treble and bass control function
- LED siren and built-in sound siren for output obstacle
- Transient over load protection when the unit is turned on



#### **APS 600E**

#### **Connection Diagram of Single Model Outputs**





MODEL	APS-GOOE
Power supplier:	ACI10-120V / 220-240V ; 60Hz / 50Hz
Input connector:	Balanced XLR I/4"TRS
Input sensitivity:	OdB
Input impedance:	$20K\Omega$
Using method:	Single unit
Output voltage/	$0.4\Omega$
Impedance:	$0-8\Omega$ ; $0-70V(8.2\Omega)$ ; $0-100V(16.7\Omega)$
Output power (RMS):	600W
Distortion:	< 0.5%
Frequency response:	50Hz-22KHz / -3dB
SNR:	>90dB(@1KHz)
Dimensions (W $\times$ H $\times$ D):	483 × 88.8 × 400mm (19" × 3.5" × 15.7")
Weight (Approx.):	16.8kg (37.04 lbs)

## **VOLUME CONTROLLER**

## **APS-1E**

#### **SPECIFICATION**

- Power: 0-10W, the max power is up to 15W.
- With power expansion port.
- Priority switching function.

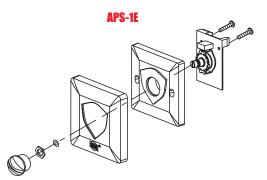
## **APS-2E**

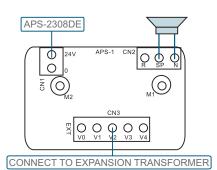
#### **SPECIFICATION**

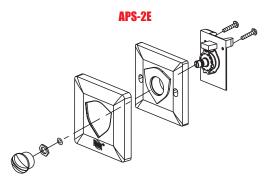
- Power: 0-50W, the max power is up to 60W.
- I alarm input, I background-music input and output.
- With power expansion port.
- Priorty switching function.

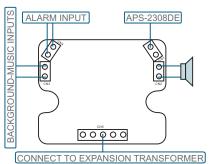












MODEL	APS-1E	MODEL	APS-2E
Input Voltage:	Max. 120V	Input Voltage:	Max. 120V
Input/ Output terminal:	R: COM; SP: output; N: input	Input channel:	2
Switching power terminal:	24V	Switching power terminal:	24V
Expansion port:	V0, V1, V2, V3,V4	Output terminal:	SP + COM
Max. power (expansion port):	200W	Expansion port:	V0, V1, V2, V3,V4
Dimension:	87 × 87 × 53mm (3.4" × 3.4" × 2.1")	Max. Power (expansion port):	200W
Gross Weight:	0.15kg (0.33 lbs)	Dimension:	87 × 87 × 53mm (3.4" × 3.4" × 2.1")
Net Weight:	0.08kg (0.18 lbs)	Gross Weight:	0.28kg (0.62 lbs)
		Net Weight:	0.21kg (0.46 lbs)



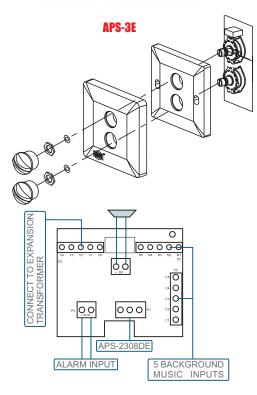
## APS SERIES VOLUME CONTROLLER

## **APS-3E**

### **SPECIFICATION**

- Power: 0-10W, the max power is up to 15W.
- I alarm input, 5 background-music inputs. (Option)
- With power expansion port.
- Prioty switching function.



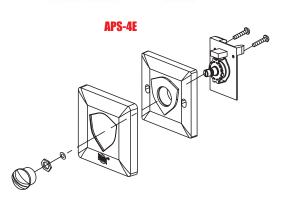


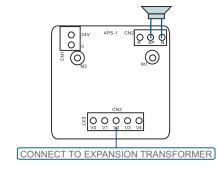
## **APS-4E**

### **SPECIFICATION**

- Power: 0-10W, the max power is up to 15W.
- With power expansion port.







MODEL	APS-3E	MODEL	APS-4E
Input Voltage:	Max. 120V	Input Voltage:	Max. 120V
Input channel:	2	Input/Output terminal:	R: COM; SP: output; N: input
Input channel for background music:	5 (option)	Expansion port:	V0, V1, V2, V3,V4
Expansion port:	T	Max. power (expansion port):	200W
Max. Power (expansion port):	200W	Dimension:	$87 \times 87 \times 53$ mm (3.4" $\times$ 3.4" $\times$ 2.1")
Dimension:	87 × 87 × 53mm (3.4" × 3.4" × 2.1")	Gross Weight:	0.15kg (0.33 lbs)
Gross Weight:	0.18kg (0.40 lbs)	Net Weight:	0.08kg (0.18 lbs)
Net Weight	0 11kg (0.24 lbs)		

## **VOLUME CONTROLLER**

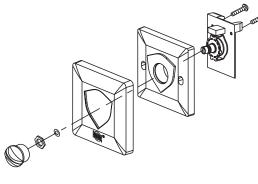
## **APS-5E**

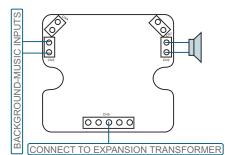
#### **SPECIFICATION**

- Power: 0-50W, the max power is up to 60W.
- I alarm input, I background-music input and output.
- With power expansion port.











MODEL	APS-5E
InputVoltage:	Max. I20V
Inputchannel:	
Outputterminal:	SP + COM
Expansionport:	
Max.power(expansionport):	200W
Dimension:	$87 \times 87 \times 53$ mm (3.4" $\times$ 3.4" $\times$ 2.1")
GrossWeight:	0.28kg (0.62 lbs)
NetWeight:	0.21kg (0.46 lbs)









