

## 2-CHANNEL AMPLIFIERS WITH DSP PROCESSOR

### SP-DSA24 SP-DSA23 SP-DSA22



#### Description:

The SP-DSA24 SP-DSA23 & SP-DSA22 is 2-channel flexible amplifiers with DSP processor for high performance installation sound system. The 2-channel power amplifiers with DSP processor are rated power output at 2 x 200W to 2 x 400W@ 8 Ohm which provide an enormous flexibility for different size sound system applications. The DSP processor in combination with remote management software gives user friendly experience with intuitive functions overview for easy configuration. Acoustics can be optimized using noise gate, matrix mixer, PEQ, crossover, delay, compressor, Butterworth, Bessel, Linkwitz6~24. These settings can be custom configured using the English remote software by mini USB port on front panel. Loudspeaker protection is provided by an output power limiter whereby the maximum output power for every channel (in Watt) can be configured. Configuration is made simple with loudspeaker presets and full system configurations which can be selected from a library and uploaded to the amplifier. This ensures the best acoustical performance with a bullet-proof loudspeaker protection. The amplifier built-in 2 Input 2 Outputs high performance DSP processor, which can ensure each input and output could be managed respectively. One mini USB on front panel for DSP configure. There are two balanced line inputs by XLR. The amplifiers support 100V & 8 Ohm both commercial audio & professional audio applications, where an output selector could enable this function for dedicated sound system. The installation of this 2-channel amplifier with DSP allows receiving and sending of low latency, high quality audio with multiple Presets. Dante (DT22) or AES67 (AES672) enabled network module are optional to add.

#### Feature:

- 2-channel amplifier with DSP processor
- Rated power output at 2 x 200W to 2 x 400W@ 8 Ohm
- Support 4Ω, 8Ω & 100V, mono, free matrix, stereo & bridge modes
- Built-in DSP with EQ, gain control, crossover, delay, limiter, high-pass filter & low-cut filter
- 31 bands of input PEQ and 10 bands of output PEQ
- 30 presets of DSP (Digital Signal Processor)
- 2 In 2 Out matrix DSP processor
- One mini USB port on front panel for DSP configure
- 0dBu/6dBu sensitivity adjustment for each input
- Remote GPIO of RS232 & RS485
- 1U height 19" rack mount type power amplifier
- Balanced line input by XLR for two channels
- Balanced link output by XLR for two channels
- Complete short circuit, overload, high temp, clip and DC protection
- Dante (DT22) or AES67 (AES672) enabled network module are optional to add

**Specification:**

Model	SP-DSA24	SP-DSA23	SP-DSA22
Description	2-Channel Amplifier with DSP Processor		
Rated Power Output 8 Ohm	2 x 400W	2 x 300W	2 x 200W
Rated Power Output 4 Ohm	2 x 800W	2 x 600W	2 x 400W
Rated Power Output 100V	400W	300W	200W
Bridge Output 8 Ohm	1000W	800W	600W
Speaker Output	4Ω, 8Ω & 100V, mono, free matrix, stereo, bridge		
DSP	EQ, gain control, crossover, delay, limiter, high-pass filter & low-cut filter, Butterworth, Bessel, Linkwitz6~24 Mini USB for configure, monitoring & control via fully manageable remote PC software		
Frequency Response	L/H Cut OFF 20Hz-20KHz (+1/-2dB) L/H Cut ON 70Hz-10KHz (+1/-3dB)		
Input	6dBu, Max. 16dBu (4.9V), balanced XLR by two channels		
THD	<0.1% (1KHz/-3dBv, 300W)		
S/N Ratio	6dBu: 94dB, 0dBu: 94dB		
Crosstalk	<-70dB		
Gain Control	6dBu: 30dB ( 29.5 times ) , 0dBu: 36dB ( 31.1 times )		
Protection	DSP limiter, High temperature, DC, high frequency, short circuit, back EMF, peak current limiter, Back EMF, Surge current limiter, startup delay, power circuit breaker protection, power over voltage , under voltage protection		
Display	240x240 pixel, IPS LCD colorful English Display		
Power Consumption	1000W	800W	500W
Power Supply	AC input switchable between 180~260V, 50-60Hz		
Dimension	484x300x44 mm		
Weight	3.4Kg		
<b>DSP (2 IN 2 OUT) Specifications</b>			
Input PEQ	31 PEQS		
Output PEQ	10 PEQS		
Crossover	Butterworth, Bessel, Linkwitz6~24		
Output Delay	Input Delay: 2 x 80ms / Output Delay: 4 x 20ms		
Output Compressor	Knee, Threshold, Attack, Ratio, Release		
Output Limiter	Threshold-90dBu~21dBu, release 1~2895ms		
DSP Presets	30 (one for factory preset)		
Control port	USB, RS485, RS232, GPIO		
DSP Channel	2 Inputs & 2 Outputs		