

# **SOLON series Digital Signal Processor**



SOLON series includes three versions of hardware: SOLON A, SOLON M/EX PLUS with a 128 channels digital bus cascading feature, SOLON M/DANTE PLUS with a 32 channels DANTE networking audio feature. The series meets the needs of different scenes for audio processing and transmission such as conference room, multi-function room, convention center, auditorium, administrative center, sports venue, theater and etc. The latest generation of AFC and AEC algorithms, high-performance DSP processors together offer you with outstanding audio effects. TCP/IP control mode easily realizes remote control. Visualized and analog operation interface in Chinese/English where users may adjust the processor in real-time just like operating an analog device, which is also easy for beginners.

#### Features:

- Excellent 24bit/48kHz sound quality;
- Enhanced microphone gain, 54dB pre-amp gain, 8 levels of gains for users to choose;
- Full-featured matrix mixer, offering flexible and easy signal routing operation to users, control the routing path and e-level with one key;
- **AFC:** Adaptive feedback cancellation, high-speed floating point algorithm offers feedback cancellation for every input of microphone to cancel system noises;
- **AGC:** Automatic gain control ensures stable volume output of the system, making sure that the volume in the audience section is not influenced by the distance between the speaker and the microphone;
- AM: Automatic mixing, intelligent management over multiple inputs of microphones, the gain-sharing algorithm ensures system stability, and the chairman microphone is adjustable;
- RS-232 dual-channel serial control interface: For the control of external devices such as: Video matrix and a compatible third party central control system such as AMX/Crestron;
- GPIO control interface: 8\*logic inputs and 8\*logic outputs;
- Adaptive POE control interface, which can be connected to the RC panel and supplies power





# **Specifications**

Model	SOLON 8A	SOLON 16A	SOLON 20A	SOLON 24A	SOLON 32A	
Input Channels	4	8	12	12	16	
Output Channels	4	8	8	12	16	
Scene management	8 sets of pre-set scenes					
	Pre-amplification, signal generator, expander, compressor, automatic					
Input channel features gain control, 5-section PEQ (except for SOLON 8A),					-section GEQ	
	LON 8A only)					
Output channel features	8-section PEQ, delayer, frequency divider, high-low pass filter, limiter					
Sampling rate	48kHz					
Dynamic range from input to output	>110dB					
Phantom power	DC 48V	DC 48V				
Input common-mode rejection	75dBu @ +20dBu , 60Hz					
Channel isolation	105dB					
Frequency response	20~20kHz (±0.5dB)					
Total harmonic distortion (THD+N)	≤0.005% @1kHz, +4dBu					
Max. input gain	54dB					
Input impedance	2KΩbalance					
Output impedance	100 ohm					
Max. output level	20dBu					
Power supply	AC 110V~230V AC, 50Hz /60Hz					
Working temperature	<b>0-40</b> °C					

# **SOLON Cascading Digital Signal Processor**



#### Features:

- 128 channels DIGI-EXP digital audio expansion bus, available for the cascading of 4 devices;
- Excellent 24bit/48kHz sound quality;
- Enhanced microphone gain, 54dB pre-amp gain, 8 levels of gains for users to choose;
- Full-featured matrix mixer, offering flexible and easy signal routing operation to users, control the routing path and e-level with one key;
- **AFC:** Adaptive feedback cancellation, high-speed floating point algorithm offers feedback cancellation for every input of microphone to cancel system noises;





- **AGC:** Automatic gain control ensures stable volume output of the system, making sure that the volume in the audience section is not influenced by the distance between the speaker and the microphone;
- **AEC:** Automatic echo cancellation, offering echo cancellation for every input, eliminating the sound picked up by the microphone from far end;
- **AM:** Automatic mixing, intelligent management over multiple inputs of microphones, the gain-sharing algorithm ensures system stability, and the chairman microphone is adjustable;
- RS-232 dual-channel serial control interface: For the control of external devices such as: Video matrix and a compatible third party central control system such as AMX/Crestron;
- GPIO control interface: 8\*logic inputs and 8\*logic outputs;

# **Specifications**

Model	SOLON M880/EX PLUS	SOLON M880/EX PLUS		
Input Channels	8	16		
Output Channels	8	16		
Scene management	8 sets of pre-set scenes			
Input channel features	Pre-amplification, signal generator,	expander, compressor, automatic		
	gain control, 5-section PEQ			
Output channel features	8-section PEQ, delayer, frequency divider, high-low pass filter, limiter			
Sampling rate	48kHz			
Dynamic range from input to output	>110dB			
Phantom power	DC 48V			
Input common-mode rejection	75dBu @ +20dBu , 60Hz			
Channel isolation	105dB			
Frequency response	20~20kHz (±0.5dB)			
Total harmonic distortion (THD+N)	≤0.005% @1kHz, +4dBu			
Max. input gain	54dB			
Input impedance	2KΩbalance			
Output impedance	100 ohm			
Max. output level	20dBu			
Power supply	AC 110V~230V AC, 50Hz /60Hz			
Working temperature	<b>0-40</b> ℃			





#### **SOLON Network-Based Digital Signal Processor**

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#### **Features:**

- **Dante Audio**: 32-channel low-delay Dante web audio transmission, 16 channels transmission and 16 channels receiving, realizing the expansion of web audio;
- 128 channels DIGI-EXP digital audio expansion bus, available for the cascading of 4 devices;
- Excellent 24bit/48kHz sound quality;
- Enhanced microphone gain, 54dB pre-amp gain, 8 levels of gains for users to choose;
- Full-featured matrix mixer, offering flexible and easy signal routing operation to users, control the routing path and e-level with one key;
- **AFC:** Adaptive feedback cancellation, high-speed floating point algorithm offers feedback cancellation for every input of microphone to cancel system noises;
- AGC: Automatic gain control ensures stable volume output of the system, making sure that the volume in the audience section is not influenced by the distance between the speaker and the microphone;
- **AEC:** Automatic echo cancellation, offering echo cancellation for every input, eliminating the sound picked up by the microphone from far end;
- **AM:** Automatic mixing, intelligent management over multiple inputs of microphones, the gain-sharing algorithm ensures system stability, and the chairman microphone is adjustable;
- RS-232 dual-channel serial control interface: For the control of external devices such as: Video matrix and a compatible third party central control system such as AMX/Crestron;
- GPIO control interface: 8\*logic inputs and 8\*logic outputs;
- Adaptive POE control interface, which can be connected to the RC panel and supplies power.

# **Specifications**

Model	M440/DANTE	M880/DANTE	M1208/DANTE	M1616/DANTE
	PLUS	PLUS	PLUS	PLUS
Input Channels	4	8	12	16



#### Shenzhen Tendzone Intelligent Technology Co., Ltd.

Email: <u>market@tendzone.com;</u> Website: http://en.tendzone.com

Address: Rm. 401, Blk. D, Bld. Huahan, No.16, Rd Langshan, Nanshan District, Shenzhen, China



# **Digital Signal Processor**

**SOLON** Series

Output Channels	4	8	8	16	
Scene management	8 sets of pre-set so	cenes			
	Pre-amplification,	signal generato	r, expander, comp	ressor, automatic	
Input channel features	gain control, 5-sec	ction PEQ ( Except	t for SOLON M440/	DANTE PLUS), 31-	
	section GEQ (SOLON M440/DANTE PLUS only)				
Output channel features	8-section PEQ, delayer, frequency divider, high-low pass filter, limiter				
Sampling rate	48kHz				
Dynamic range from input to output	>110dB				
Phantom power	DC 48V				
Input common-mode rejection	75dBu @ +20dBu , 60Hz				
Channel isolation	105dB				
Frequency response	20~20kHz (±0.5dB)				
Total harmonic distortion (THD+N)	≤0.005% @1kHz, +4dBu				
Max. input gain	54dB				
Input impedance	2KΩbalance				
Output impedance	100 ohm				
Max. output level	20dBu				
Power supply	AC 110V~230V AC	, 50Hz /60Hz			
Working temperature	<b>0-40</b> ℃				

