



# SOLON Series

## DIGITAL AUDIO PROCESSOR



## General A/V Integration Applications

The SOLON Series from Tendzone provides a vast range of versatile audio DSP tools for the general AV integrator. The SOLON Series DSP's come in 5 size configurations, ranging from 4x4 to 16x16.

SOLON Series DSP's offer feedback suppression, auto-mixing, and expansion (cascading). The SOLON M880/EX and 16x16/EX versions allow for 4-level expansion to create larger configurations of 16x16, 24x24, 32x32, 40x40, 48x48, 56x56 and 64x64. This expansion capability provides for added capacity in future upgrades. The SOLON Series also offers an 8x8 version with Dante™ signal extension.

All Tendzone DSP's come packed with a standard toolkit of powerful processing and integration features. AGC, compressor/limiter, expander, and matrix mixing are core features to all models. (A 5-band parametric EQ is standard on all size configurations, except 4x4). Tendzone's versatile speaker processor provides 8-band EQ, delay, crossover, and filtering. All Tendzone DSPs include room noise reduction, which provides for discreet removal of certain persistent ambient background sounds. In addition, all DSP models come with a standard Tendzone bonus feature: PTZ camera voice-tracking. A dedicated RS-485 port provides bi-directional commands to most robotic PTZ cameras, allowing for mic-triggered recall of camera shot presets. All of these functions are configured using Tendzone's highly-intuitive Tend-Ware GUI interface. Tendzone DSPs are backed by a standard 3-year parts and labor warranty.

Tendzone offers multiple control options for system integrators. Standard bidirectional control via RS-232, and GPI allows all Tendzone DSP's to work with standard third-party control systems, including AMX and Crestron. Local room control is also available via Tendzone's array RC-LINK wallplate controllers. These units provide bi-directional control and use PoE power, via standard Ethernet cabling. Tendzone DSP products are designed to be integrator-friendly, in terms of installation and field configuration.

The SOLON Series of DSP's provide a digital "Swiss Army knife" for AV integrators requiring versatile features, reliable performance, high stability, easy configuration, and high value at a cost-effective price.

## SOLON Series

Available in 4x4, 8x8, 12x8, 12x12, & 16x16

### SERIES FEATURES

- Expandable, Up To 4 Levels (8x8 & 16x16)
- Feedback Suppression
- Auto-Mixer
- Dante Version (4x4, 8x8, 12x8, 16x16)

### STANDARD FEATURES

- AGC, Expander, Compressor/Limiter
- \*5-Band Parametric EQ (Except 4x4)
- 31-Band Graphic EQ (Only in 4x4)
- Matrix-Mixer
- Speaker Processor (EQ, Delay, Crossover, Filters)
- Room Noise Reduction
- PTZ Camera Voice-Tracking
- RS-232 / GPI
- 8 Presets
- Tend-Ware Intuitive GUI Software
- AMX & Crestron Compatible
- 3-Year Warranty

### OPTIONS

- RC-LINK Panels
- \*In All Sizes Except 4x4

# SOLON SPECIFICATIONS

SOLON MODELS											
	8A	16A	20A	24A	32A	M880EX	M1616EX	M440 DANTE PLUS	M880 DANTE PLUS	M1208 DANTE PLUS	M1616 DANTE PLUS

GENERAL	
GAIN	UNBALANCED OUTPUT: -6dB; BALANCED OUTPUT: 0dB
FREQ RESPONSE	20-20,000Hz (+/-0.5dB)
THD+NOISE	<0.005% @ 1kHz + 4dBu
S/N RATIO	112dB @ 20-20,000Hz
CROSSTALK	112dB

AUDIO INPUTS												
INPUTS	4	8	12	12	16	8	16	4	8	12	16	
CONNECTOR	CAPTIVE SCREW TERMINAL (3.5MM/3-POLE)											
IMPEDANCE	20K OHM (BALANCED) 10K OHM (UNBALANCED)											
NOMINAL LEVEL	0.775V											
MAX INPUT GAIN	54dB											
CMRR @ 60Hz	105dBu @ +20dBu (60Hz)											
PHANTOM POWER	YES (+48V DC)											

AUDIO OUTPUTS												
OUTPUTS	4	8	12	12	16	8	16	4	8	12	16	
CONNECTORS	CAPTIVE SCREW TERMINAL (3.5MM/3-POLE)											
IMPEDANCE	100 OHMS											
MAX OUTPUT	20dBu											

AUDIO PROCESSING	
D/A CONVERSION	SAMPLING: 24BIT/48KHz
A-D DYN RANGE	≥ 116dB
D-A DYN RANGE	118dB
QUANTIZATION	48KHz/24BIT
I/O DYN RANGE	112dB
NOISE CANCELLATION	UP TO 30dB/SOFTWARE SELECTABLE

PTZ CAMERA VOICE TRACKING	
INCLUDED	YES
RS-232/485 & VISCA SUPPORT	YES

SERIAL CONTROL	
RS-232 PORT	1
CONNECTOR	DB-9(F)
RS-485 PORT	1 (FOR CAMERA CONTROL)
CONNECTOR	DB-9(F)
BAUD RATE AND PROTOCOL	300-57600 BAUD (9600 BAUD IS DEFAULT), 8 DATA BITS, 1 STOP BIT, NO PARITY, NO FLOW CONTROL
PIN CONFIGURATION	RS232: RX-PIN2, TX-PIN3, GND-PIN5 RS485: A-PIN3, B-PIN4, GND-PIN5

GENERAL PURPOSE INTERFACE (GPIO)	
GPIO	16 DEVICES, VIA DC VOLTAGE. (8 IN & 8 OUT). TWO AVAILABLE INPUT VOLTAGES (3.3V-5V & 12V). ONE OUTPUT VOLTAGE (3V)
CONNECTOR	DB-25(F)

PRESETS	
NUMBER	UP TO 8 AVAILABLE PRESETS
CONFIGURATION	VIA TENDZONE TEND-WARE

TENDZONE RC-LINK PANEL/M-LAN SUPPORT	
INCLUDED	YES
RC-LINK PORTS	1
M-LAN PORTS	1

SOLON MODELS											
	8A	16A	20A	24A	32A	M880EX	M1616EX	M440 DANTE PLUS	M880 DANTE PLUS	M1208 DANTE PLUS	M1616 DANTE PLUS

SOFTWARE SUPPORT/ COMPATIBILITY	
TEND-WARE	YES
WINDOWS 7/8	YES
THIRD-PARTY CONTROL	YES, VIA STANDARD RS-232 & ASCII COMMAND STRINGS (COMPATIBLE WITH AMX, CRESTRON, EXTRON, ETC)

EXPANSION BUSS(T-LAN)											
EXPANSION SUPPORT	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO
MAX LEVELS	-	-	-	-	-	4	4	-	-	-	-
SIGNAL TYPE	TENDZONE PROPRIETARY										
AUDIO FORMAT	24bit MSB/LIS										
CONNECTORS	RJ45										
INPUTS (RX)	NO	NO	NO	NO	NO	1	1	NO	NO	NO	NO
OUTPUTS (TX)	NO	NO	NO	NO	NO	1	1	NO	NO	NO	NO
MAX CABLE LENGTH	-	-	-	-	-	1METERS	1METERS	-	-	-	-
LATENCY	-	-	-	-	-	3MS	3MS	-	-	-	-

DANTE PORTS											
CONNECTORS	-	-	-	-	-	-	-	RJ45	RJ45	RJ45	RJ45
INPUTS (RX)	-	-	-	-	-	-	-	NO	NO	NO	NO
OUTPUTS (TX)	-	-	-	-	-	-	-	NO	NO	NO	NO
AUDIO FORMAT	-	-	-	-	-	-	-	PCM 24-BIT	PCM 24-BIT	PCM 24-BIT	PCM 24-BIT
LATENCY	-	-	-	-	-	-	-	1MS	1MS	1MS	1MS

HARDWARE	
CPU	TEXAS INSTRUMENTS OMAP-L138 C6000
TYPE	DSP+ARM (DUAL CORE)
PROCESSORS	2

POWER & COOLING	
POWER	110-230V AC @ 50/60 Hz
CONSUMPTION	60 WATTS
OPERATING TEMPERATURE	0-40 °C / 32-104 °F
HUMIDITY	10-90% NON-CONDENSING
COOLING TYPE	CONNECTION & FAN
MOUNTING	1RU (19x1.75" EIA STANDARD)

PHYSICAL											
DIMENSIONS	19x9.85x1.75 (in.) / 483x250x44 (mm)										
PRODUCT WEIGHT	6.06LBS (2.75KG)	6.17LBS (2.8KG)	6.53LBS (2.96KG)	6.66LBS (3.02KG)	6.81LBS (3.09KG)	6.22LBS (2.82KG)	6.81LBS (3.09KG)	6.02LBS (2.73KG)	6.12LBS (2.78KG)	6.38LBS (2.89KG)	6.6LBS (3.08KG)
SHIPPING WEIGHT	9.74LBS (4.42KG)	10.05LBS (4.56KG)	10.40LBS (4.72KG)	10.54LBS (4.78KG)	10.68LBS (4.85KG)	10.08LBS (4.58KG)	10.71LBS (4.86KG)	9.90LBS (4.49KG)	10.05LBS (4.57KG)	10.36LBS (4.71KG)	10.65LBS (4.84KG)

REGULATORY COMPLIANCE-SAFETY	
CE	YES
REGULATORY COMPLIANCE-EM/EMC	
CE	YES
REGULATORY COMPLIANCE-ENVIRONMENTAL	
ROHS	YES

WARRANTY	
LENGTH	3 YEARS
COVERAGE	PARTS & LABOR
TERMS	SEE TERMS & CONDITIONS AT WWW.TENDZONE.COM



## Shenzhen Tendzone Intelligent Technology Co., Ltd.

✉ sales@tendzone.com

🌐 http://en.tendzone.com

📍 Room 202, Block C, Huahan Building, No.16 Langshan Rd, Nanshan District, Shenzhen, China