MTX Series

Matrix Processor



YDIF AMX @crestron

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Rear Panel

Matrix processor equipped with a variety of programmable features designed to maximize the performance of sound systems in commercial installations.

- Inputs; 8 mono (mic/line), 2 stereo (line), 16digital (via YDIF*).
- Outputs; 8 mono (line), 16 digital (via YDIF*) .
- Can expand YDIF* equipped inputs and outputs with Exi8/Exo8 expanders.

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- SD Card Slot for playback of MP3/WAV files stored on an SD Memory Card.
- Functions for worry-free operation; Feedback Suppressor, Auto Gain Control, Priority Ducker.
- Two useful digital processors "Reverb" and "Echo" for entertainment applications.
- Remotely control the volume and presets of multiple zones with DCP series wall mount digital controllers.

YDIF [

- Wireless DCP for iPhone and iPod touch is free available on the App Store.
- Equipped with Network port and GPI ports that offer compatibility with touch panel controllers such as AMX/Crestron.
- Easy setup and parameter control with MTX Editor.

*YDIF: the newly developed digital transmission format; a unique propriety Yamaha technology that delivers 16ch audio and word clock transmission via standard CAT5 Ether cable.

OPTIONS

INPUT EXPANDER/OUTPUT EXPANDER

EXi8 Input Expander

EXi8 input expanders convert analog microphone/line audio to digital and transmits the signal using Yamaha's YDIF format. The EXi8's preamps can be controlled remotely from an MTX processor via Ethernet cable.





Is of DA converters that produce

EXo8 output expanders feature 8 channels of DA converters that produce high quality analog audio by converting digital output from MTX Series processors via YDIF.



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DIGITAL CONTROL PANELS

DCP Series Digital Control Panel provide flexible external control of several functions such as preset recall, levels, and SD card playback. All three models are available in either US or EU standardized sizes, built to meet the specifications of most regions around the globe.

DCP1V4S

1 Volume & 4 Switch equipped Wall Mount Control panel for MTX Series Easy connection by CAT5 carrying RS485 + power Maximum 8 DCPs can be connected to 1 MTX Series



4 Switch equipped Wall Mounut Control panel for MTX Series Easy connection by CAT5 carrying RS485 + power Maximum 8 DCPs can be connected to 1 MTX Series



DCP4V4S

4 Volume & 4 Switch equipped Wall Mounut Control panel for MTX Series Easy connection by CAT5 carrying RS485 + power Maximum 8 DCPs can be connected to 1 MTX Series



MTX Series

GENERAL SPECIFICATIONS

Memory bank	PRESET: 50					
Mixing Capacity	Mixing Channel : 8 Mono + 3 Stereo + 2 Effect Return + 8 Insert					
wixing capacity	Output Busses : 8 Mono					
	Mono CH : 3-band PEQ, Comp, Gate, Auto Gain Control, Feedback					
Input Channel Functions	suppressor (only available in ch 1-4)					
	Stereo CH: 3-band PEQ, Comp, Auto Gain Control					
Output Channel Functions	Room Delay, Room EQ, Speaker Processor, X-Over (1way,2way),					
	Delay, 6-band PEQ, Limiter					
Internal Processing Priority Ducking, Ambient Noise Compensator						
Sampling frequency rate 48kHz						
Signal delay Less than 2.5ms (AD-DA @48kHz)						
Total harmonic distortion*1	Less than 0.05% (+4dBu, Gain:-6dB),					
	Less than 0.1% (+4dBu, Gain:+66dB)					
Frequency response	20Hz to 20kHz, +0.5dB, -1.5dB					
Dynamic range	107dB (Gain:-6dB)					
Hum & noise level	-62dBu (Gain:+66dB), -81dBu (Gain:-6dB)					
(20Hz to 20kHz), Rs=150Ω						
Phantom Power	+48V					
Crosstalk (@1kHz)	-100dB					
Heat diffusion	43kcal/h max					
Power requirements	AC100V-240V 50Hz/60Hz					
Power consumption	50W					
Dimensions (W x H x D)	480 x 44 x 362mm (18.9" x 1.7" x 14.3"), 1U					
Weight	4.8kg (10.6lbs)					

*1 Total harmonic distortion is measured with a 18dB/Oct filter @80 *2 Hum & noise level is measured with a 6dB/oct filter @12.7kHz; ec infinite dB/Oct attenuation.

INPUT CHANNEL

MATRIX

BLOCK DIAGRAM INPUT PORT

Nº.

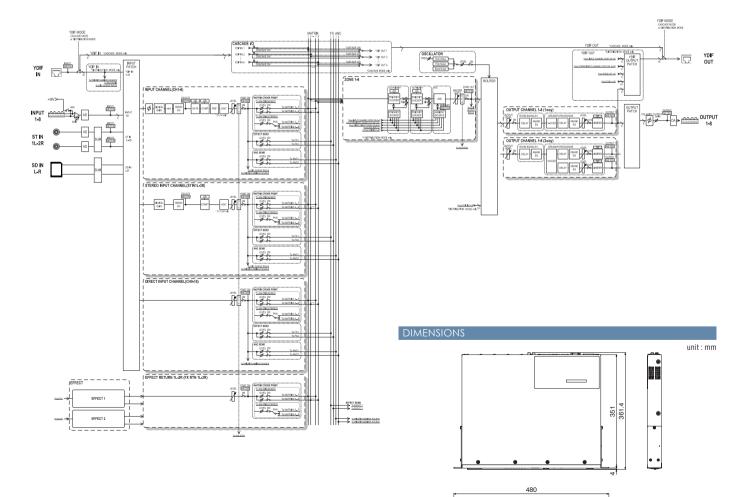
		-		Output level			Connector		
Output terminal					Nominal	Max. before clip			
OUTPUT 1-8		75Ω			+4dBu	+24dBu	Euroblo	ck*	
DIGITAL	INPL	JT AND OUT	TPU	t speci	FICATIO	ons			
Termin	Terminal			Level		IN/OUT	Conne	Connector	
YDIF In		YDIF		RS-42	22	16 IN	RJ45		
YDIF Out		YDIF	RS-4		22	16 OUT	RJ45		
Terminal		Format				-		nector	
Terminal		Format			Leve	1	Conr	nector	
GPI -		_		,		,			
8IN / 40UT		_							
	+V	_		DC5V		Eurobloc	k		
Network		Ethernet 100Base-TX		—			RJ-45		
		_		RS-232C (BAUD RATE : 38.4kbps or 115.2kbps)		s) D-sub 9n	in (Male		
REMOTE								ini (imaid	
	OUTPUT 1-8 DIGITAL Termin YDIF In YDIF Out CONTRO Terminal GPI 8IN / 40UT	OUTPUT 1-8 DIGITAL INPU Terminal YDIF In YDIF Out CONTROL I/0 GPI 8IN / 40UT +V	Impedance 0UTPUT 1-8 75Ω DIGITAL INPUT AND OUT Terminal Format YDIF In YDIF YDIF Out YDIF CONTROL I/O SPECIFIC Terminal Format GPI IN 8IN / 400T OUT	Output terminal Impedance inc OUTPUT 1-8 75Ω 10k DIGITAL INPUT AND OUTPU Terminal Format YDIF In YDIF YDIF YDIF Out YDIF YDIF YDIF Out YDIF YDIF GPI In — GPI OUT — 8IN / 400T H —	Output terminal Impedance nominal OUTPUT 1-8 75Ω 10kΩ Lines DIGITAL INPUT AND OUTPUT SPECI Terminal Format Leve YDIF In YDIF RS-42 YDIF Out YDIF RS-42 CONTROL I/O SPECIFICATIONS Terminal Format GPI 8IN / 400T IN — 0V-5V (IN	Output terminal Actual source Impedance For use with nominal Nominal OUTPUT 1-8 75Ω 10kΩ Lines +4dBu DIGITAL INPUT AND OUTPUT SPECIFICATION Terminal Format Level YDIF In YDIF RS-422 YDIF YDIF RS-422 YDIF Out YDIF RS-422 YDIF RS-422 YDIF YDIF Out YDIF RS-422 YDIF YDIF YDIF YDIF YDIF Out YDIF RS-422 YDIF <	Output terminal Actual Source Impedance For use with nominal Nominal Max. before clip OUTPUT 1-8 75Ω 10kΩ Lines +4dBu +24dBu DIGITAL INPUT AND OUTPUT SPECIFICATIONS Terminal Format Level IN/OUT YDIF In YDIF RS-422 16 IN YDIF Out YDIF RS-422 16 OUT CONTROL I/O SPECIFICATIONS CONTROL I/O SPECIFICATIONS Terminal Format Level 0UT OV-5V (IN8 Withstand voltage +24V 6PI 8IN / 40UT IN — VUT Open Collector +V — DC5V	Output terminal Actual source Impedance For use with nominal Nominal Max. before clip Con OUTPUT 1-8 75Ω 10kΩ Lines +4dBu +24dBu Eurobio DIGITAL INPUT AND OUTPUT SPECIFICATIONS Terminal Format Level IN/OUT Conne YDIF In YDIF RS-422 16 IN RJ45 YDIF Out YDIF RS-422 16 OUT RJ45 YDIF Out YDIF RS-422 16 OUT RJ45 SCONTROL I/O SPECIFICATIONS Control I/O SPECIFICATIONS Terminal Format Level Conne GPI 8IN / 40UT IN — 0V-5V (IN8 Withstand voltage +24V) Eurobioc WIT — 0pen Collector Eurobioc Eurobioc	

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ANALOG INPUT SPECIFICATIONS



ZONE

Input terminal		Actual load	For you with	Input			
	GAIN	Actual load impedance	For use with nominal	Nominal	Max. before clip	Connector	
INPUT 1-8	+66dB		50-600Ω Mics & 600Ω Lines	-62dBu	-42dBu	Euroblock*	
	-6dB	10kΩ		+10dBu	+30dBu	EUTODIOCK	
ST IN 1,2			600Ω Lines	-10dBV	+10dBV	RCA Pin Jack**	

ANALOG OUTPUT SPECIFICATIONS							
Output terminal	Actual Source Impedance	For use with nominal	Out	tput level			
			Nominal	Max. before clip	Connector		
OUTPUT 1-8	75Ω	10kΩ Lines	+4dBu	+24dBu	Euroblock*		

OUTPUT CHANNEL OUTPUT PORT