MTX Series

Matrix Processor

MTX5-D

Rear Panel

Dante™ YDIF AMX CRESTRON

MY16 2U

Matrix processor offers expandability and format compatibility with an on-board Dante network port and MY card slot.

- 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.
- 16 Channel I/O on-board Dante network port for larger installations.
- MY card slot offers further expandability and compatibility with other audio formats.
- 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.
- 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

YDIF 1U

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.

EXo8 Output Expander

YDIF 1U

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.

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

DCP4S

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

GENERAL SPECIFICATIONS

Memory bank	PRESET: 50
Mixing Capacity	Mixing Channel : 16 Mono + 3 Stereo + 2 Effect Return + 8 Insert
	Output Busses : 16 Mono
Input Channel Functions	Mono CH : 3-band PEQ, Comp, Gate, Auto Gain Control, Feedback suppressor (only available in ch 1-8)
	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 / 44.1kHz
Signal delay	Less than 3.0ms (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 (20Hz to 20kHz), Rs=150Ω	-60dBu (Gain：+66dB), -83dBu (Gain：-6dB)
Phantom Power	+48V
Crosstalk (@1kHz)	-100dB
Heat diffusion	55.9kcal/h max
Power requirements	AC100V-240V 50Hz/60Hz
Power consumption	65W
Dimensions (W x H x D)	480 x 88 x 351mm (18.9" x 3.4" x 13.9"), 2U
Weight	6.3kg (13.9lbs)

*1 Total harmonic distortion is measured with a 18dB/Oct filter @80kHz.
*2 Hum & noise level is measured with a 6dB/oct filter @12.7kHz; equivalent to 20kHz filter with infinite dB/Oct attenuation.

ANALOG INPUT SPECIFICATIONS

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

ANALOG OUTPUT SPECIFICATIONS

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

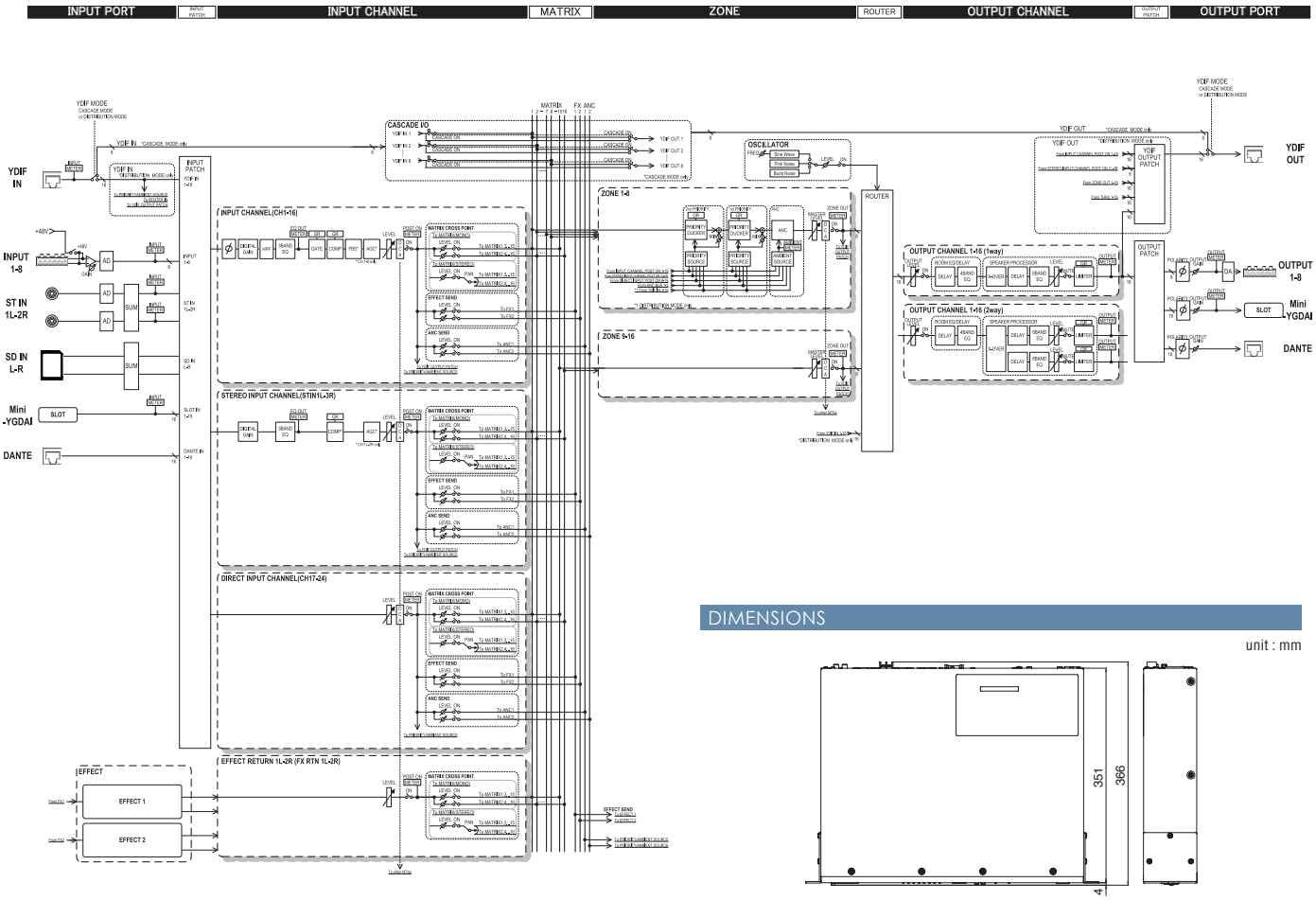
DIGITAL INPUT AND OUTPUT SPECIFICATIONS

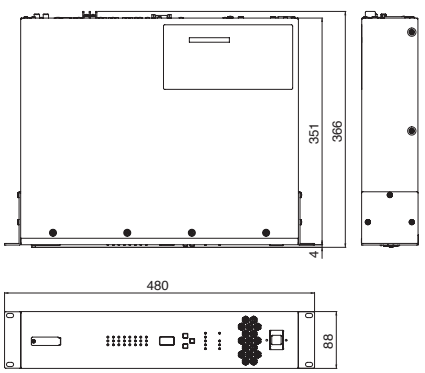
Terminal	Format	Level	IN/OUT	Connector
YDIF In	YDIF	RS-422	16 IN	RJ45
YDIF Out	YDIF	RS-422	16 OUT	RJ45
Primary / Secondary	Dante	1000base-T	16 IN / 16 OUT	RJ45

CONTROL I/O SPECIFICATIONS

Terminal		Format	Level	Connector
GPI 16IN / 8OUT	IN	—	0V-5V (IN16 Withstand voltage +24V)	Euroblock
	OUT	—	Open Collector	Euroblock
	+V	—	DC5V	Euroblock
Network		Ethernet 100Base-TX	—	RJ-45
REMOTE		—	RS-232C (BAUD RATE : 38.4kbps or 115.2kbps)	D-sub 9pin (Male)
DCP		—	—	RJ-45

BLOCK DIAGRAM



DIMENSIONS

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