Overview

DME7 is an open architecture-type digital signal processor, which offers state-of-the-art performance and connectivity, 96 kHz sound quality and support for up to 256 input/output channels.

Features

- 64 channels of Dante I/O and Matrix Mixer are available as standard
- Dante I/O and Matrix Mixer can be expanded with expansion kit DEK-DME7-DX64
- Each DEK-DME7-DX64 can add 64 channels of Dante I/O and Matrix Mixer
- Up to three DEK-DME7-DX64 can be added to enable up to 256 channels of Dante I/O and Matrix Mixer on a single DME7
- Supports redundant power supply
- Equipped with 8-channel audio interface function. (USB 2.0 Type C)
- SD Card slot for playback of MP3/WAV audio files stored on SD Card
- Built-in processing solutions include - Dugan Automixer, Acoustic Echo Canceller
- Remote control of levels and snapshots from the DCP series of wall mount controllers
- 16In/8Out GPI ports for additional external control
- Easy setup and system design with ProVisionaire Design software
- Compatible with ProVisionaire Control / Control Kiosk, a customizable control panel software
- ProVisionaire Touch Kiosk for iPad offers custom control panel design and operation, free from the App Store
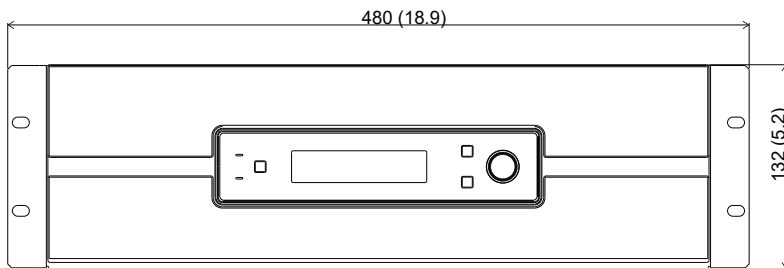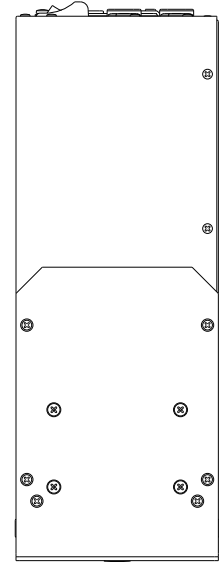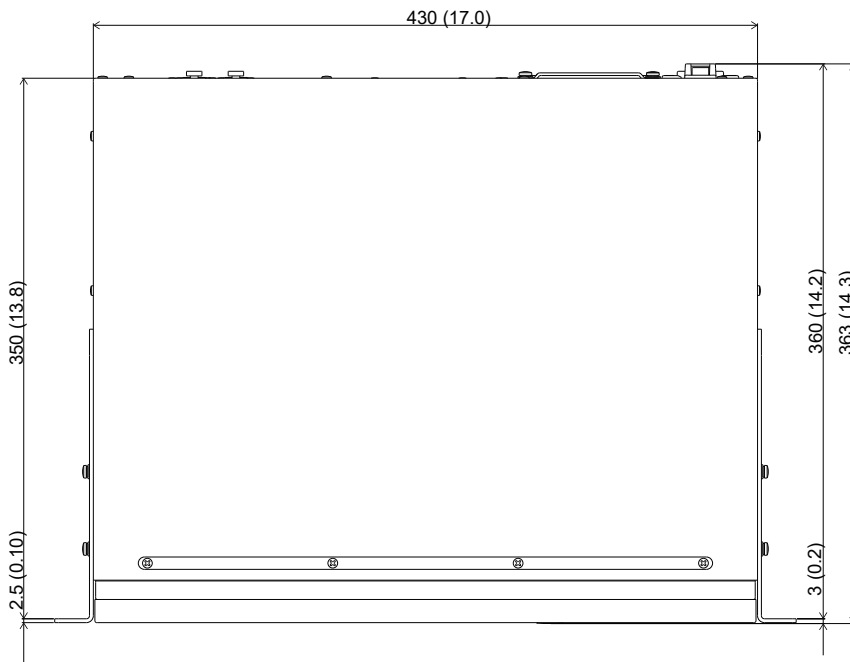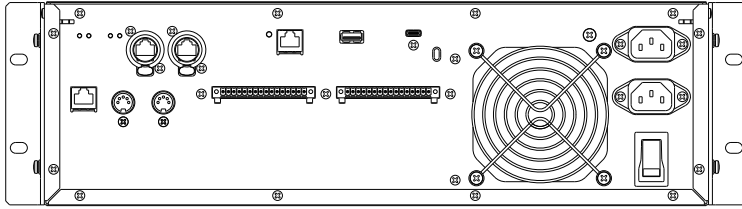- Low noise design that achieves NC20

Specifications

General Specifications

Internal processing		44.1/48/88.2/96 kHz
Latency		2.7msec (at Rio-D2 analog input/output with Dante latency at 0.25 msec, Dante through output on DME7)
Memory		Parameter sets: 1000
		Snapshots: 10000
Cooling		Constant-speed fan x1
Fan noise		NC20 (1m from front panel)
Dante interface	Channel count	64IN, 64OUT, redundant (expandable to 256IN, 256OUT)
	Sampling frequency	44.1/48/88.2/96 kHz
	Bit depth	24/32 bits
USB audio	Channel count	8 inputs, 8 outputs with SRC
	Sampling frequency	44.1/48/88.2/96 kHz
Connectors	Dante	etherCON x 2 (PRIMARY / SECONDARY)
		1000Base-T
	DCP	RJ45 x 1
	USB TO HOST	USB 2.0 Type-C connector for USB audio
	USB TO DEVICE	USB 2.0 Standard-A Connector for Save/Load
	Network	RJ45 x 1
		100Base-TX
	GPIO	Euroblock 16 terminals (mini) x2
		(GPI x16, GPO x8, +5V power supply x4)
	MIDI	DIN 5 pin ×2 (IN, OUT)
	AC IN	AC inlet (IEC, V-Lock) x 2
Memory device specifications	Compatible formats	File format: FAT32, FAT16
	Supported capacity	Maximum media capacity:
		SDHC: Maximum 32 GB
		SD: Maximum 2 GB
	Maximum file size	FAT16: Maximum 2 GB
		FAT32: Maximum 4 GB
Controls	Front panel	Rotary encoder and buttons for GUI control
		Operation lock feature (Full lock or Lock except volume and mute)
	Display	224 × 48 pixels, mono color with brightness adjustment
AC power requirement		100V-240V 50Hz/60Hz
Power consumption		100W
Heat dissipation		86.3kcal/h
Operating temperature		0°C to +40°C
Storage temperature		-20°C to +60°C
Dimensions (W x H x D)		480 x 132 x 363mm (3U) (18.90 x 5.20 x 14.29inch)
Weight		9.5kg (20.94lbs)
Rackmount conditions		No limit
Finish		Front panel: Aluminum (black anodized) Munsell approximate value N2.5
		Handle: Metal (black paint)
Included items		Setup Guide
		Two Euroblock plugs (16-pin, 3.50 mm pitch)
		Two power cords
		One cable hook
Separately sold items		DCP4S-US/EU
		DCP1V4S-US/EU
		DCP4V4S-US/EU
		DCH8
Expansion license		DEK-DME7-DX64

Dimensions

Unit: mm (inch)

430 (17.0)

350 (13.8)

2.5 (0.10)

360 (14.2)

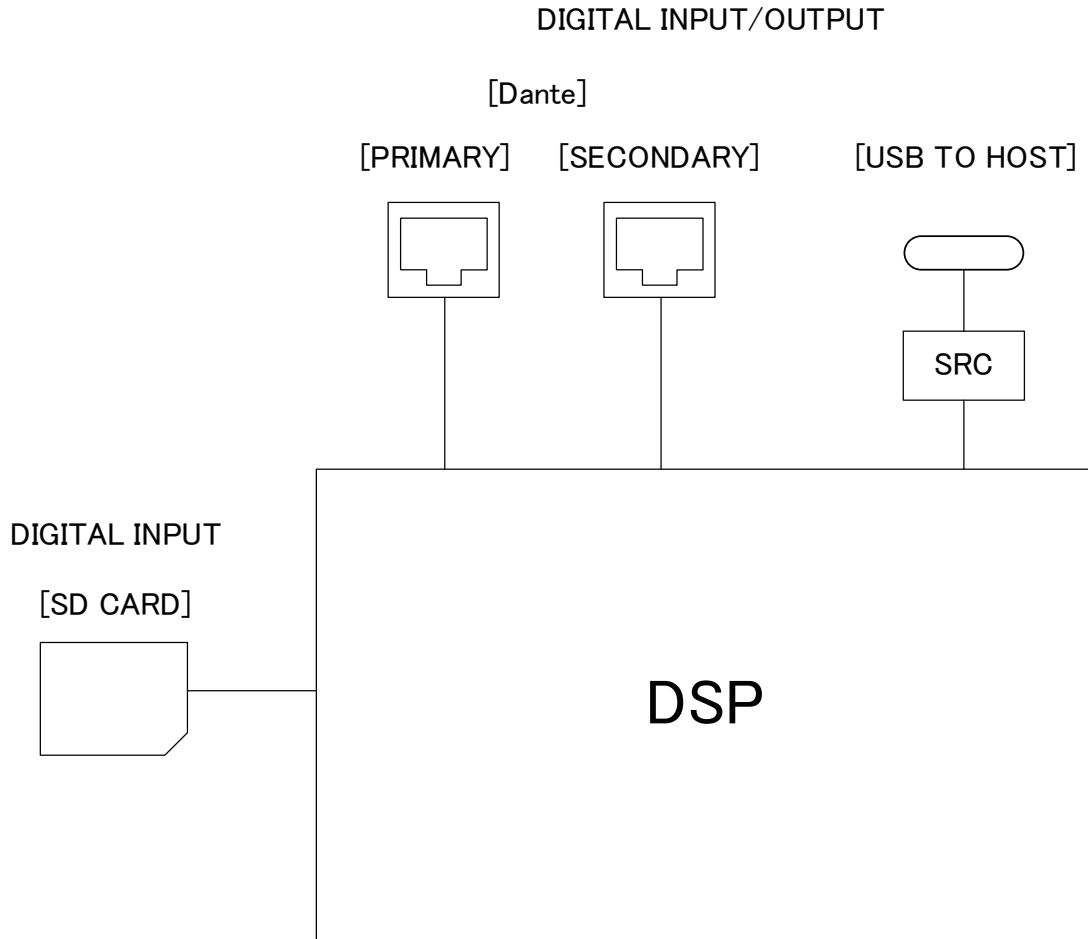363 (14.3)

3 (0.2)

480 (18.9)

132 (5.2)

Architectural and Engineering Specifications

The Yamaha DME7 Signal Processor shall be a high-performance open-architecture digital signal processor for professional audio systems. Internal system configurations and signal routing for the DME7 shall be created by using the ProVisionaire Design software application, downloadable from Yamaha websites at no charge. ProVisionaire Design shall allow DME7 components to be freely and flexibly laid out, and internal parameters to be adjusted to meet system requirements. A large number of audio components for audio and live performance system design shall be supported, from essentials such as Combiner, Delay, Dynamics, Effect, EQ, Filter, Meter, Matrix Mixer, Router, Source Selector, and Speaker Processor to high-level functions such as Comp260, DCA, Dugan Automixer, Rev-X and others. Utility and administrative functions shall be available via a basic control and display interface on the DME7 front panel.

Audio input and output shall be managed via a Dante network audio interface having primary and secondary etherCON connectors for redundancy. The Dante interface shall be capable of handling up to 64 channels of audio input and output, expandable to 256 channels of audio input and output (extra 64-channel licenses required). The DME7 shall provide digital audio processing at 44.1, 48, 88.2, and 96 kHz. A USB TO HOST connector shall allow the DME7 to be directly connected to a computer via a USB cable, functioning as an 8-in/8-out audio interface with a sampling frequency of 96 kHz. The DME7 shall have GPI I/O ports and an RJ45 Ethernet port that allow remote control from computer software, 3rd party control systems, computers running the ProVisionaire Control/Control Kiosk application, and smart devices running the ProVisionaire Touch Kiosk application. A separate RJ45 DCP port shall be provided for connection to dedicated DCP-series wall mount control panels. MIDI IN and OUT terminals shall be provided for communication and control via MIDI messages. A USB TO DEVICE connector shall allow the DME7 to be connected to an external USB memory device for convenient data storage and retrieval. An SD memory card slot on the DME7 front panel shall provide a convenient way to export project files and logs, and allow playback of MP3 or WAV files.

The DME7 shall be powered by an internal universal power supply with dual IEC V-lock AC inlets for power redundancy. Rated power consumption shall be 100 watts. Cooling shall be maintained by a single fixed-speed fan with an NC20 noise rating. Dimensions shall be 480 x 132 x 363 mm. Weight shall be 9.5 kg.

Block Diagram

DIGITAL INPUT/OUTPUT

[Dante]

[PRIMARY]   [SECONDARY]   [USB TO HOST]

SRC

DIGITAL INPUT

[SD CARD]

DSP