NT MATRIX

Audio Interface Unit

Overview

NT MATRIX is a system interface with a built-in DSP processor that performs routing matrix, mixing, and various processing of audio signals. It supports various forms of use by combining audio input and output cards and control cards. It also supports redundancy of power supply input and redundancy of audio signal processing unit (optional), and therefore is ideal for relaying, live broadcasting, program recording, and television and radio studios requiring high reliability.

Features

› Function - rich function

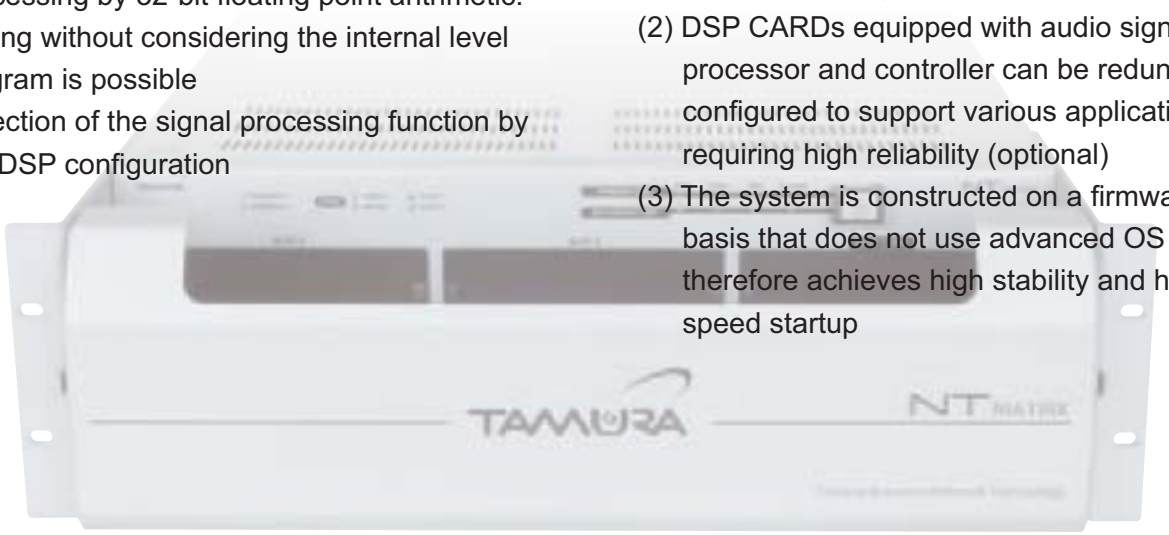
(1) 160 ch x 160 ch AUDIO MATRIX ROUTER
(2) Configurable DSP audio signal processing
(3) Six card slots (two of which support 64 ch audio input and output)
(4) Analog, digital audio I/O cards and option for GPIO and VCA control cards
(5) LOGIC function for logical setting of button ON/OFF status of GPIO and the touch panel
(6) GUI application that allows flexible configuration of user interface
(7) Size appropriate for mounting on EIA 19 inch rack

› Original technologies - advanced technology

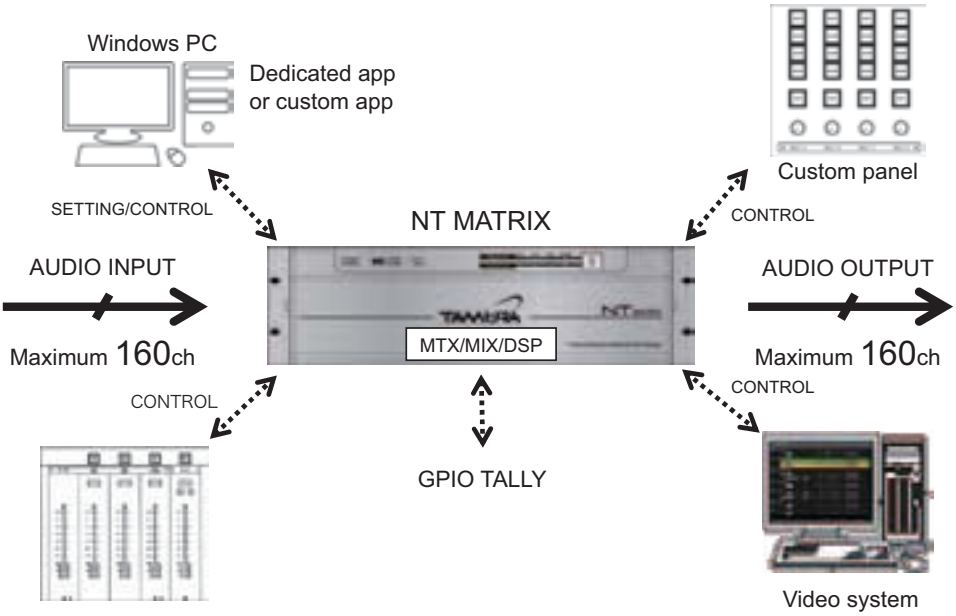
(1) Built-in high dynamic range audio signal processing by 32-bit floating point arithmetic. Mixing without considering the internal level diagram is possible
(2) Selection of the signal processing function by the DSP configuration

› Operational safety - high safety

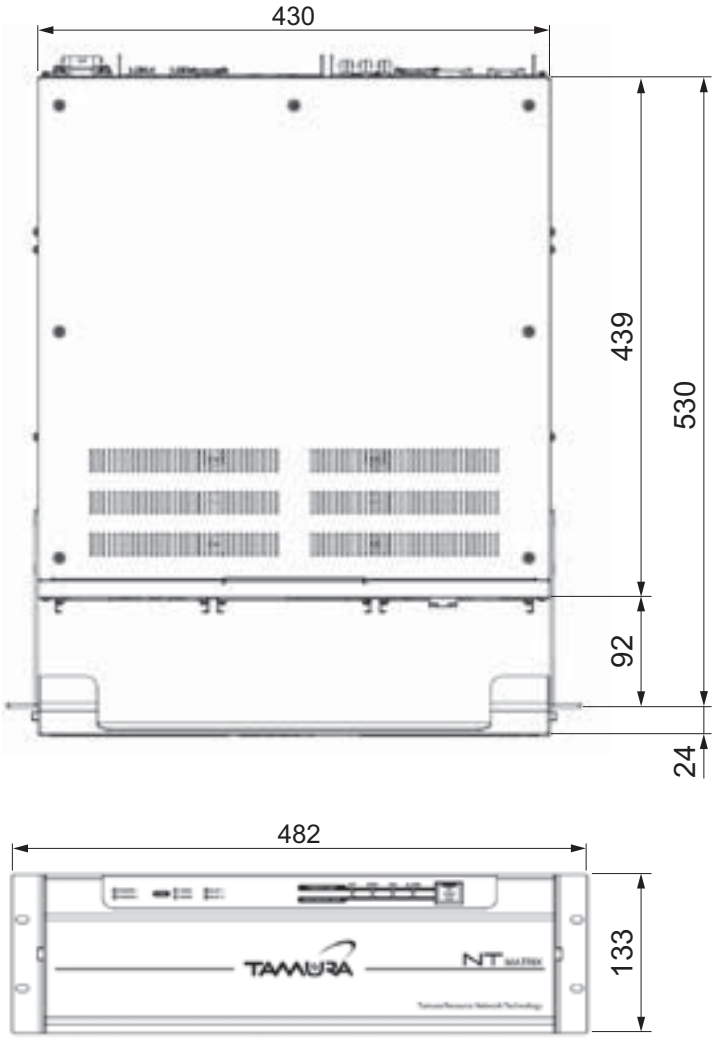
(1) Redundant configuration with two AC inputs for power supply
(2) DSP CARDs equipped with audio signal processor and controller can be redundantly configured to support various applications requiring high reliability (optional)
(3) The system is constructed on a firmware basis that does not use advanced OS and therefore achieves high stability and high-speed startup



NT MATRIX System



Dimensions



Custom UI

- Equipped as standard with GUI software that can customize operation parts
- DSP parameters are freely assigned to operation parts
- Parts such as buttons, faders, meters, lamps, texts, etc. are available as operation parts
- Customization is possible for the operation parts such as their color, characters, and sizes
- Graphical and design-friendly GUI can be constructed by the bitmap import function
- Test of GUI operation in the offline environment by EMULATE MODE

Specifications

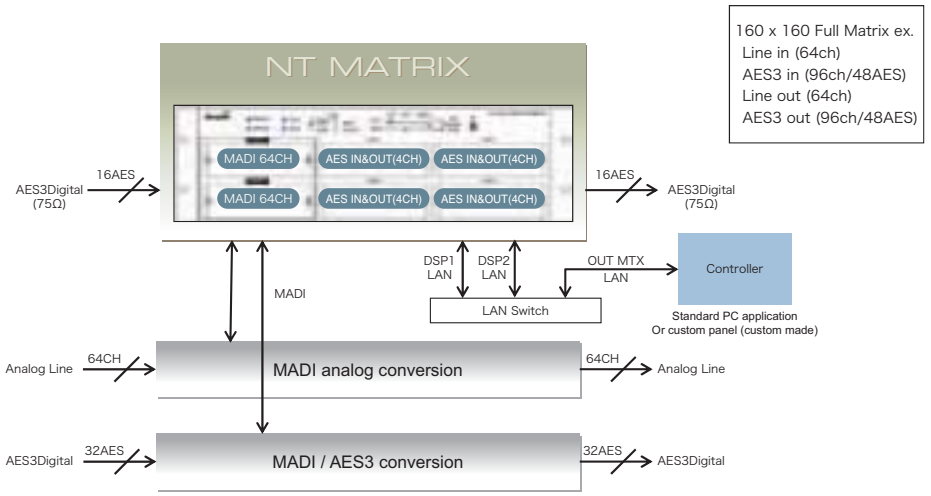
Items	Specification
AUDIO ROUTER	160ch x 160ch
DSP PROCESS	32in x 32out DSP x 6
DSP FUNCTION	32in x 32out Mix Matrix or Filter/Limitter , AUD , Internal OSC
CONTROL PORT	LAN/RS422SERIAL/GPIO/VCA
SYNCHRONIZED INPUT SIGNAL	WORD CLOCK/VIDEO
POWER SUPPLY	AC100-240V 50/60Hz
OPERATION TEMPERATURE	-10 ~ 40 ºC
EXTERNAL DIMENSIONS (WxDxH)	482 x 554 x 133

Option

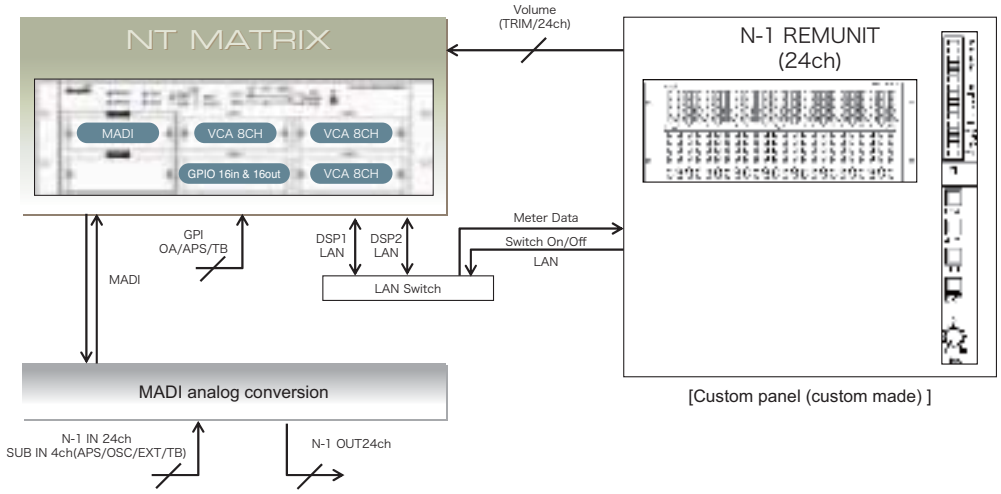
Items	Specification
DSP CARD	Redundancy DSP CARD
MIC/LINE INPUT CARD	MIC INPUT 4ch + LINE INPUT 4ch
LINE OUTPUT CARD	LINE OUTPUT 8ch
AES3id CARD	AES3id INPUT 4ch + AES3 id OUTPUT 4ch
MADI CARD	MADI INPUT 1ch + MADI OUTPUT 1ch(OPTICAL & COAXIAL)
Dante CARD	Dante 1ch (Primary & Secondary)
GPIO CARD	GPI INPUT 16ch + GPI OUTPUT 16ch
VCA CARD	VCA INPUT 16ch

Example of application

Audio Router(Matrix)



N-1 Sending back system



OTC system