

Owner's Manual

8 CHANNEL MASTER / SLAVE UNIT

Model **MS-8**



Introduction

Thank you utilizing NetCIRA by Fostex Model MS-8.



The MS-8 is a unit which converts between conventional audio signals and the EtherSound network audio protocol. Depending on whether an optional input card or output card is installed, the MS-8 acts as a transmitter (master) or receiver (slave) respectively. When an optional input card is installed, the unit receives the audio signals, converts them to the EtherSound format network audio protocol and transmits them. When an optional output card is installed, the unit receives the EtherSound network audio protocol, converts it to audio signals and feeds them.

MS-8 provides an RS232C port (D-sub 9-pin) which allows the unit to interact with external control devices, as well as WORD IN and OUT connectors which allows the unit to synchronize with external digital equipment.

Depending on the type of audio data to be received or fed, you can choose from an extensive range of input and output option cards including AES/EBU digital, ADAT optical, balanced analog (XLR or EURO connectors) and unbalanced analog (RCA pin) format.

<Note>

The option cards should be installed by our authorized service staff. Ask to your installer/dealer or the nearest NetCIRA by Fostex service station.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER - SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>		

"WARNING"

"TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE."

SAFETY INSTRUCTIONS

1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions - The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions - All operating and use instructions should be followed.
5. Water and Moisture - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
6. Carts and Stands - The appliance should be used only with a cart or stand that is recommended by the manufacturer.



An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

7. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

<p>CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.</p> <p>ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU' AU FOND.</p>



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

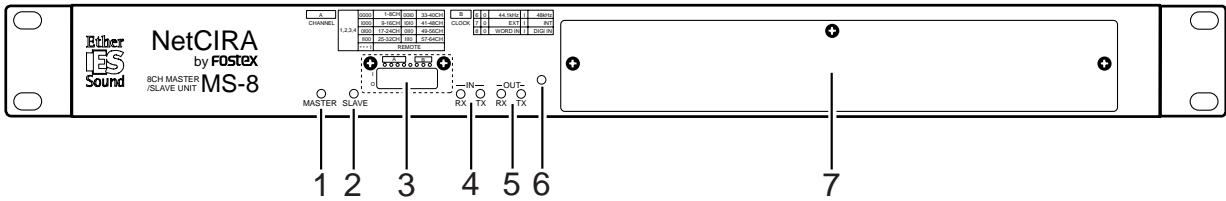


The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

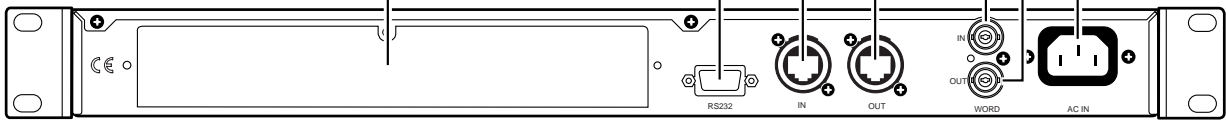
10. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. Grounding or Polarization - The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
12. Power Cord Protection - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
13. Cleaning - The appliance should be cleaned only as recommended by the manufacturer.
14. Nonuse Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
15. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
16. Damage Requiring Service - The appliance should be serviced by qualified service personnel when:
 - A. The power supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled into the appliance; or
 - C. The appliance has been exposed to rain; or
 - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
 - E. The appliance has been dropped, or the enclosure damaged.
17. Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.
18. The appliance should be situated away from drops of water or spray of water.
19. Objects containing liquid such as vase must not be put on the appliance.
20. The appliance is not completely isolated from the power supply even if the power switch is at off position.

Names and Functions

Front panel



Rear panel



1) MASTER indicator

This indicator is lit when an optional input card is installed to the unit and the power is turned on. In other words, it is lit when the unit acts as the master.

2) SLAVE indicator

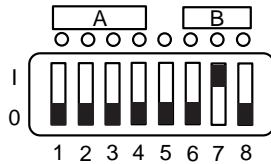
This indicator is lit when an optional output card is installed to the unit and the power is turned on. In other words, it is lit when the unit acts as a slave.

3) DIP switches

1 - 3	Used to set the output (or input) channel.
4	Selects whether the output (or input) channel is set locally (by switches 1 through 3) or remotely (externally).
5	Unused (for the future expansion).
6	Selects Fs (44.1 or 48) when the reference clock is set to INT (internal clock).
7	Selects the reference clock (INT or EXT).
8	Selects the external sync signal (WORD IN or DIGI IN).

* Depending on the type (output or input) of the optional card installed, these switches are used to set the output or input channel.

* Factory preset condition
Only "switch #7" is set to "1".
All other switches are set to "0".



1	2	3	Output Channel (Input Channel)	4	6
0	0	0	1-8CH	0 LOCAL	0 44.1kHz
1	0	0	9-16CH	1 REMOTE	1 48kHz
0	1	0	17-24CH		
1	1	0	25-32CH		
0	0	1	33-40CH		
1	0	1	41-48CH		
0	1	1	49-56CH		
1	1	1	57-64CH		
			7		8
			0 EXT	0 WORD IN	
			1 INT	1 DIGI IN	

4) IN (RX, TX) indicator

This indicator shows the condition of receiving data at the IN port. When it is lit, the unit is receiving audio or control data.

5) OUT (RX, TX) indicator

This indicator shows the condition of transmitting data at the OUT port. When it is lit, the unit is transmitting audio or control data.

6) Reset switch

If the MS-8 appears not to be functioning or is not recognised on the NetCIRA network, press the recessed "RESET" button with a pointed object. If the MS-8 is set to "REMOTE" mode (DIP Switch No. 4 is set to "1"), the input / output channels will revert to those last written to its EEPROM memory.

7) Optional card slot

An optional input (or output) card can be installed to either front or rear slot.

<Note>: The optional card should be installed by our authorized service staff. Ask to your dealer or the nearest NetCIRA Fostex service station.

8) RS232C port (D-sub 9-pin)

This port is connected to the serial port of a personal computer.

9) IN port (EtherCon)

This port is connected to the upstream LAN cable for receiving data. Note that when the unit is functioning as primary master, you do not have to make connection of this port.

10) OUT port (EtherCon)

This port is connected to the downstream LAN cable for transmitting audio and control data.

11) WORD IN connector (BNC)

This connector receives a word clock from an external digital device.

12) WORD OUT connector (BNC)

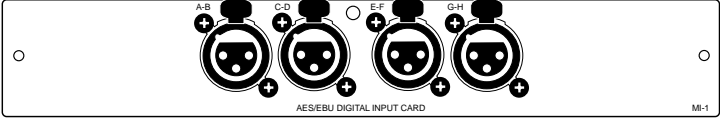
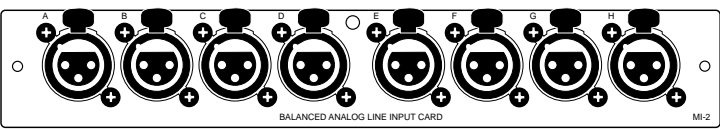
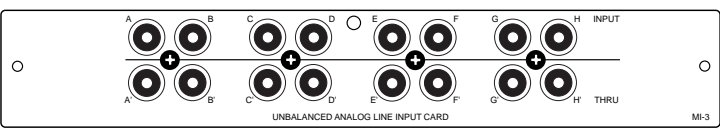
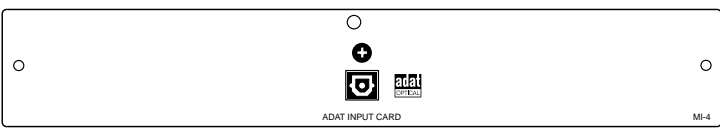
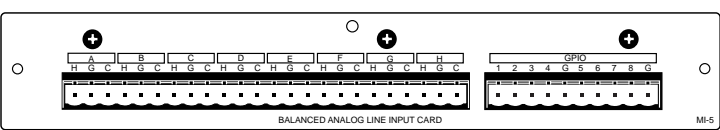
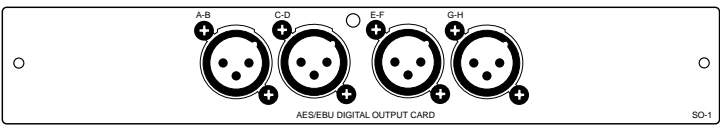
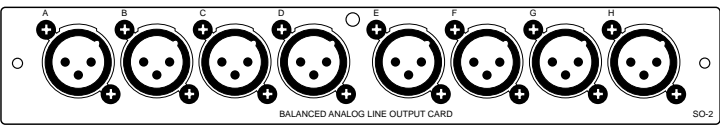
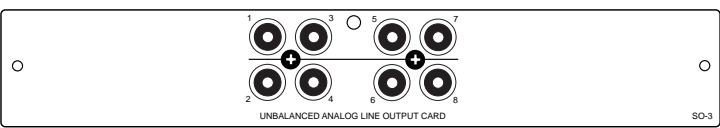
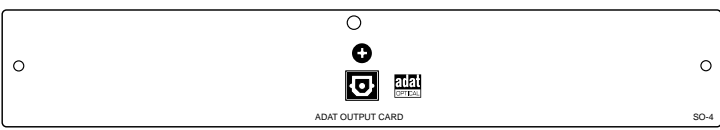
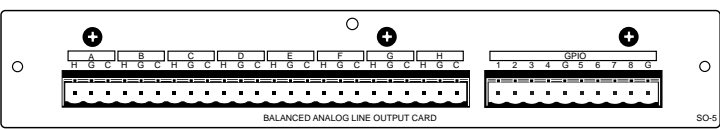
This connector sends a word clock to an external digital device.

13) AC IN connector

This connector is used to connect the supplied power cord. The unit does not provide a power switch. You can turn on or off the power by connecting or disconnecting the power cord.

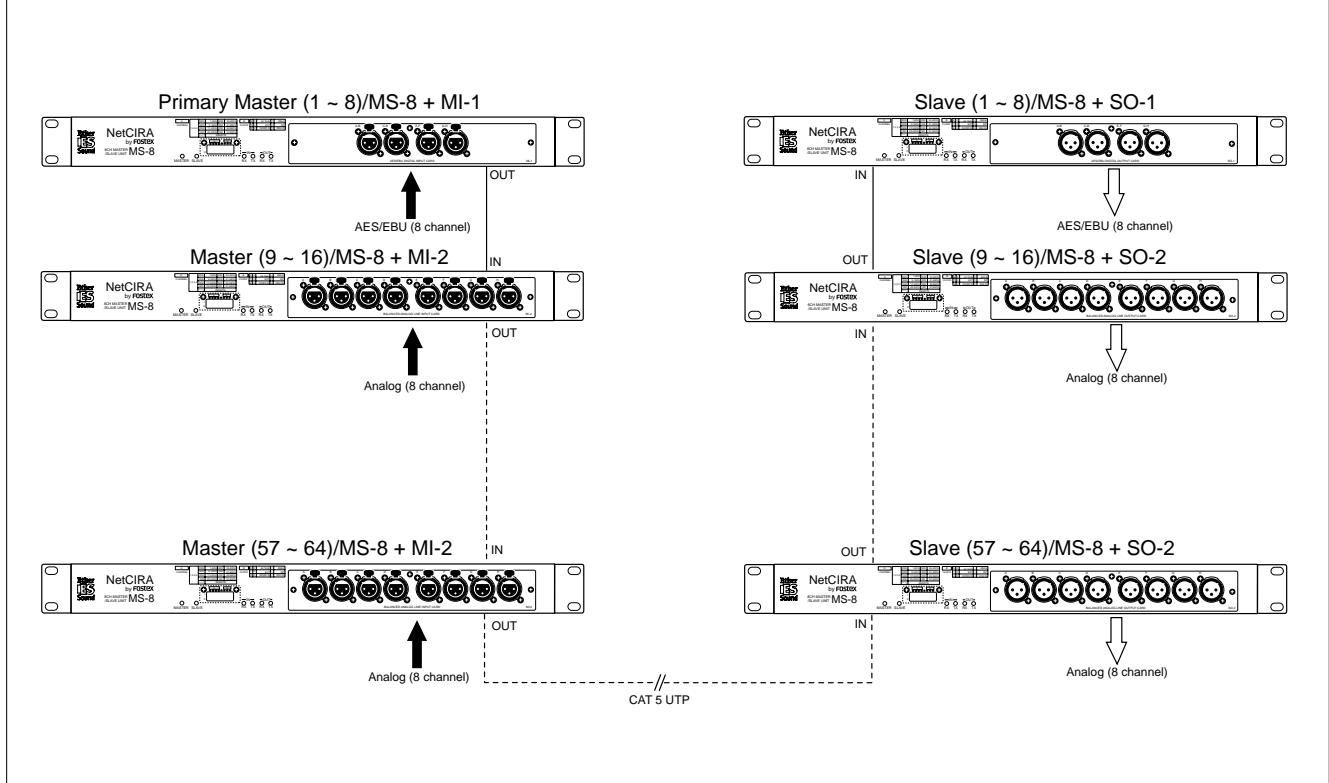
Optional Cards

The following option cards for the MS-8 are available. You can install any one of these cards according to your system.

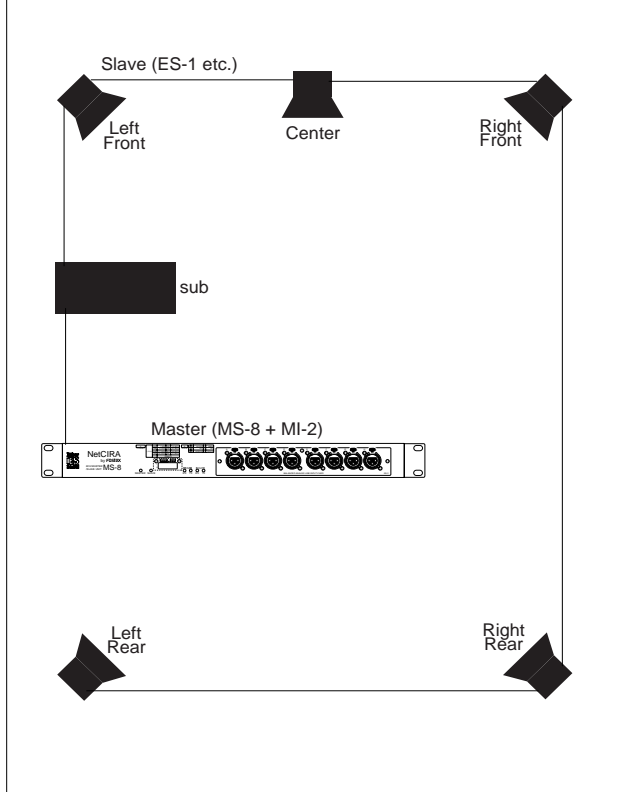
<p>Model MI-1 AES/EBU digital input card Connector: XLR-3-31 type</p>	
<p>Model MI-2 Balanced analog line input card Connector: XLR-3-31 type</p>	
<p>Model MI-3 Unbalanced analog line input card Connector: RCA pin jack</p>	
<p>Model MI-4 ADAT input card Connector: TOS LINK</p>	
<p>Model MI-5 Balanced analog line input card Connector: EURO 24-pin+EURO 10-pin * EURO 10-pin: GPIO port</p>	
<p>Model SO-1 AES/EBU digital output card Connector: XLR-3-32 type</p>	
<p>Model SO-2 Balanced analog line output card Connector: XLR-3-32 type</p>	
<p>Model SO-3 Unbalanced analog line output card Connector: RCA pin jack</p>	
<p>Model SO-4 ADAT output card Connector: TOS LINK</p>	
<p>Model SO-5 Balanced analog line output card Connector: EURO 24-pin+EURO 10-pin * EURO 10-pin: GPIO port</p>	

Examples

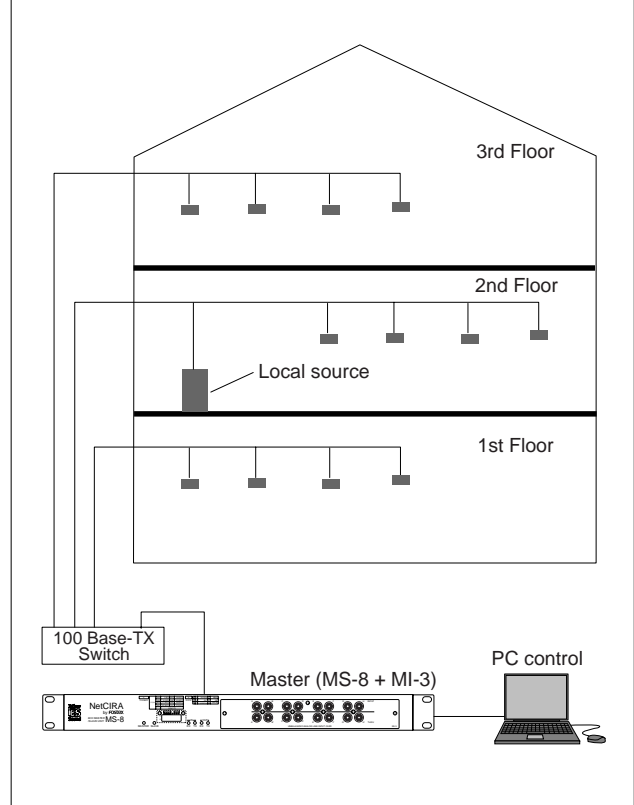
Simple Audio Transmission - Stage Box System



5.1 Audio Management



Distributed Audio



Specifications

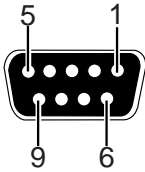
Inputs/Outputs

<Network interface section>

IN, OUT port
 Connector : EtherCon
 Media: 100BASE-TX
 Protocol: Digigram EtherSound

<Control interface section>

RS232C port
 Port: RS232
 Connector: D-sub 9pin
 Pin Assignments:



1	NC	6	NC
2	TxD	7	CTS
3	RxD	8	RTS
4	NC	9	NC
5	NC		

<WORD INPUT/OUTPUT section>

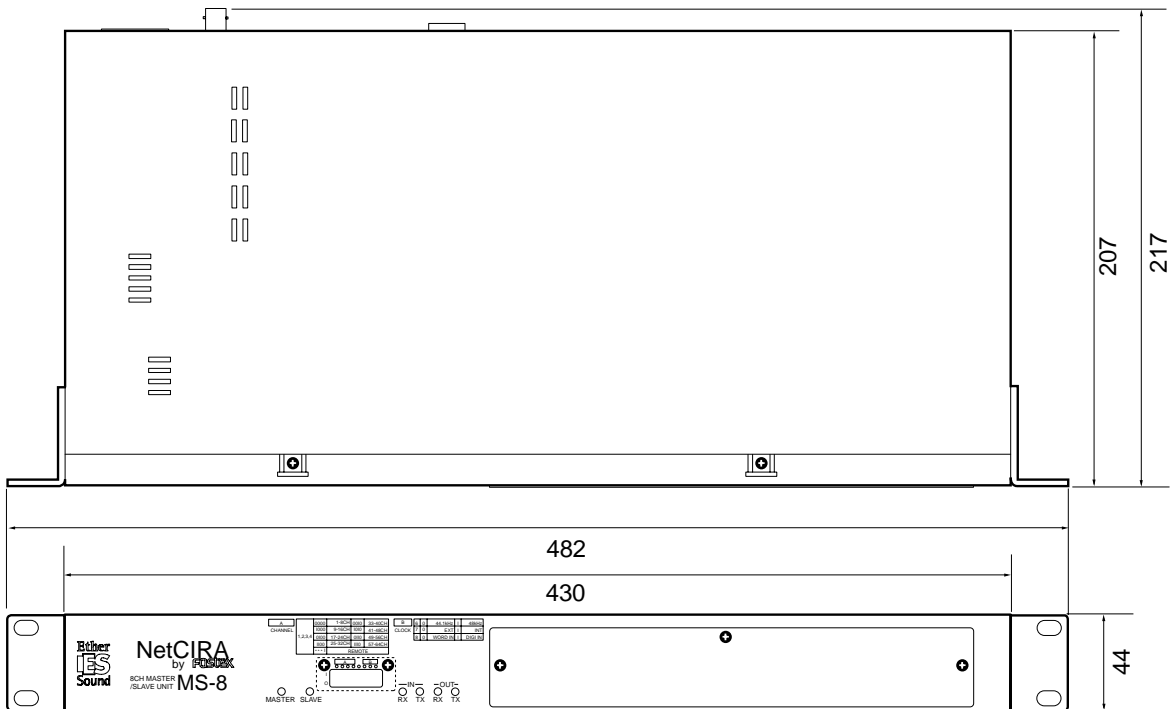
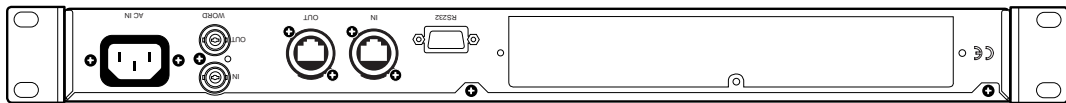
Connector: BNC type
 Reference Input/Output level: TTL level

<General>

Power supply: Switching type
 Power requirement:
 US: 120VAC 60Hz
 EUR/UK: 230V~ 50Hz
 JPN: AC100V 50/60Hz
 Power consumption: 11W (120VAC & 230V~)
 10W (AC100V)
 Weight: Approx. 2.3kg
 Dimensions (mm): 482 (W) x 44 (H) x 217 (D)

* Specifications and appearance are subject to change without notice for product improvement.

Dimensions



Declaration of EC Directive

This equipment is compatible with the EMC Directive (89/336/EEC) - Directive on approximation of member nation's ordinance concerning the electromagnetic compatibility and with the Low Voltage Directive (73/23/EEC) - Directive on approximation of member nation's ordinance concerning electric equipment designed to be used within the specified voltage range.

The Affect of Immunity on This Equipment

The affect of the European Specification EN61000-6-1 (coexistence of electromagnetic waves - common immunity specification) on this equipment are as shown below.

In the electrical fast transient/burst requirements, surge, conducted disturbances by radio-frequency fields, power frequency magnetic field, radiate electromagnetic field requirements and static electricity discharging environment, this could be affected by generation of noise in some cases.

NetCIRA

by **FOSTEX**

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