

## MA-3300HD HDTV DIGITAL MASTER SWITCHER MA series

MA-3300HD HDTV master switcher provides high performance and operability to adopt embedded audio SDI aimed digital broadcasting. This switcher has 16 inputs, 2 program output, 1 preset output, and 4 down stream keyers.



MA-3300HD CONTROL PANEL

### Features

**Designed for embedded audio SDI (8 channel in audio)**

**16x5 Matrix Module**

**Program and Preset Line (Breakaway of video and audio)**

**Aux Line for Monitoring**

**Maximum 4 DSKs of Self and External Key**

**Luminance and Linear Key**

**Boarder Effect**

**Clip and Gain Control**

**Transition Effect of CUT, FF, CF, FC and Mix**

**Internal Source Generator of Black and Silence for Program and Preset Line**

**Relay Bypass for PGM1 Out from BASE2 In (for Emergency Matrix)**

**Redundant Power Supply**

**Monitoring**

The status of each card can be monitored via SNMP. Condition of the video, audio and reference signals can be also monitored.

**Option**

**APS (Automatic Program Control System)**

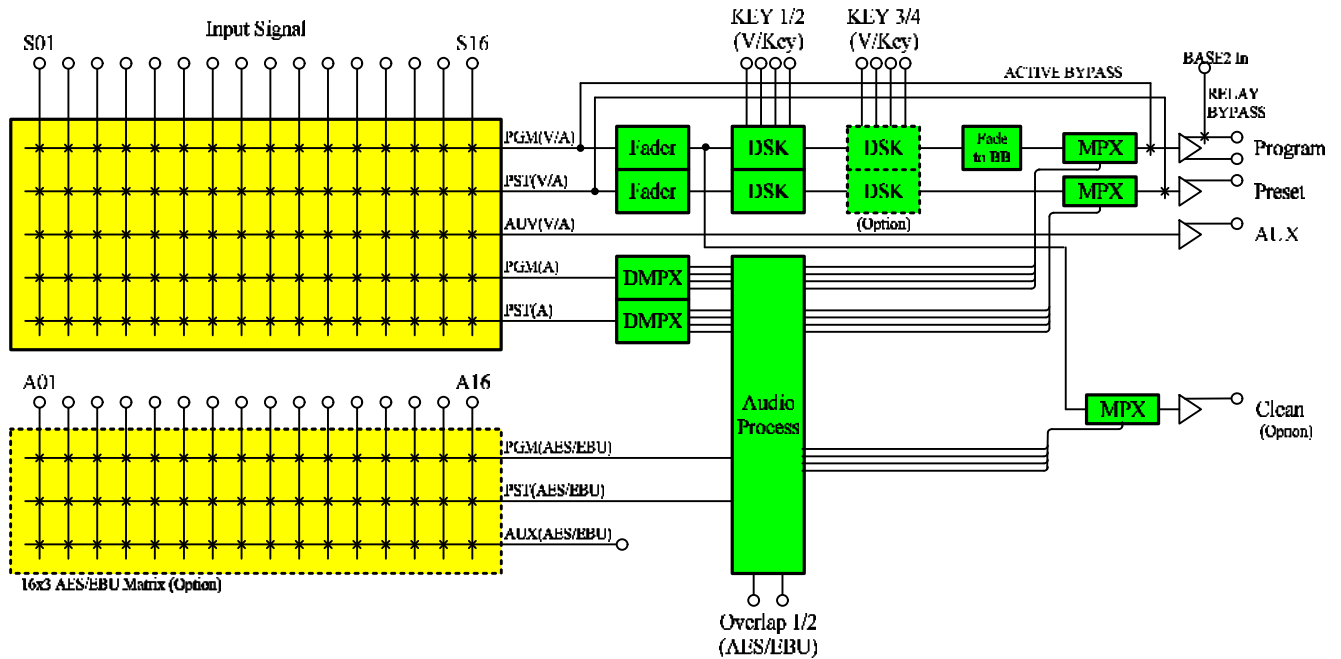
**AES/EBU Digital Audio Matrix**

**Audio Level Meter**

**Clean Output**

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## Block Diagrams



## Outside view of Main frame

The main frame is 3RU in size and mounts a matrix board, a DSK board, a control board and two power supply units.



FRONT VIEW



REAR VIEW

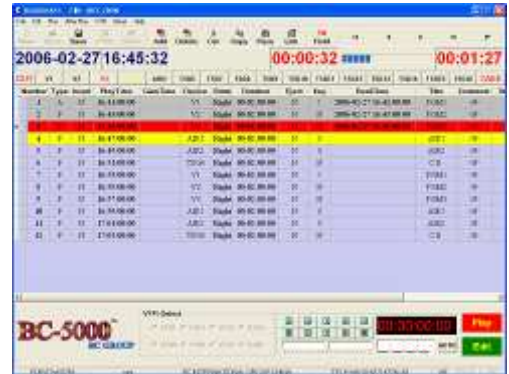
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## APS (Automatic Program Control System)

Automatic program control and data management by operating personal computer are available. It can play back the peripheral equipment of VTR, Video Server and Character Generator automatically in accordance with program schedule data.

### Feature

- More than 1,000 event data per week can be stored.
- Basic language is English and several foreign language can be displayed for Title and comment.  
Ex. Japanese, Chinese, Spanish, French, etc
- Several kind of VTR and Server can be control by serial interface.  
Ex. Sony, Panasonic, Thomson, etc

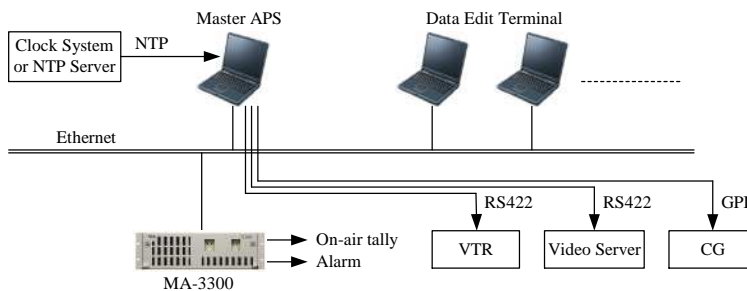


Layout of On-air Display

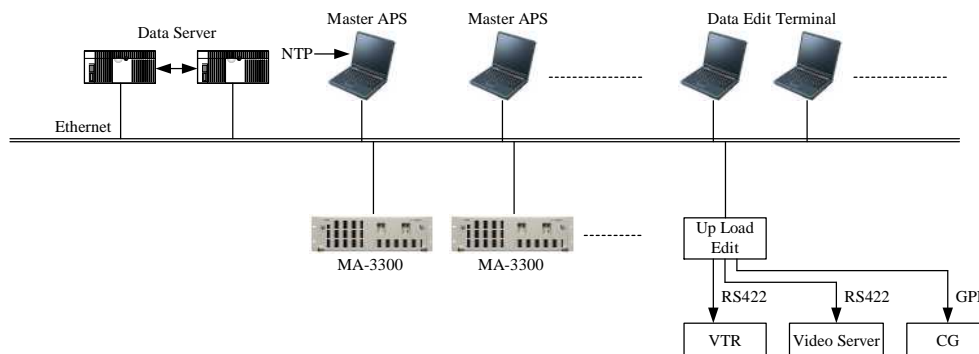
## Control Block Diagram with APS

The Master APS can control accurately MA-3300HD master switcher, VTR, Video Server, etc in accordance with NTP. One master APS terminal can control one MA-3300HD Master switcher, and data edit terminals can be installed in control system. In the multi channel transmission, the dual server system can achieve the high reliability and performance.

### One channel transmission



### Multi channel transmission



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## Specifications

Video Signal	Serial Digital (SMPTE-292M; 1080/50i or 1080/59.94i)
Number of Input	: 16
Number of Key Input	: 2 or 4(Option)
Output Line	: Program, Preset, AUX, and Clean (Option)
Transition Mode	: CUT, FF, CF, FC and MIX
Transition Time	: 1.0 sec.
Transition Function	: Take Control Fade to Black / Go to Silence
DSK	
Number of Key	: 2DSK or 4DSK(Option)
Mode of Key	: Self and External Key
Transition Mode	: CUT and Fade
Adjustment	: Clip Level and Gain : HUE, SAT and BRT : Boarder On/Off
Audio Signal	Embedded Audio
Number of Input	: 16
Number of Channel	: 8 Channels per 1 Input Signal
Output Line	: Program, Preset, and Clean (Option)
Transition Mode	: CUT, FF, CF, FC and MIX
Transition Time	: 1.0 sec.
Transition Function	: Take Control
Adjustment	: Input Level Control (+/-20db by 0.2db step)
Output Limiter	: In Program and Preset; Parameter prefixed
Overlap Audio Signal	AES-3
Number of Overlap	: 1 (Selected from 2 Inputs)
Transition Mode	: CUT and Fade
Adjustment	: Audio Ratio
Others	
On-Air Tally Output	: 10/100 BASE-TX
Alarm Output	: Relay Contact
Control of EMG SW'er	: Relay Contact
Power Supply	: Redundant (Option)
Remote Control	: Interface from Automatic Programming Control System (10/100BASE-TX or RS-422A)
General	
Power Requirement	: AC 100 to 240V +/-10%, 50/60Hz
Power Consumption	: Main frame: 320VA x2, Control Panel: 125VA x2
Operating Temperature	: 0 degree to 40 degree Celsius
Dimensions (Main frame)	: 132 (H) x 480 (W) x 530 (D) mm
Dimensions (Control panel)	: 120 (H) x 580 (W) x 330 (D) mm



### Safety precautions

To install, make connections and operate this product, please carefully read and observe instructions, precautions and recommendations in our instruction manuals.

The colors in this brochure may differ from those of the actual unit. Designs and specifications of this product is subject to change without prior notice.

For further details or inquiries, please contact:  
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ISO 9000 Series



ISO 9001 JMI-0119  
NEC Broadcast and Video

ISO 14001



JQA-E-90066  
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