

3025SW-HDSD / 3025SW-3G

Mini 3025EMC Master Control Switcher with Advanced Branding and Internal Router

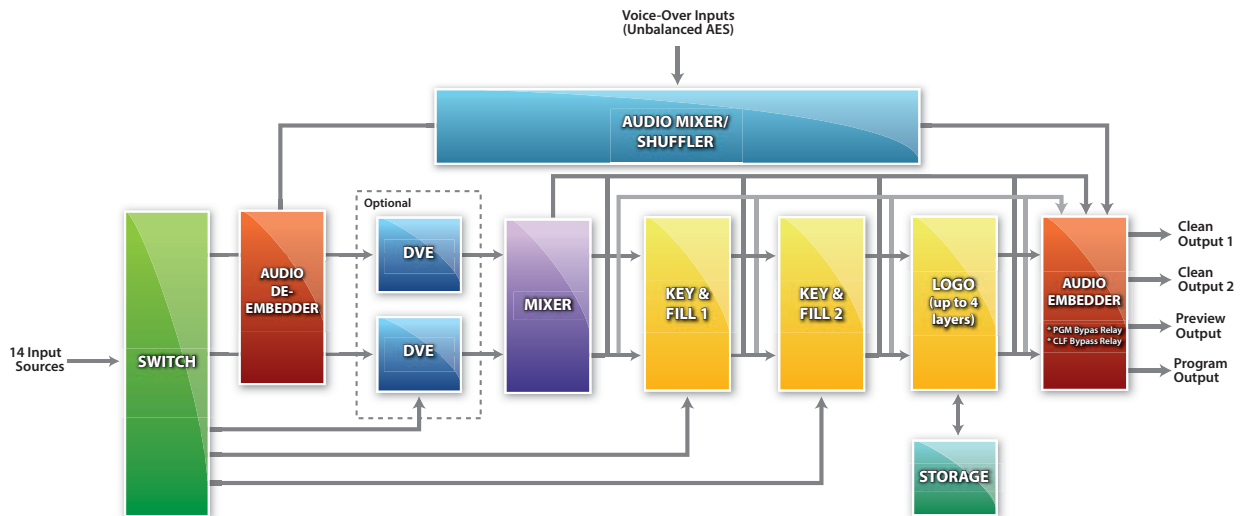
►Mini EMC Master Control Switcher

The 3025SW Mini 3025EMC Master Control switcher has been designed to meet the growing demands for master control functionality for low revenue or backup switching applications. Based on the successful 3025EMC (EMC) platform, the 3025SW provides a cost-effective solution for facilities converting to SD, HD and 3Gb/s. The hardware platform runs solid, field-proven software to form a foundation that meets the latest playout and branding requirements for building new or updating existing facilities. The 3025SW utilizes a number of major features the EMC platform which include: bypass & emergency inputs, hot-swappable hardware, and redundant power supplies. Combined, these features create a reliable system for 24/7 year-round programming.

Evertz® Integrated Solution: The 3025SW offers a unique approach to SD/HD/3G master control with a number of options and a broad selection of configurable control panels. It can be assembled to meet any need and size. The 3025SW is comprised of an internal 14-input router, full video and audio transition engine, and advanced branding. This architecture is ideal for facilities looking for low-cost master control or backup switchers. The feature rich 3025SW can be easily controlled under automation or manual control. The intelligent LCD pushbutton control panels give operators high flexibility in panel layout and user-friendly functionality. The 3025SW integrates seamlessly with the Evertz® MAGNUM, MVP® multi-viewer, router, and EMC product lines, allowing customers to have a complete "turn-key" master control solution.



►3025SW Block Diagram



►The 3025SW Platform

The 3025SW is designed to support 3Gb/s, HD and SD video formats, including: 525i/59.94, 625i/50, 720p/59.94, 720p/50, 1080i/59.94, 1080i/50, 1080p/50, and 1080p/60. Each 3025SW represents a single output broadcast channel that uses a complete Program and Preset path. One of the 14-inputs can be designated as an Emergency input which allows users to quickly go to a safe feed in case of emergency.

The 3025SW provides a Program output and a full "look-a-head" Preview of the next transition. It provides two independent clean outputs, where video and audio are taken from anywhere on either the Program or the Preview processing path. The 3025SW has built-in bypass relays, which provide maximum protection for the Program and Clean feed in cases of failure.

►Branding & DVE

The 3025SW comes with two external keys to allow users to overlay external graphics onto the Program or Preview video paths. The 3025SW also has four internal key layers for static or animated "bugs" over the video signal. The internal media inserter/generator also offers the options for the use of audio chimes/snipes, dynamic text for lower thirds, and dynamic text crawls. Time, date, and temperature objects are standard graphical objects on the 3025SW. Dynamic text objects and crawls (+TXT) are options that are available for the 3025SW. The size of each logo is variable and ranges from 1/25th to full-screen. Various media formats (such as Tiffs, TGA, Bitmaps, and WAV files) can be imported into the Evertz® *overture*™ Suite software and transferred to the 3025SW via Ethernet.

The 3025SW utilizes 2GB of playout cache and 2GB of compact flash for on-line and off-line storages. This allows the 3025SW to store hundreds of static and animations (depending on image size). The 3025SW provides optional memory expansions to up to 8GB (+PC8G) & (CF8G) of on-line or off-line media storage space.

The 3025SW offers an optional DVE feature. The 2-channel 2-D DVE option (+DVE-2D) provides live and dynamic visual effects, such as picture sizing, picture-in-picture with full preview capabilities and positioning, and is fully integrated within the 3025SW. The DVE is fully assignable within the video-processing path of the 3025SW. The DVE may be controlled manually or from the automation system and is independent of the key and logo (bug) layers.



3025SW-IO-BNC

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►Audio & Voice-Overs

The 3025SW has powerful and flexible audio capabilities. With a standard 16 channels of embedded audio support on any of the inputs, it is easy to integrate into any station. Audio level adjustments may be made from the panel at any time and stored on a source-by-source basis. Internal audio shufflers, channel re-mapping and mono-mixing allow routing from any input to any output.

The 3025SW can perform two independent stereo voice-overs (via AES inputs), each mappable to any or all output channels. Full "pre-hear" allows level and voice-over ratio to be set prior to going on-air. Voice-overs can be taken to air combined with another transition or independently. The 3025SW allows for .wav audio files to be used as voice-over as well.

►3025SW Manual Control

Manual Control: The 3025SW system was designed for ease of use in live and automated environments. The 3025SW uses the full EMC range of control panels which have been optimized for size and ease of use in single and multi-channel playout applications. All the control panels use 10 character LCD buttons, providing a dynamic control environment. Every button is user-configurable, enabling panel layouts that are operator friendly. The panel layout provides a menu system, exposing the full capability of the 3025SW to the operator. The control panels range from a 1RU version to the full size desktop control panel.

Automated Control: Each 3025SW channel can connect to the leading automation systems through a dedicated serial port located on every channel. This gives low latency and maximum protection against on-air problems. The control protocols used by 3025SW are supported by the major automation vendors.



Evertz® EMC-DCP , QMC-CP-1000E, QMC-CP-E Control Panels and VUE Interface

►Specifications

Video Connections:

Inputs: 14 Sources, Program Bypass, Clean Bypass
Standards: SMPTE ST 259-1, SMPTE ST 292-1, SMPTE ST 424
Signal Level: 800mV p-p nominal
Impedance: 75Ω terminating
Return Loss: 15dB typical (5MHz – 1485MHz)
Cable equalization: Belden 1855A, 300m @ 270MHz 100m @ 1.5Gb/s, 100m @3G
Connectors: BNC per IEC 61169-8 Annex A
Timing window: ±½ line w.r.t. Reference input

Outputs:

Standards: 4 Standard (dual): Program, Preview, Clean, Aux
Signal Level: Same as input
Impedance: 800mV p-p ±10%
Return Loss: 75Ω terminating
DC Offset: 15dB typical (5MHz – 1485MHz)
Connectors: 0 ±0.5V BNC per IEC 61169-8 Annex A

Switching Reference:

Reference input: Analog 525/625 or Tri-level
Signal level: 1V p-p ±3dB
Connector: BNC per IEC 61169-8 Annex A

Control:

Serial: 6 serial (configurable RS-232/RS-422) DB9 female (on two breakout panels)
Ethernet: Dual 10/100/1000BT, 8-pin RJ45

General Purpose Inputs/Outputs:

Inputs: 16 (standard)
Outputs: 16 (standard)
Type: Opto-isolated, active low
Connector: Terminal block (on breakout panel)

LTC Reader:

Standard: SMPTE ST 12-1
Frame Rate: 25 and 30 Fps nominal
Connectors: 3-pin female XLR type connector (on breakout panel)
Level: 0.2V to 4V p-p, balanced or unbalanced

Physical (EMX6-FR):

Height: 10.5" (266mm)
Width: 19" (483mm)
Depth: 14.5" (368mm)
Module: 15 single slot modules

Physical (EMX3-FR):

Height: 5.25" (133mm)
Width: 19" (483mm)
Depth: 15.75" (400mm)
Module: 5 single slot modules

Discrete Audio Support:

Contact Factory

Electrical (EMX6-FR):

AC Mains Input: Auto ranging, 100-200V AC, 50/60Hz
Max. Oper Current: 9.5A (@115V AC nominal) 4.0A (@220V AC nominal)
Single Channel: Approx. 90W
Connector: IEC 60320 - 1 per power supply

Electrical (EMX3-FR):

AC Mains Input: Auto ranging, 100-200V AC, 50/60Hz
Max. Oper. Current: 4.6A (@100V AC nominal) 1.85A (@240V AC nominal)
Single Channel: Approx. 90W
Connector: IEC 60320 - 1 per power supply
EMC: Complies with FCC Part 15, Class A Complies with EU EMC directive 89/336/EEC

Physical (number of slots):

3025SW-3G 3
 3025SW-HDSD 3

►Ordering Information

3025SW-HDSD	HD/SD Mini 3025EMC Master Control with Advanced Branding Module and internal router
3025SW-3G	3G/HD/SD Mini 3025EMC Master Control with Channel Branding Module and internal router

Main Processing Module Options

+DVE-2D Two channel 2D DVE
+TXT Texting option for crawls and CGs
+TP Air Temperature probe
+PC8G Upgrade of playout cache to 8GB
+CF8G Upgrade of compact flash to 8GB
+E Support for EAS crawl insertion (North America only)

Main Processing Module I/O Enclosures

3025SW-IO-BNC BNC I/O Rear Module for 3025SW-HDSD or 3025SW-3G

Frames

EMX6-FR 6RU frame for 3025SW modules. Up to five 3025SW modules. +6PS Redundant power supply
EMX3-FR 3RU frame for 3025SW modules. +3PS Redundant power supply

Control Panels

EMC-DCP Desktop control panel for 3025SW
QMC-CP-1000E 3025SW Auxiliary Control Panel - Fully programmable panel with 16 integral 10 character LCD buttons and Ethernet. 1RU rack mount
QMC-CP-E 3025SW Control Panel - Standard panel with fully programmable 10-character LCD buttons and Ethernet. 2RU rack mount
QMC-CP-2048E 3025SW Buddy Panel - Three rows of 16 integral 10 character LCD buttons which can used in conjunction with other 3025SW control panels for extended control. 2RU rack mount with Ethernet
QMC-DCP-SW Software version of EMC-DCP / QMC-DCP