Platinum™ MX
Advanced Medium-Scale Routing

The Platinum MX™ line of routing switchers combines a highly robust architecture with the flexibility required to future-proof your investment, delivering unsurpassed value for your mid scale routing needs.

Designed to support high-quality routing of all analog and digital video and audio signals, Platinum MX seamlessly integrates the capabilities of the discrete audio infrastructure in a fully embedded video plant without the need for a secondary audio frame. Created to support 24/7 operation, Platinum MX routing switchers are well-suited to network, local broadcaster, mobile production, cable, telco, military, government and corporate applications — any environment that requires routing of a large number of signals.

FEATURES

• Mixed-signal routing (SD, HD, 3 Gig and Audio)
  ◦ Up to 256x256 video in 15RU (up to 512x512 discrete stereo/audio)
  ◦ Up to 512x512 video in 28RU (up to 1024x1024 discrete stereo/audio)

• Modular I/O in groups of 8 provides support for either coaxial or fiber connectivity

• Front-loading, hot-swappable modules for 24/7 operation

• Redundant power supplies, controllers and signal paths

• Mux/Demux audio processing support
Platinum MX

PRODUCT DETAILS

World’s Only True Embedded Audio Processing Router
Platinum MX combines the best of both high bandwidth video signal routing and an internal TDM architecture to provide the world’s first embedded audio infrastructure router. The combination of these technologies into a single frame enables Platinum MX to provide processing functionality to demux incoming embedded audio signals route them independently and discretely, and then multiplex any audio signal within the router on any digital video output. Additionally, utilizing the TDM M•A•X crosspoint Platinum MX can perform phase reversal, swap, sum and "quiet" break-away switching of the audio between any discrete or embedded input, provide gain/level adjustments on a per-channel basis.

This combined capability provides significant savings in space, power, cost and complexity. System designs can now include a reduction of the number of modules, frames, wiring and system integration while providing enhanced functionality.

Enhanced Control and Monitoring
Harris router control systems make even the most complex router configuration simple and intuitive to implement and maintain. Low-level discovery of available hardware allowing database creation and maintenance to be accomplished from the engineer's desk and automatic wizard based creation of logical source assignments for demultiplexed audio levels are among the powerful tools available for administering systems. The database editor interface provides access to the Platinum MX's distributed

- Mux/Demux 16 channels of audio per video stream
- Full mono breakaway audio routing support
- Seamless integration between demultiplexed and discrete audio
- Multiplex 16 channels of audio into each video output

- Enhanced control and monitoring
  - Wide range of hardware control panels
  - Software and Web-based applications with user-configurable GUIs
  - Protocol support for CCS™, SNMP and third-party vendors
  - Secure access rights with restrictions by level, source and destination

- Video routing support
  - 1080p (3 Gb/s) signal routing (any size)
  - Almost any digital video signal from 3 Mb/s to 3 Gb/s including: HD-SDI, SD-SDI, ASI, SMPTE 310, SMPTE 305, etc.
  - SMPTE compliant analog video supported via conversion to/from SD-SDI on I/O

- Discrete audio routing support
  - Digital audio signals including balanced and un-balanced AES
  - Analog stereo/mono audio via conversion to/from AES on I/O modules
  - Support for up to 16 embedded AES streams per video input
  - “Quiet switch” with transitions

- CENTRIO integrated internal multiviewer
  - 32 Pip's per CENTRIO module
  - On-screen control
  - CC presence and text
  - Clocks and Timers
  - Tallies and UMD’s
  - Audio meters and phase
control architecture which drives router frames and control surfaces without reliance on a centralized controller. Each Platinum MX frame features redundant control modules that store configuration information related to that frame in non-volatile memory protecting your crucial configuration information and current routing status. This topology also allows control panel communication to be distributed throughout the facility eliminating single points of failure.

**Integrated Multi-Viewer Support**
Platinum MX is the only routing system in the marketplace to offer an integrated, internal multi-viewer system. Centrio modules reside in the Platinum MX frame seamlessly providing multi-viewer support for all inputs coming into the router. Combining superior graphics, industry-proven architecture and integrated test and measurement tools, CENTRIO is a landmark development in multiviewer design and value. With multi-image processing, routing, superior graphics, and an unrivaled monitoring toolkit all in one chassis, CENTRIO delivers a lower cost solution, simpler system design and a more efficient use of space for broadcast video and audio monitoring, master control rooms, broadcast trucks, and events. Each multi-viewer output provides up to 32 discrete Pip (picture in picture) images that are controlled from the router control system in the same way as dedicated outputs creating user-friendly experience that is easily understood by operators.

**Higher Reliability**
Platinum MX routing frames are designed for harsh operation (including mobile truck environments) and feature front-loading, hot-swappable modules for ease of serviceability. Employing the latest technology, Platinum MX allows more functionality at lower power consumption, and is supported by redundant, load sharing power supplies. Airflow is from front to back, with each fan individually replaceable without taking the system offline. For further reliability, Platinum MX I/O modules support either eight inputs or eight outputs, thereby limiting the number of signals affected by any one module. Each Platinum MX frame supports redundant control, and redundant cross-points are available in most configurations.

**ORDERING INFORMATION**

### Frame Components
- **PM-FR-5**  
  Platinum MX 5RU Frame Assembly (incl. -PS, -RES)
- **PM-FR-9**  
  Platinum MX 9RU Frame Assembly (incl. -PS, -RES)
- **PT-PS**  
  Platinum and MX AC redundant power supply
- **PT-FAN**  
  Platinum and MX replacement fan
- **PT-ALARM**  
  Platinum and MX replacement alarm module
- **PM-FR-5-DC**  
  Platinum 5RU Frame Assembly w/DC power (incl. (1)-PS, -RES)
- **PM-FR-9-DC**  
  Platinum 9RU Frame Assembly w/DC power (incl. (1)-PS-, -RES)
- **PT-PS-DC**  
  Platinum and MX DC redundant power supply

### Control Components
- **PT-RES**  
  Platinum and MX resource controller module
- **PT-SNMP-128**  
  Platinum and MX SNMP license (per 128 ins & outs)
## Cross-point Modules
- PM-40x32-3G5: Platinum MX 40x32 cross-point module for 5RU
- PM-64x64-3G9: Platinum MX 64x64 cross-point module for 9RU
- PM-72x64-3G5: Platinum MX 72x64 cross-point module for 5RU
- PM-128x128-3G9: Platinum MX 128x128 cross-point module for 9RU
- PM-64x64-X9: Platinum MX 64x64 3G cross-point module for 9RU

## TDM Cross-point Modules
- PM-ATDM9-X5: Platinum & MX ATDM XPT for 9 slots audio in 5RU
- PM-ATDM16-X9: Platinum & MX ATDM XPT for 16 slots audio in 9RU

## Input Modules
- PM-HS-IB+: Platinum MX 8 HD-SDI input module with options and BP
- PM-S-IB+: Platinum MX 8 SD-SDI input module with options and BP
- PM-DEC-IB: Platinum MX 8 analog to SDI decoder input with BP
- PM-HSO-PIN-IB: Platinum 8 input (4 SFP) optical input module with options and BP
- PM-AECT-IB: Platinum MX 16 unbalanced AES input module with BP
- PM-AEBT-IB: Platinum MX 16 balanced AES input module with BP
- PM-ADCT-IB: Platinum MX 16 stereo to balanced AES input with BP
- PT-DMX: Platinum and MX Demux daughter board for video signals up to 1.5Gb/s
- PT-DMX-3G: Platinum and MX Demux daughter board for video signals up to 3Gb/s

## Output Modules
- PM-HSR-OBG+: Platinum MX 8 HD-SDI with reclock output green module with options and BP
- PM-SR-OBG+: Platinum MX 8 SD-SDI with reclock output module with options and BP
- PT-HSR013-OB+: Platinum 8 output (4 SFP) optical output module with options and BP
- PM-ENC-OB: Platinum MX 8 SDI to analog encoder output with BP
- PM-AECT-OB: Platinum MX 16 unbalanced AES output module with BP
- PM-AEBT-OB: Platinum MX 16 balanced AES output module with BP
- PM-DACT-OB: Platinum MX 16 balanced AES to stereo output with BP
- PT-MUX: Platinum and MX Mux daughter board for video signals up to 1.5Gb/s
- PT-MUX-3G: Platinum and MX Mux daughter board for video signals up to 3Gb/s
## Output Monitoring Modules

<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
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<tbody>
<tr>
<td>PT-HSR-OM</td>
<td>Platinum and MX HD-SDI output monitoring module</td>
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</table>

## Back modules (included with front module but orderable separately)

<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
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<tbody>
<tr>
<td>PT-BLANK1-BP</td>
<td>Platinum and MX 1 slot blank/spacer BP</td>
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<tr>
<td>PT-BLANK2-BP</td>
<td>Platinum and MX 2 slot blank/spacer BP</td>
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<tr>
<td>PT-BLANK4-BP</td>
<td>Platinum and MX 4 slot blank/spacer BP</td>
</tr>
<tr>
<td>PT-BLANK16-BP</td>
<td>Platinum and MX 16 slot blank/spacer BP</td>
</tr>
<tr>
<td>PT-V-BP</td>
<td>Platinum and MX 8 BNC BP (HSR,SR,ENC,DEC)</td>
</tr>
<tr>
<td>PT-A2-IBP</td>
<td>Platinum and MX 8 stereo audio input BP</td>
</tr>
<tr>
<td>PT-A2-OBP</td>
<td>Platinum and MX 8 stereo audio output BP</td>
</tr>
<tr>
<td>PT-AEB-IBP</td>
<td>Platinum and MX 8 balanced AES audio input BP</td>
</tr>
<tr>
<td>PT-AEB-OBP</td>
<td>Platinum and MX 8 balanced AES audio output BP</td>
</tr>
<tr>
<td>PT-AEC-IBP</td>
<td>Platinum and MX 8 unbalanced AES input BP with CAB</td>
</tr>
<tr>
<td>PT-AEC-OBP</td>
<td>Platinum and MX 8 unbalanced AES output BP with CAB</td>
</tr>
<tr>
<td>PT-CAB-AEC-BOC</td>
<td>Platinum and MX 8 unbalanced AES break-out cable</td>
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<tr>
<td>PT-A2-44MALEDB</td>
<td>Platinum and MX 8 stereo break-out screw term. BP</td>
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<tr>
<td>PT-AEB-25MALEDB</td>
<td>Platinum and MX 8 AES 25-pin male DB connector</td>
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## Ethernet Switch

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<tr>
<th>Switch</th>
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<tbody>
<tr>
<td>CCS-NET-24</td>
<td>24-port Ethernet switch for CCS routing networks</td>
</tr>
<tr>
<td>CCS-NET-24-PS</td>
<td>Redundant power supply for CCS-NET-24. Requires CCS-NET-PS-FR for every two CCS-NET-24-PS</td>
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<tr>
<td>CCS-NET-PS-FR</td>
<td>Redundant power supply tray for CCS-NET-24, holds two power supplies (power supplies not included), tray only required for redundancy</td>
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## SERVICE OPTIONS

### 90-DAY ELITE CARE

<table>
<thead>
<tr>
<th>Service</th>
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<tbody>
<tr>
<td>PT-90-ELITE</td>
<td>90-day Elite™ ServicePAK— Enhanced Elite support for the first 90-days: includes on-call project expert, next-day advance exchange of parts, RemoteDialup™ support and one wrap-up and review session. (Excludes Travel and Expenses, actual charges billed using PS-TE-V-SVC)</td>
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## QUICKSTART COMMISSIONING

<table>
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<tr>
<th>Service</th>
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<tr>
<td>PT-SM-QS</td>
<td>Mandatory 3-Day QuickStart for 128X Platinum (Includes Travel Time, Travel and Expenses)*apply to</td>
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specific zones in Europe, and Asia.

PT-SM-QSNT  Mandatory 3-Day QuickStart for 128X Platinum (Excludes Travel Time, Travel and Expenses, which are billed separately)

PS-TE-V-SVC  Travel and Expense Charges for Harris Support for Video Processing and Distribution Products

SERVICEPAK AGREEMENTS

PT-SM-BASIC  1-year Basic ServicePAK for small (128X) Platinum router

PT-SM-GOLD  1-year Gold ServicePAK for small (128X) Platinum router

PT-RDOPT-BASIC  1-year Basic ServicePAK for Platinum redundant options (Logic cards and Power Supplies)

PT-RDOPT-GOLD  1-year Gold ServicePAK for Platinum redundant options (Logic cards and Power Supplies)

TRAINING COURSES

PT-OPS-OTR  2-day on-site Platinum operational training course (Plus Travel and Expenses)

PT-OPS-FTR  2-day factory Platinum operational training courses (Customer pays Travel and Expenses)

CONTACTS

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<thead>
<tr>
<th>Region</th>
<th>Phone Number 1</th>
<th>Phone Number 2</th>
<th>Phone Number 3</th>
<th>Phone Number 4</th>
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<tbody>
<tr>
<td>North America</td>
<td>+1 800 231 9673</td>
<td>+1 786 437 1960</td>
<td>+44 (0) 118 964 8200</td>
<td>+852 2776 0628</td>
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<td>Caribbean and Latin America</td>
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<td>Europe, Middle East &amp; Africa</td>
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<tr>
<td>Asia, Pacific Rim</td>
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