

FAQs – Platinum™ TDM M•A•X Frame Sync Input Card

Why is the frame sync input important?

When you are looking to buy a router, you have to decide whether you want to have an embedded or discrete audio plant. That decision influences the size and quantity of routers, as well as the amount of ancillary processing equipment needed to distribute both discrete and embedded audio signals. In order for audio to be properly switched in the TDM domain, incoming video signals must be locked. The frame sync capability of these input cards eliminates the need for external processing and allows you to simplify their design by allowing for both embedded and discrete audio within the same frame. This provides significant cost, space and power savings.

Can I mix video signal standards on the same I/O boards?

Yes. The only restriction is that all eight video inputs on the same physical board need to be the same frame rate. For example, each input on a PT-FSDMX-IBG video board needs to be either 50 or 59.94.

Is this a daughtercard for the Platinum™ plus series input modules?

No. The PT-FSDMX-IBG and PT-FSDMXO-IBG are standalone input modules for the Platinum™ and Platinum™ MX router frames.

Can I use asynchronous video signals?

Yes. The frame sync capability of this new card synchronizes all incoming video, eliminating the need for synchronous, timed signals.

Can I mix both discrete and embedded audio?

Yes. The Platinum router can accept discrete AES, discrete analog and embedded audio in the same frame. Any of these signals can be routed and processed, then sent out either as analog discrete, AES discrete, or embedded back into a video stream.

Does this product replace the PT-DMX-3G daughtercard?

Yes, it does. Since this input card performs full audio de-embedding operations by default, it will replace the current PT-DMX and PT-DMX-3G daughtercards. Additionally, the PT-FSDMX-IBG cards do not have the restriction of requiring all sources to be one type even without the frame sync license.

Note: These daughtercards will continue to be supported and systems with mixed loads of both PT-FSDMX-IBG input cards and PT-DMX and PT-DMX-3G daughtercards are possible.

What is required to make this work?

1. A video crosspoint for wideband signals
2. A TDM crosspoint to switch and manipulate audio signals
3. PT-FSDMX-IBG or PT-FSDMXO-IBG input modules (PT-FSIB-OPT license option if frame sync is required)
4. "+" version video output boards to mount mux daughtercards
5. A mux sub-board (PT-MUX-3G) for each output module requiring audio mux capability

What does this do to Dolby®?

Any multiplexed non-PCM signal can be left alone, de-embedded, or embedded. Processing can be turned off on the modules so the audio streams do not become corrupted.

How do I know which frame sync input module to order?

For coaxial (electrical) connectivity, order PT-FSDMX-IBG. For optical connectivity, order PT-FSDMXO-IBG. The frame sync functionality is enabled by the use of a license key, PT-FSIB-OPT.

How do I know which crosspoint module to order?

There is only one choice for the 5RU and 9RU Platinum MX, PM-ATDM9-X5 and PM-ATDM16-X9 respectively. For the 15RU and 28RU, you have two choices for each one. The first number in the part number (PT-ATDM16-X15) determines how many input and output slots will be used for audio routing. The second number in the part is the frame size (PT-ATDM16-X15).

Example: PT-ATDM32-X28

This is a TDM crosspoint that will allow a user to switch audio via TDM with up to 32 input and output slots of a 28RU frame.

Example: PT-ATDM64-X28

This is a TDM crosspoint that will allow a user to switch audio via TDM with all 64 input and output slots of a 28RU frame.

What do I get when I order a TDM M•A•X crosspoint module?

You get (1) crosspoint module and (1) PT-SYNC module. You do not need to order a separate PT-SYNC module. The PT-SYNC module is used to distribute sync to all of the card slots in the frame. A customer will typically connect a DARS reference to one of the (4) sync inputs on the back of the frame and assign the PT-SYNC board to use that as its reference. Each Platinum and Platinum MX frame has slots for a primary and redundant TDM crosspoint module, and a primary and redundant PT-SYNC module. Important note, when the PT-SYNC board is in use with TDM, it takes the 4th sync input of Platinum for internal use, thereby reducing the number of reference inputs to three.

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