XPression Tessera One Setup

When launching XPression Tessera One for the first time, the setup consists of default presets and settings. If the defaults are changed, this document explains how to check the Tessera One settings and restore defaults.

This document covers the following topics:

- Hardware Setup
- Preferences
- Tessera Settings
- Demo Project Package
- Creating a Project
- DashBoard
- Supported Scaler Configurations

Hardware Setup

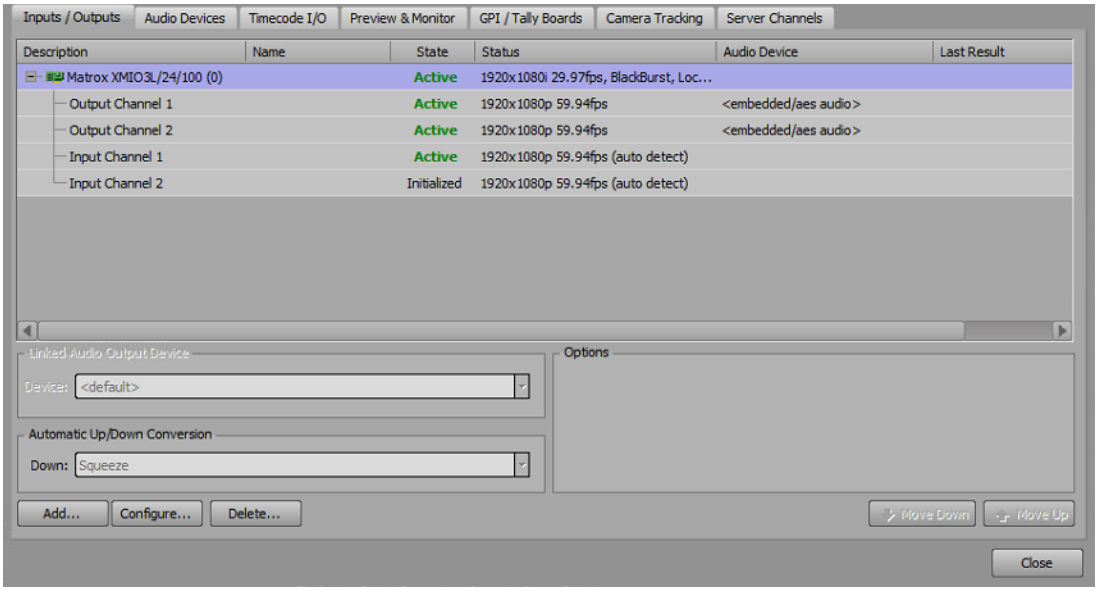
The following hardware settings are required for Tessera One to operate properly using the low latency scaler. They are configured by default but should the settings be changed, use the following procedure to return to the default settings.

Tessera One comes with a default setting of Fill/Fill but can be set to Fill/Key. There is also an option to purchase two additional fills.

Inputs

1. In XPression, click **Edit** > **Hardware Setup**.

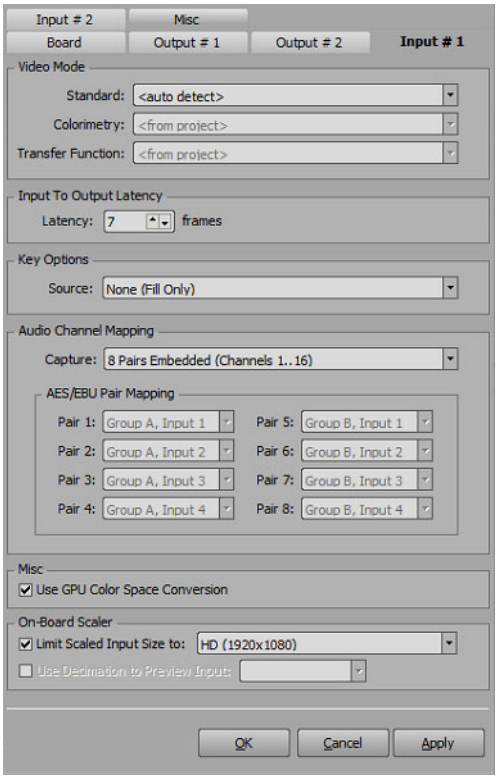
   The **Hardware Setup** dialog box opens.



Phone: +1 613-652-4886 • Technical Support: 1-844-652-0645 (North America), +800 1005 0100 (International) • 3500DR-554-02 •August 2022

2. In the **Inputs / Outputs** tab, double-click an input from the I/O list.

   The **Matrox DSX - Framebuffer Setup** dialog box opens on the **Input** tab for the selected input.



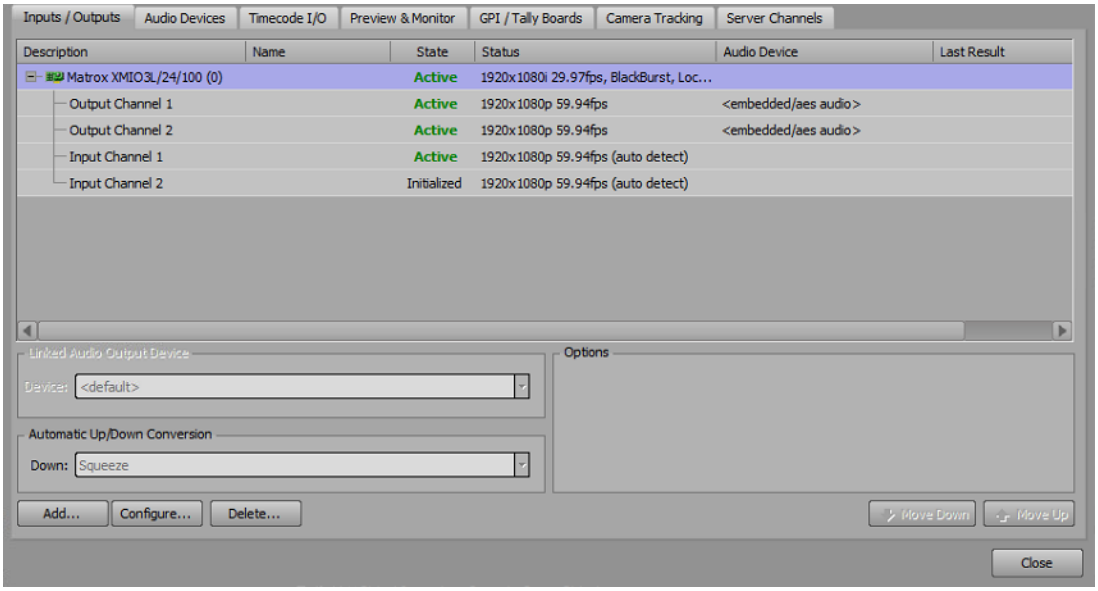
3. In the **Misc** section, select the **Use GPU Color Space Conversion** check box if it is not already selected.
4. In the **On-Board Scaler** section, select the **Limit Scaler Input Size to** check box if it is not already selected and use the list to select a scaler size. The default is HD (1920x1080).
5. Click **Apply**.
6. Click **OK**.

   The **Matrox DSX - Framebuffer Setup** dialog box closes.
7. Repeat steps **2** to **5** for any other inputs.

Outputs

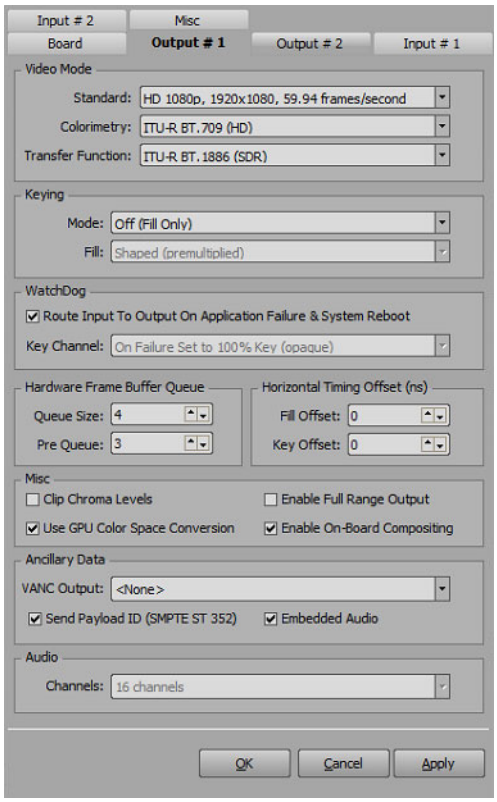
1. In XPression, click **Edit** > **Hardware Setup**.

   The **Hardware Setup** dialog box opens.



2. In the **Inputs / Outputs** tab, double-click an output from the I/O list.

   The **Matrox DSX - Framebuffer Setup** dialog box opens on the **Output** tab for the selected output.



3. In the **Misc** section, select the **Use GPU Color Space Conversion** check box if it is not already selected.
4. Select the **Enable On-Board Compositing** check box if it is not already selected.
5. Click **Apply**.
6. Click **OK**.

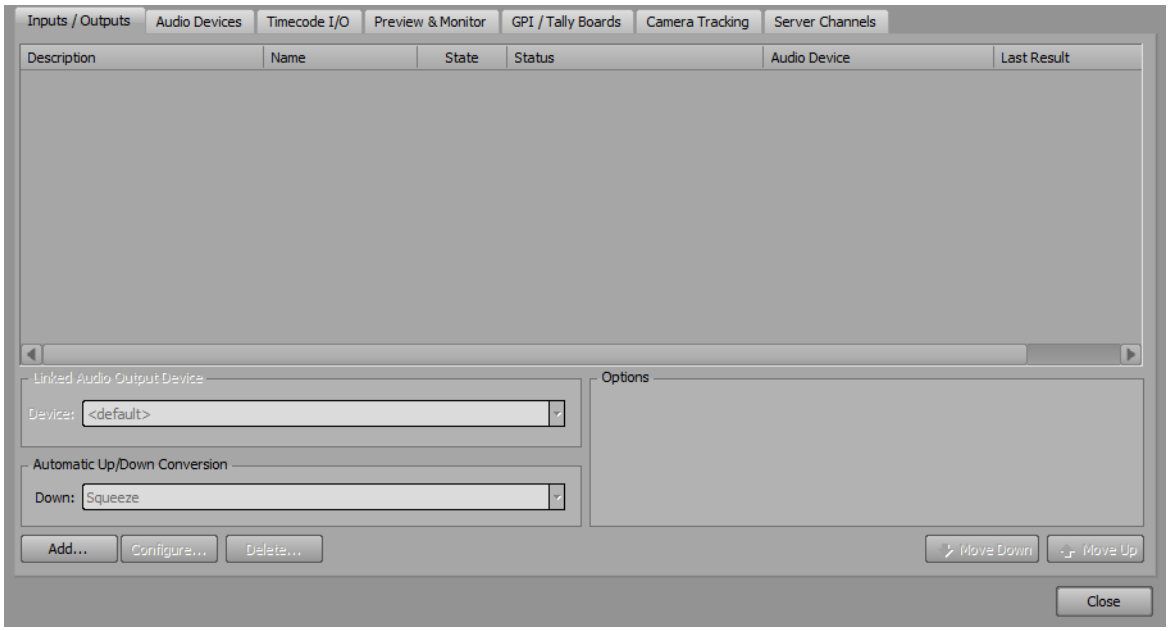
   The **Matrox DSX - Framebuffer Setup** dialog box closes.
7. Repeat steps **2** to **5** for any other outputs.

RossTalk GPI

The RossTalk GPI settings are configured by default, but should the settings be changed, use the following procedure to reconfigure the RossTalk GPI settings.

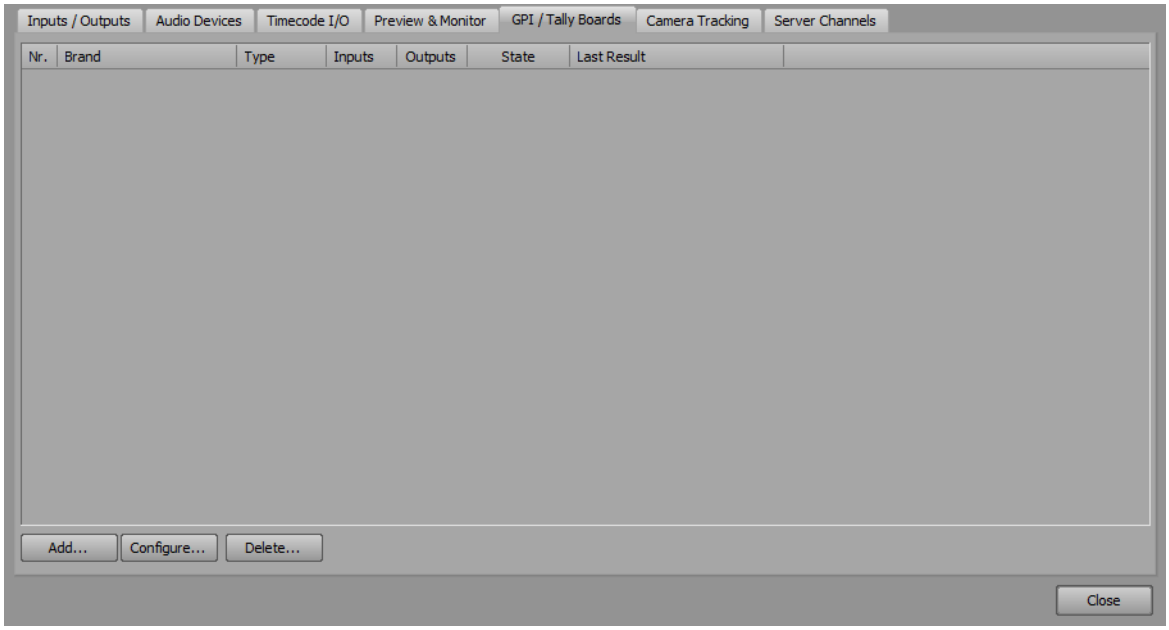
1. In XPression, click **Edit** > **Hardware Setup**.

   The **Hardware Setup** dialog box opens.



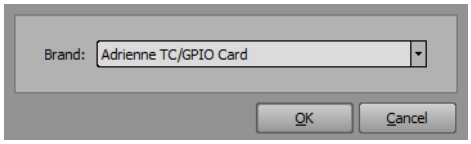
2. Click the **GPI / Tally Boards** tab.

   The **GPI / Tally Boards** section is displayed.



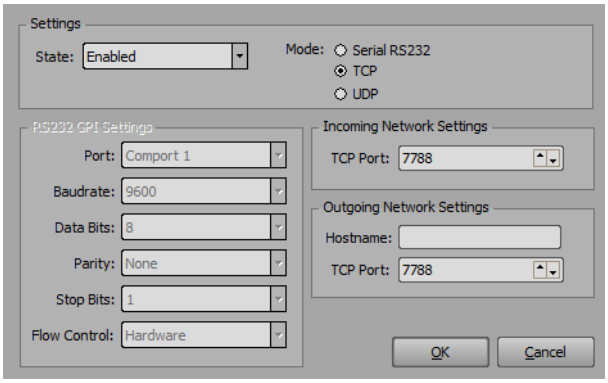
3. Click **Add**.

   The **Add New GPI Board** dialog box opens.



4. In the **Brand** list, select **Smart GPI / RossTalk**.
5. Click **OK**.

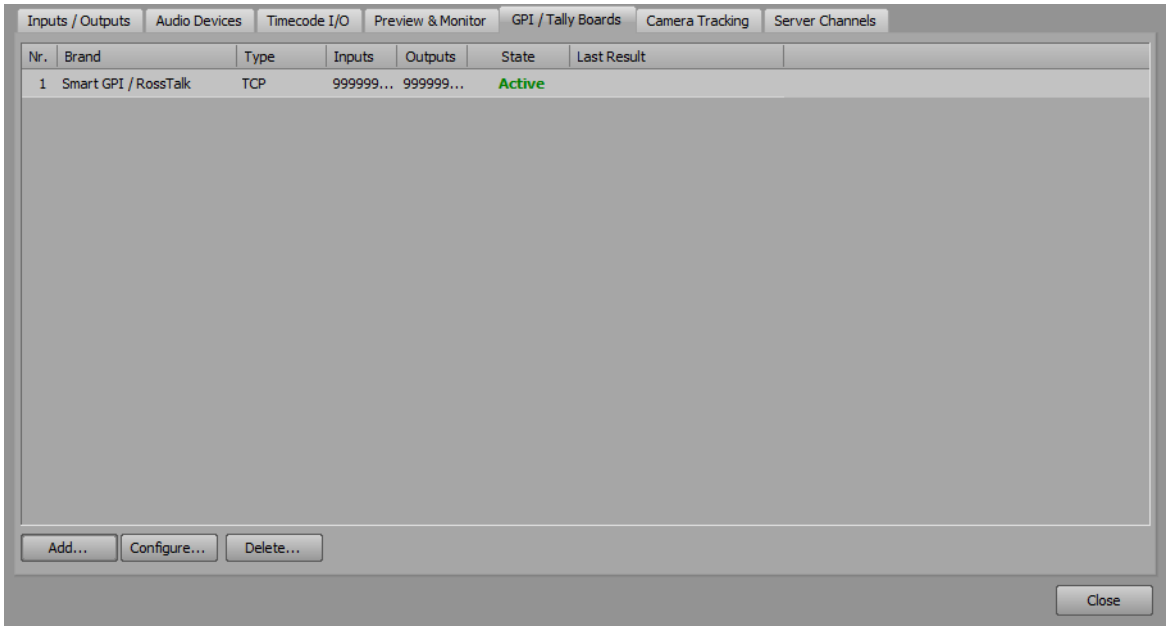
   The **Smart GPI / RossTalk Setup** dialog box opens.



The default settings for the RossTalk setup are used for Tessera One.

6. Click **OK**.

   The **Smart GPI / RossTalk Setup** dialog box closes and the Smart GPI / RossTalk board is added to the **GPI / Tally Boards** list.



7. Click **Close**.

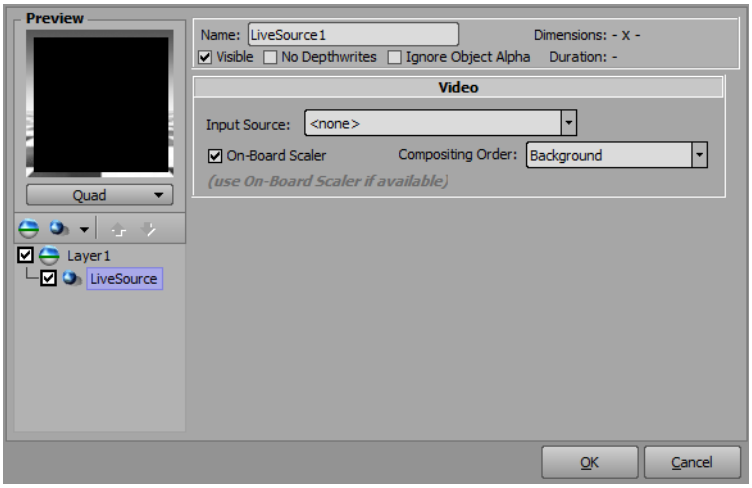
   The **Hardware Setup** dialog box closes.

Low Latency Scaler Live Source Material

- With the on-board scaler enabled in the material, all other live source options are disabled and the material can only be applied to quad and background objects.

1. In the **Material Manager**, right-click on a Live Source material and select **Edit**.

   The **Material Editor** opens for the selected Live Source material.



2. In the **Video** section for the Live Source material, select the **On-Board Scaler** check box if it is not already selected.
3. Click **OK**.

   The **Material Editor** closes.
4. Repeat steps **1** to **3** for any other Live Source material.

For More Information on...

- creating a Low Latency Live Source material, “**Create a Low Latency Scaler Material**” on page 4–17.

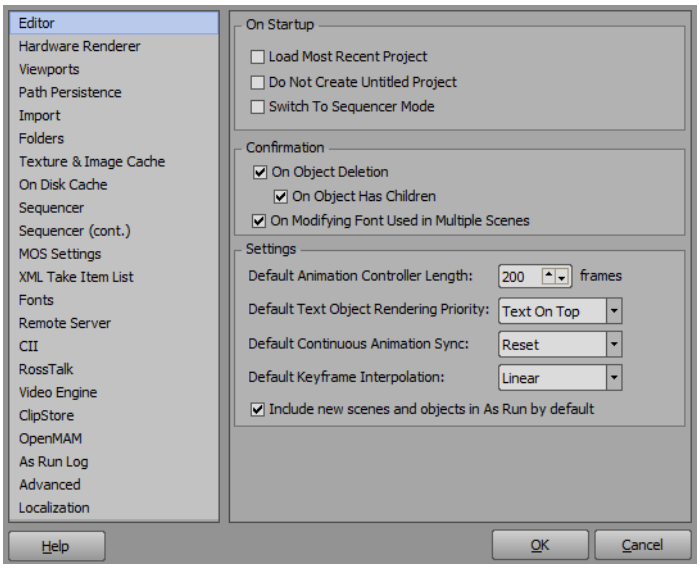
Preferences

The following preferences settings are required for Tessera One to operate properly. They are configured by default but should the preferences settings be changed, use the following procedure to return to the default settings.

Hardware Renderer

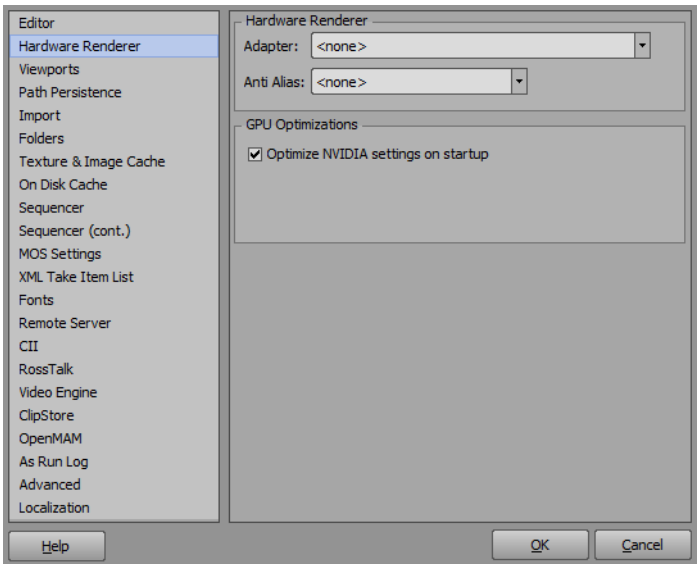
1. In XPression, click **Edit** > **Preferences**.

   The **Preferences** dialog box opens.



2. Click **Hardware Renderer**.

   The **Hardware Renderer** panel is displayed.



3. In the **Hardware Renderer** section, ensure the **NVIDIA Quadro RTX 4000** is selected in the **Adapter** list.
4. Ensure that **8x CSAA High Quality** is selected in the **Anti Alias** list.

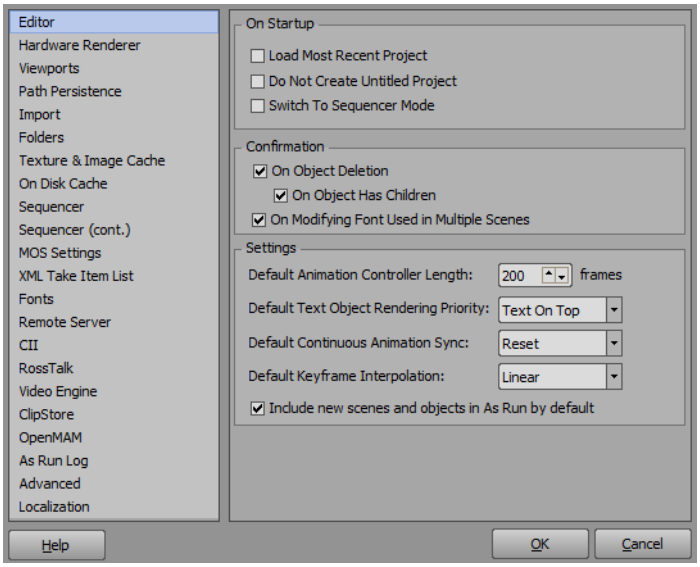
5. Click **OK**.

   The **Preferences** dialog box closes.

Sequencer

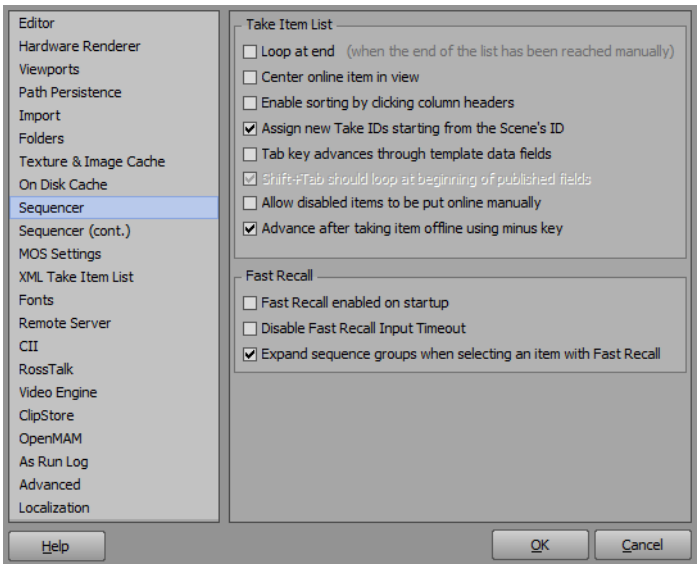
1. In XPression, click **Edit** > **Preferences**.

   The **Preferences** dialog box opens.

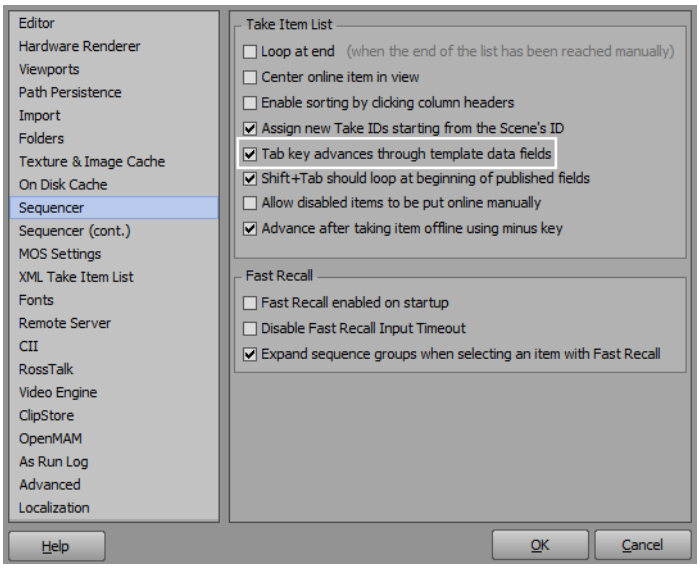


2. Click **Sequencer**.

   The **Sequencer** panel is displayed.

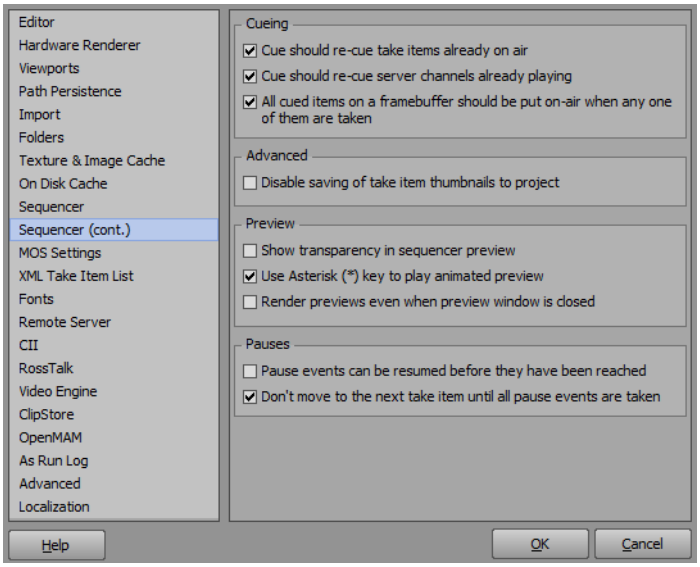


3. In the **Take Item List** section, select the **Tab key advances through template data fields** check box if it is not already selected.

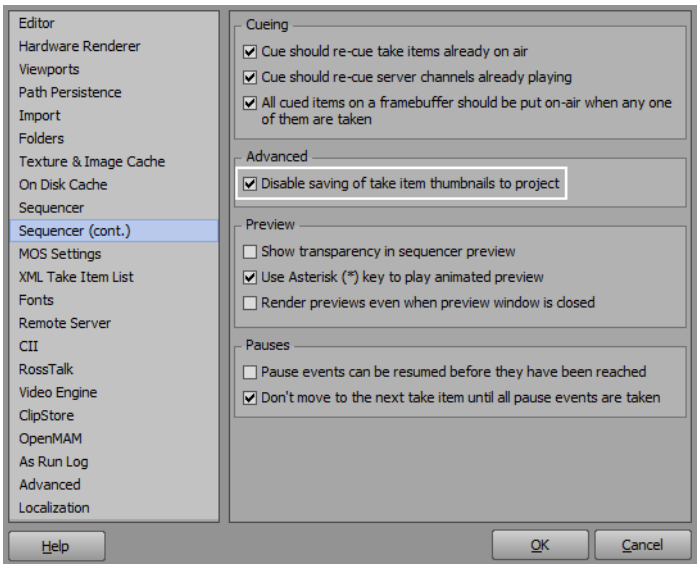


4. Click **Sequencer (cont.)**.

   The **Sequencer (cont.)** panel is displayed.



5. In the **Advanced** section, select the **Disable saving of take item thumbnails to project** check box if it is not already selected. This increases the speed of project save and load times.



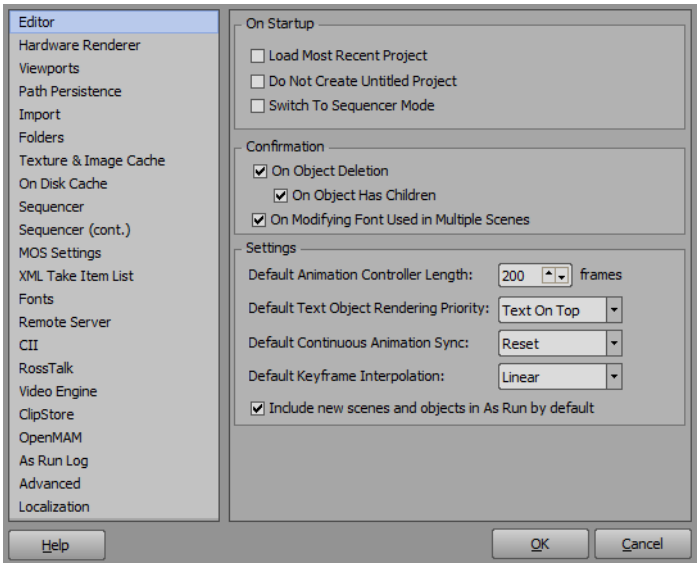
6. Click **OK**.

   The **Preferences** dialog box closes.

Video Engine

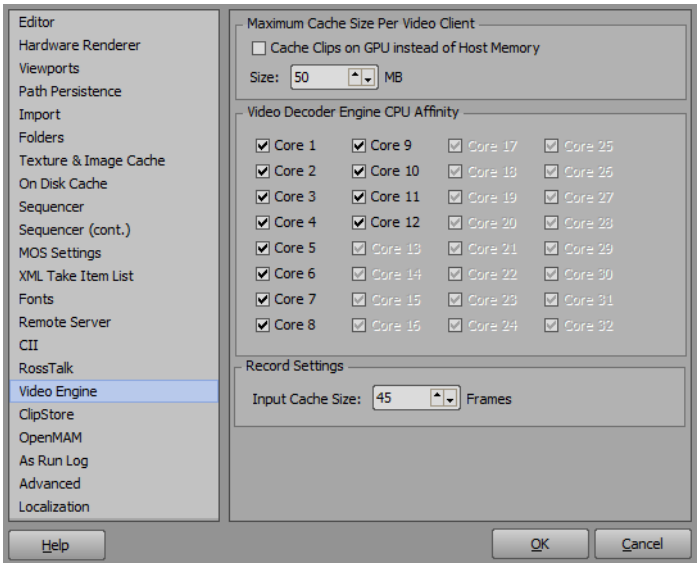
1. In XPression, click **Edit** > **Preferences**.

   The **Preferences** dialog box opens.

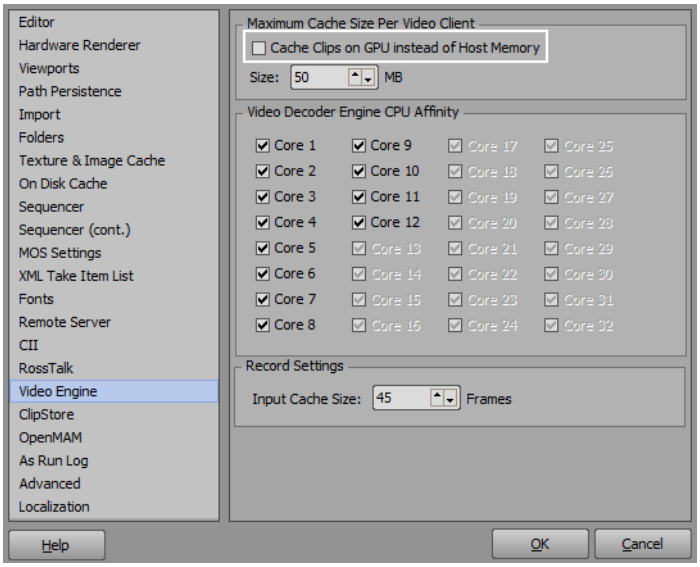


2. Click **Video Engine**.

   The **Video Engine** panel is displayed.



3. In the **Maximum Cache Size Per Video Client** section, ensure that the **Cache Clips on GPU instead of Host Memory** check box is not selected.



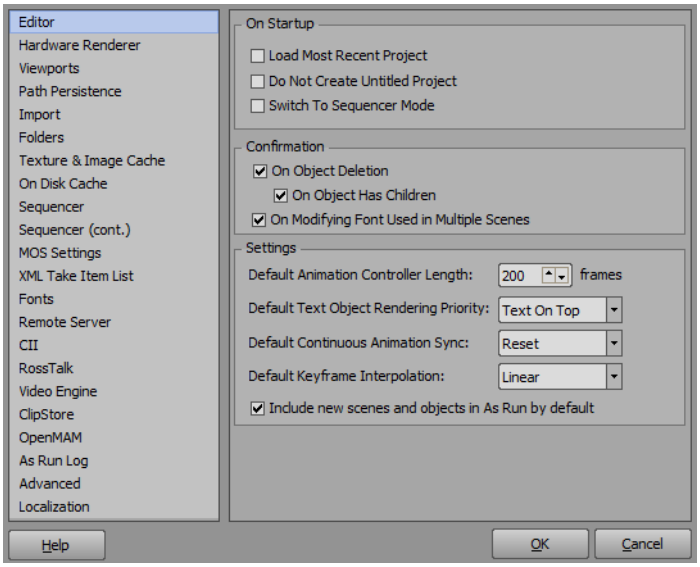
4. Click **OK**.

   The **Preferences** dialog box closes.

As Run Log

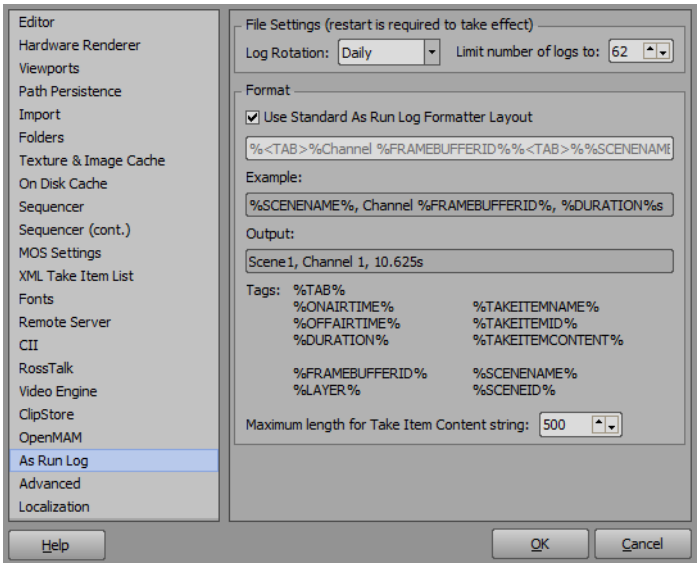
1. In XPression, click **Edit** > **Preferences**.

   The **Preferences** dialog box opens.

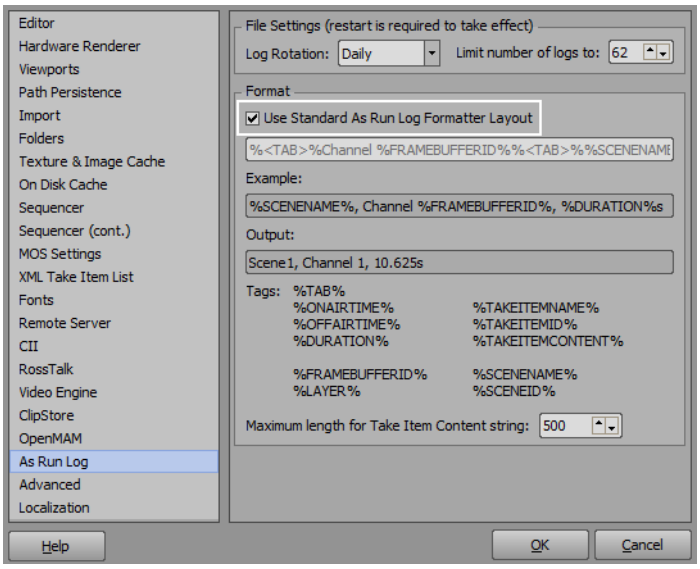


2. Click **As Run Log**.

   The **As Run Log** panel is displayed.



3. In the **Format** section, select the **Use Standard As Run Log Formatter Layout** check box if it is not already selected.



4. Click **OK**.

   The **Preferences** dialog box closes.

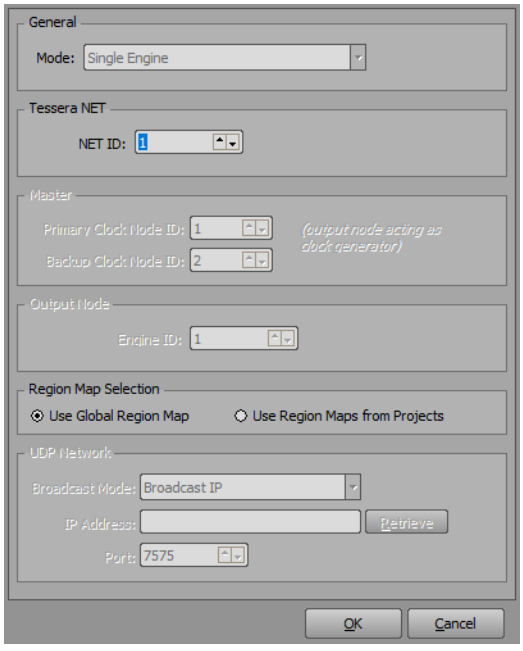
Tessera Settings

The following Tessera settings are required for Tessera One to operate properly. They are configured by default but should the Tessera settings be changed, use the following procedure to return to the default settings.

✶ Tessera One operates by default in single engine mode and can not be changed.

1. In XPression, click **Edit** > **Tessera** > **Settings**.

   The **Tessera Settings** dialog box opens.



2. If controlling multiple Tessera One systems using Remote Sequencer, in the Tessera NET section, use the **NET ID** box to enter a NET ID for the machine.

3. In the **Region Map Selection** section, select one of the following two options:
   - **Use Global Region Map** — use one map that multiple projects share.
   - **Use Region Maps from Projects** (Tessera One default setting) — use maps specific to each project.
4. Click **OK**.

   The **Tessera Settings** dialog box closes.

Demo Project Package

Tessera One comes with a pre-loaded demo project with pre-configured scenes, scripts, sequencer layout, Tessera region mapping, ClipStore content, and INcoder watch folders, as well as a custom DashBoard panel demo for playout (`Tessera One - User Panel.grid`). These demo projects are a good resource for learning how to create Tessera One scenes, how to use DataLinq, how to setup a custom DashBoard panel for Tessera One operation, and more.

If at any point you want to access the demo project for Tessera One:

1. In XPression, click **File** > **Open Project**.

   The **Open** browser opens.
2. Locate the Tessera One v1 demo project file in `D:\XPression Projects\Tessera One v1.xpf`.
3. Click **Open** to open the demo project.

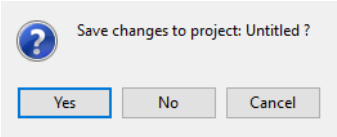
Creating a Project

This section covers creating a new project and configuring a low latency scaler material.

Create a New Project

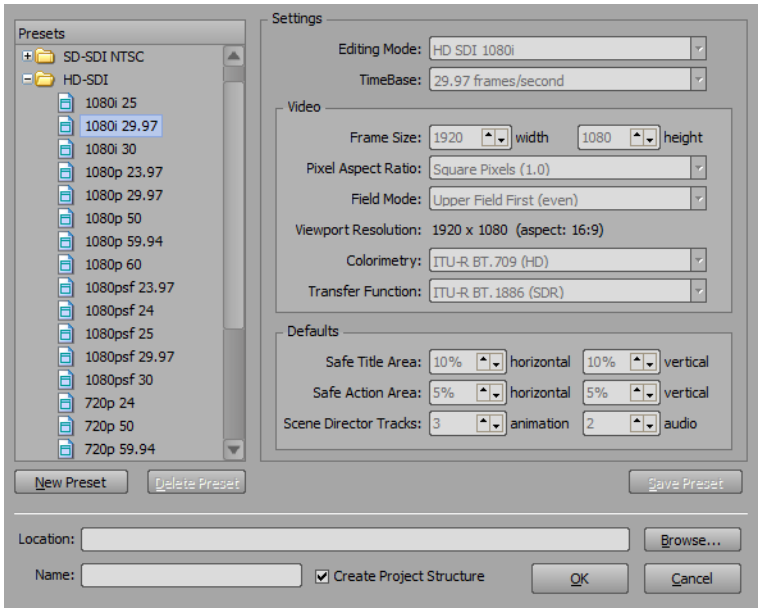
1. In XPression, click **File** > **New**.

   A save **Confirm** notification opens.



2. Click **Yes** to save the current project or **No** to not save the current project.

   The **New Project** dialog box opens.



3. In the **Presets** section, select a video format suitable for the project.
4. Click **Browse** to select the **Location** for the project.

   The **Select Project Folder** file browser opens.
5. Select or create a folder for the project. It is recommended to save projects in their own specific folder.
6. Click **Select Folder**.

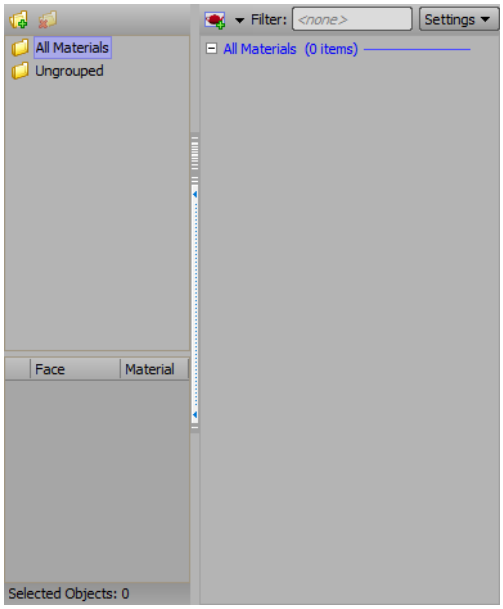
   The **Select Project Folder** file browser closes.
7. In the **New Project** dialog box, use the **Name** box to enter a name for the new project.
8. Click **OK**.

   The **New Project** dialog box closes.

Create a Low Latency Scaler Material

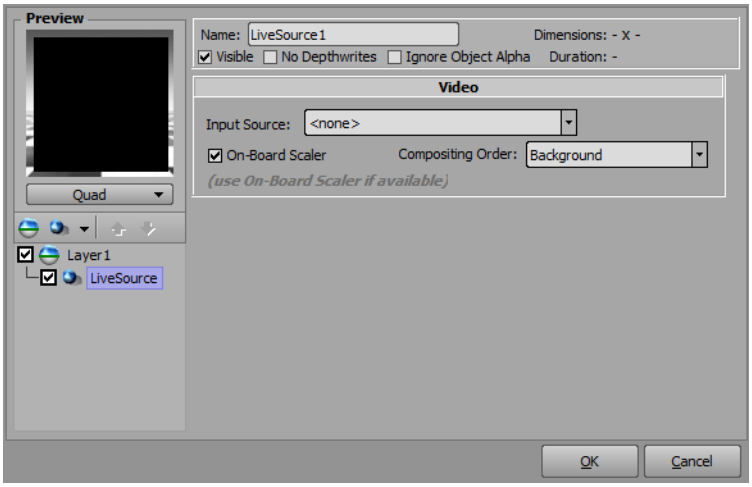
1. Open the **Material Manager** (**Ctrl**+**M** or click the **Material Manager** tab).

   The **Material Manager** opens.



2. In the **All Materials** list, right-click and select **New** > **Live Source**.

   The **Material Editor** opens with a new Live Source material.



3. In the **Video** section, use the **Input Source** list to select a video input.
4. Select the **On-Board Scaler** check box if it is not already selected. It is selected by default. This enables the low latency material scaler.
5. Use the **Compositing Order** list to select one of the following options:
   - **Background** — layer the scaled input behind the graphics.
   - **Foreground** — layer the scaled input over the graphics.

6. Click **OK**.

   The **Material Editor** closes.

7. Apply the new material to an object.

For More Information on...

- configuring the low latency scaler, refer to “**Hardware Setup**” on page 4–1.

DashBoard

Optionally, users can use DashBoard custom panels as customizable graphical user interfaces to control Tessera One. DashBoard custom panels are opened using the DashBoard client software. If DashBoard is not installed on the system, navigate to the DashBoard downloads page on the Ross Video website to download the software: https://www.rossvideo.com/support/software-downloads/dashboard/. The system ships with examples of these custom panels that can be used as training resources or can be modified for user specific needs. The custom panel package can be found here: `D:\Dashboard Applications\Tessera One - User Panel\Tessera One - Control.grid`

The DataLinq default port number is 2021.

The XPression Tessera One device IP and port parameters are:

- TesseraOne_IPAddress = localhost
- TesseraOne_RossTalkExPort = 8020
- TesseraOne_RossTalkPort = 7788

Baseball

Basketball

XPression

Football

Hockey

Soccer

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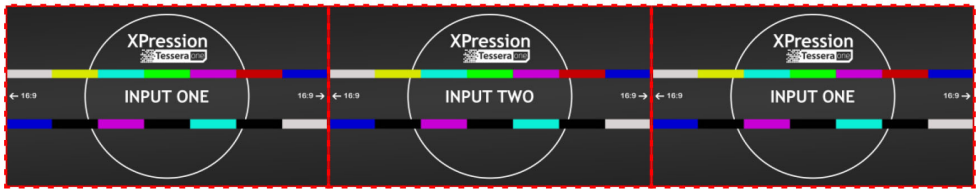
Supported Scaler Configurations

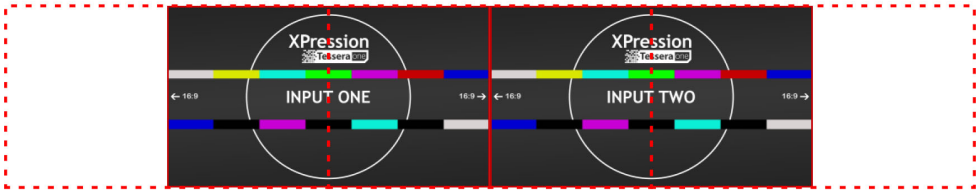
The following diagrams illustrate the supported scaler configurations for Tessera One and the configurations that will not work.

ONE FULL RESOLUTION SCALER AVAILABLE ON UP TO THREE FILLS



[FILL 1] [FILL 2] [FILL 3]
*REQUIRES (1) FILL+ LICENSE

TWO FULL RESOLUTION SCALERS SPANNED ACROSS THREE FILLS

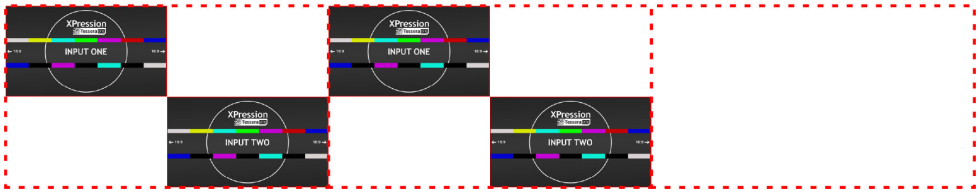


[FILL 1] [FILL 2] [FILL 3]
*REQUIRES (1) FILL+ LICENSE

THREE HALF RESOLUTION SCALERS AVAILABLE ON ONE FILL

[FILL 1] [FILL 2] [FILL 3]
*REQUIRES (1) FILL+ LICENSE

TWO HALF RESOLUTION SCALERS AVAILABLE ON UP TO TWO FILLS



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*REQUIRES (1) FILL+ LICENSE

TWO HALF RESOLUTION SCALERS AVAILABLE ON ONE FILL
ONE HALF RESOLUTION SCALER SPANNED ACROSS TWO FILLS

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*REQUIRES (1) FILL+ LICENSE