Our three screens across the front provides us with the ability to present a more impactful media experience for our congregation. Solomon had gold, we have video (1 Kings 6:21).

Each screen is 1920x1080 pixels, and when combined they create a canvas that is 5760x1080 pixels. This is made possible by using the “Decklink” interface that we began using a few months back.

There are two scenarios that we need to handle.

1. Tiled content: Graphic or video content that is only 1920 wide and we want that repeated across all three screens. (or maybe left and right with a prop in the centre).
2. Spanned Content: content that is designed to be different across all three screens. This includes using a motion background that is stretched across all three.

The Operator display (upper right corner) of the screen has been enhanced to show you what will be displayed. At the top of the operator screen in the section “TW\_Group” is how spanned content would appear. Below that the section called “TW\_Mirror” shows the tiled view (only 1 of 3 since they are all the same). Notice that in each case, only one of the two has content in it. The results can look quite odd if both are displaying content at the same time – it can look like a double/blurry image.

Figure Operator View - named “Operator 2x2\_TW”.

A screenshot of a computer

Description automatically generatedA screenshot of a video

Description automatically generated

Which of these two configurations is active is determined by the “Look” that is active. I have updated the normal macros so that things get set correctly. Some older content (songs) may set the look without using the macros. If that is the case, delete that look setting from the song and use the macros instead.

There is another output that is shown on the second row, right side. It is called “SW HDMI”. This is what is sent out via the HDMI output. It will usually be identical to the “TW\_Mirror” output. This leads us to talk about the video matrix. The normal configuration for that would be one of two states. All three screens coming from the TW view, or the Centre screen coming from the ATEM Aux (for the series graphic usually). This is the first of those configurations.

A screenshot of a computer

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The second configuration would be different in the Output 2 (“ProjCent”) would be connected to input 7 (“ATEM AUX”) rather than input 2 (“PP TW B”).

This new configuration requires us to use the NDI approach (covered earlier) for doing things like showing a Web Page (mentimeter). The first three outputs are only known to ProPresenter, so applications like Safari, Powerpoint or the DVD player cannot see/use them. That is when the hdmi output is to be used. The matrix would need to set output 1,2 and 3 to be input 8.

Figure Recap of typical matrix configurations. Differences from "Full TW" are highlighted.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Output | Full TW | Centre From ATEM AUX | Centre from ATEM Prg | All three from HDMI |
| 1 ProjEast | 1 | 1 | 1 | **8** |
| 2 ProjCent | 2 | **7** | **6** | **8** |
| 3 ProjWest | 3 | 3 | 3 | **8** |
| 4 RearProj | 4 | 4 | 4 | 4 |
| 5 ATEM In 1 | 8 | 8 | 8 | 8 |
| 6 not used | 4 | 4 | 4 | 4 |
| 7 Lobby | 6 | 6 | 6 | 6 |
| 8 Nursery | 6 | 6 | 6 | 6 |

It is possible that we could use a Prop targeting the centre screen for content like our series graphic and not use the ATEM for that at all. This would allow the ProPresenter operator to have more control over when to use which graphic for the centre. For this to work well we would need to ensure that don’t arbitrarily “clear props” or “clear all”.