

Appendix U

Production Switcher Input Source Assignment

Outputs of video routing switchers are commonly used to feed some or all of the inputs on a production switcher. This gives the operator a means of accessing sources that cannot be permanently wired to the production switcher due to input limitations. Production switcher inputs that receive their source signals from routing switcher feeds are referred to as “assignable inputs.” A routing switcher control panel is used to select the assignable input. See Figure U–1.

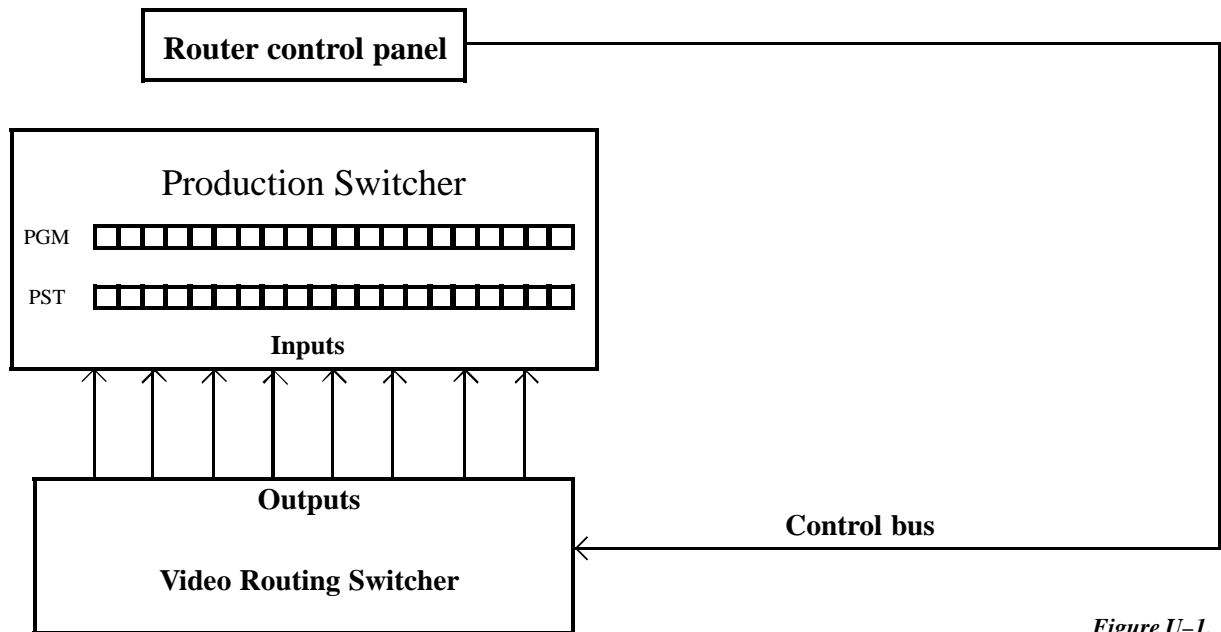


Figure U–1.

Using the routing switcher control panel, the operator must first select the output to be switched and then the routing switcher source. This operation is cumbersome and can result in human errors which could affect an on air signal. The Jupiter Input Source Assignment option addresses this problem by automatically selecting the correct router output and locking that output whenever it is on-air.

The sequence of events proceeds as follows:

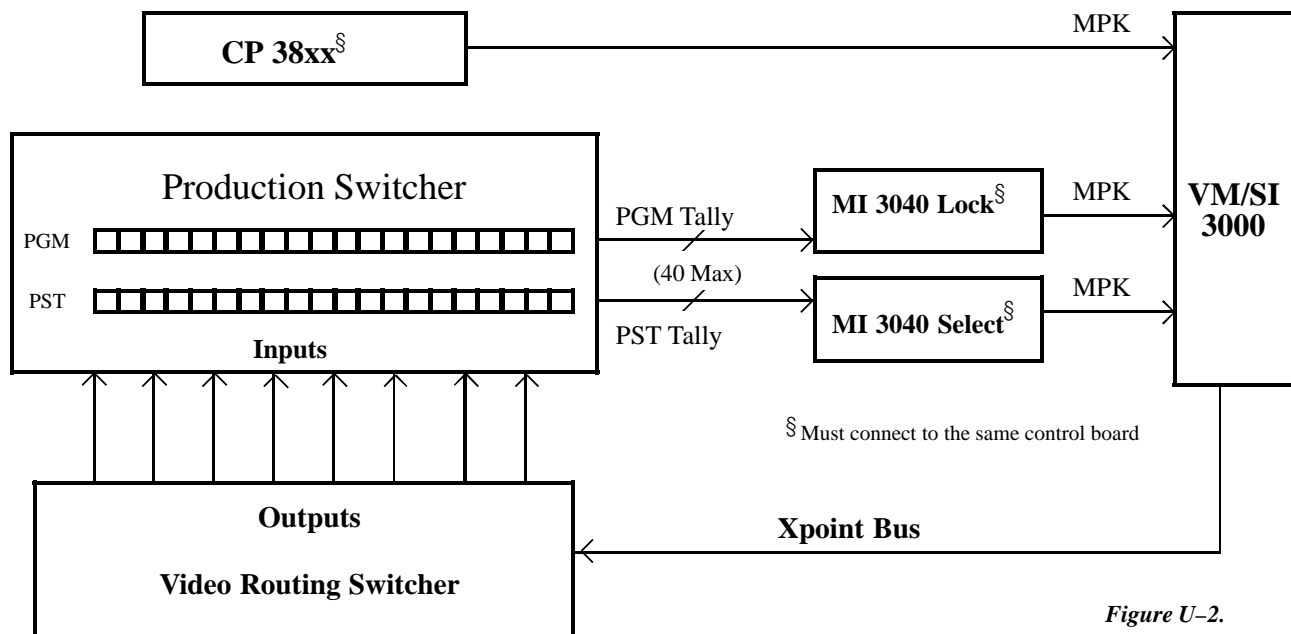


Figure U-2.

1. The operator selects the desired Preset button on the production switcher. This energizes the appropriate PST Tally line for that input; this condition is detected by a dedicated MI 3040 General Purpose Parallel Interface. Software within the VM/SI 3000 can now determine which router output is associated with the Preset button just pressed.
2. Control of the router output is automatically given to a CP 38xx series panel, which the operator now uses to select the desired input; for example, Camera 1. Camera 1 is now assigned to the Preset button selected on the production switcher.
3. When the signal on the Preset bus is taken to air, a similar process is used to detect this event. A second MI 3040 uses the Program Tally lines to determine which signal is on-air; the VM/SI 3000 uses this information to lock the router output involved. In this example, if Camera 1 was now on-air, the CP 38xx panel would not be able to switch to another source until Camera 1 was taken off-air.

HARDWARE COMPONENTS

Routing switcher control panel

This can be a CP 3808, CP 3824, CP 3832, CP 3864, or CP 3830 control panel. These are all single output panels.

Note: The CP 3800A and CP 3830P (CP 3830 operated in Preview mode) cannot be used in this application.

The control panel operation has not been changed due to the implementation of these new features. The system also allows each new device to be associated with a *different* CP-38xx panel if desired.

MI 3040 Select Device

This is a dedicated MI 3040 used to read and communicate the production switcher PST tally status to the Jupiter control system. The tally inputs are associated with a CP 38xx control panel output set as described in the configuration section of this document. The Jupiter control system uses that tally information to automatically assign the output of the specified control panel to the router output feeding the production switcher assignable input. When no tally input is received from the production switcher, (an assignable input is not being used on the production switcher PST bus) the Jupiter control system does nothing, leaving the control panel output where it was last set to. If the production switcher activates multiple tally lines, the Jupiter control system uses the last activated tally to set the output on the control panel. Manual operation of the control panel, including output selection, is unchanged.

MI 3040 Lock Device

This is a dedicated MI 3040 used to read and communicate the production switcher PGM tally status to the Jupiter control system. The tally inputs are associated with a CP 38xx control panel output set as described in the configuration section of this document. The Jupiter control system uses that tally information to automatically lock the specified routing switcher output. This feature prevents an inadvertent switch from being made to an assignable input if it is currently being used on the PGM bus of the production switcher. If the production switcher activates multiple tally lines, the Jupiter control system will lock all associated routing switcher outputs. When no tally input is received from the production switcher, (an assignable input is not being used on the production switcher PGM bus) the Jupiter control system removes all locks controlled by this application. Locks activated by the application and currently in place can be overridden (removed) using the routing switcher control panel. Locks activated by the panel are removed if this same source (router output) is placed on the production switcher PGM bus and then removed from the PGM bus. Manual operation of the control panel, including output selection, is unchanged.

SOFTWARE CONFIGURATION

The operator can use either one or both new MI 3040 applications. To configure both portions, the following items must be defined in the configuration editor:

1. All three devices (the CP 38xx and the two MI 3040 devices) must be configured on the same control board.
2. Select the “3040SLCT” (MI 3040 control panel output assignment application) in the MPK Devices table for the MI 3040 to be used for the PST tallies.
3. Select the “3040LOCK” (MI 3040 output lock application) in the MPK Devices table for the MI 3040 to be used for the PGM tallies.
4. Associate the MI3040SLCT device to the appropriate CP 38xx panel in the MPK Devices table by entering the name of the CP 38xx panel in the MI3040SLCT device’s “Inp Set” field.
5. Associate the MI3040LOCK device to the appropriate CP 38xx panel in the MPK Devices table by entering the name of the CP 38xx panel in the MI3040LOCK device’s “Inp Set” field. NOTE: There is no requirement to use the same CP 38xx panel with this device as with the MI3040SLCT device, although it is recommended that they be the same.
6. Select the 40 outputs to be associated to the 40 PST & PGM tallies by entering the tally input numbers in each associated CP 38xx output set’s “Button” column. The connections to the respective MI 3040s opto isolators from the PGM and PST tallies must be the same.