ADVANCED CONTROL SYSTEMS

FUNCTIONALITY DEEP-DIVE SERIES

Issue Three: Table Routing

INTRODUCTION

Every customer has their own workflows and challenges to address; users should be able to leverage the full capabilities of their systems. In this series of How-To Guides, we will help engineers understand how to configure systems with added-value functionality to help solve issues in existing and future projects. Customers will be able to use a control platform as a simple unified system to deliver professional output and make simple day-to-day modifications without the need for expensive support calls.

This How-To Guide showcases TSL's table routing capabilities.

What is a Table Router?

The table route is a simple mechanism by which a crosspoint made within a connected matrix can be used to trigger another crosspoint. This triggered crosspoint can be made within the same matrix or within another matrix.

Scenario

This guide provides step-by-step instructions for setting up a multiviewer's sources to follow the sources routed to a switcher. When a source is routed to a destination that feeds a source of the switcher, Tallyman will then use this change as a trigger to route the same source to a corresponding destination that feeds a source of the multiviewer. This will allow all the sources routed to a switcher to be displayed on the multiviewer.

BEFORE YOU START

This document assumes you have set up router control, as described in Step 1 of TSL Control Systems: Functionality Deep Dive: #1 Router Control.

EXAMPLE OF USER CASES

Protocol conversion of routing control between third party routers

A controller using SW-P-08 protocol, for example, might be required to control a matrix using Quartz protocol. In this case you can table route from an SW-P-08 Dummy router to a Quartz router within TallyMan. The reason you would use a table route as opposed to a copy route is that the size and mapping of controller and router frame may be different.

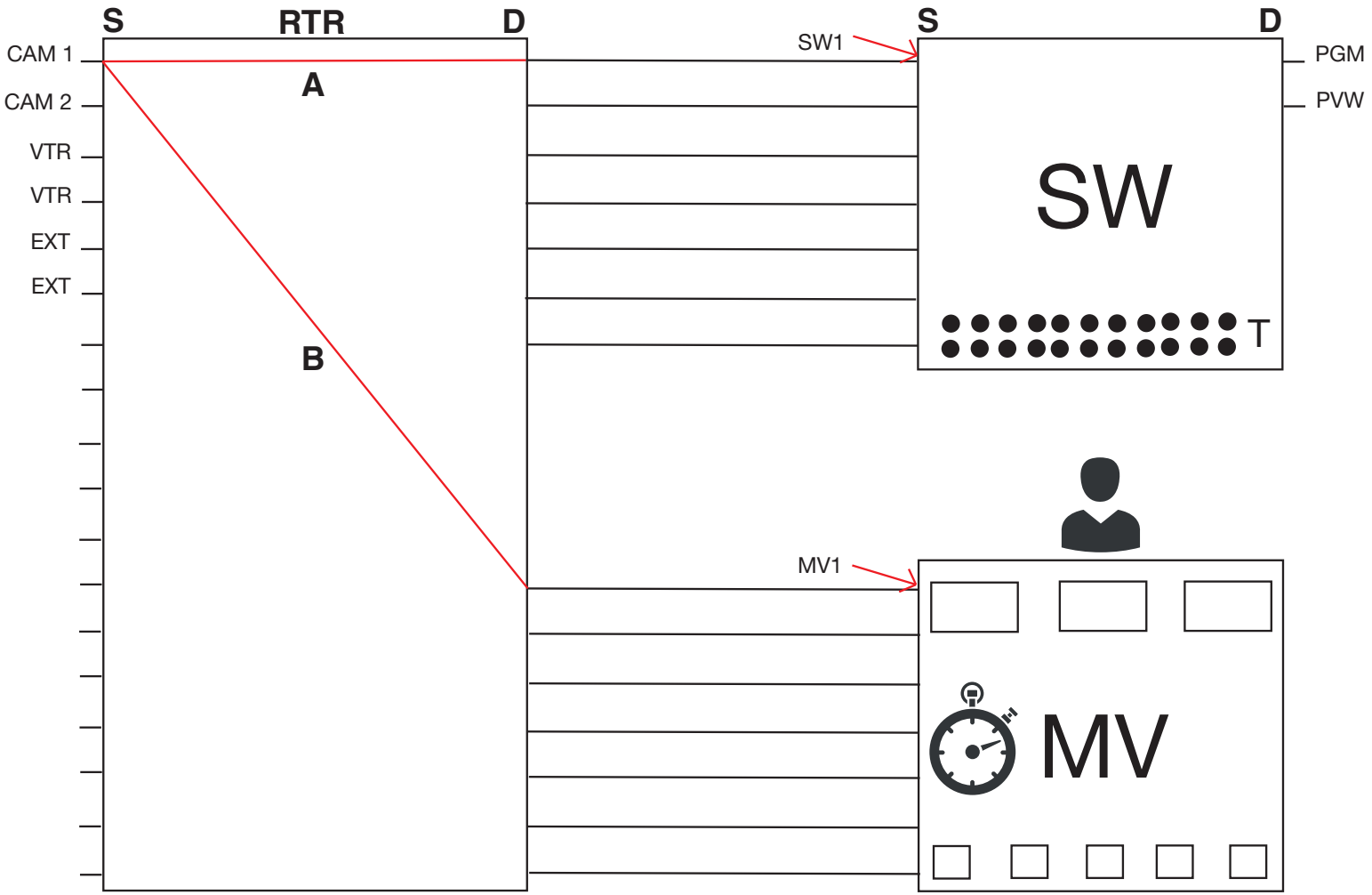
Multiviewer follow Switcher

Many studio systems require switcher inputs to be permanently displayed in multiviewer pips. Using table routes allows you to:

- Set the trigger crosspoints as crosspoints to switcher destinations.
- Set the action crosspoints as crosspoints to the multiviewer destinations.

This means you can configure the table route to take any source routed to a switcher input and route it to a multiviewer input.

In this example: Both source 1 of the switcher and multiviewer will always have the same source routed.
If the source changes on the switcher, then the the source of the multiviewer will also change automatically.

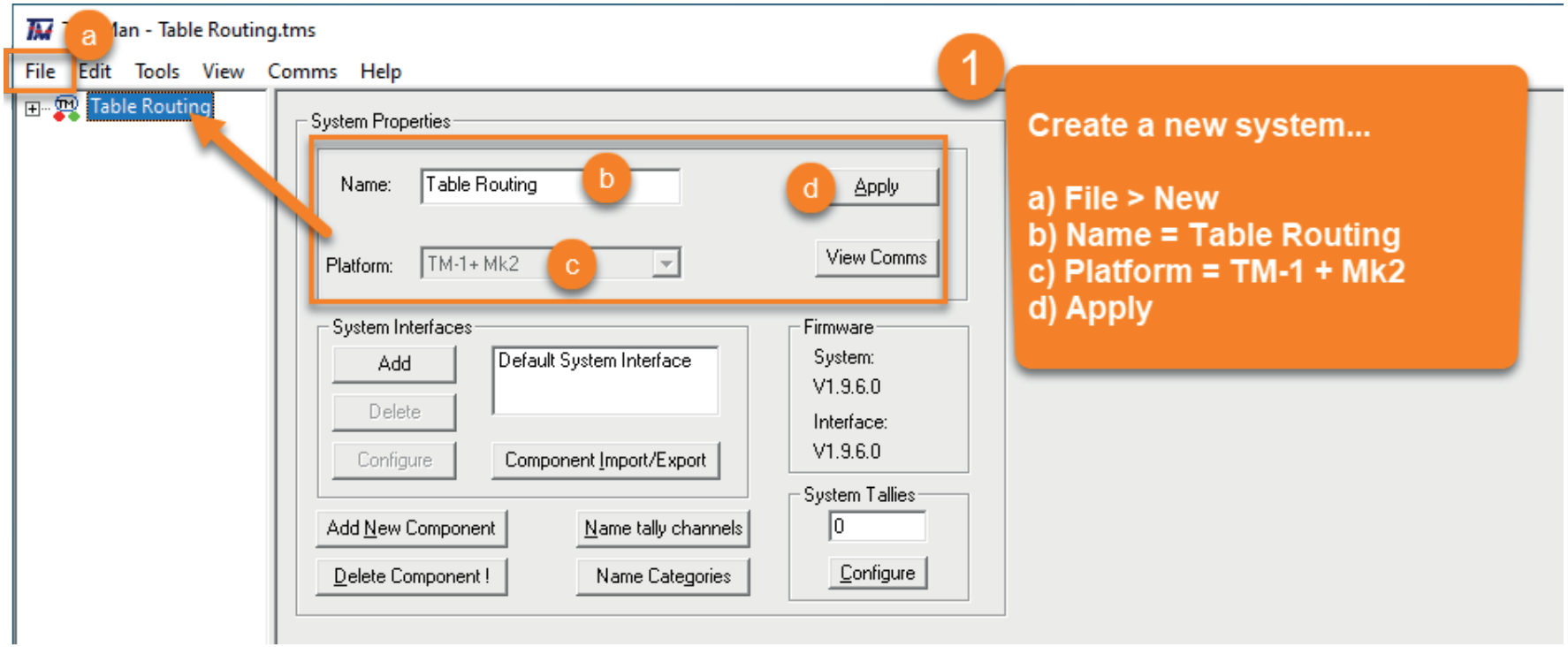


ADD & SET UP A ROUTER

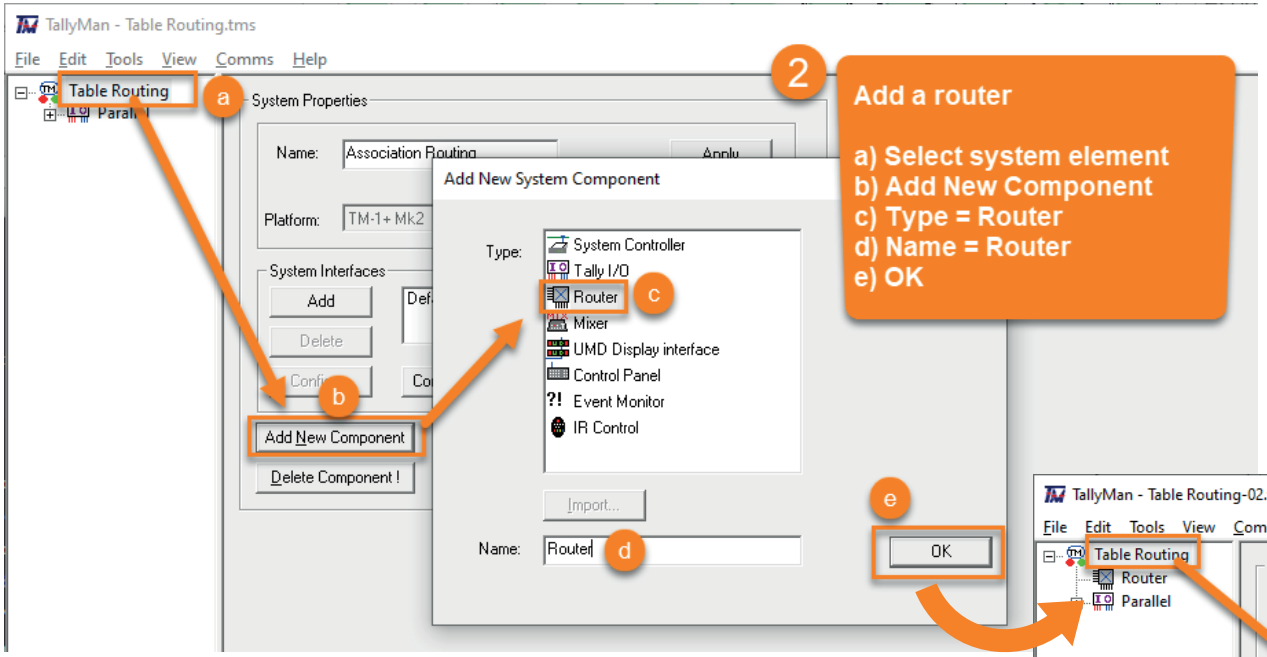
Although we are using a new config in this example, the steps can also be used to add to an existing configuration.

In this example:

- Connecting to a 32x32 router over SW-P-08 protocol.
- Using the table router function to set up the destinations of the router that feed the mulitviewer, to follow the switcher destinations of the router so that the multiviewer's sources are the same as the switcher's sources.



ADD & SET UP A ROUTER



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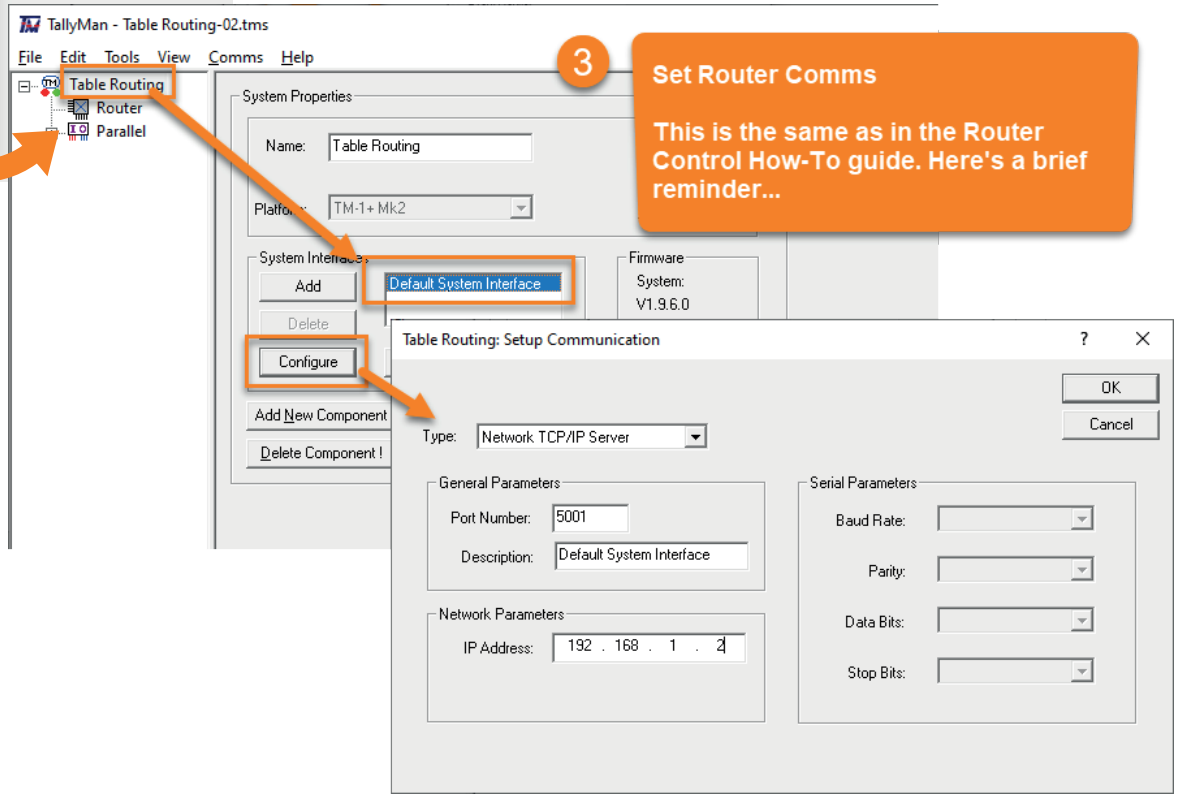
Add a router

a) Select system element
b) Add New Component
c) Type = Router
d) Name = Router
e) OK



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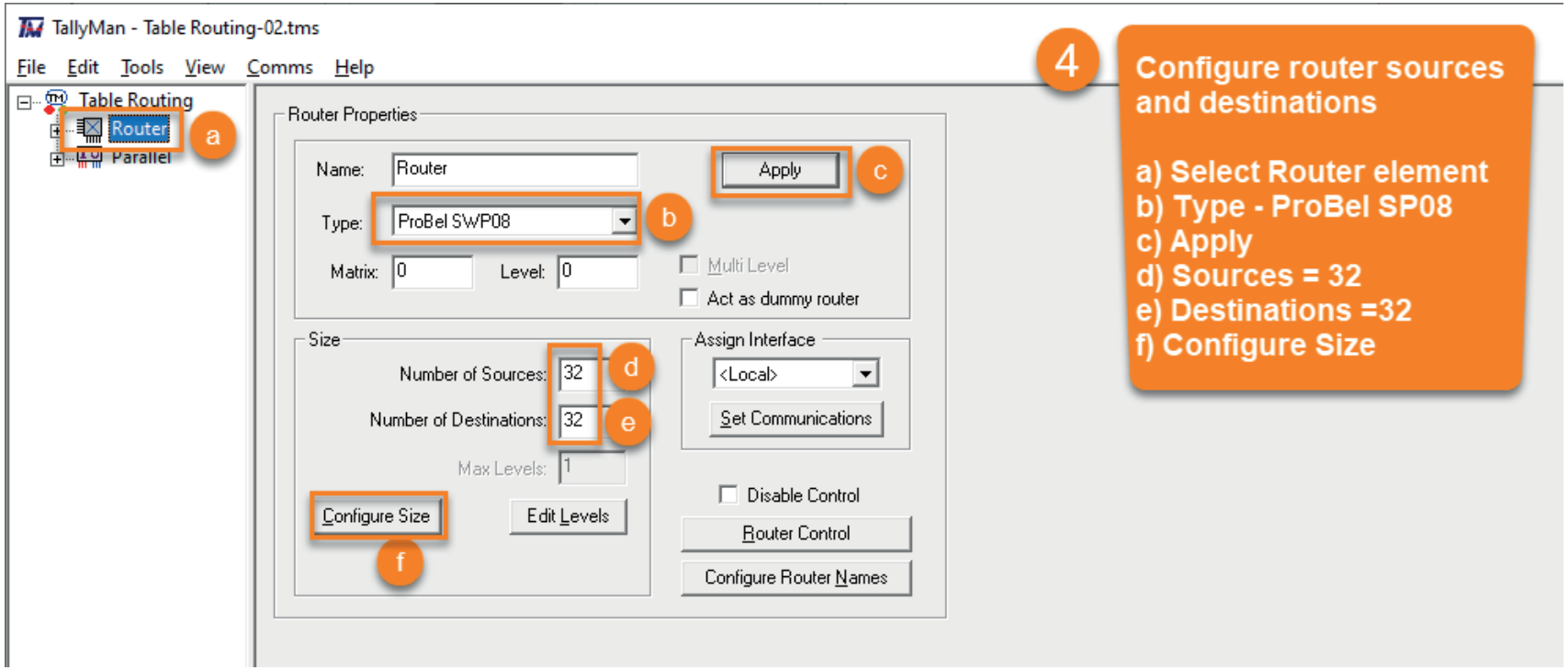
Set Router Comms

This is the same as in the Router Control How-To guide. Here's a brief reminder...

Setting up the router communications and size.

ADD & SET UP A ROUTER



ADD & SET UP A ROUTER

Populating the router's Sources and Destinations
There are two methods for populating a router's Source (input) and Destination (output) names:

- Manually entering every name one by one
- Using an Excel spreadsheet to copy/paste multiple names at a time

Firstly, here's the result we're trying to achieve:

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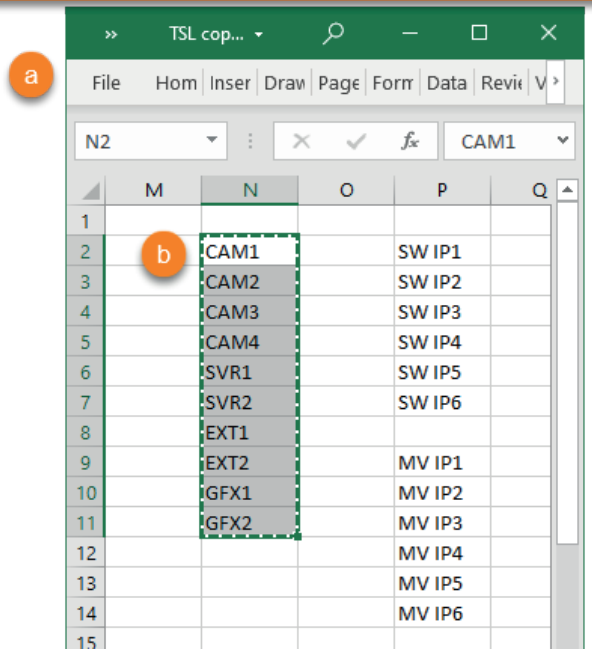
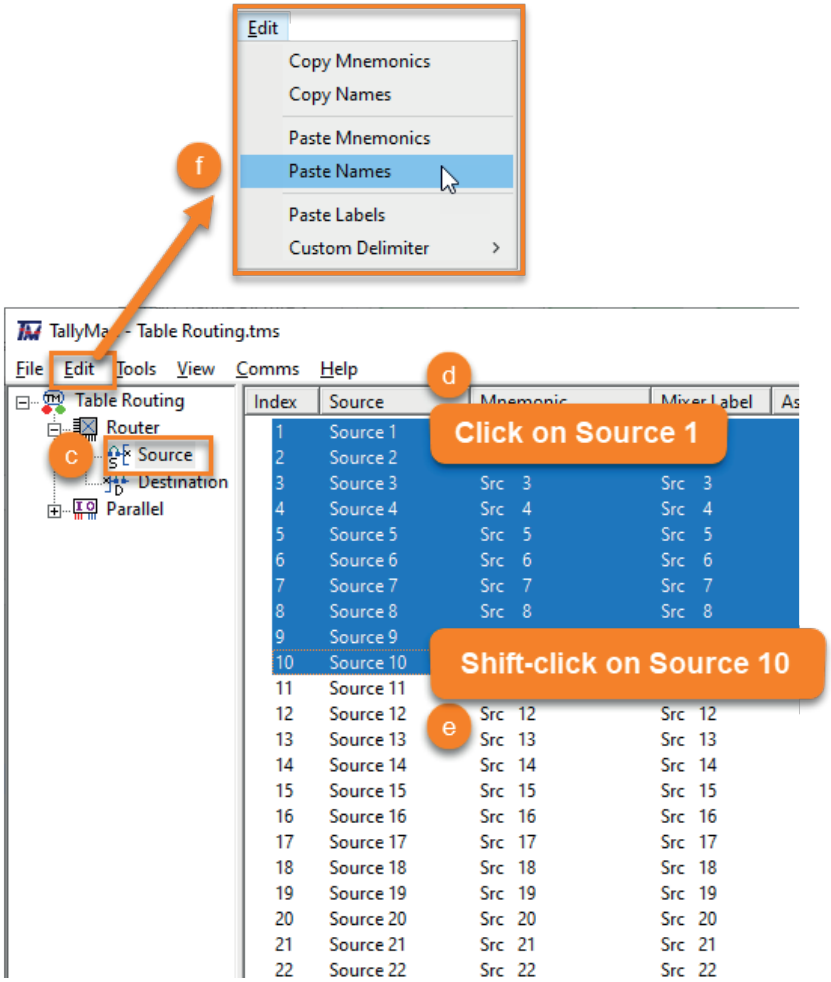
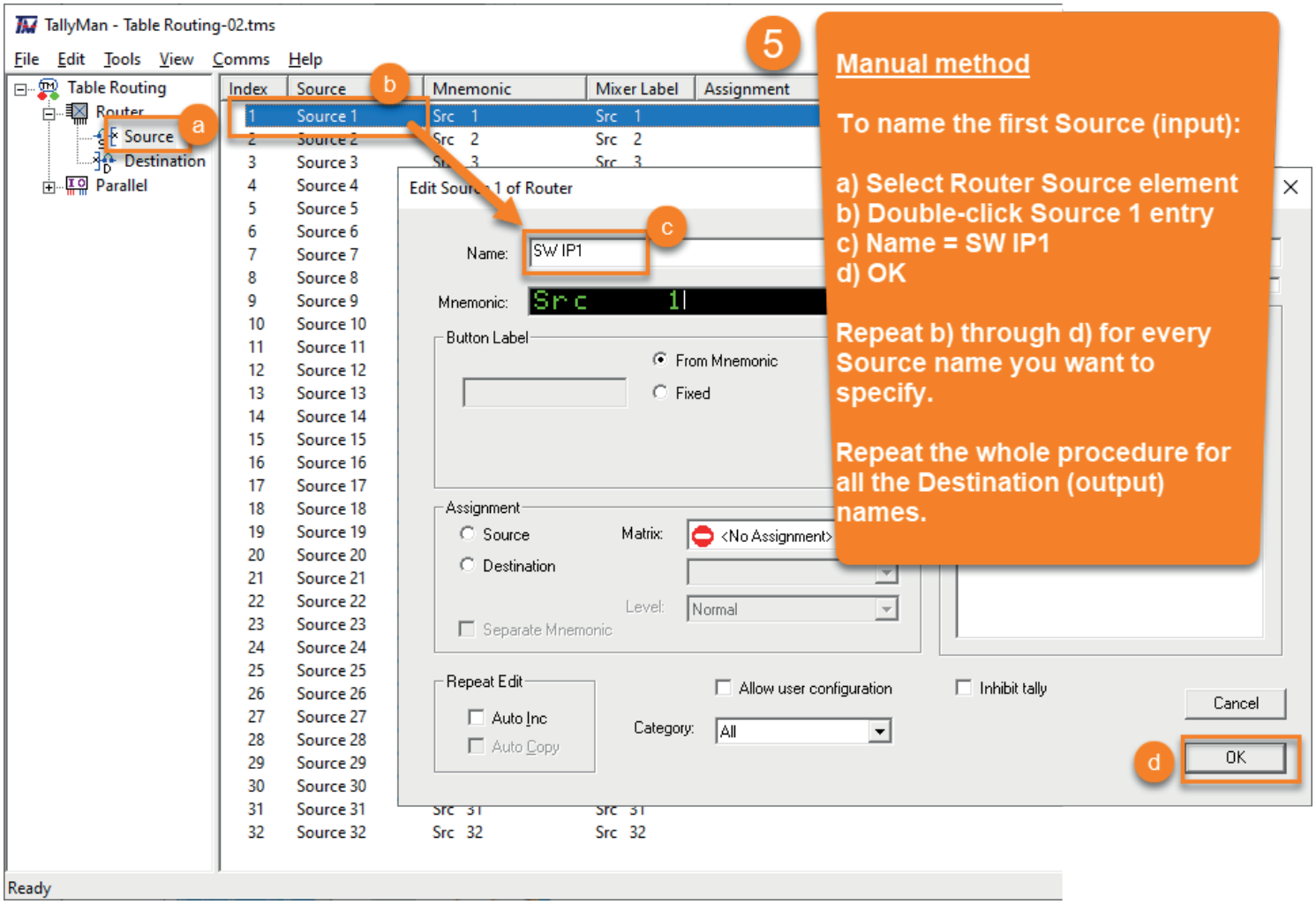
Spreadsheet method

a) Create Excel spreadsheet with I/P and O/P names
b) Select I/P names in spreadsheet and Copy
c) Select Router Source element
d) Click to select the first Source entry
e) Shift-click to select the range to Source 10
f) Edit > Paste Names

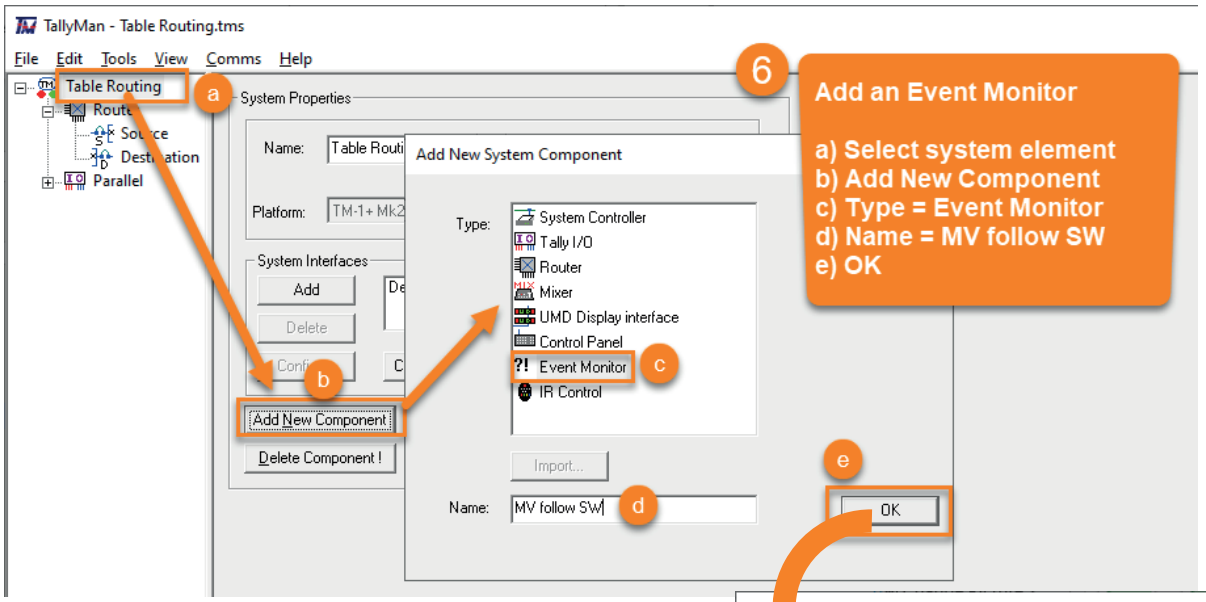




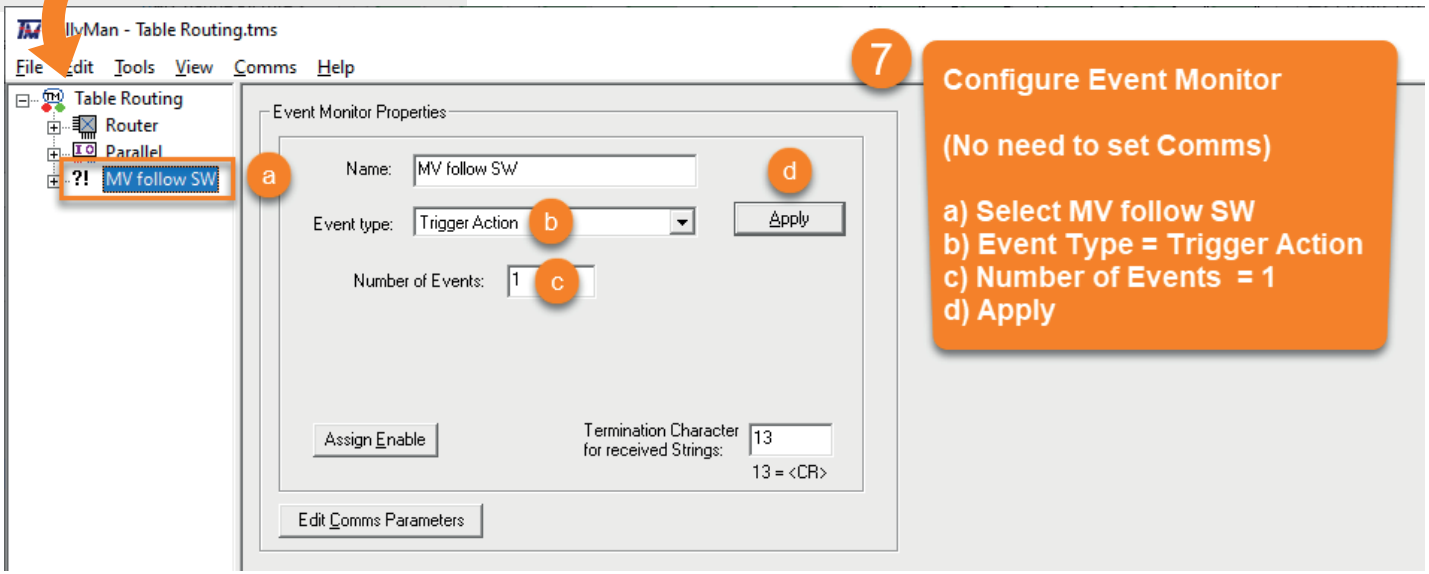
ADD & SET UP A ROUTER



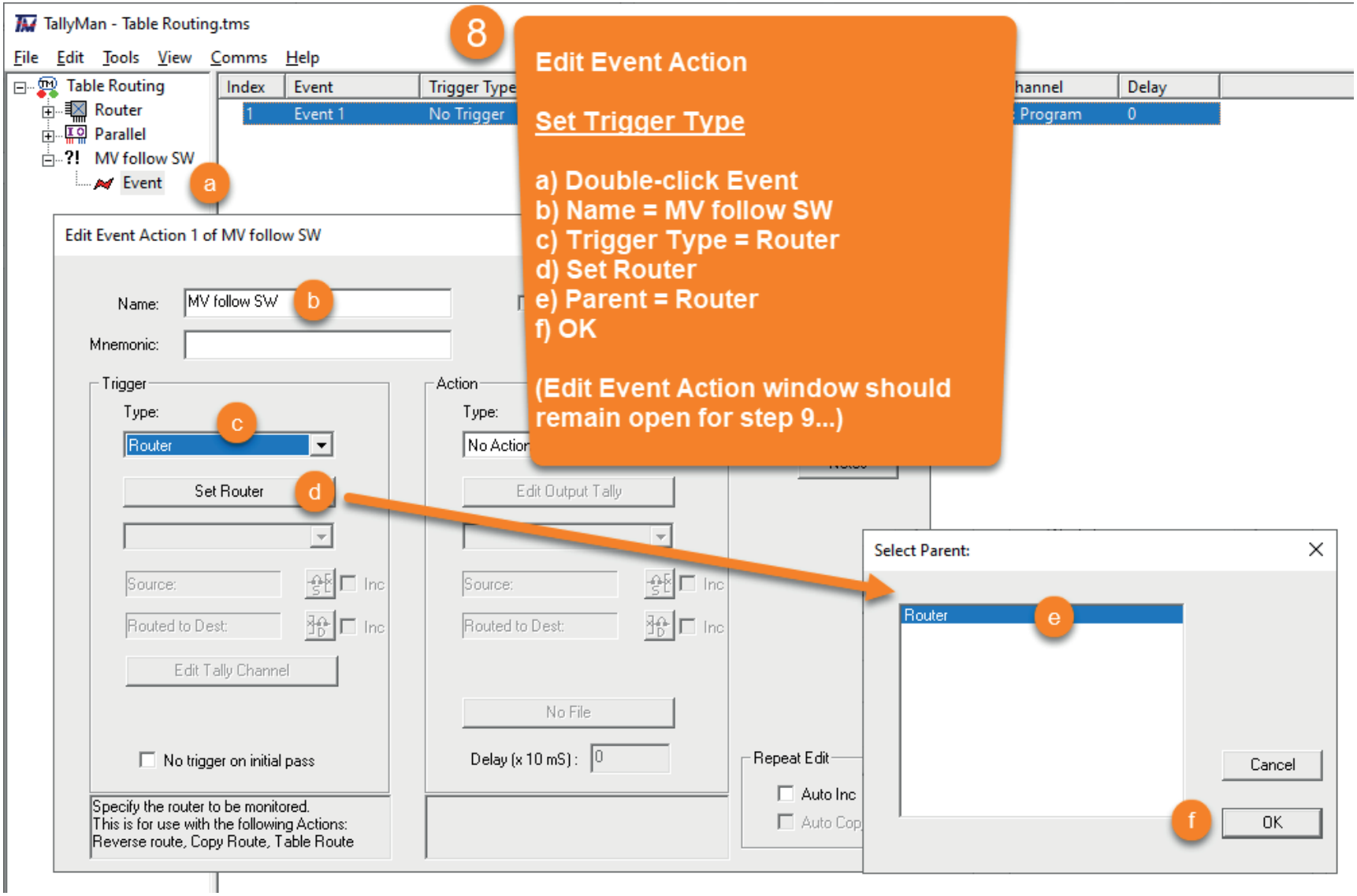
ADDING AN EVENT MONITOR



Configure the Event Monitor



ADDING AN EVENT MONITOR



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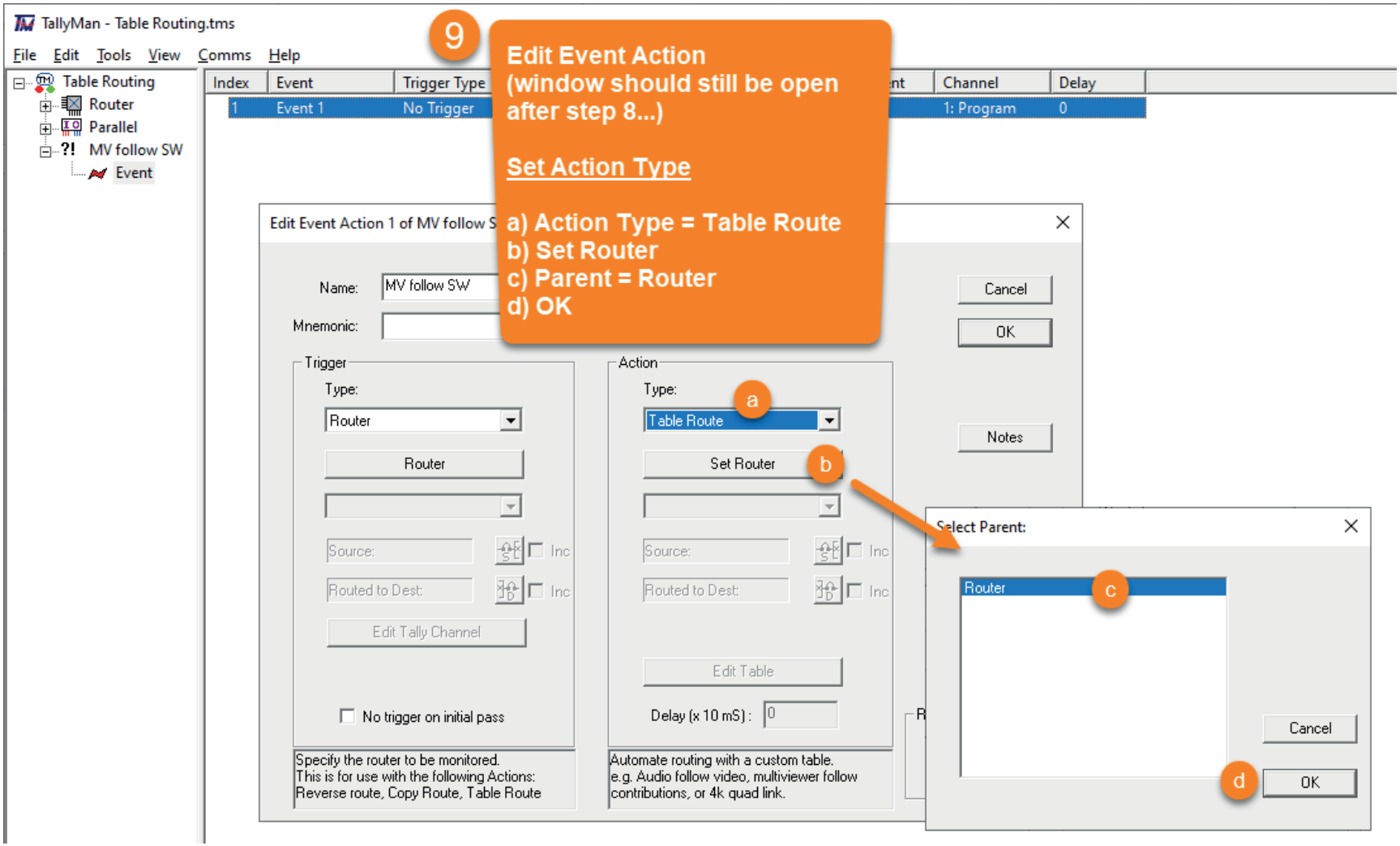
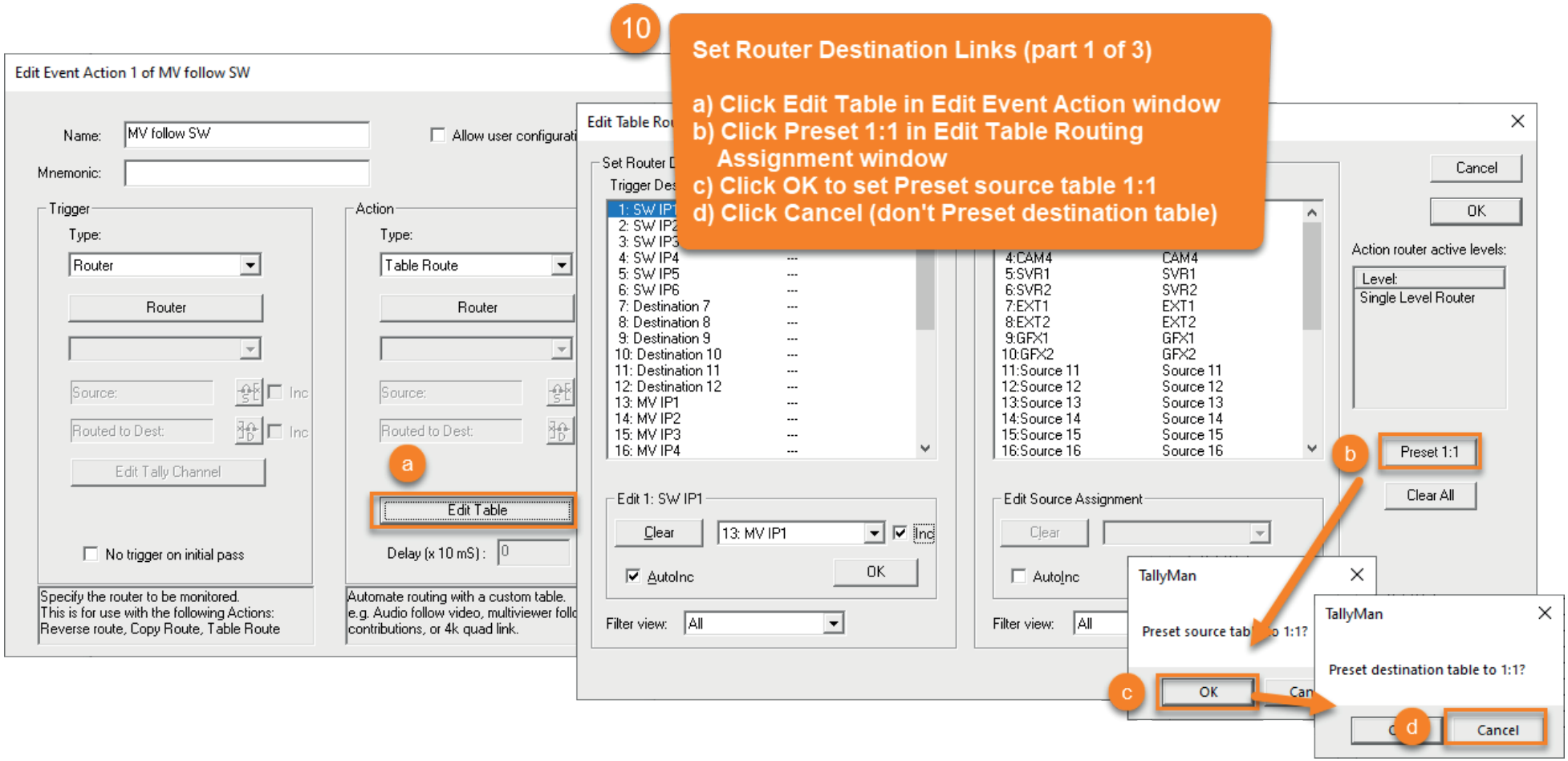


SETTING ROUTER DESTINATIONS & LINKS



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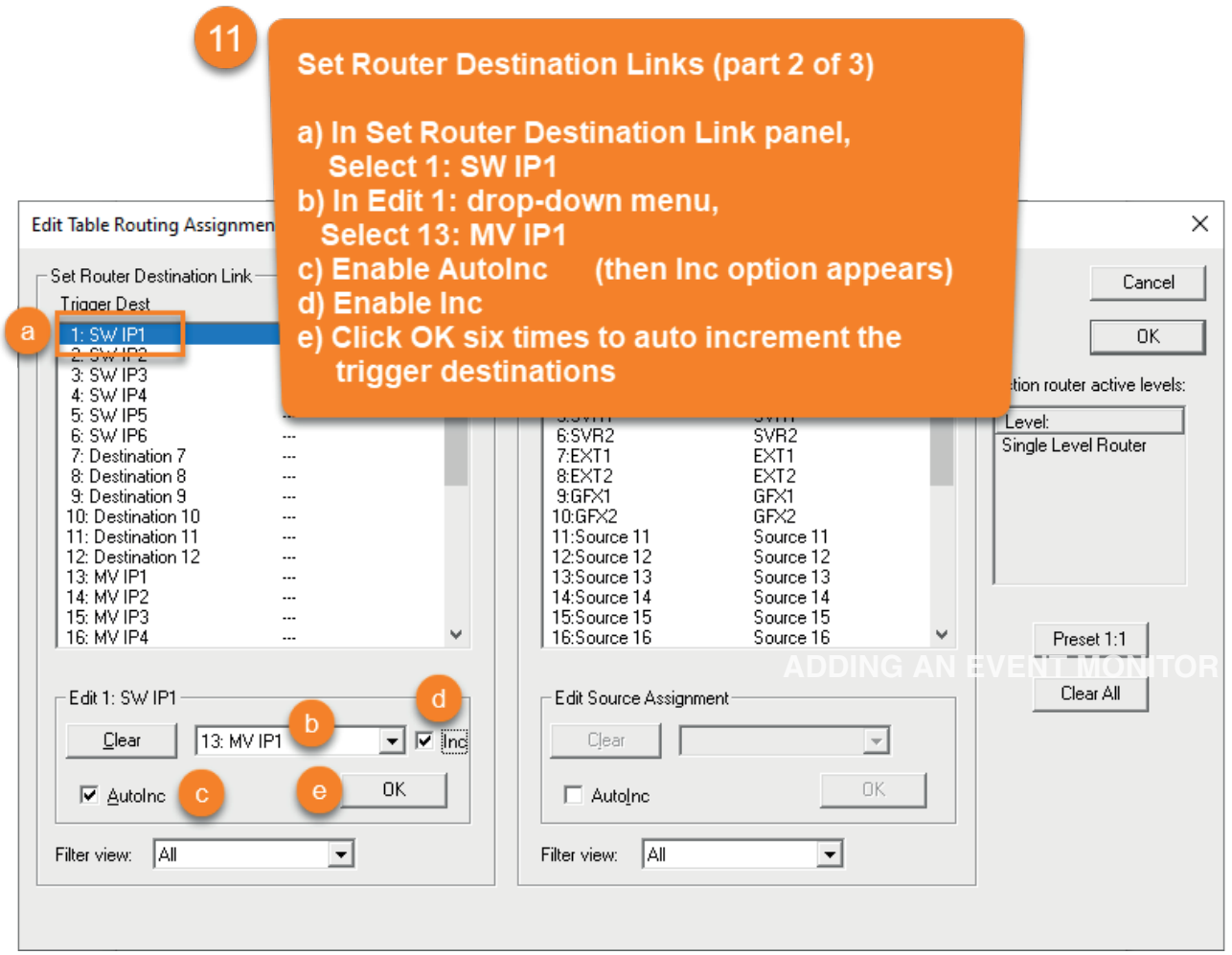

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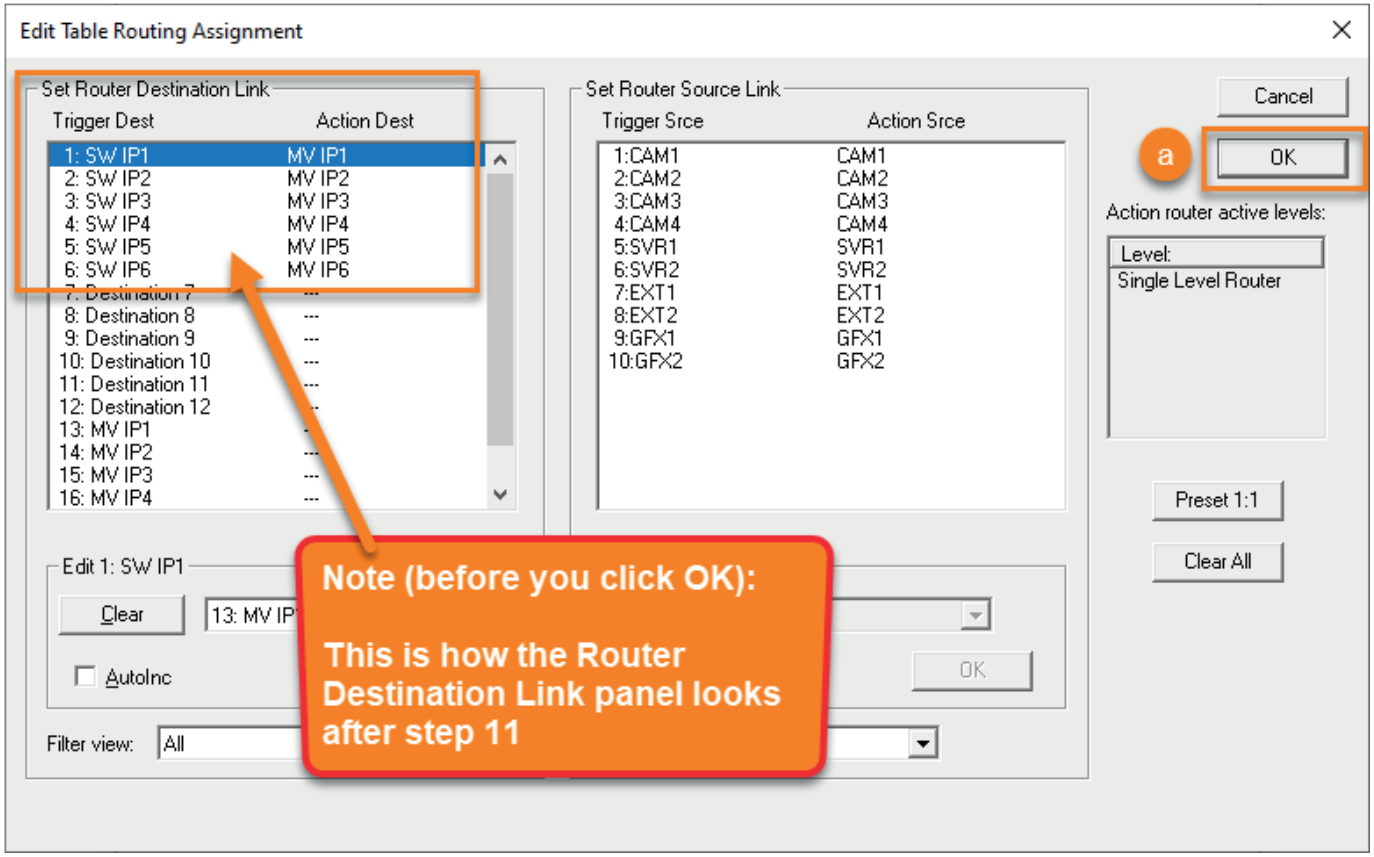
Set Router Destination Links (part 3 of 3)

a) Click OK to save and dismiss Edit Table Routing Assignment window

b) Click OK to save and dismiss Edit Event Action window (not shown here)



USING THE TABLE ROUTER

To use the Table Router, you need to set up a router control panel.

An Table Router is controlled in the same way as any router in Tallyman, by either hardware panel, virtual panel or via an event.

As a quick reference:

To use TMVP, in Tallyman:

1. Choose Comms > Disconnect from System.
2. Add a TMVP interface on a new port.
3. Choose Comms > Write Configuration and Restart when prompted.

To create a router control panel in TMVP:

1. Create a New Project and Import the Tallyman tms file.
2. Connect TMVP to Tallyman.
3. Create/edit a panel and add sources and destinations.
4. Use the Assign tab to find the router and assign the sources and destinations to the buttons.
5. Click the Play button use the router panel in kiosk mode.

Take a look at the detailed instructions are in Functional DeepDive #1: Routing Control

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Issue One: Router Control

Access Issue #1 and additional video guides at:
tslproducts.com/tech-insight-hub/functional-deep-dives

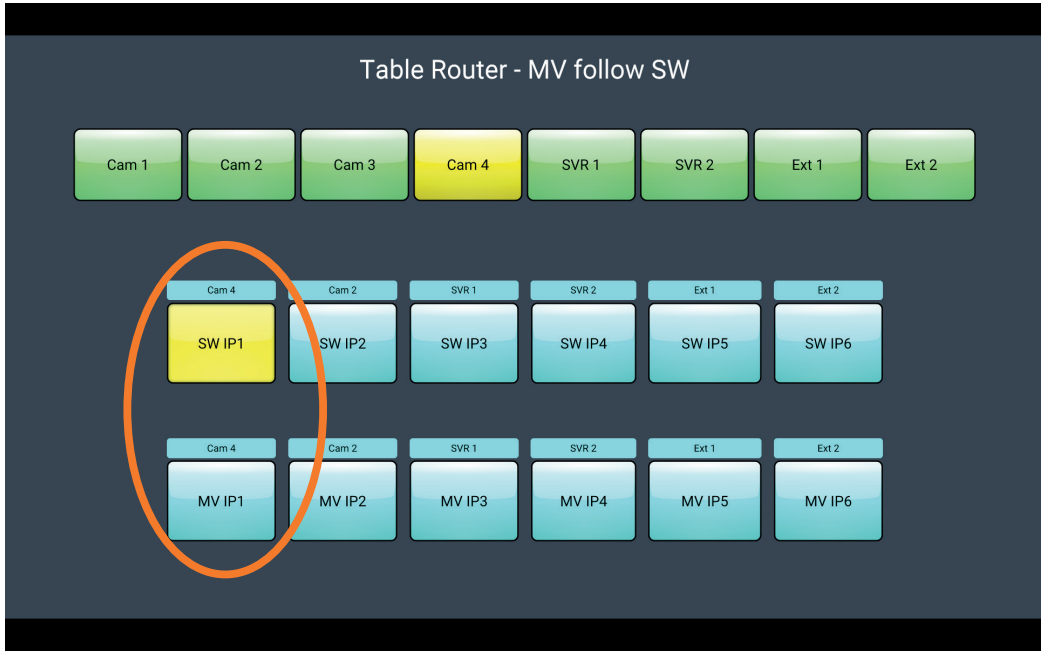
USING THE TABLE ROUTER

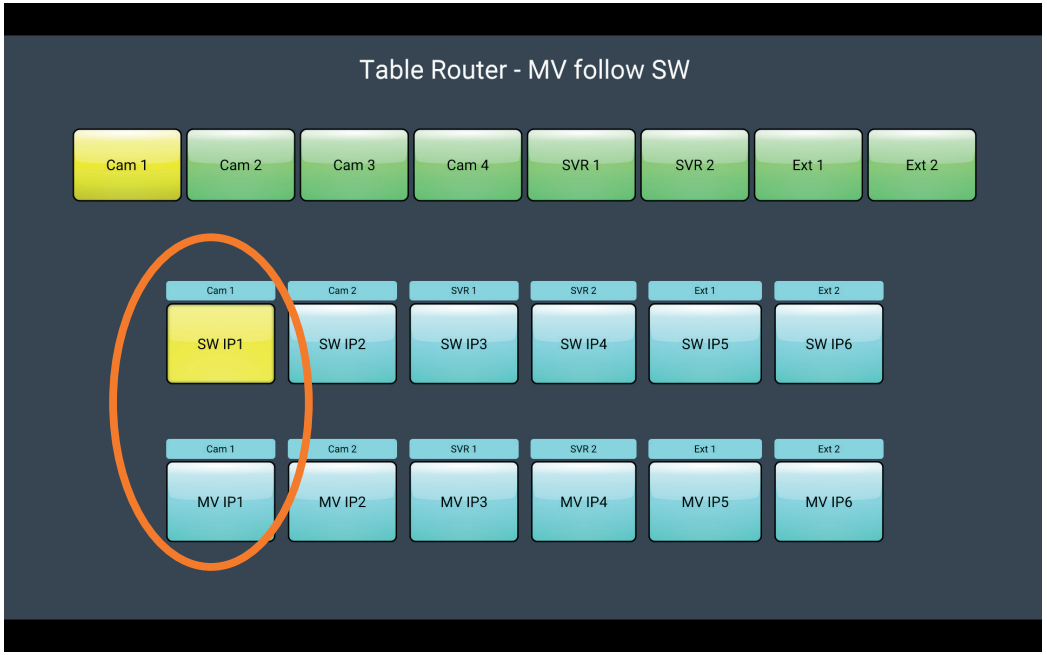
Illustrating the Table Router at work

Once your control panel is set up you can start to route the table router like any router. When you make a cross-point, the tabled cross-points will also be made.

To see this in action in TMVP:

1. Add another row of destination buttons to your router control panel.
2. Assign the destinations of the router that feed the multiviewer to the buttons.
3. Click the Play button use the router panel in kiosk mode.
4. When you route sources to the destinations that feed the switcher, the second row of destination representing the destinations that feed the multiviewer will also receive the same sources.





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