



ADVANCED CONTROL SYSTEMS

FUNCTIONALITY DEEP-DIVE SERIES

Issue Four: Joy Stick Overrides

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 joystick control capabilities.

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.

SCENARIO

Consider a shading operator, who needs to be able to colour match the image settings across multiple cameras. TallyMan uses the output from the RCCP's joystick press to control which camera is routed to the shading position monitor, allowing the shading operator to perform the colour-matching process quickly and efficiently.

This guide provides in-depth instructions on how to set up joy stick control.

JOYSTICK CONTROL

From a control systems perspective, joystick control is the ability to momentarily make predefined cross-points on the router. When an RCCP's joystick (or other trigger such a button) is pressed, the control system makes the predefined cross-point on the router.

When the joystick is released, the control system reverts the router destination cross-point to its default. The control system is also able to change the default source as instructed by the user. This is an option of the control system.



1. SETTING UP VIRTUAL JOYSTICK CONTROL

First, we need to add a control panel

The image shows a sequence of steps in the TallyMan software interface. On the left, the 'System Properties' window is open, and the 'Add New System Component' dialog is displayed. The 'Add New Component' button is highlighted, and the 'Control Panel' option is selected in the 'Type' list. The 'Name' field is set to 'Joysticks'. On the right, the 'Control Panel Properties' window is shown for the 'Joysticks' component. The 'Type' is set to 'TSL Control Panel', and the 'Mixed Tally and Routing' option is selected under 'Default Button Settings'. The 'Joystick Overrides' field is set to '4', and the 'Apply' button is highlighted. A large orange callout box on the right contains the text: 'Set... a) Type b) Default Button Settings c) Joystick Overrides ...then Apply'. The number '1' is in a circle next to the 'Add New Component' button, and the number '2' is in a circle next to the 'Apply' button.

1

Add new Control Panel component and name it

2

Set...

a) Type
b) Default Button Settings
c) Joystick Overrides

...then Apply

This could be done by connecting to a TSL control panel but in the case we are going to use a virtual instance so select 'Virtual Panel' from the list.

3 Set Comms

Control Panel Properties
Name: Joysticks
Type: TSL Control Panel

Joysticks: Setup Communication
Type: Virtual Panel

Set Comms

Set Backup comms parameters

Set up the first Joy stick input.

Index	Pg	Btn	Button	Tally Channel	Assignment	Level
1	1	1	Button 1			
2	2	2	Button 2			
3	3	3	Button 3			
4	4	4	Button 4			
5	5	5	Button 5			
6	6	6	Button 6			
7	7	7	Button 7			
8	8	8	Button 8			
9	9	9	Button 9			
10	10	10	Button 10			
11	11	11	Button 11			
12	12	12	Button 12			
13	13	13	Button 13			
14	14	14	Button 14			
15	15	15	Button 15			
16	16	16	Button 16			
17	2	1	Joystick 1			
18	2	2	Joystick 2			
19	2	3	Joystick 3			

4 Set up joystick buttons:
a) Double-click Button branch
b) Double-click to edit Joystick 1
c) Set Matrix
d) Set Source for Joystick 1 button

Edit Panel Button 17 of Joysticks
Name: Joystick 1
Matrix: Router
Source: 1: Source 1

Select the trigger for the selected Joystick.

Two ways to assign joystick functions...

Using external triggers
(e.g. Remote Camera Control Panels)

The 'Edit Panel Button 17' dialog shows 'Joystick 1' with 'Matrix: Router' and 'Source: 1: Source 1'. An orange circle 'a' is next to the 'Add Tally' button. An orange arrow points from 'a' to the 'Add Assigned Tally' dialog. In the 'Add Assigned Tally' dialog, 'Type: Tally In' (b), 'Parent: Parallel' (c), and 'Tally: 1: Tally In 1' (d) are selected. An orange circle 'e' is next to the '> Add >' button. An orange circle 'f' is next to the 'Finished' button. An orange circle 'g' is next to the 'OK' button in the 'Edit Panel Button' dialog.

Tally	Parent	Logic	Ct
Tally In 1	Parallel		1:

If using system triggers
(e.g. hardware or virtual buttons)

The 'Edit Panel Button 18' dialog shows 'Joystick 2' with 'Matrix: Router' and 'Source: 2: Source 2'. An orange circle 'a' is next to the 'Map to Button' button. An orange arrow points from 'a' to the 'Add Assigned Tally' dialog. In the 'Add Assigned Tally' dialog, 'Type: Button' (b), 'Parent: Joysticks' (c), and 'Tally: 2: Button 2' (d) are selected. An orange circle 'e' is next to the '> Add >' button. An orange circle 'f' is next to the 'Finished' button. An orange circle 'g' is next to the 'OK' button in the 'Edit Panel Button' dialog.

Tally	Parent	Logic	Ct
Button 2	Joysticks		1:

Index	Pg	Btn	Button	Tally Channel	Assignment	Level
1	1	1	Button 1	*Router*	---	---
2	2	2	Button 2	*Router*	---	---
3	3	3	Button 3	*Router*	---	---
4	4	4	Button 4	*Router*	---	---
5	5	5	Button 5	*Router*	---	---
14	14	14	Button 14	*Router*	---	---
15	15	15	Button 15	*Router*	---	---
16	16	16	Button 16	*Router*	---	---
17	2	1	Joystick 1	*Router*	Source: Source 1	---
18	2	2	Joystick 2	*Router*	Source: Source 2	---
19	3	3	Joystick 3	*Router*	Source: Source 3	---
20	4	4	Joystick 4	*Router*	Source: Source 4	---
21	5	5	JS Def Source	*Router*	---	---
22	6	6	JS Destination	*Router*	---	---
23	7	7	Rotary 1	1: Program	---	---

6

Repeat steps 4 and 5 to define remaining Joystick buttons

Set the default source, this will be the source used when no joystick is pressed.

Btn	Button	Tally Channel	Assignment	Level
1	Button 1	*Router*	---	---
2	Button 2	*Router*	---	---
3	Button 3	*Router*	---	---
4	Button 4	*Router*	---	---
5	Button 5	*Router*	---	---
6	Button 6	*Router*	---	---
7	Button 7	*Router*	---	---
8	Button 8	*Router*	---	---
9	Button 9	*Router*	---	---
10	Button 10	*Router*	---	---
11	Button 11	*Router*	---	---
12	Button 12	*Router*	---	---
13	Button 13	*Router*	---	---
14	Button 14	*Router*	---	---
15	Button 15	*Router*	---	---
16	Button 16	*Router*	---	---
17	2 1 Joystick 1	*Router*	---	---
18	2 Joystick 2	*Router*	---	---
19	3 Joystick 3	*Router*	---	---
20	4 Joystick 4	*Router*	---	---
21	5 JS Def Source	*Router*	---	---
22	6 JS Destination	*Router*	---	---
23	7 Rotary 1	1: Program	---	---

Edit Panel Button 21 of Joysticks

Name: JS Def Source

Matrix: Router

Source: 2: Source 2

OK

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Set Joystick default Source (will revert to this when no button has been pressed)

Index	Pg	Btn	Button	Tally Channel	Assignment	Level
1	1	1	Button 1	*Router*	---	
2	2	2	Button 2	*Router*		
3	3	3	Button 3	*Router*		
4	4	4	Button 4	*Router*		
5	5	5	Button 5	*Router*		
6	6	6	Button 6	*Router*		
7	7	7	Button 7	*Router*		
8	8	8	Button 8	*Router*		
9	9	9	Button 9	*Router*		
10	10	10	Button 10	*Router*		
11						
12						
13						
14						
15						
16						
17						
18	2		Joystick 2	*Router*		
19	3		Joystick 3	*Router*		
20	4		Joystick 4	*Router*		
21	5		JS Def Source	*Router*		
22	6		JS Destination	*Router*		
23	7		Rotary 1	1: Program		

Name: JS Destination
 Matrix: Router
 Dest: 1: Destination 1
 OK

8
Set Destination (where output will be sent when this Joystick is pressed)

Select the destination used for the colour grading monitor.

Write the configuration to the TallyMan system.

TallyMan - Offline
 File Edit Tools View Comms Help
 Router Example
 Connect to System
 Disconnect from System
 Write Configuration
 Shutdown System

9
Write the configuration

TallyMan
 Confirm: Write current file to Active System?
 Yes

Configure TallyMan System
 Write to Local System
 Download and Restart

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