Blackmagic Design GPI Tally Box

The GPI Tally box sits in between the ATEM Switcher and the control panel or computer on the Ethernet/LAN cabling. It has two LAN ports, one labelled IN and one labelled OUT. The IN port is connected to the Control Panel/Computer. The OUT port is connected to the ATEM switcher.

The USB port is just for firmware updates.

The 25pin D-Sub connector uses the following pin definitions…

BMD GPI TALLY BOX		
Pin	**Description**	
1	GND	
2	GND	
3	GPI 8	
4	GPI 7	
5	GPI 6	
6	GPI 5	INPUTS : Optical isolators triggered by connection to ground - Max 5V at 14mA
7	GPI 4	
8	GPI 3	
9	GPI 2	
10	GPI 1	
11	GND	
12	GND	
13	GND	
14	GND	
15	GND	
16	TALLY 8	
17	TALLY 7	
18	TALLY 6	
19	TALLY 5	OUTPUTS : Mechanical relay contact closure to ground - Max 30V at 1A
20	TALLY 4	
21	TALLY 3	
22	TALLY 2	
23	TALLY 1	
24	GND	
25	GND	

Datavideo ITC-100 base unit – Tally Inputs A & B
Tally Inputs A & B on the ITC-100 base unit rear panel are configured for direct connection to a Datavideo switcher or a self made cable from the Blackmagic Design GPI TALLY BOX.

These A & B connectors support Bi-colour tally information from the base unit ITC-100 to the ITC-100SL or belt pack; a TD-1 or TD-2 tally light is then connected to the belt pack and mounted on the camera.

RED LED on the tally light indicates Live and AMBER indicates Cued or next.

Tally A connector on the ITC-100 base unit will feed tally information for switcher channels 1 ~ 4 and Tally B connector will feed information for switcher channels 5 ~ 8.

ITC-100 Tally Input - Pin Cross Reference

If you are using the ITC-100 with a Datavideo product you do not need to worry about tally information, as it is automatically sent to the ITC-100. If you are using the ITC-100 with other equipments the following tables may help explain the pin configurations of the ITC-100 Tally A and Tally B input.

Contact closure between the relevant Pin number and ground will illuminate the Tally LED. For example on Tally A, if Pin 1 is connected to Pin 4 the RED LED will light up on Channel 1; if Pin 13 is connected to Pin 4 the AMBER LED will light up on Channel 3

The Tally A Input will receive Tally Information from Channels 1 ~ 4 from the switcher or GPI tally box.

The following table shows the pin numbers for each channel:

The Tally A Input will send Tally Information to Channels 1 ~ 4.

Video Channel	Red [live] LED pin ref	Amber [Next] LED pin ref
1	Pin 1	Pin 3
2	Pin 6	Pin 8
3	Pin 11	Pin 13
4	Pin 5	Pin 15

Pins 4, 9 and 14 can be used as ground.

The Tally B Input will send Tally Information to Channels 5 ~ 8.

Video Channel	Red [live] LED pin ref	Amber [Next] LED pin ref
5	Pin 1	Pin 3
6	Pin 6	Pin 8
7	Pin 11	Pin 13
8	Pin 5	Pin 15

Pins 4, 9 and 14 can be used as ground.

Self made cable GPI TALLY BOX 25 pin D-Sub to ITC-100 2x 15pin D-Sub
should be wired as follows

BMD GPI TALLY BOX		ITC-100 Base Unit - Tally A & B	
Pin	Description	Pin	Description
1	Not used		Not used
2	Not used		Not used
3	Not used		Not used
4	Not used		Not used
5	Not used		Not used
6	Not used		Not used
7	Not used		Not used
8	Not used		Not used
9	Not used		Not used
10	Not used		Not used
11	Not used		Not used
12	Not used		Not used
13	Not used		Not used
14	GND	14	GND For tally B
15	GND	9	GND For tally B
16	TALLY 8	5	TALLY B - CHL 8
17	TALLY 7	11	TALLY B - CHL 7
18	TALLY 6	6	TALLY B - CHL 6
19	TALLY 5	1	TALLY B - CHL 5
20	TALLY 4	5	TALLY A - CHL 4
21	TALLY 3	11	TALLY A - CHL 3
22	TALLY 2	6	TALLY A - CHL 2
23	TALLY 1	1	TALLY A - CHL 1
24	GND	14	GND For tally A
25	GND	9	GND For tally A

NOTE the BMD GPI TALLY BOX only supports the LIVE [RED LED] indications.