

# **14 Tally Management**

## vsmStudio

Manual



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Tally configuration requires GPIs and GPOs (see chapter 15). GPIs are needed for physical mixer tally and exchange GPOs with the corresponding tally logic.

#### 1 Setting-up Tally GP-I/Os

First, create around 50 GPIs named *Red / Green / Yellow Tally Mixer In* (for each free colour) in the GP-I/O list (see chapter 15.2 New GP-I/O).



The numbering for the Red Tally GPIs begins at 10,001, for Green Tally at 12,001, and for Yellow Tally at 14,001. These settings also have to be entered in the port.

s G	P-I/O List				×
Con	fig 🏓 🚺	GPIs	•=>	GPOs	
	Number	1	Π	Name	
	I-10001	ۍ	0	Red Tally Mixer In 1	
	I-10002	₽	0	Red Tally Mixer In 2	
	I-10003	₽	0	Red Tally Mixer In 3	1.10
	I-10004	₽	0	Red Tally Mixer In 4	=
**	I-10005	₽	0	Red Tally Mixer In 5	
	I-10006	₽	0	Red Tally Mixer In 6	
	I-10007	ۍ	0	Red Tally Mixer In 7	100
	I-10008	₽	0	Red Tally Mixer In 8	
**	I-10009	₽	0	Red Tally Mixer In 9	
**	I-10010	₽	0	Red Tally Mixer In 10	
*•	I-10011	₽	0	Red Tally Mixer In 11	
**	I-10012	타	0	Red Tally Mixer In 12 Red Tally GPIs	

Next, create the same number of GPOs, named *Calculated Red / Green / Yellow Tally Mixer In*. The different colours begin at the same number as those mentioned above.

Number:	12001	Range: 12001-12050	
Name:	Calculated	Green Tally Mixer In (1-50)	_
Resulting Enumeration:	"Calculated	Green Tally Mixer In 1",	
Comment:			_
	E Set to "	True" on Startup	
	C Suppre	ss default logging.	
	🔲 Is Signa	alled when "False"	
	Enable	Color Preset	
	Gre	een Tally GPOs	

For emergency purposes, an *Emergency* GPO with the number 10,000 should also be created. This GPO can be activated through an emergency panel in the event of a mixer failure. Tally will then be sent from a defined target, for example a program target.

•22>	0-001	1	U	disable IL 1	
•=	O-002	₽	0	disable TL 2	
•=	O-003	₽	0	disable TL 3	=
•=>	O-004	₽	0	disable TL 4	
•=	O-005	₽	0	disable TL 5	
•=	O-006	₽	0	Crosspoint	
•=	O-007	₽	0	Test	
•=	O-008	⊕	0	Timer 1 Run	
•=>	O-009	Ð	0	Timer 1 Zero	
•=>	O-010	₽	0	Timer 1 Timeout	
•=>	0-011	₽	0	Timer	
•=>	O-10000	Ð	0	Emergency Mixer	
•=	O-10001	Ð	0	Calculated Red Tally Mixer In 1	
•=>	O-10002	₽	0	Calculated Red Tally Mixer In 2	
•=>	O-10003	₽	0	Calculated Red Tally Mixer In 3	
•=>	O-10004	Ъ	0	Calculated Red Tally Miver In 4 Emergency GPO	

#### 1.1 Linking of Tally GP-I/Os

If the GPIs and GPOs have been created, they must be linked with each other. To do so most easily, open a second window so that two GP-I/O windows can be placed side by side.



Next, drag and drop each GPI from the GPI view into the corresponding GPO.

GP-I/O List	X	>=⊑ GP-I/O List
Config 🏼 🍽 GPIs 🕬 GPOs		Config 🍬 GPIs 🔹 GPOs
Number Name	A	Number Name
🔹 I-10001 🕀 🔿 Red Tally Mixer In 1		🔹 0-10001 🕀 O Calculated Red Tally Mixer In 1
🔹 I-10002 🕀 🔿 Red Tally Mixer In 2		🔹 0-10002 🕀 O Calculated Red Tally Mixer In 2
🔹 I-10003 🕀 🔿 Red Tally Mixer In 3		0-10003 🖶 🔍 Calculated Red Tally Mixer In 3
🔹 I-10004 🕂 🔿 Red Tally Mixer In 4	E	🔹 0-10004 🗄 🔿 Calculated Red Tally Mixer In 4
🔹 I-10005 🕀 🔿 Red Tally Mixer In 5		🔹 0-10005 🕀 🔿 Calculated Red Tally Mixer In 5
🔹 I-10006 🕀 🔿 Red Tally Mixer In 6		🔹 0-10006 🕀 O Calculated Red Tally Mixer In 6
🗢 I-10007 🕂 🔿 Red Tally Mixer In 7		🚥 0-10007 🕀 O Calculated Red Tally Mixer In 7
🔹 I-10008 🕀 🔿 Red Tally Mixer In 8		🔹 🗢 O-10008 🕀 O Calculated Red Tally Mixer In 8
🔹 I-10009 🕂 🔿 Red Tally Mixer In 9		🔹 0-10009 🕀 O Calculated Red Tally Mixer In 9
💼 L10010 🖓 🔿 Red Tally Miver In 10		■ Collor10
	Linking of	GP-I/Os

In the event of an emergency, also drag and drop the *Emergency* GPO into every GPO.

Con	fig 🍬 C	āPis	•=>	GPOs	
	Number		Π	Name	*
•=>	O-010	₽	0	Timer 1 Timeout	
•=>	0-011	₽	0	Timer	-
•=	O-10000	₽	0	Emergency Mixer	
•=>	0-10001	₽	0	Calculated led Tally Mixer In 1	
•=	O-10002	Ð	0	Calculated Fed Tally Mixer In 2	H
•=	0-10003	Ð	0	Calculated Ked Tally Mixer In 3	
•=	O-10004	₽	0	Calculated Red Tally Mixer In 4	
•\$	O-10005	₽	0	Calculated Red Tally Mixer In 5	
•\$	O-10006	₽	0	Calculated Red Tally Mixer In 6	
•=>	O-10007	₽	0	Calculated Red Tally Mixer In 7	
•=>	O-10008	₽	0	Calculated Red Tally Mixer In 8	
•=>	O-10009	₽	0	Calculated Red Tally Mixer In 9	
•\$	O-10010	Ð	0	Calculated Red Tally Mixer In 10	
•=>	O-10011	₽	0	Calculated Red Tally Mixer In 11	
•=>	0-10012	₽	0	Calculated Red Tally Mixer In 12	

#### 1.2 Setting the Tally GPO Logic

Next, set the GPO logic: to do so, turn off the *Emergency* GPO and activate the corresponding GPI. Therefore, if the *Emergency* GPO is not active while the GPI *Red Tally Mixer In* is active, the *Calculated Red Tally Mixer In* GPO will be activated.

Name	Condition	Logic	
0-10003 C	Iculated Red Tally Mixer In 3	5550. 	276
<b>≫•</b> I-10003			Red Tally Mixer In 3
•\$ O-10000		<u>~</u>	Emergency Mixer
>	{vBit: <unknown>}</unknown>		
$\longrightarrow$	{vBit: <unknown>}</unknown>		

### 2 Linking Tally GPOs with Signal Paths

In the GPI view of the master matrix (see chapter 6.3 GPI View), place the relevant signal so that the GPO tally sends to a target.

Master Vie	v										Ŀ	-	-	X		<b>*</b> •=	GP-	I/O List				x
Layout 🔤	🛱 Cu	rrent		<b>¤</b> G	iPl											С	onfig	i 🍬 (	GPIs	•=>	GPOs	
	8					Τ											1	Number			Name	-
	0			10	2	5	0	4 4	0 00	N	ωσ	9				•	۵ (	0-12049	Ð	0	Calculated Green Tally Mixer In 49	
		E F	T S		E E	E	đ	t d	E E	T		E S	1	a 2	Its	•		0-12050	Ð	0	Calculated Green Tally Mixer In 50	
	i i	ili i	dio i		Ĭ	Ĭ	ĕ		10	Ŭ		Ĭ	ind la	mer	tpr	•=	. (	0-14001	⊕	0	Calculated Yellow Tally Mixer In 1	
_ Identifier		AU	AU		×	÷	÷.	¢ k	έ¢	×.	¢ ¢	¥.	5 5	Ca	õ	•=	• (	0-14002	⊕	0	Calculated Yellow Tally Mixer In 2	
Audio In 1	٦Ē			1	T								7	-		•=	. (	0-14003	Ð	0	Calculated Yellow Tally Mixer In 3	
Audio In 2	•			1									-	-			. (	0-14004	Ð	0	Calculated Yellow Tally Mixer In 4	
Audio In 3																	. (	0-14005	Ð	0	Calculated Yellow Tally Mixer In 5	
Audio In 4		-	_	_	-													0-14006	Ā	0	Calculated Vellow Tally Mixer In 6	
Audio In 5		-	_	-	-												. (	0-14007	ц.	0	Calculated Vellow Tally Mixer In 7	
Audio In 7	1			-														0-14008	- E	0	Calculated Vellow Tally Mixer In 8	
Audio In 8	•																	0 14000	Д	0	Calculated Vellow Tally Mixer In 0	
Audio In 9	•			- 12														0-14009			Calculated Fellow Tally Mixer In 9	-
Audio In 10	•															•	<u> </u>	3-14010		0	Calculated Yellow Fally Mixer In 10	
Mute																•	۵ (	0-14011	Ð	0	Calculated Yellow Tally Mixer In 11	
Input 12						4		- 1		i = i		6 - G					• (	0-14012	Ð	0	Calculated Yellow Tally Mixer In 12	
In 1																			. —	~	جبا مباعد معادية	

Dragging GPOs onto signals in the master matrix

If a GPO is dragged onto a target in the matrix, a coloured sun is displayed next to the signal. It indicates that the target receives tally. An arrow in the GPO logic shows that this GPO sends tally to this target. If a target should only receive Green Tally, the tally colour can be defined in the GPO logic through the small arrow beside the sun.

Name	Condition	Logic	Description
O-10001	Calculated Red Tally Mixer In 1		
➡• I-10001			1 Red Tally Mixer In 1
•\$ O-10000		<u>, ~~</u> , ~ <u>≥</u> , <del>}, }, }, }, }, }, }, }, }, , , , , , </del>	Emergency Mixer

Tally display in the GPO logic

If the tally is active, the GPI is set to ON and triggers a GPO that sends a red light to a target.

🗰 Master V	liew									
Layout لکست	<b>##</b> (	Curre	ent	•	۶	GF	1			
	70									_
_ Identifier		BK Audio Mon	Slow2 Audio Mon	Prod Audio Mon	Menono Switcher I/P1	XXX Switcher I/P2	Control Switcher I/P3	O O Switcher I/P4	XXX Switcher I/P5	XXX Switcher I/P6
External 2>	• <b>??</b>		٠		٠			٠		
External 3	• •									
External 4	- )									

Tally display in the Current view of the master matrix

In the Current view of the master matrix (see chapter 6.2 Current View), active tally is shown through small lamps on the relevant signal paths. The sources switched onto that target will also receive tally. This is again indicated by a small lamp. If this source is switched to additional targets, they will also receive tally. Passed-through tally that is inactive is indicated at the target with a half-filled circle.

#### **3 Tally Forwarding to External Devices**

To forward a tally to an external device, for example a CCU, an additional GPO must be created. Drag and drop the relevant signal into that GPO. The signal will now trigger the GPO. If this signal receives tally, the GPO becomes active and the CCU, or an arbitrary external device, receives tally.

GP-I/O Edit - O-012 -	CCU 1 Red Tally		×	Signal Paths				
Name	Condition	Logic	Description	Assignment				
• 0-012 CCU	1 Red Tally		45 D.44	Signal Path Name	/ VM	Layer	Moor	Info Fam.
		+10-0	21	Camera 4	T: 000025	Video	T: - V -	
$\bigcirc$		<u> </u>	ক'	Camera 4	S: 000028	Video	S: - V -	
( • C)U1		어돌락내내	CCU 1	Camera 5	T: 000026	Video	T: - V -	
Red				Camera 5	S: 000029	Video	S: - V -	
Green				Camera 6	T: 000027	Video	T: - V -	
Yellow				Camera 6	S: 000030	Video	S: - V -	
Blue				Camera 7	T: 000028	Video	T: - V -	
Silence				Camera 7	S: 000031	Video	S: - V -	
Non Silence				Camera 8	T: 000029	Video	T: - V -	
✓ Use Effectiv	e Tally			Camera 8	S: 000032	Video	S: - V -	
				Camera 9	T: 000030	Video	T: - V -	
				Camera 9	S: 000033	Video	S: - V -	
				Camera 10	T: 000031	Video	T: - V -	
				Camera 10	S: 000034	Video	S: - V -	
				Camera 11		Video	T: - V -	
				Camera 11		Video	S: - V -	
				CCU1		Video	S: 00002	

Logic for tally forwarding to an external device

Tally colour as well as *Silence, Non-Silence*, and *Use Effective Tally* can be adjusted through the small arrow beside the lamp. Activate *Use Effective Tally* to prevent the tally's self-preservation.

GP-I/O	List			Pan	el Edit - (4) 1	ally				
Config	🗢 GP	ls 📲	GPOs	Ner	v Page	Move < Name		Layout III Page	1]	
Nur	mber	T	Name		Draw	Move > Delete	Сору			
•=======	12 -	3 0	CCU1 Red Tally							
•== 0-1	0000 {	∃ (	Emergency Mixer		0 1000	0 10002	0 10002	0 10004	0 10005	
•== 0-1	0001 {	3	Calculated Red Tally Mixer In 1		GPI	GPI	GPI	GPI GPI	GPI	0.5
	0002 {	3	Calculated Red Tally Mixer In 2		CALCULATED	EDT CALOULATEDREDT	CALCULATEDRE	DT CALCULATEDREDT	CALCULATEDREDT	
• 0-1	.0003 -{	3	Calculated Red Tally Mixer In 3 🚽		0-10001	0-10002		0-10004		-
•• 0-1	.0004 {	3	Calculated Red Tally Mixer In 4							1
• 0-1	.0005 {	3	Calculated Red Tally Mixer In 5		08	09	10	11	12	13
⇒• 0-1	0006 {	3 G	Calculated Red Tally Mixer In 6							
			s en nune neufine negl							

Assigning GPOs to a control panel

Tally can also be forwarded to third party devices via physical GPOs. To do so, place GPOs onto a control panel and assign the function *Assign Tally to GPO* to it.

Page Mov	e < Name	La Copy	yout 🎟 Page '	1	Buttons
O-10001 CALQULATEDREDT	O-10002 CALCULATEDREDT	O-10003 CALCULATEDREDT	O-10004	O-10005 CALCULATEDREDT	
?-TALLY	7-TALLY	7-TALLY	7-TALLY	7-TALLT	10 10 10 10 10 10 10 10 10 10
08	09	10	11		13 A → / 13
16	17	18	19	20	A Be 80
24	25	26	27	28	29 <b>*</b> 7

Configure the buttons so that they jump to the sources. There, the appropriate source is selected, and the GPO that forwards the tally physically to the relevant third party device becomes active. In this configuration, the tally colour can be selected through the tally symbol on the control button in the panel edit.



Selecting tally colour in the panel edit

#### **Manual Tally Configuration** 4

To configure tally for a target manually, for example for an EVS server while it is recording, only one GPO must be dragged onto the relevant target. The tally colour can be set in the GPO. The GPO can only be activated at the push of a button or through a logic.

#### **5** Source as Tally Trigger

A source can also function as tally trigger. To set it up, the GPO must be dragged onto the relevant source. If the GPO becomes active, a small lamp is displayed at the source in the current view of the master matrix (see chapter 6.2 Current View)





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