



**Television
Systems Limited**

TallyMan

THE ONLY TALLY SYSTEM YOU'LL EVER NEED

Mixers

***– this section is intended to be read in conjunction
with the Introduction***

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Vision Mixers / Switchers

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1.0 Introduction

Mixers may be connected to the TM1 either via a serial link, TCP/IP or via the parallel input D37 connector depending on the mixer.

In TallyMan, the mixer may be treated exactly as though it were a router. However, some simpler mixers output parallel tally information only and so mixer router status is not available.

As the mixer may be treated as a router, UMDs may be assigned to sources as well as destinations (Buses).

Normally, it might be assumed that mixer tallies are used directly to indicate which source is on-Air.

Where a mixer does not have a Tally In interface in TallyMan, a permanent tally (a System Tally) must be set to the bus, PGM, PST or whatever is required. Sources will be tallied as long as the mixer manufacturer outputs the bus information required.

As in a router, a tally set to a destination or bus will tally the source that is selected by that destination. This is a use for an ON System Tally.

Many mixers now support source button names. TallyMan allows a choice to be made of the sources for these names which may be derived from a router or may be a fixed name.

Notes

The **Tally In** modules for some mixers are there in order that you can, if you wish, use the mixer tally controls to decide what tallies are generated.

Alternatively you can ignore them, and still allocate a Program System tally as long as router status is transmitted to TallyMan.

Where mixer manufacturers give a comprehensive protocol, both options apply.

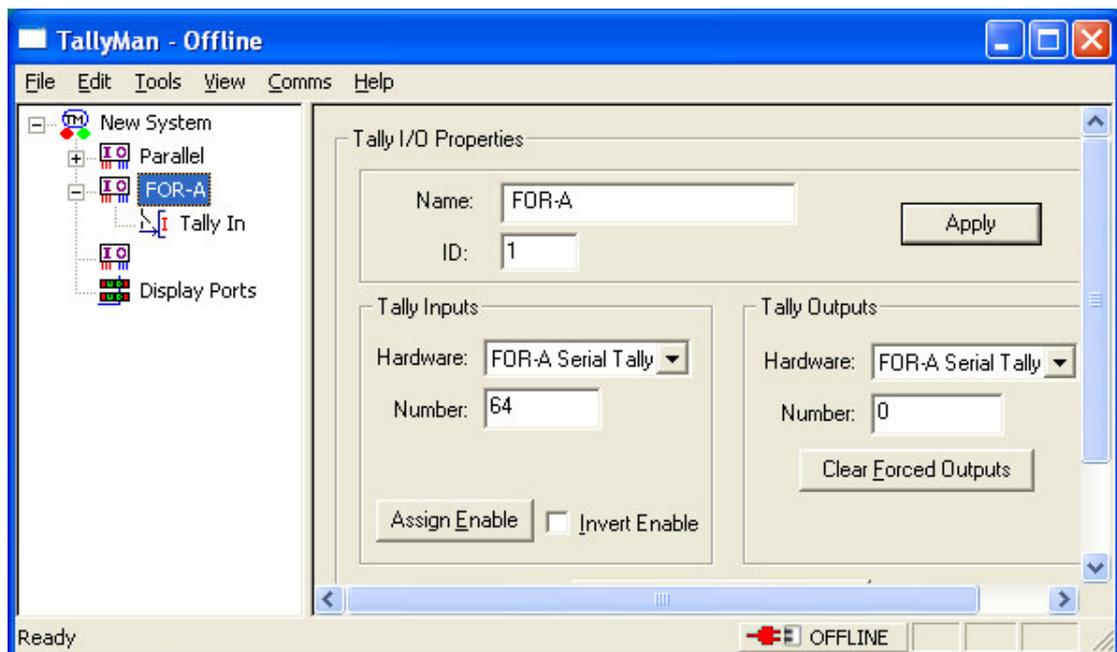
In the case of the DD35, using ACOS protocol gives information on what sources are on what busses but does not give mixer derived tallies or Key/ME contribution information. Recent Thomson mixers output tally data via a TCP/IP link.

Vision Mixers are treated as routers in TallyMan. If a Router Destination feeds the input to the Mixer, the Mixer Source should be assigned to the Router Destination. Cameras will normally be inputs to the Router so physical output pins may be assigned to these router inputs. The camera CCUs will get a tally via the mixer-to-destination-to-router source-to-output pins mapping.

Where the Router is a monitoring router for the picture monitors and the cameras are fed to both to the Router Inputs (Sources) and to the Mixer Inputs (Sources), Mixer Source to Router Source mapping should be carried out. Physical output pins for the camera CCUs should still be assigned to the Router Sources.

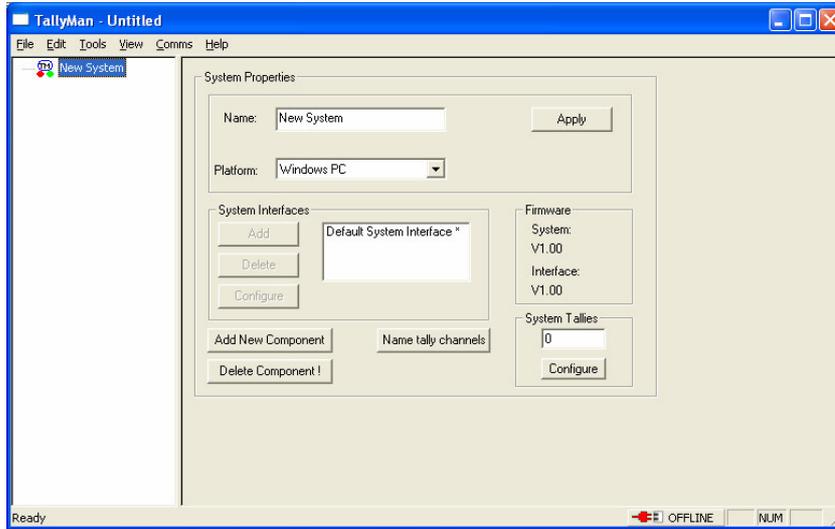
Also some mixer only output serial tallies with no router status. These protocols will be found in the I/O module, similar to the default Parallel one seen on the TMx platforms.

E.G. A Tally I/O module set for a FOR-A mixer

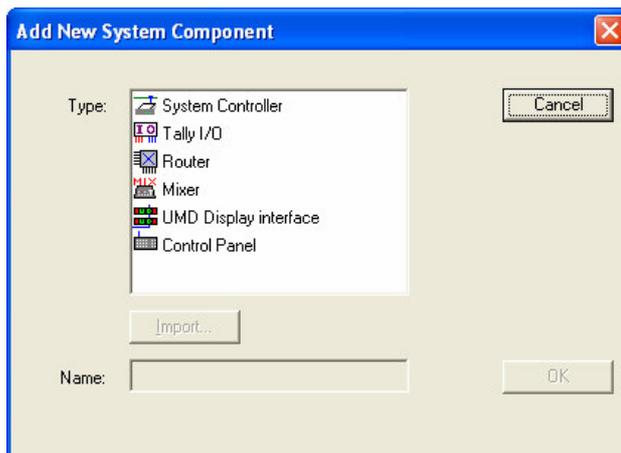


2.0 Adding a Vision Mixer

Click on **Add New Component** on the main screen.

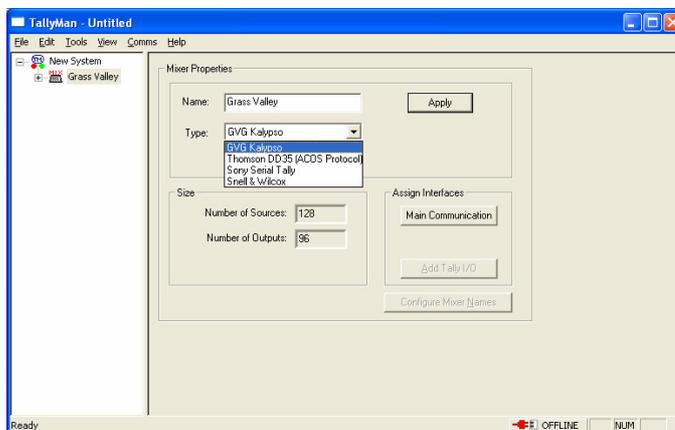


From the **Add New System Component** list select Mixer or I/O as appropriate.



When a new component is added to the system it must be given a Name before the OK button becomes active.

This Name will be seen in the system tree on the left side of the screen.



The Mixer type is selected from the drop down box and here is shown as type GVG Kalypso. Press **Apply**.

The Size will be set for some mixers – if they are not set enter the appropriate number in the Size box.

The Mixer Sources and Destinations are seen in the LH column.

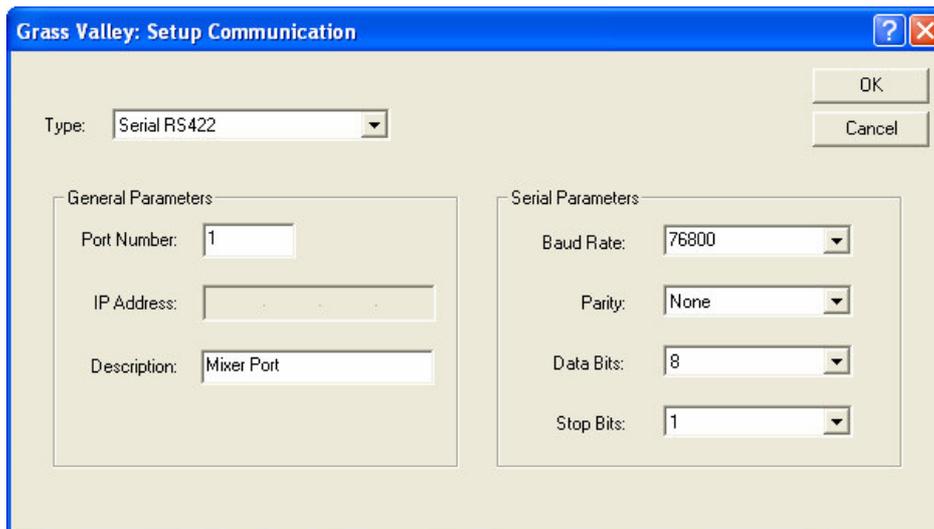
When the Mixer type has been set press **Apply**. The program will now jump to the **Main Communication** box in the Assign Interfaces area.

2.1 Assign Interfaces – Main Communication

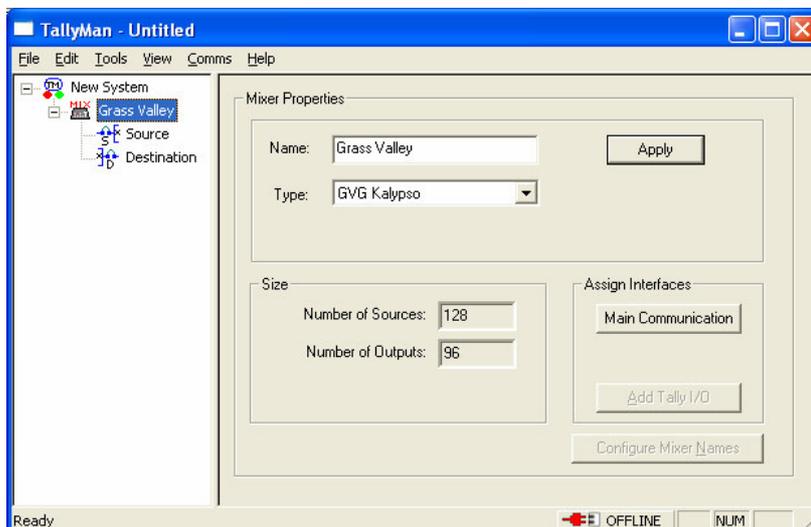
The Mixer communications must now be set up. Select the **Type**.

Select the **Port Number** that the computer will use to communicate with the Mixer. Give it a **Description**.

The **Serial Parameters** will usually be automatically entered where this is known by TSL.



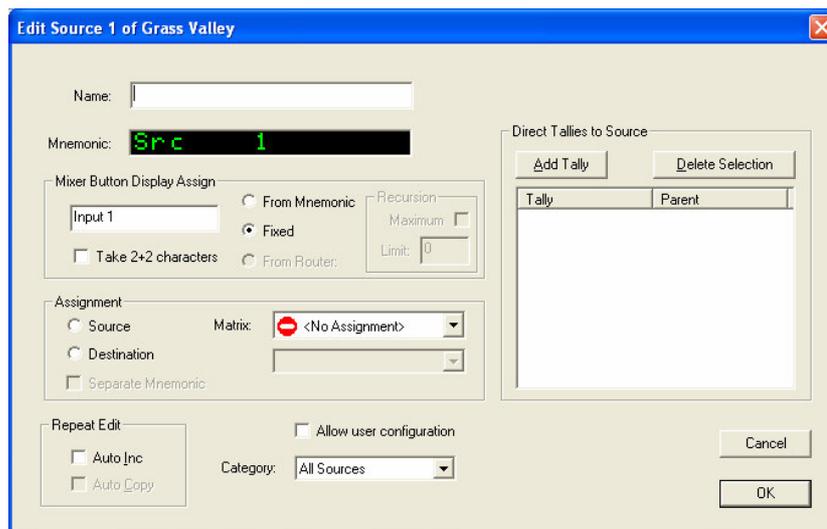
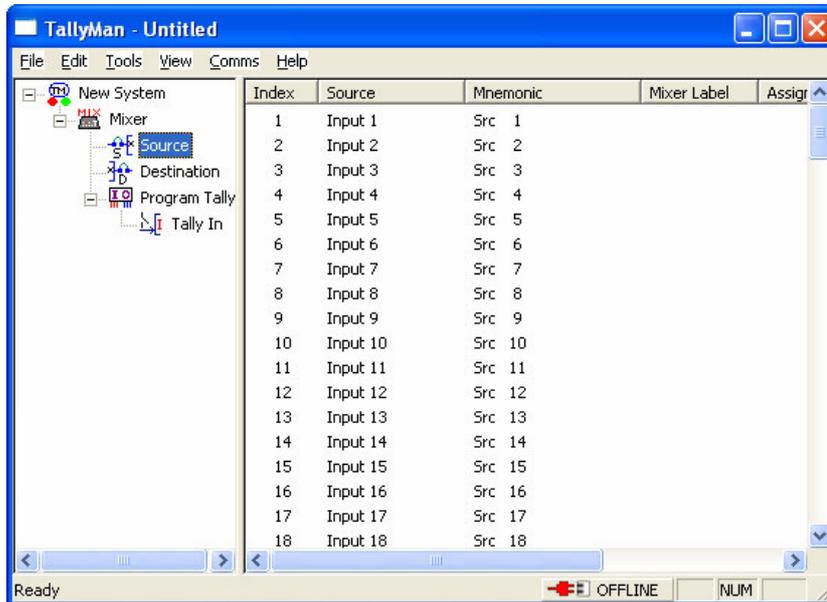
On clicking on OK the main system screen will be shown.



The sources and destinations may now be edited as required.

3.0 Mixer Sources

A Click on the Source will show this dialog box.



A double click on a Source field will bring up this dialog box.

The Name box is only an aide memoir.

The Mnemonic box shows what would appear on a UMD assigned to, say, the PGM output when this source is selected.

3.1 Mixer Button Display Assign

The Mixer (panel) Label can be taken from:

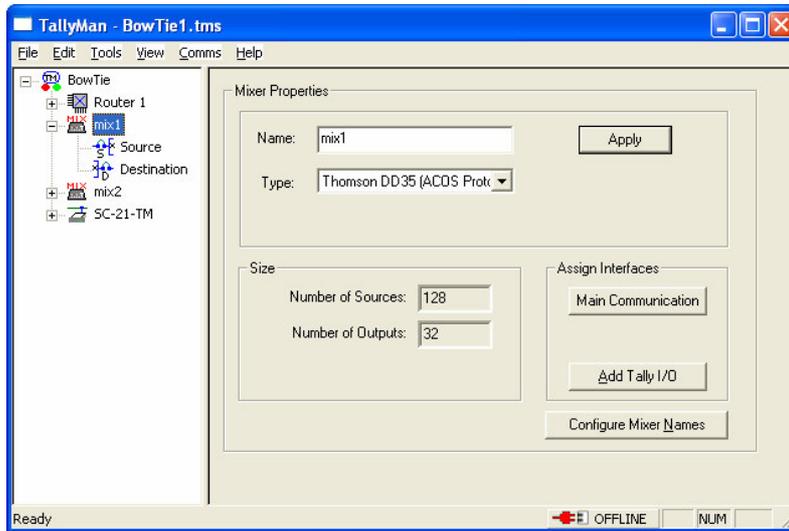
- the Fixed box (Shown with the text Input 1)
- or via the Router mapped sources – set below in the Assignment box.

The recursive level must be set – 1 is back to the first destination, 2 is set to the source feeding that destination etc.

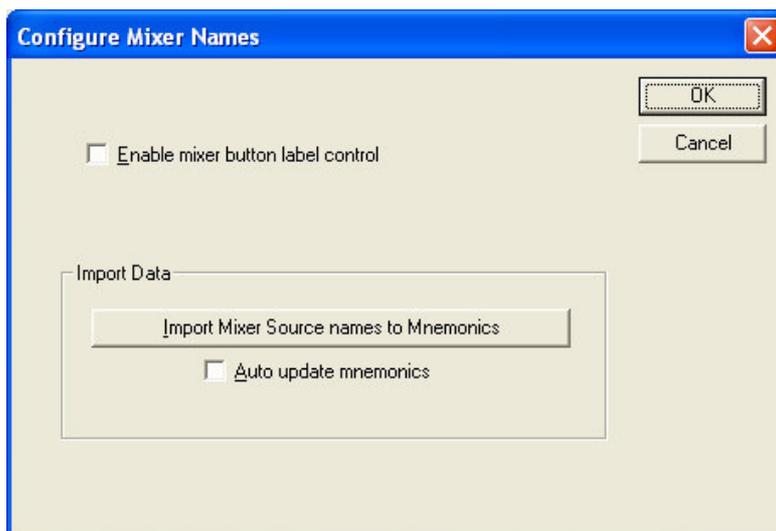
- or from the Mnemonic set in the box near the top with the green characters.
- Take 2+2 will take the first 2 and last 2 characters.

Notes

The mixer panel names are enabled via the screen:



Select **Configure Mixer Names**.



3.2 Assignment

The mixer source may be mapped to

A router/mixer source – source to source mapping

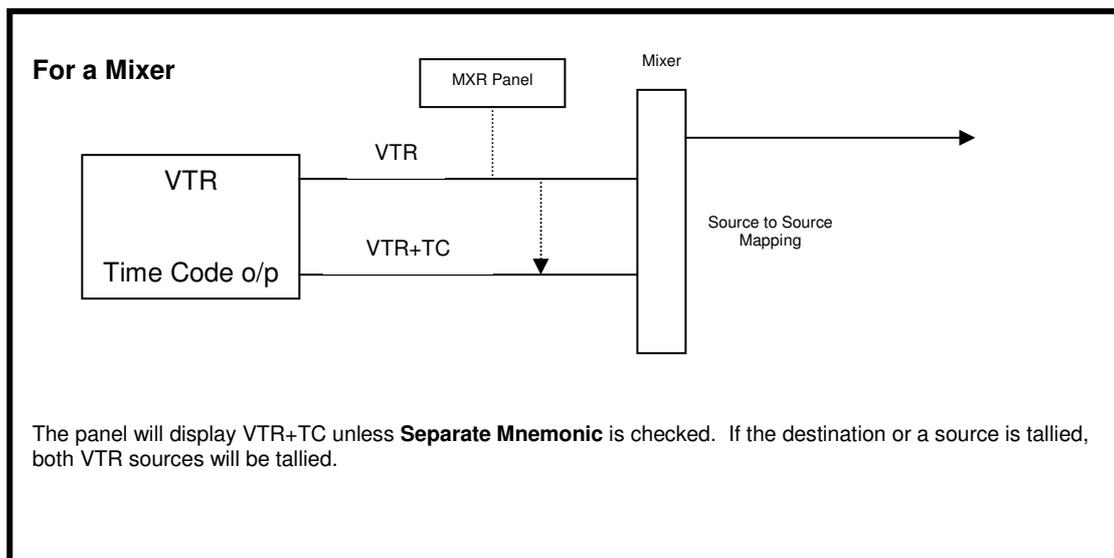
A router destination – source to destination mapping

UMDs associated with the mixer and the mixer panel labels will reflect this mapping.

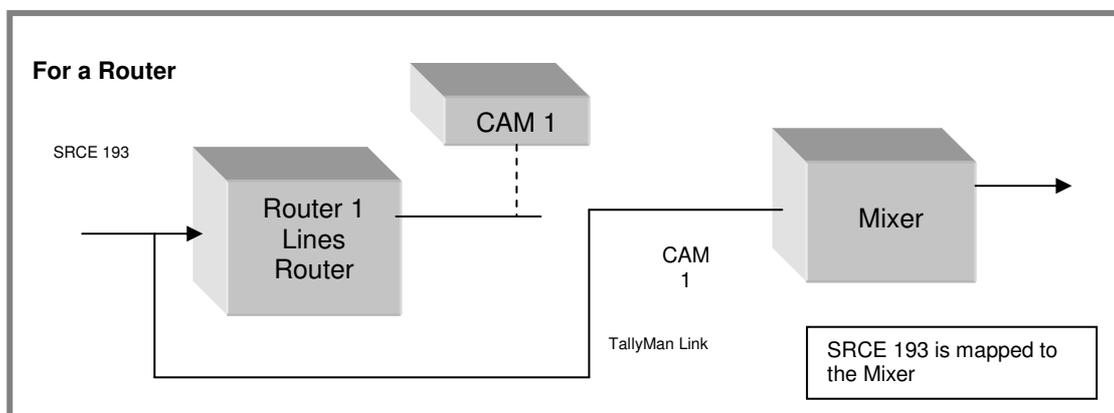
With source to source mapping a Separate Mnemonic may be set for any UMD which is the Mnemonic shown on dialog box.

3.2.1 Assign to Source

Source to source mapping allows two sources to be linked together for tally purposes but the source mapped **to** is the controlling source for mnemonics.



When this option is selected in the **Assignment** box, the Display on the router output will show the mnemonic of the assigned source. Tallies may be derived from either the assigned source and/or from the original source. In this example, "CAM 1" will be shown, assuming that the Router 1 Bus has selected its input, SRCE 193.



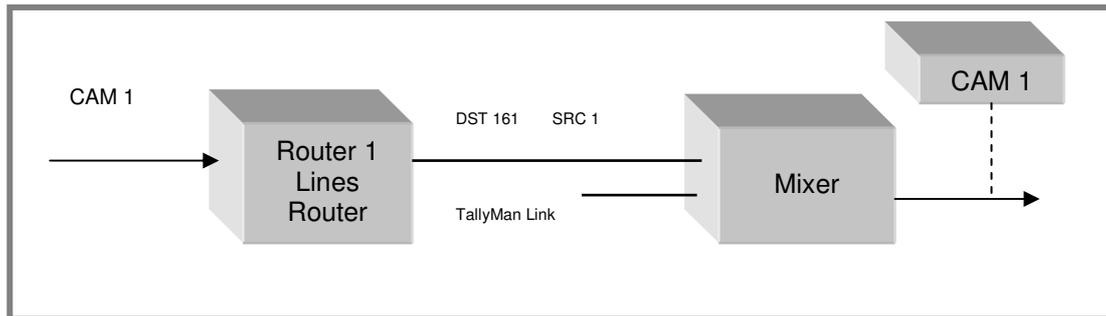
The mnemonics for the input to Router 1, SRCE 193, are effectively taken over by the input mnemonics of the mixer. The router input will also be tallied by the mixer source as previously described.

Conversely, the mixer inputs could be mapped **to** the inputs to the router. In this case the mixer's mnemonics would be those entered for the router sources. As tallies add, the router sources would be tallied by the mixer source.

It is important to remember that the source that you are assigning **to** is the controlling mnemonic source.

3.2.2 Assign to Destination.

This is used when a router destination is linked to the mixer input and UMDs need to show the correct original source mnemonic.



A display on a Mixer Bus or button legend needs to show the correct Router 1 source mnemonic. A display could be associated with the PGM Bus.

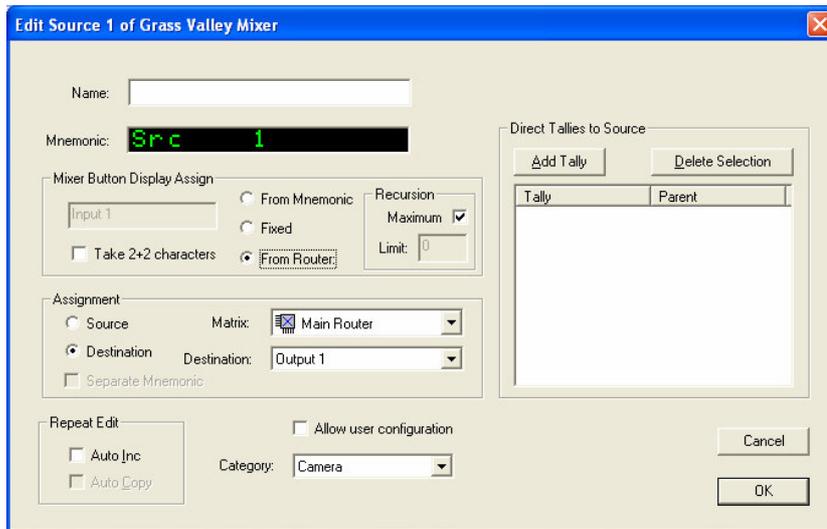
In the example above, the Mixer has a UMD on its PGM Bus. Input 1 on Router 1 has the mnemonic "CAM 1".

Mixer input 1 is connected to Router 1, Bus 161, (which has the mnemonic "DST 161"). Router 1 will have mnemonics assigned to its sources. It is these source mnemonics that will be shown on the Mixer Bus Display.

Therefore, the linking will now ensure that Mixer Bus Display shows the correct Router 1 Source mnemonic which is selected by Router 1, Bus161.

The Mixer sources will be tallied, as will the Router destination. This will, in turn, will tally the selected router source. This tallied router source may be mapped to a physical output pin to get tallies out to the cameras.

If there are several routers in the system the recursive depth may be set. This shows that the recursive depth is set to maximum.



The Mixer Button Display may be taken from the Router Names lists.

The Source is assigned to the Main Router with the Destination Mnemonic shown as Output 1.
Any UMD assigned to the Mixer's destination will show the Router's source mnemonics.

For example, if there are two cascaded routers in the system, the Mixer names may be taken from either the first router's sources lists or from the second router's source lists, depending on whether 1 or 2 is set in the box.

3.3 Repeat Edit

This will allow quick automatic incrementation of mixer sources and the Auto Copy will carry on down the same settings for the next mixer source.

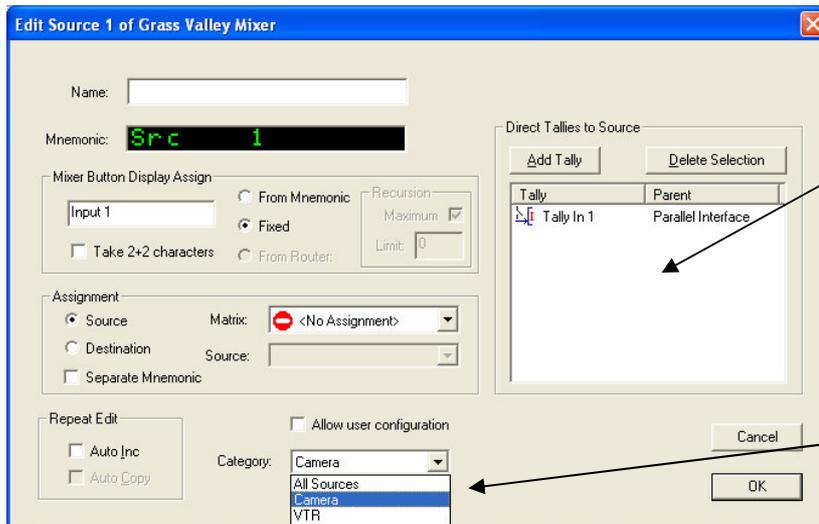
3.4 Allow User Configuration

If this box is checked this dialog screen will be accessible from the User settings.

3.5 Category

Mixer sources may be assigned to one of seven categories to assist editing later.

3.6 Direct Tallies to Source.

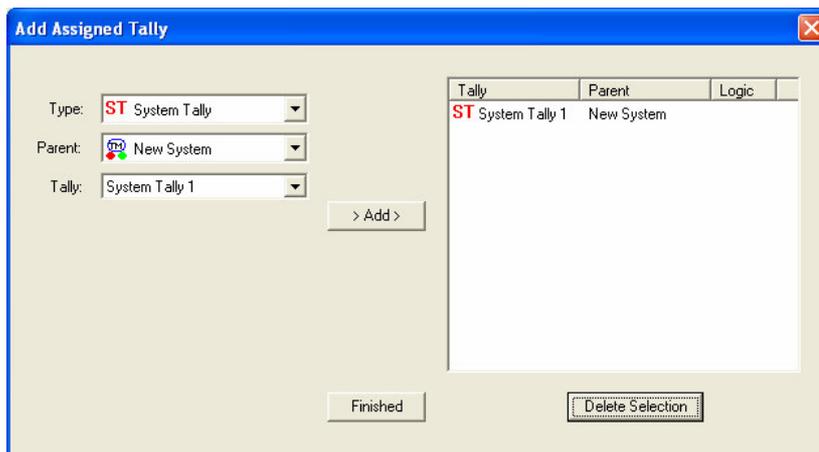


Direct Tallies to Source

Tallies from an I/O module may have its tallies mapped to the source(s) if required.

This shows a tally has been assigned from a Parallel I/O.

Category
The Source may be categorised, if required, to allow editing by category.



A click on the Direct Tallies In button will show this box.

A Tally (or tallies) may be assigned to the mixer destination.

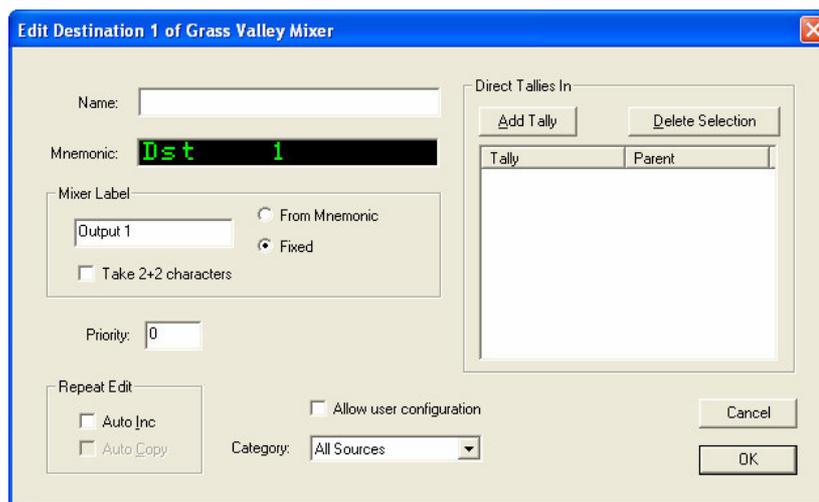
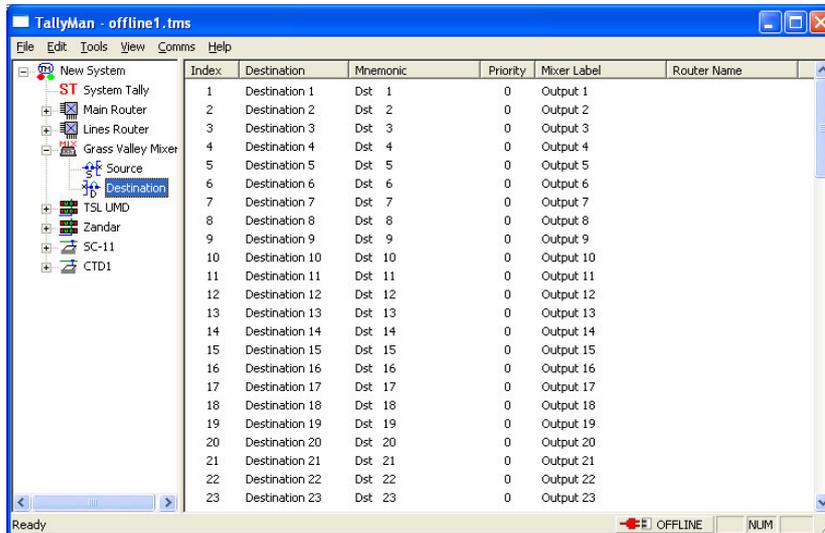
This shows that a System Tally has been assigned to Source 1.

- The tally **Type** must be selected.
- The **Parent** source must be selected.
- The actual **Tally** must be selected.
- and then **Added** to the box.

For mixers with parallel tally outputs, the tallies will be connected to a Parallel I/O unit and direct tallies may then be mapped to the mixer sources,

4.0 Mixer Destinations

Clicking on the Destination will show the following screen.



The Name box is only an aide memoir.

The Mnemonic box shows what would appear on a UMD assigned to a mixer source when this destination selects that source.

Allow user configuration box allows the User to modify this screen.

Delete Selection will allow removal of tallies

4.1 Mixer Label

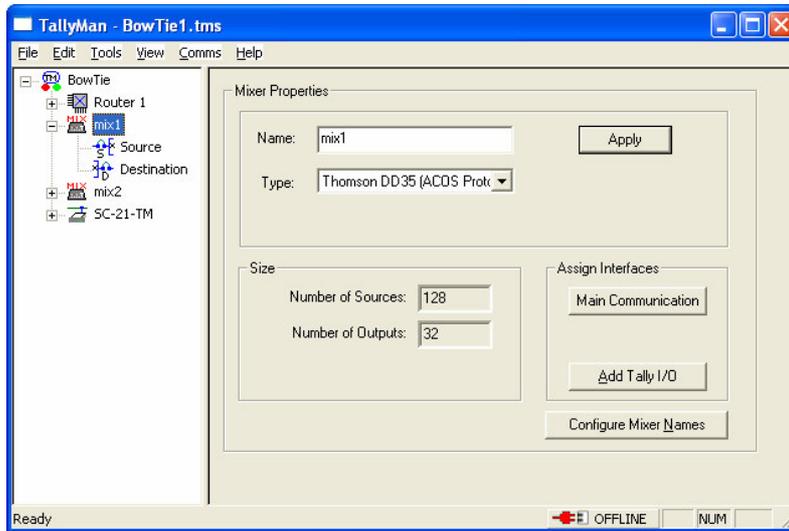
This is the name which may be offered to a mixer button when the selection set in 3.2.1 Mixer Button Display Assign is made for a router.

The Mixer (panel) Label can be taken from:

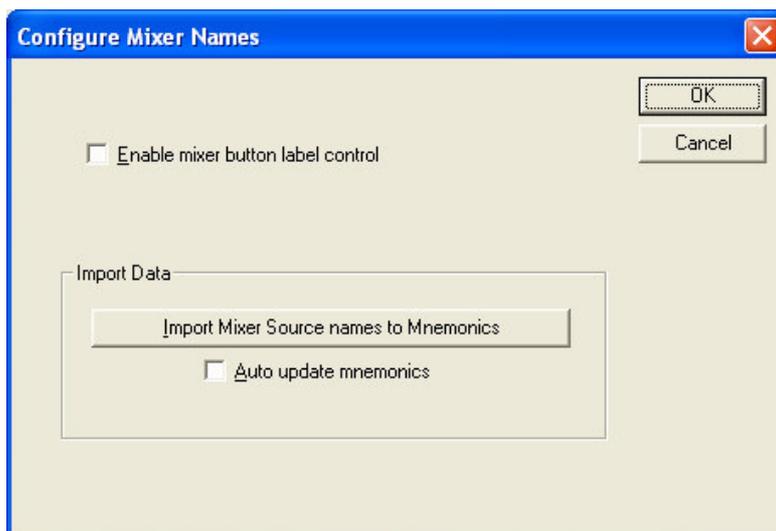
- the Fixed box (Output 1)
 - or from the Mnemonic set in the box near the top with the green characters.
- Take 2+2 will take the first 2 and last 2 characters.

Notes

The mixer panel names are enabled via the screen:



Select **Configure Mixer Names**.



4.2 Priority

This is only required to be set for UMDs assigned to the Sources. Priority 1 is the top priority.

It is possible for a mixer/router source to be selected by several buses at once. A priority needs to be set for the router buses so that any Display attached to the router source will show the desired bus mnemonic.

4.3 Repeat Edit

This will allow quick automatic incrementation of mixer sources and the Auto Copy will carry on down the same settings for the next mixer source.

4.4 Category

The Destination may be categorised, if required, to allow editing by category.

4.5 Direct Tallies In

Tallies from the Mixer to the rest of the system.

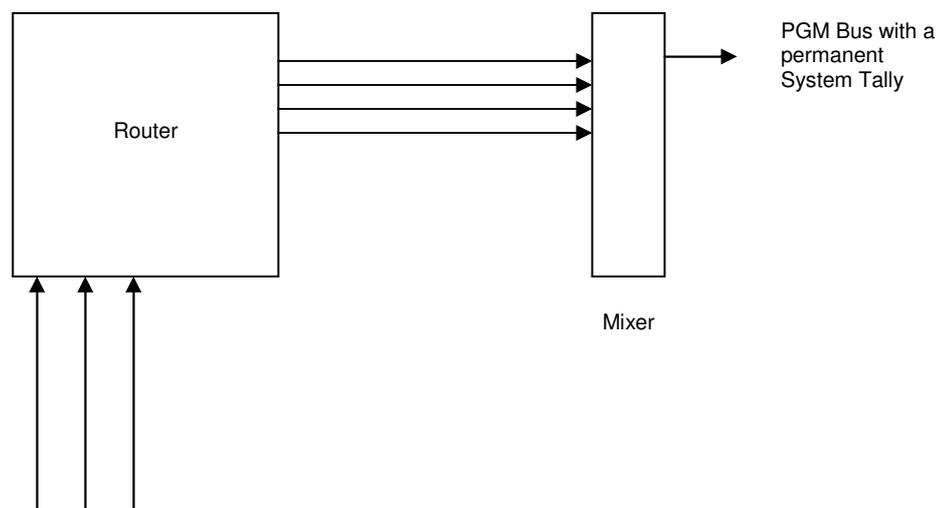
If there is no mixer parallel **Tally In** module associated with the mixer, it is very important that a tally (a permanently ON System Tally) is assigned to the Destination(s), for tallies to appear at the mixer source when that source is put to air. TallyMan reads the router information from the mixer and uses this as information as to which source is on air.

For mixers with parallel tally outputs, the tallies will be connected to a the Parallel I/O unit and direct tallies may then be mapped to the mixer sources,

The tallied mixer source may then be mapped to a router destination for the UMD to show the correct tally state and also to a Parallel I/O unit for output to the cameras.

In this example a permanently ON System Tally has been set to the PGM mixer destination which will, in turn tally the sources that the PGM destination selects. So, in other words, any source put to air will get a tally.

Overview of a typical tally path.



The Mixer source will be tallied; this will tally the Router Destination feeding that Mixer Source; the Router Source will be tallied.

Tallies may then be output via the Parallel I/O interface for the camera red lights etc. by assigning a router source to a physical output pin.

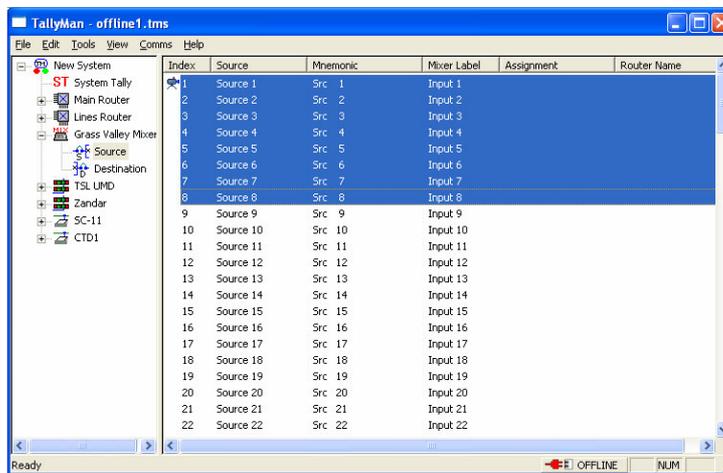
A UMD assigned to any point in the path which is On-Air will show a tally assuming that the UMD mask has been set to show the Active Tally Channel.

Please see the UMD and Tally Sections for more details.

5.0 Using other programs to edit the Mixer source and destination lists.

5.1 Copying Names and / or Mnemonics

If the mixer sources or destinations are selected and copied (RH mouse button or via Edit > Copy Mnemonics or Edit > Copy Names) the text may be downloaded into other applications such as Microsoft Excel. No delimiters should be checked for vertical filling. Various delimiters are available for loading into other programs.



The edit menu allows copying or pasting of the Mnemonics and / or Names

Open Excel and mark the first box. Click on Paste and the Names or Mnemonics will be entered.

5.2 Pasting Names and Mnemonics into TallyMan.

Lists may be created in other programs, such as Microsoft Excel and pasted into TallyMan.

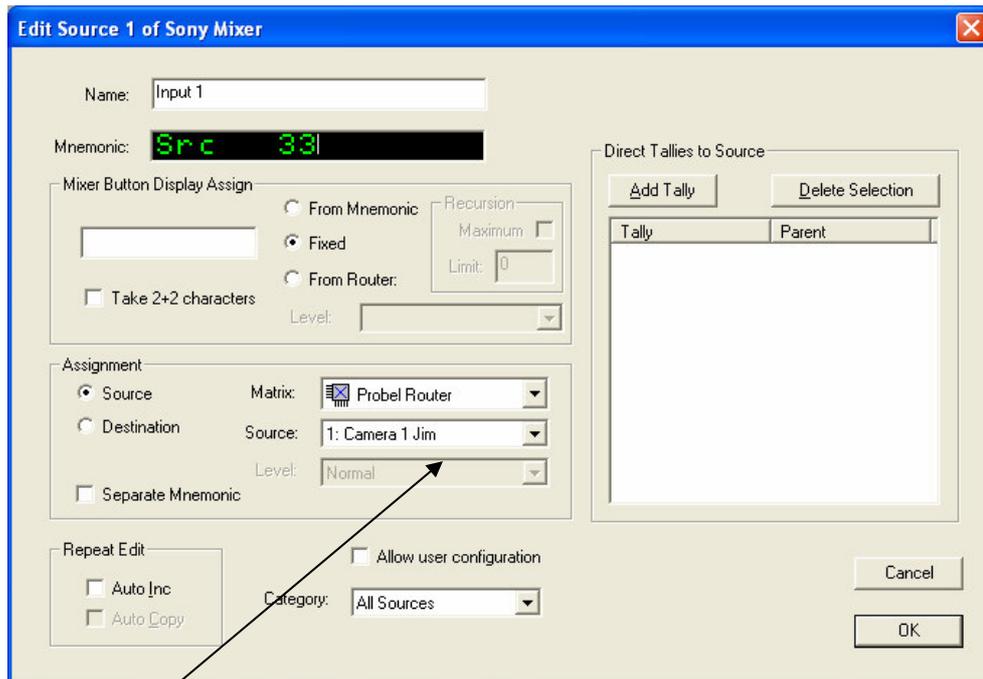
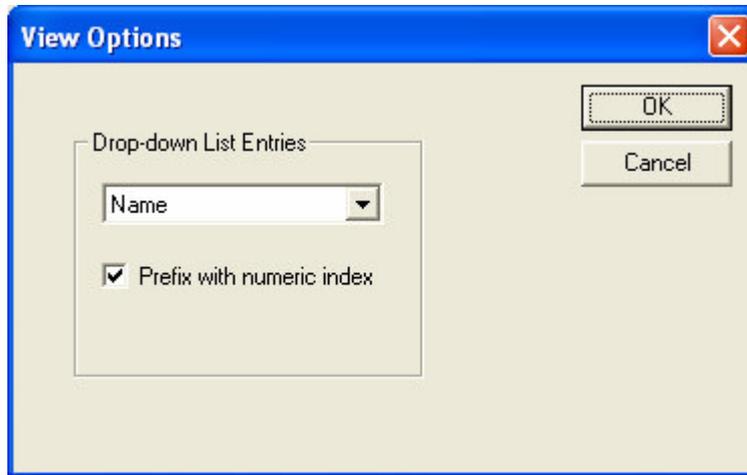
Mark the list and copy to the Clipboard. Open TallyMan and paste into the Names or Mnemonics list as required.

6.0 Tools > Router Mimic

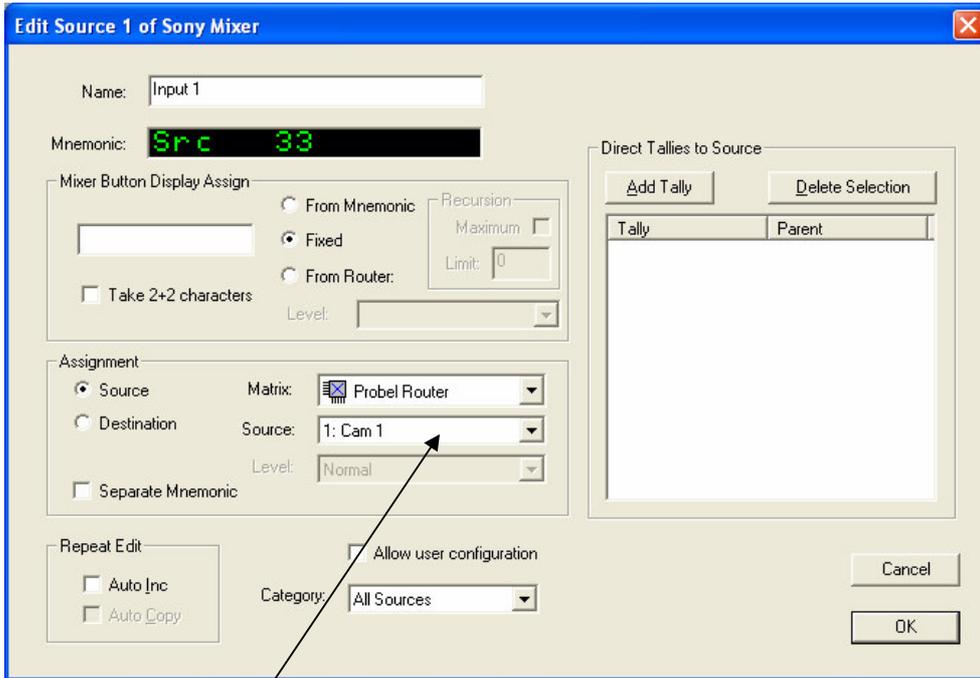
When the program is on-line and this box is displayed, mixer-router communication may be observed. This facility should be used to check for correct communications.

7.0 View > Options

The facility is now offered whereby the drop down lists may show either the Name or the Mnemonic associated with the router, for example. The Index number may also be shown, if required.



This shows the Index number and the Name



This shows the Index number and the Mnemonic.