



Television  
Systems Limited

**TallyMan**

THE ONLY TALLY SYSTEM YOU'LL EVER NEED

## The TSL Tally and UMD Configuring Program

### ***Routers***

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

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## **Routers**

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- 2.0 Adding Routers to the System**
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- 5.0 The Virtual Tally Router**
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## 1.0 Introduction

Routers may be connected to any of the ports on the TM1 / TM2.

The router status or cross point information is read and UMDs may be assigned to the destinations or sources for mnemonic updating.

Tallies may be mapped to the router destinations or sources in TallyMan via the dialog boxes.

It will be seen that everything associated with the destination or source is contained within these dialog boxes.

Router source to source and destination to source mapping may be carried out for cascaded routers. This means that if two routers are cascaded with a destination on the first router feeding an input (source) on the second router, and a UMD is assigned to a destination on the second router, the correct source mnemonics of the first router will be shown on the UMD.

Control is provided for the recursive depth of the linking, so tally and mnemonic information may be set differently.

A facility is provided for the source and destination router lists to be copied to the clipboard and loaded into other programs such as Microsoft Excel for editing.

### Notes:

For UMDs assigned to router sources be sure to set the Priority for the router destinations otherwise destination mnemonics will not be shown on the UMD and tallies may be slow to switch.

As from TallyMan version V1.66, a router source display will show the final Destination Mnemonic that has selected that Source where there is more than one recursion. i.e source to destination mapping in TallyMan.

The following rules apply:

Destinations with the priority set to 0 are not included.

Priority 1 is the highest, 2 is next, etc.

Destinations with the same priority will supercede each other; i.e. the last one scanned in a group of the same priority will win.

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. See Section 3.3 for details.

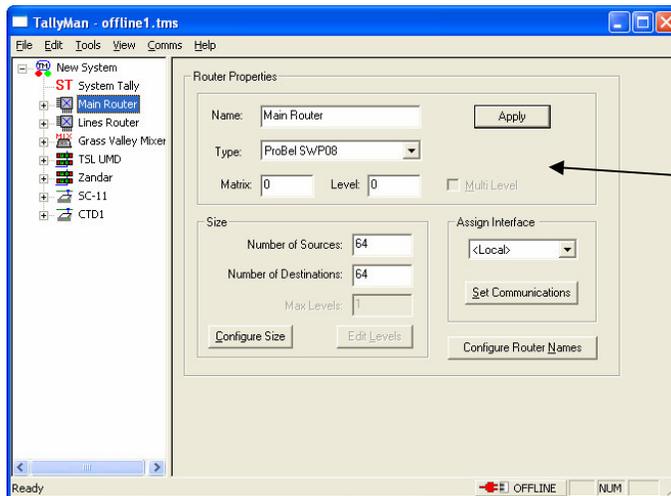
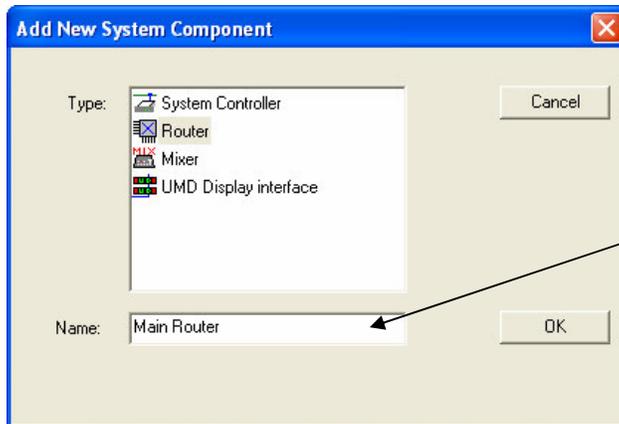
Loading Names into TallyMan from the router – where supported.

Press "Read Names" while online in order to initiate the transfer.

Also, please note that any background poll does not result in a mimic message unless the crosspoint has changed.

## 2.0 Adding Routers to the System

To add a router to the system, go Offline and to the New System Icon and click on **Add New Component**. Select a Router.



## 2.2 Router Properties

### 2.2.1 Name

Give the Router a **Name**.

### 2.2.2 Type

Select the router **Type** from the drop-down box

### 2.2.3 Matrix

If there is a **Matrix** number set it here.

### 2.2.4 Levels

Set the **Level** of the Router that TallyMan needs to read the status. A router will probably have several levels. The level that the UMDs will be assigned to must be set here.

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Press **Apply**. The program will now jump to **Set Communications**.

For Multi-level routers please see below.

### 2.2.5 Assign Interface - Set Communications

When the Apply button is pressed this dialog box will be shown.

Main Router: Setup Communication

Type: Serial RS422

OK Cancel

General Parameters

Port Number: 3

IP Address:

Description: Router Comms

Serial Parameters

Baud Rate: 38400

Parity: None

Data Bits: 8

Stop Bits: 1

Communications must be set.

When set press **OK**

Set or leave the Assign Interface to **Local** for a single router level.

#### General Parameters.

Select the port on the TSL Controller / computer that is to connect to the router frame. Give the Port a Description.

#### Serial Parameters

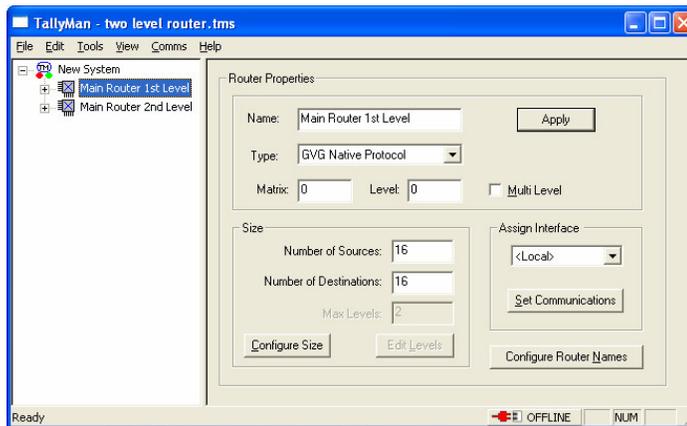
Set the Serial Parameters of the Port .

## 2.2.6 Multi Level

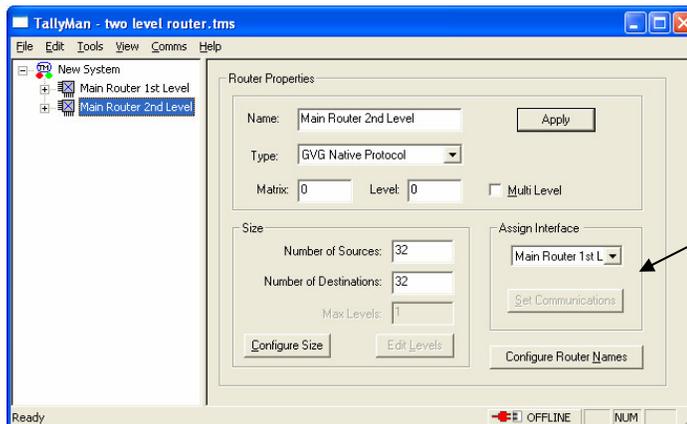
If the router is Multi Level, check this box and enter the number of levels in the **Max Levels** box in the **Size** section. UMDs may then be set to the appropriate level. This assumes that all sources across the levels will have a common source mnemonic.

If separate / different mnemonics are required for the different router levels, enter the second router into TallyMan as a separate object in the tree, as show in the screen pictures. This method of working offers greater flexibility.

Where the router has several levels, and a common communications port, the top box in the Assign Interface area will not be set to **Local** but will be set to the parent router for levels other than the first one.



Main Router 1<sup>st</sup> level.



Main Router 2nd level.

The Interface has been assigned to the "Main Router 1<sup>st</sup> Level".

The Comms port used will now be the one set up for the "Main Router 1<sup>st</sup> Level".

Note.

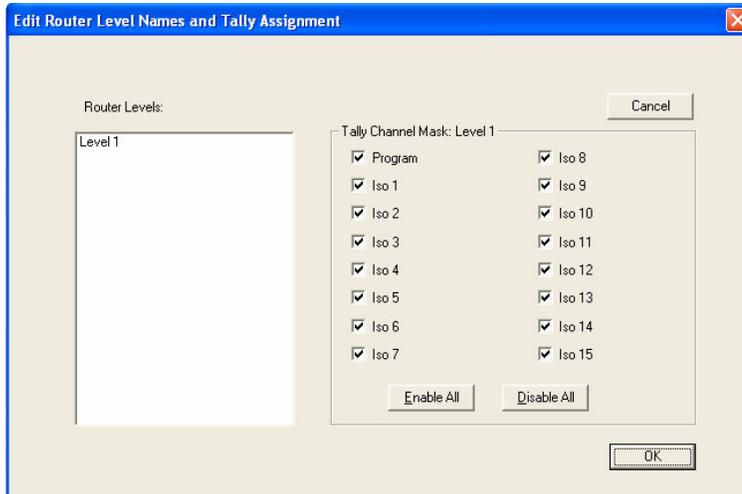
In this instance UMDs will not be set in their dialog box to "Level 2" as the 2<sup>nd</sup> Level here is used within TallyMan as another router. So the UMDs will be assigned to Main Router 2<sup>nd</sup> Level, level 1 for both the source and / or destination mapping requirements.

Where a single router entry is shown as having several levels, it is presumed that all the source and destination mnemonics will be the same for all levels as there will be only one set of mnemonic lists.

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## 2.2.7 Edit Levels

This shows a router with one level. The Tally Channel Mask may be set so that only the tally channels required are passed through the router on that level.



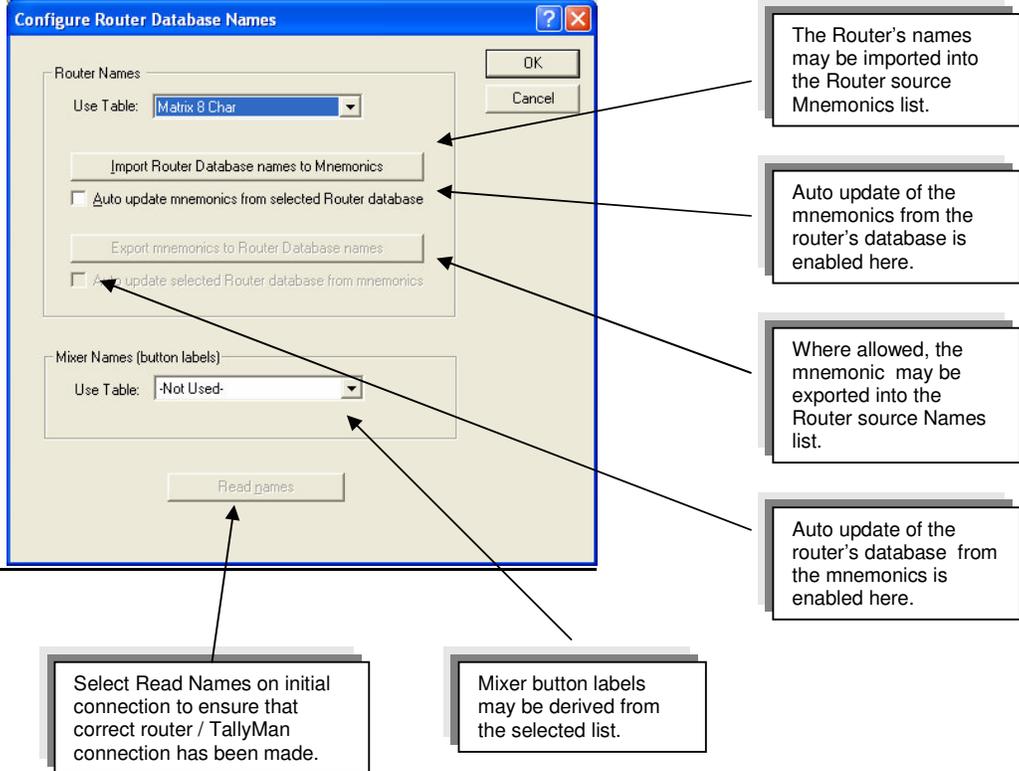
## 2.3 Size

Enter the number of Sources and Destinations and confirm the Max Levels setting.

Press **Config Size**.

## 2.4 Configure Router Names

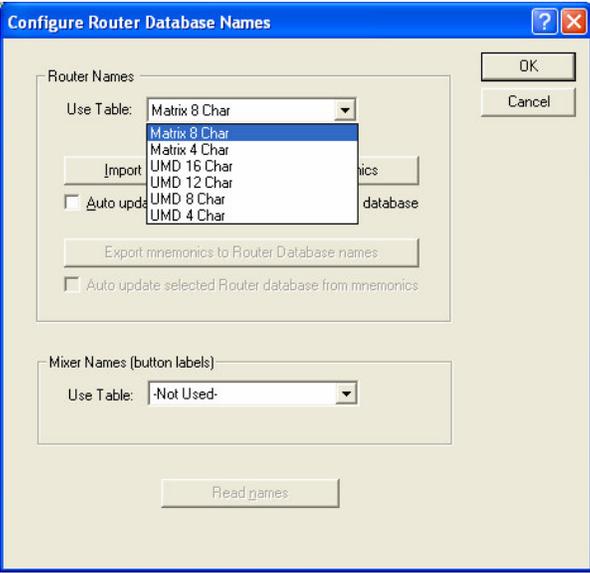
Where the router allows uploading and downloading of names, the various buttons will become active.



The screenshot shows the 'Configure Router Database Names' dialog box. It has a blue title bar and standard window controls. The main area is divided into two sections: 'Router Names' and 'Mixer Names (button labels)'. The 'Router Names' section contains a 'Use Table' dropdown menu set to 'Matrix 8 Char', an 'Import Router Database names to Mnemonics' button, a checkbox for 'Auto update mnemonics from selected Router database', an 'Export mnemonics to Router Database names' button, and a checkbox for 'Auto update selected Router database from mnemonics'. The 'Mixer Names (button labels)' section contains a 'Use Table' dropdown menu set to '-Not Used-' and a 'Read names' button. Callout boxes provide the following information:

- The Router's names may be imported into the Router source Mnemonics list.
- Auto update of the mnemonics from the router's database is enabled here.
- Where allowed, the mnemonic may be exported into the Router source Names list.
- Auto update of the router's database from the mnemonics is enabled here.
- Select Read Names on initial connection to ensure that correct router / TallyMan connection has been made.
- Mixer button labels may be derived from the selected list.

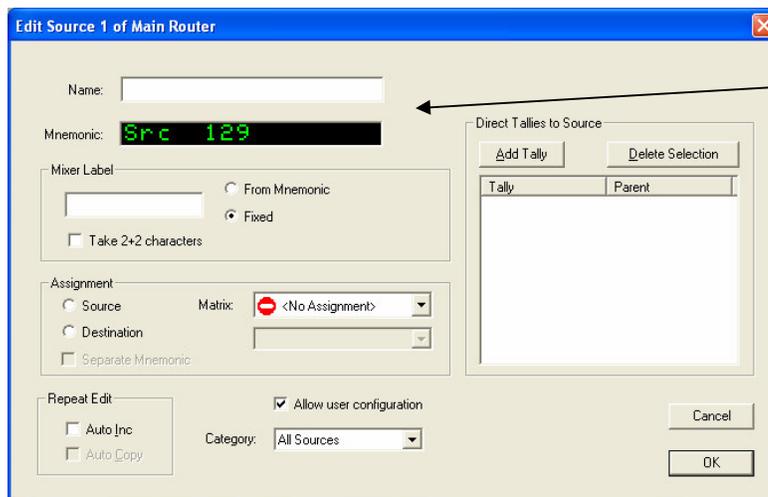
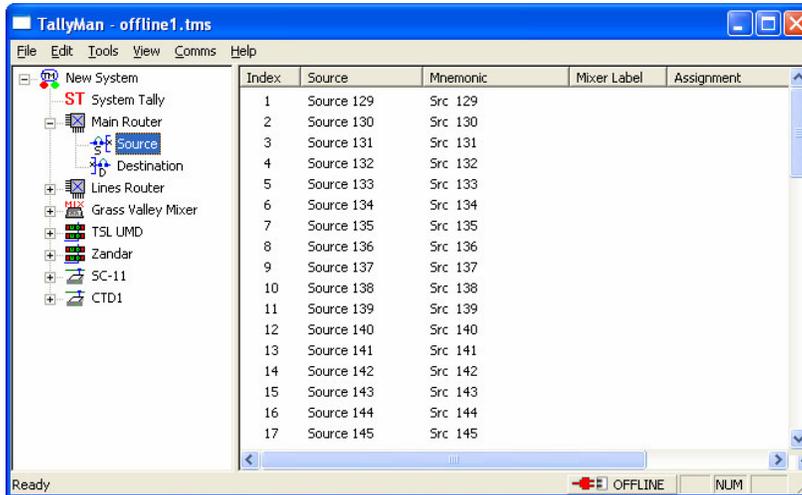
A ProBel Router dialog screen.



This screenshot shows the same 'Configure Router Database Names' dialog box, but with the 'Use Table' dropdown menu in the 'Router Names' section open. The menu lists several options: 'Matrix 8 Char', 'Matrix 4 Char', 'UMD 16 Char', 'UMD 12 Char', 'UMD 8 Char', and 'UMD 4 Char'. The 'Matrix 8 Char' option is currently selected. The rest of the dialog box, including the 'Mixer Names (button labels)' section and the 'Read names' button, remains the same as in the previous screenshot.

### 3.0 Router Sources

A click on the router source will show the following dialog box. Double click on the Source to be edited.



The Name box is only an aide memoir.

The Mnemonic box shows what would appear on a UMD assigned to a router destination and the destination has selected this source.

Src 129 shows in the Mnemonic box as this is source number 129 in this hypothetical system.

Type in the required **Mnemonic**.

The Name may be reset to the default by deleting the entered text.

### 3.1 Mixer Label

This is where the engineer decides what to offer the Mixer for Names. Names may be derived from:

The Fixed box (VTR1)

Or the mixer label may be derived from the Mnemonic box, near the top with the green characters.

Take 2+2 will take the first 2 and last 2 characters.

## 3.2 Assignment

The router source may be mapped to:

- A router source – source to source mapping
- A router destination – source to destination mapping

With source to source mapping a Separate Mnemonic may be set which is the Mnemonic shown on this screen. All tally mapping will be dynamic but the mnemonic will stay as shown in the box with the green text at the top of this screen.

**Edit Source 1 of Main Router**

Name:

Mnemonic: **Src 129**

Mixer Label  
  From Mnemonic  
 Fixed  
 Take 2+2 characters

Assignment  
 Source Matrix:   
 Destination Source:   
 Separate Mnemonic

Repeat Edit  
 Auto Inc  
 Auto Copy

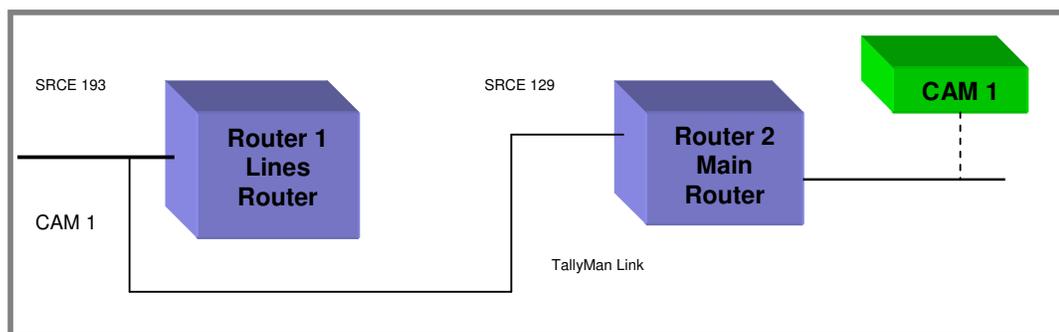
Allow user configuration  
Category:

Direct Tallies to Source

Tally	Parent
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### 3.2.1 Assign to Source

When this option is selected in the **Assignment** box, the Display on the second router output will show the mnemonic and tally state of the assigned source. In this example, "CAM 1" will be shown, assuming that the Router 2 Bus has selected its input, SRCE 129.



The mnemonics for the input to Router 2, SRCE 129, are effectively taken over by the input mnemonics state to Router 1. In this example, the mnemonics state shown on the UMD will be those for SRCE 193. Tallies from either source will be shown.

Therefore, in this example, only the mnemonics for Router 1 need be entered in the mnemonics lists.

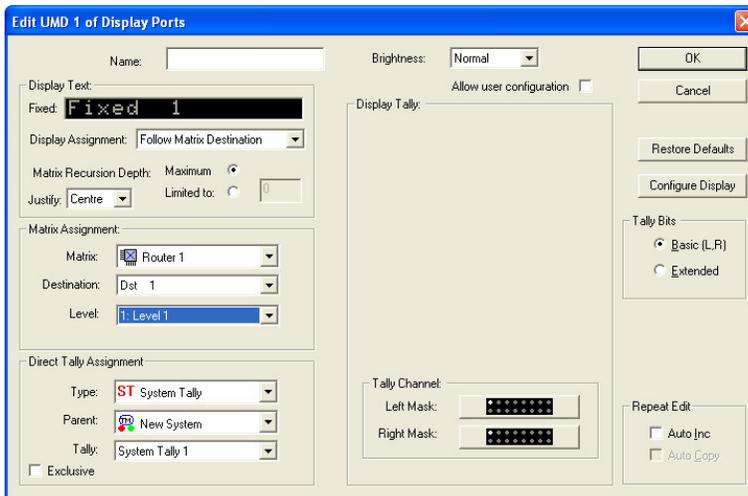
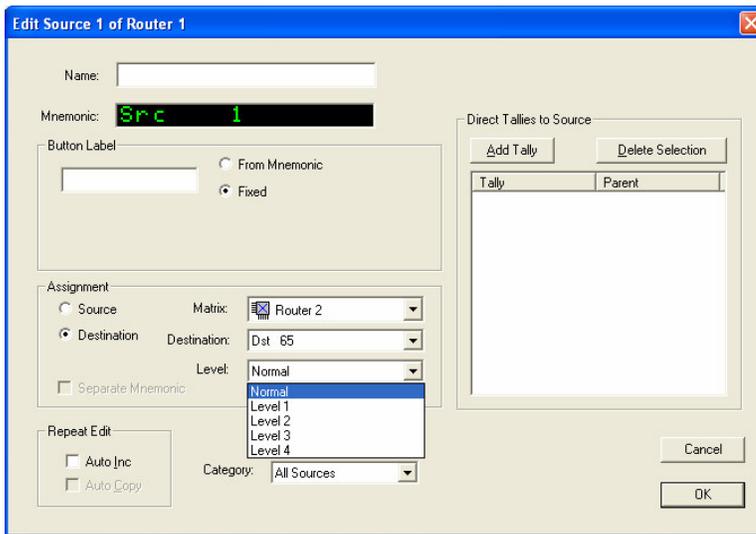
Source to Source mapping may also be done within one router.

An exception to this is when the **Separate Mnemonic** box is checked. Although the tallies will effectively be added together, the mnemonics will be kept separate.

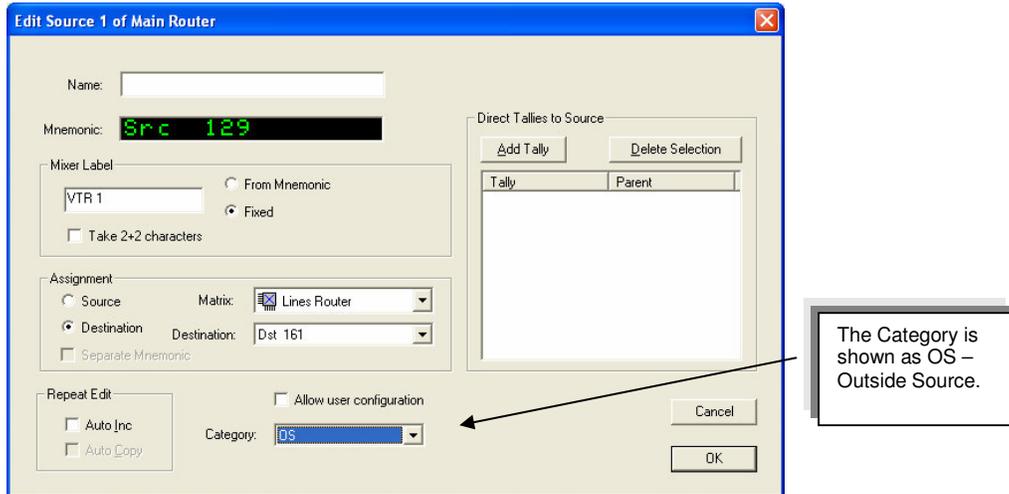
### Multilevel Routers

If a source is assigned to a destination, it is possible to specify a particular Level for the assignment.

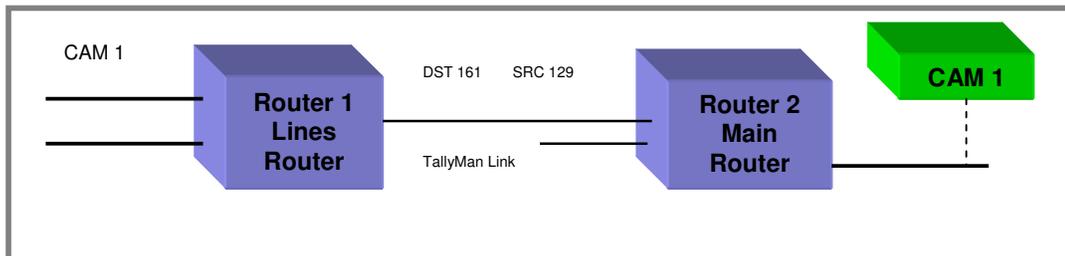
Leaving the Level set to **Normal** means that any UMD assignment will take its selected level and path through TallyMan.



### 3.2.2 Assignment to Destination



This is used when there is more than one router in the system and displays need to show the correct original source mnemonic.



A display on the Main Router bus needs to show the correct Lines Router source mnemonic.

In the example above, Router 2 is the final Router in the chain. Input 1 on Router 2 has the mnemonic "SRC 129".

This input 1 is connected to Router 1, Bus 1, which has the mnemonic "DST 161". Router 1 will also have mnemonics assigned to its sources. It is these source mnemonics that will be shown on the Router 2 Bus Display.

Therefore, the linking will now ensure that the Router 2 Bus Display shows the correct Router 1 source mnemonic which is selected by Router 1, Bus 1.

#### Note

As from TallyMan version 1.66 a Router Source display will show the final Destination Mnemonic that has selected that Source with more than one recursion.

The following rules apply:

Destinations with the priority set to 0 are not included.

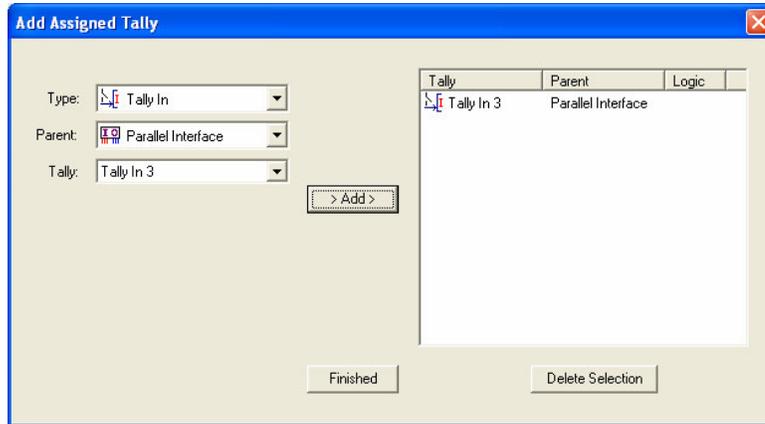
Priority 1 is highest, 2 next, etc.

Destinations with the same priority will supercede each other; i.e. the last one scanned in a group of the same priority will win.

## Direct Tallies to Source

Tallies may be assigned to the router sources.

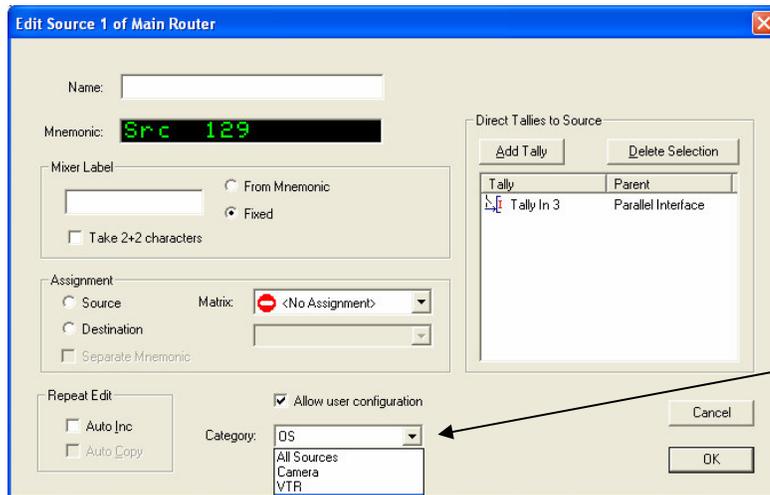
Click on **Add Tally**



- Select the tally **Type**
- Select the **Parent** source
- Select the **Tally**
- and then **Add** to the box.

Tallies may be deleted as a group and may be randomly selected using the usual Windows selection techniques.

The configuring engineer may **Allow User configuration** access and the router source may be set a any one of seven Categories for easy group editing later



The Category is shown as OS - Outside Source.

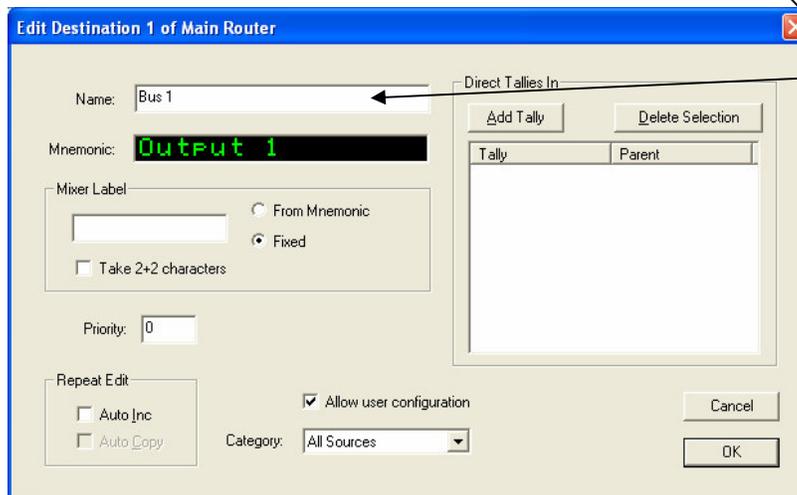
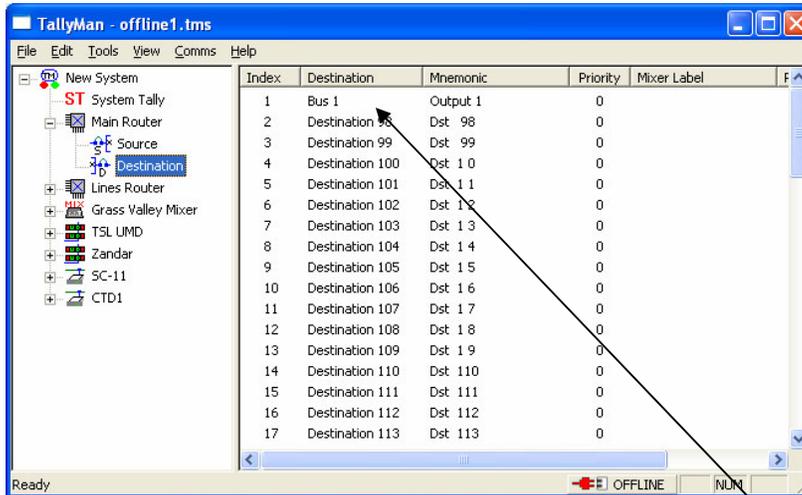
### 3.3 Repeat Edit

The **Auto Inc** and **Auto Copy** boxes may be checked for quick copying of source mnemonics where they are similar.

The router source may be set to belong to one of seven categories for easier editing later on.

## 4.0 Router Destinations

To edit the Destination parameters, click on the router destination icon then double click on the Destination to be edited.



The Name box is only an aide memoir.

The Mnemonic box shows what would appear on a UMD assigned to a source and the destination has selected this source or if a UMD is assigned to the Destination as a Fixed Destination display.

Type in the required Mnemonic.

### 4.1 Mixer Label

The Mixer Label is shown as being taken from the Mnemonic and the first 2 and last two characters are used: Ou 1.

### 4.2 Priority

The Priority must be set if there are source displays. As several destinations may select the same source, a system is needed whereby the UMD is "told" what to display.

Priority 1 is a higher priority than Priority 2 etc.

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### 4.3 Repeat Edit

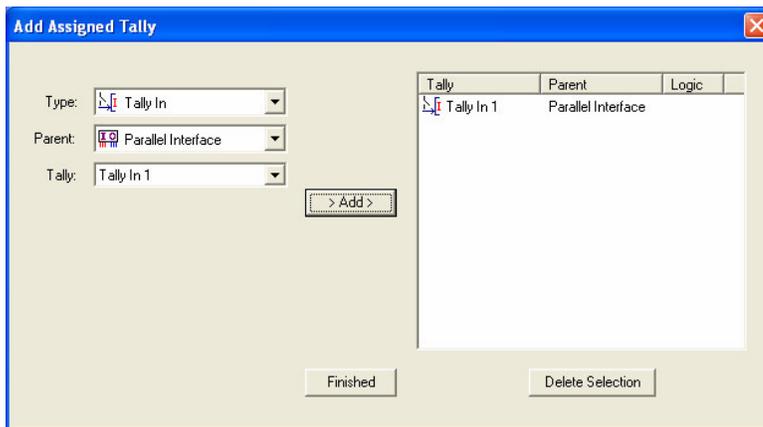
This will allow quick automatic incrementing of mixer sources and the Auto Copy will carry on down the same settings for the next mixer source

### 4.4 Direct Tallies In

Tallies may be assigned to a Destination.

Any UMD associated with the Destination or any Router Source UMD that is assigned to a Source that has been selected by the Destination will have a tally set provided that the UMD mask has been set to accept the tally channel.

Clicking on **Add Tally** will show the following box.



- Select the **Tally** type
- Select the **Parent** source
- Select the **Tally**
- and then **Add** to the box.

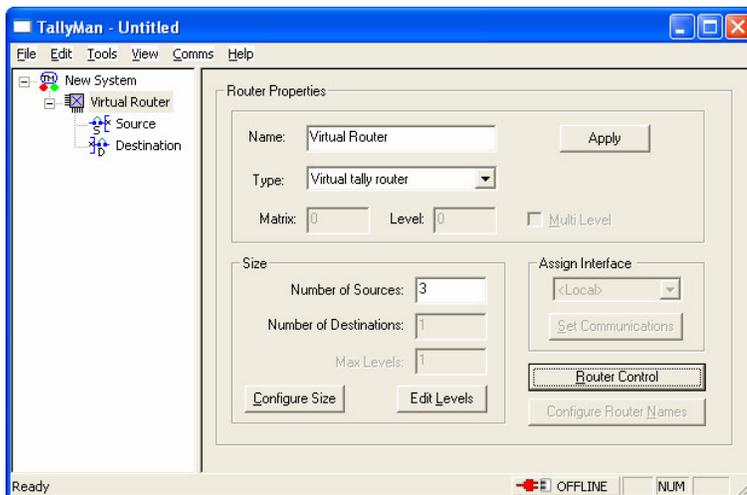
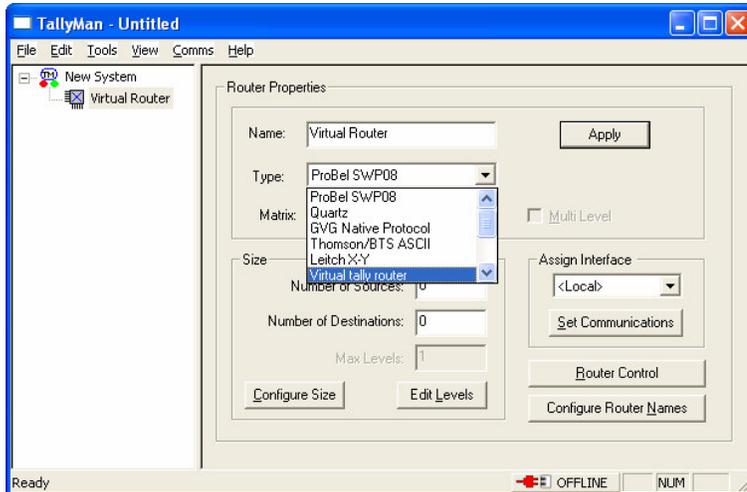
Tallies may be deleted as a group and are randomly selected using the usual Windows selection techniques.

## 5.0 The Virtual Tally Router

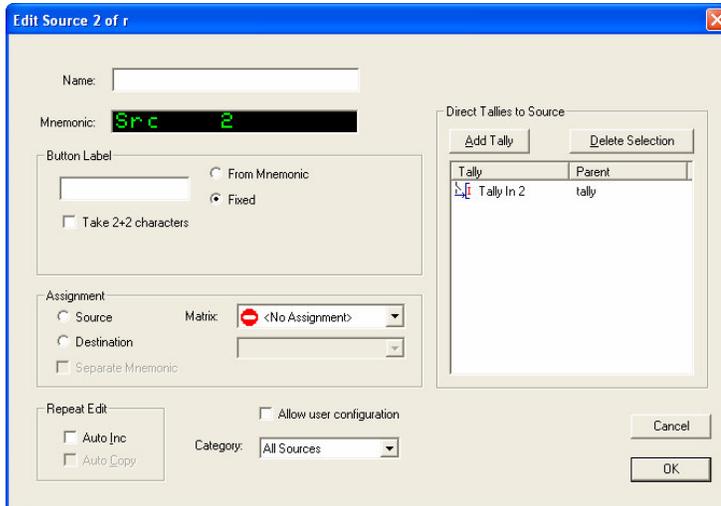
There may be instances when a virtual router is required in the system.

This could be used, for example, as a UMD mnemonic switch to show the transmission status on a UMD if a prime router destination is put to air or to route tallies automatically to the prime router destination if that destination has to be put to air under emergency conditions.

The tally in these cases could be an external contact closure; a GPI connected to the parallel I/O.



Here a Virtual Tally Router with 3 i/ps is shown.



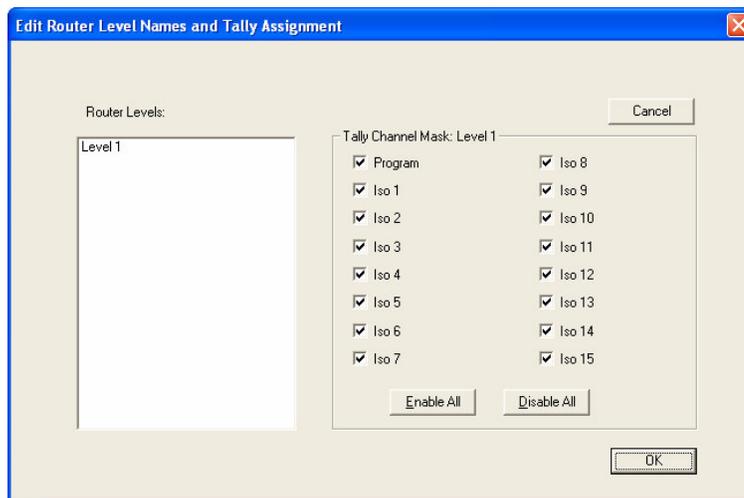
Tally 2 is used to switch the Destination to Source 2.

The Virtual Tally Router looks at the tally status of each of its sources. It then routes the first source it finds tallied, to the single destination. If tallies are set simultaneously to sources 2 and 3, source 2 will be selected. This is a priority system.

If no sources are tallied, Source 1 is routed to the Destination.

The level mask, accessed via **Edit Levels**, is applied to the tally status. It determines which tally channels are allowed to pass through or switch the router.

- The control tally should be in a different tally channel to the tallies set to the destination etc. It is suggested that Iso 15 tally channel is used but any different tally channel to the “program” tallies may be used.



Note that the router mimic will not show the Virtual Router activity in **Tools > Router Mimic**. This mimic only shows real router activity when on-line.

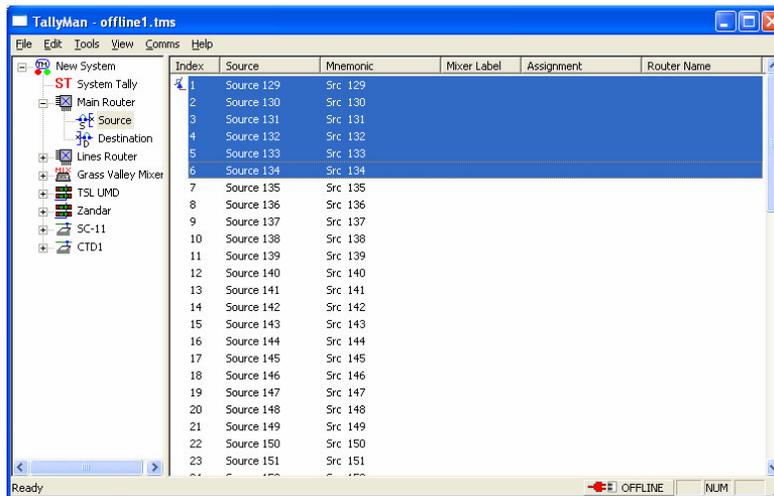
## 6.0 Cut and Pasting Names and Mnemonics into the Lists.

Names and Mnemonics may be cut and pasted between lists in TallyMan and Microsoft Excel for easy updating and editing.

### 6.1 Using other programs to edit the Router source and destination lists.

### 6.2 Copying Names and / or Mnemonics

If the router 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 in Excel. Various delimiters are available for loading into other programs.



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

### 6.3 Pasting Names and Mnemonics into TallyMan.

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

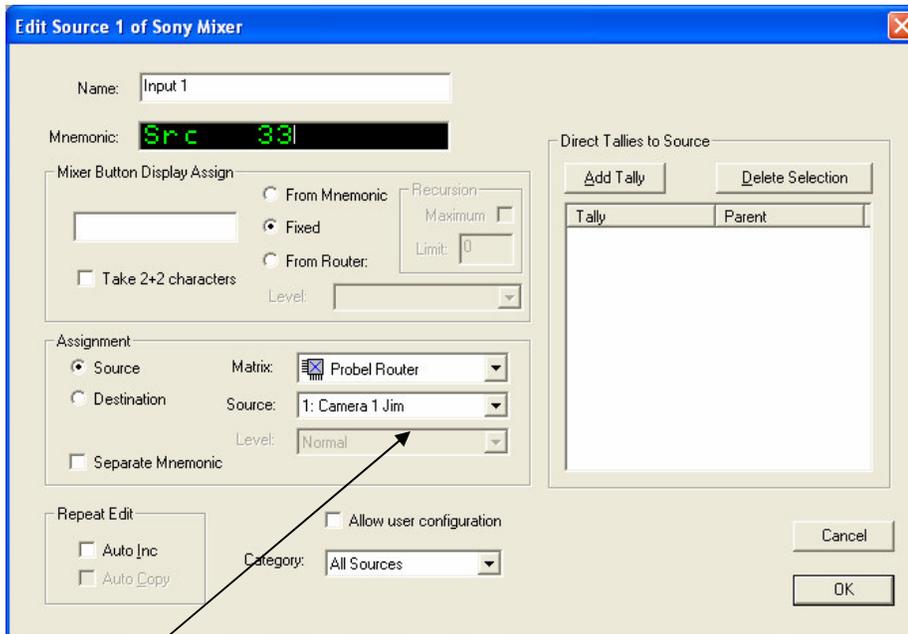
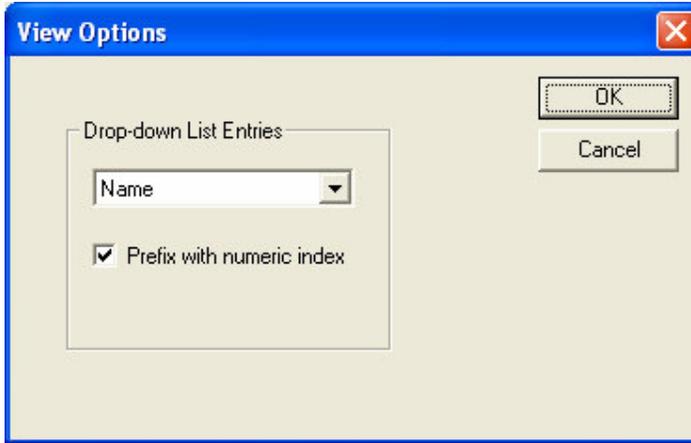
Mark the list and copy to the Clipboard. Open TallyMan and paste into the Names or Mnemonics list as required.

## 7.0 Tools > Router Mimic

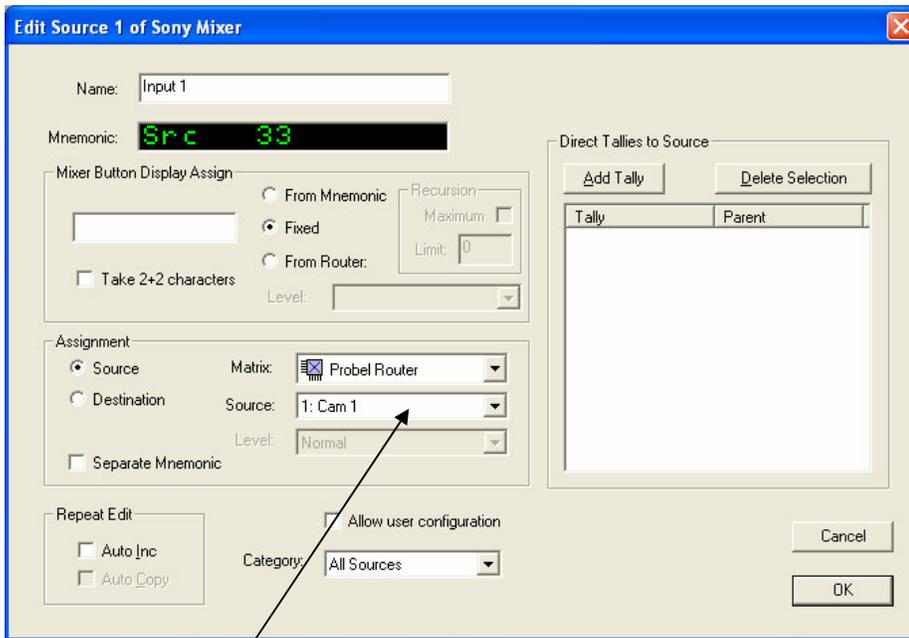
When the program is on-line and this box is displayed, router communication may be observed as cross point information is read. This facility should be used to check for correct communications.

## 8.0 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



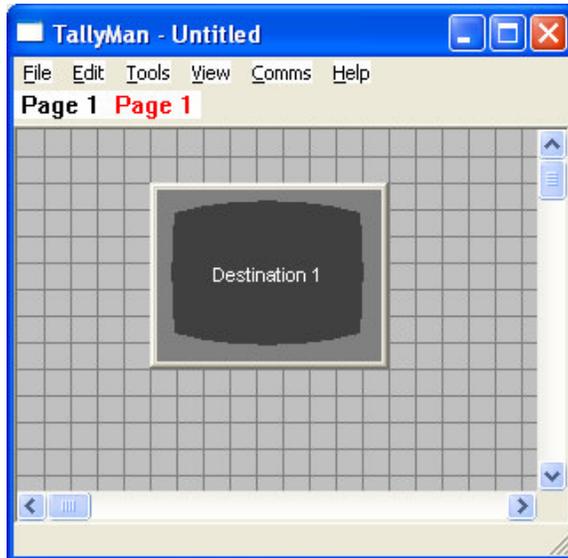
This shows the Index number and the Mnemonic.

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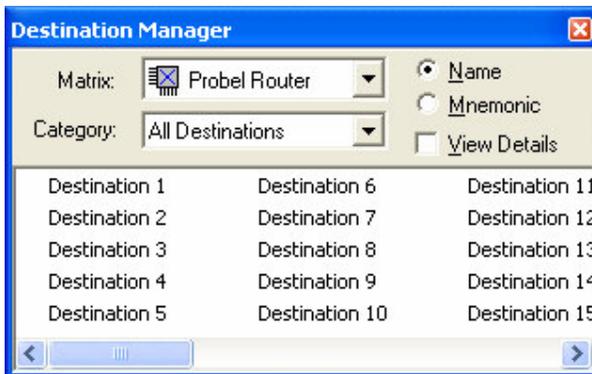
## 9.0 Tools > Edit Source Panels

### Use with the User Screen

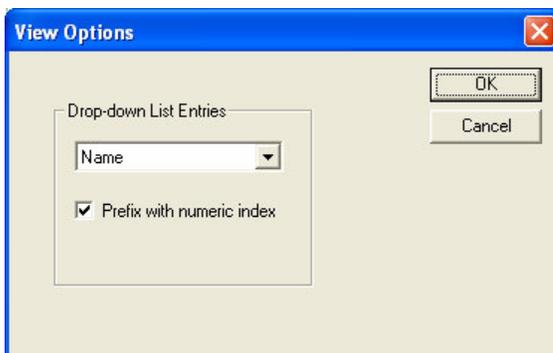
This allows individual source selection, hence router changes, once a monitor has been set to a Destination.



- Enter a Monitor and assign as Destination to it. Drag and drop the Destination into the monitor.

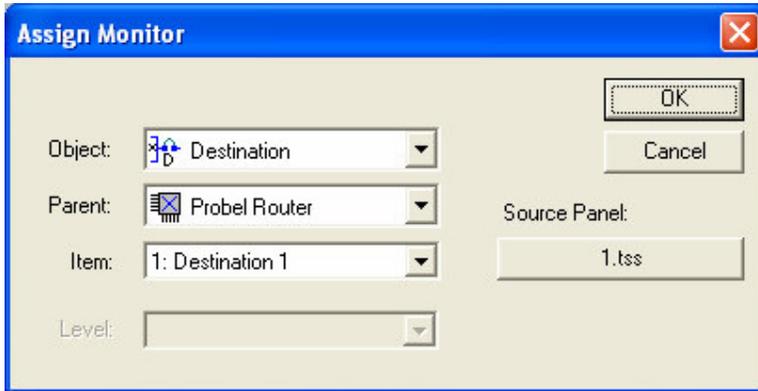


This option determines how the text in the monitor will be displayed. Seen via the **Setup > View > Options** dialogue box.



**If required:**

- RH mouse click on the monitor
- Load the appropriate Source Panel settings from the saved .tss file.

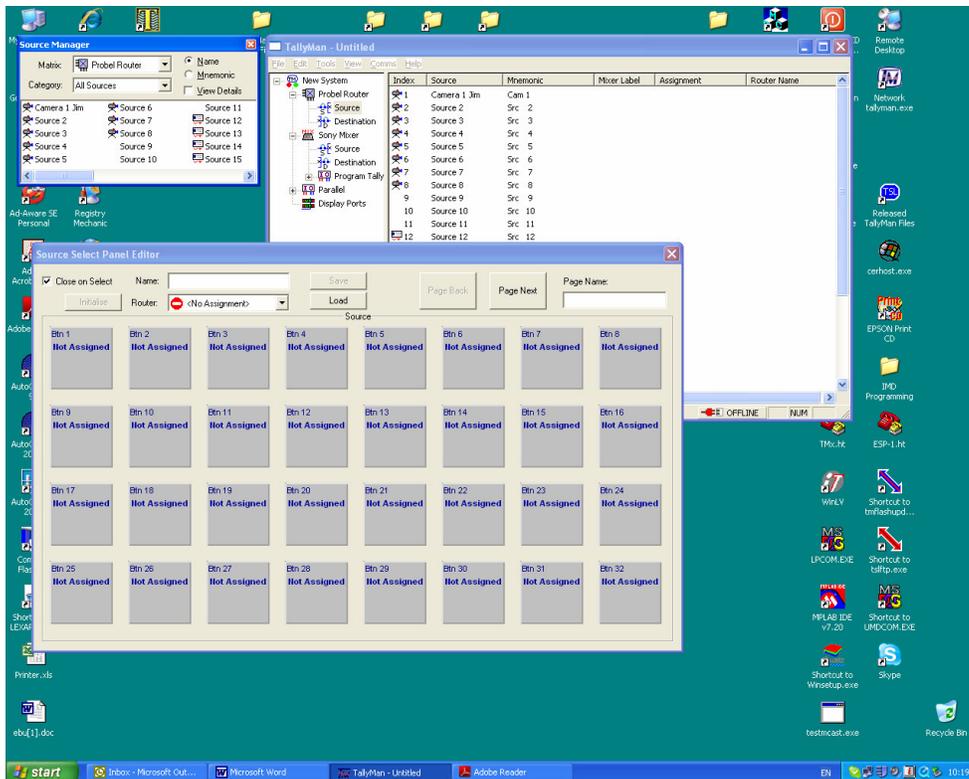


To Edit Source Panels

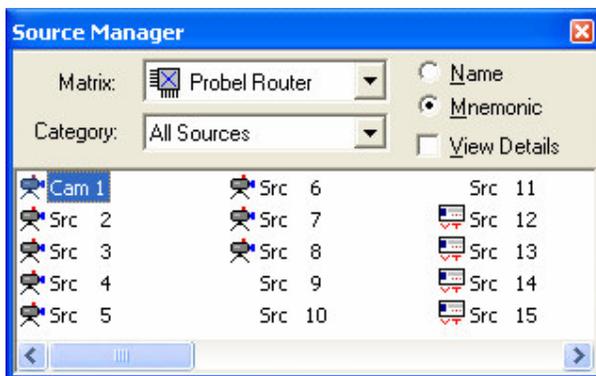
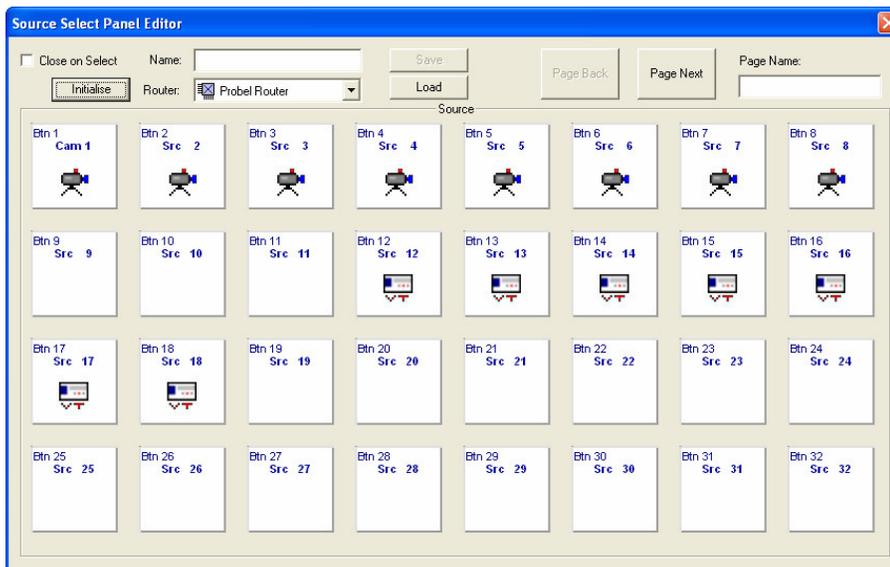
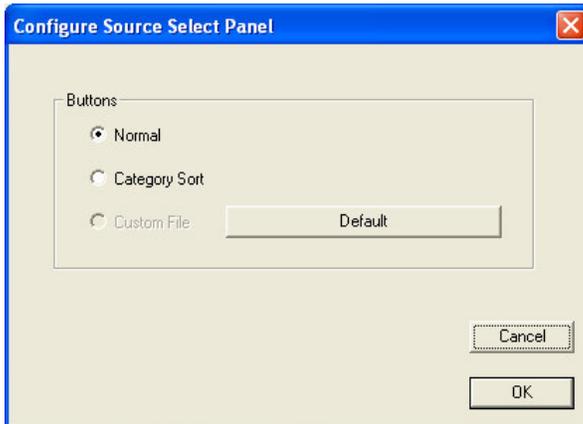
Panel buttons may be allocated to the sources as described below.

When this option is selected both the Source Manager and Source Select Panel Editor will open.

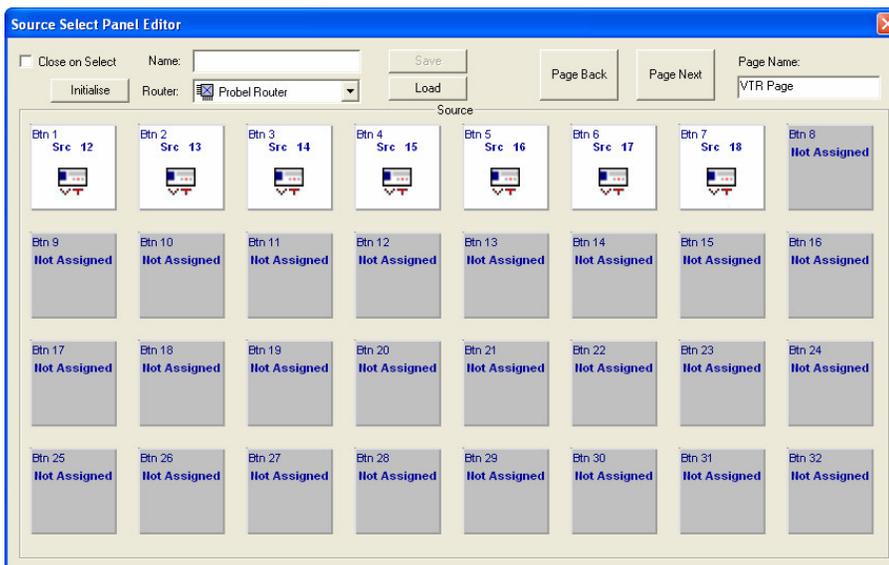
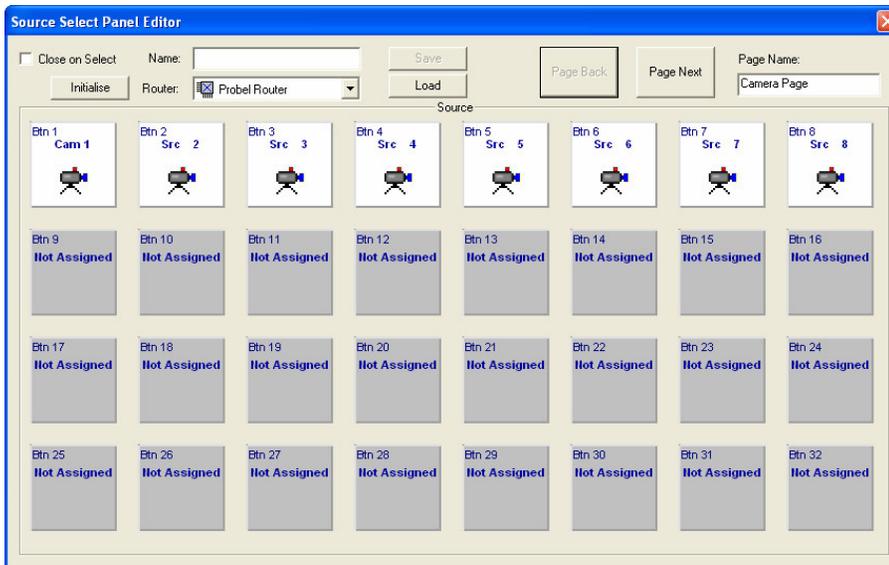
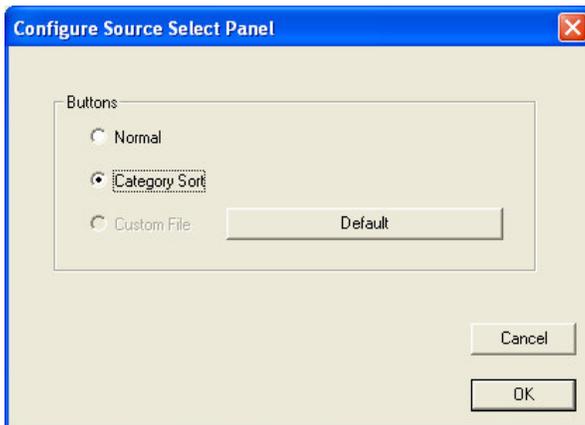
It is possible to drag and drop the sources onto the buttons. A LH mouse click will remove the assignment.



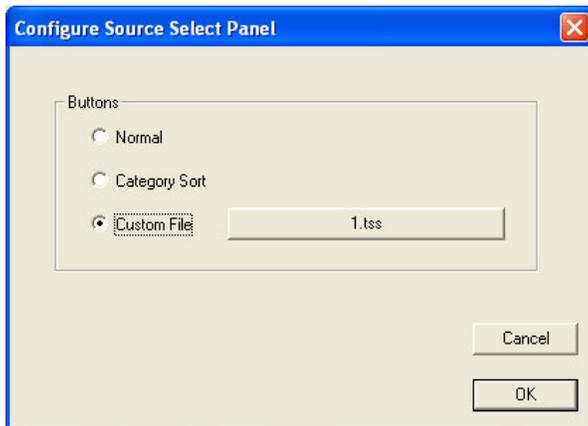
Select the Router and then **Initialise** and the buttons are auto-filled. This shows that **Normal** has been selected.



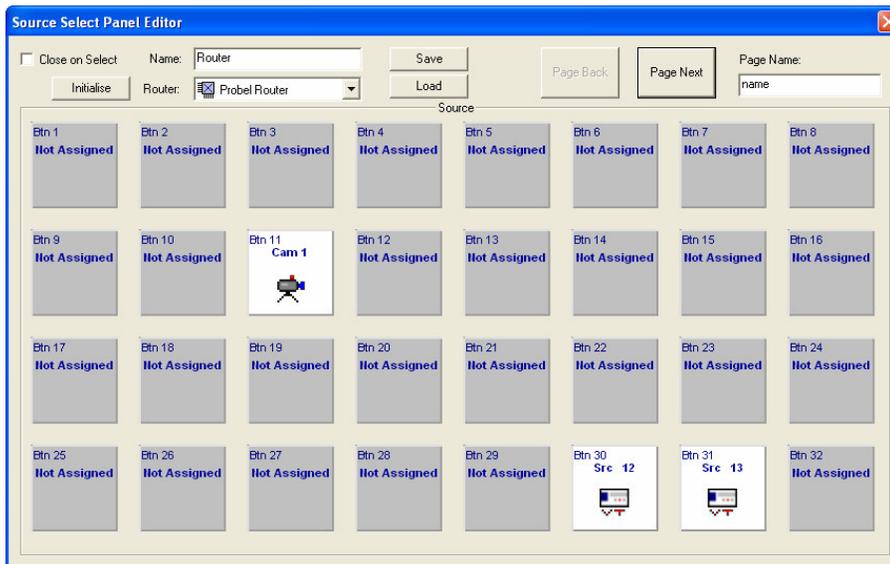
If **Initialize > Category Sort** is selected each category is put on separate pages.



A Custom File may be saved / loaded by clicking the **Default** button

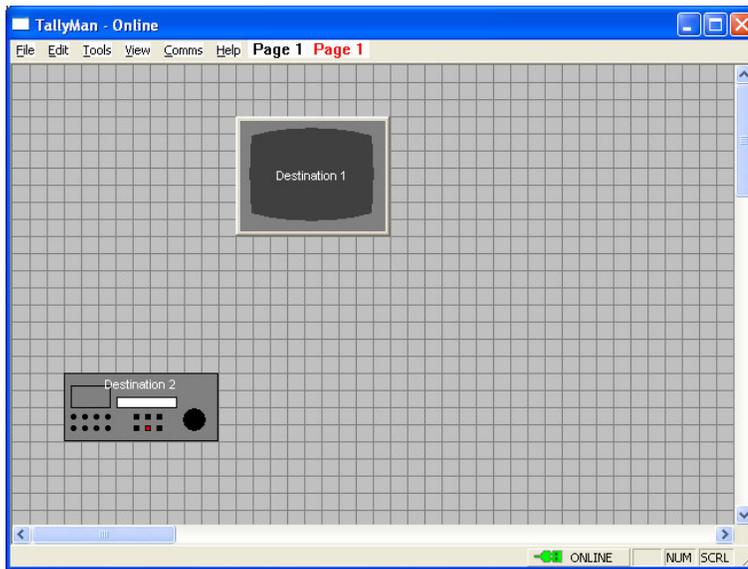


Or by selecting either the **Save** or **Load** buttons, as appropriate.

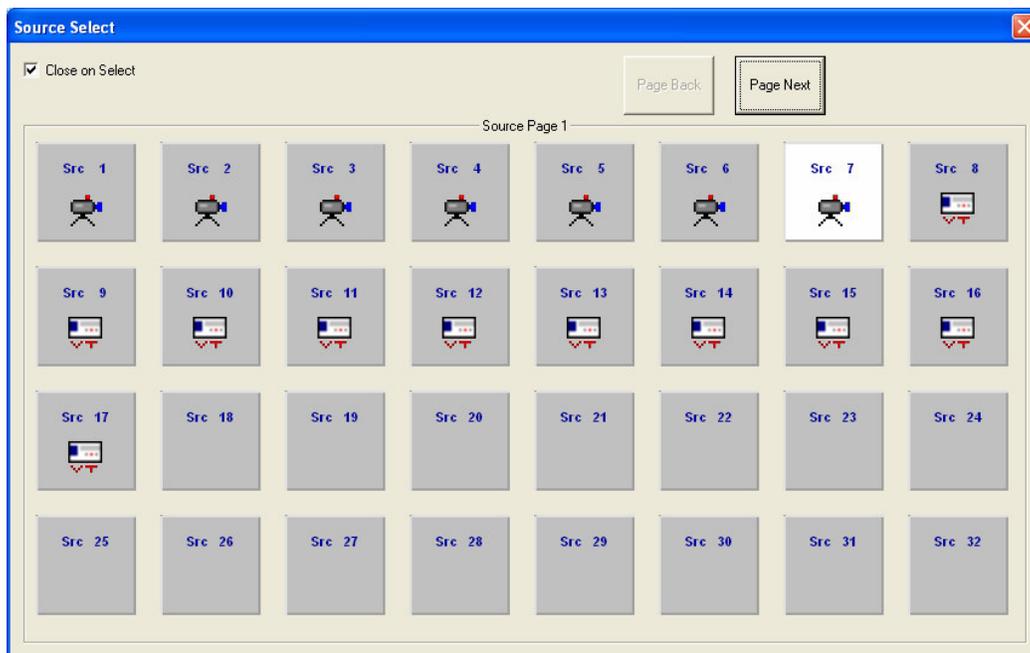


- Write this setup to the TMx

Then, when on-line go to the User screen:



Press on the button graphic if you have a touch screen or click with a mouse,



This screen will reappear and sources may be selected to the monitor.  
If **Close on Select** is checked, the screen will disappear on touching a source button.

Notes:

When on-line alternative panel selections and destination control settings may be loaded.  
The program will show which source has been selected even if a hardware panel is used to make changes.