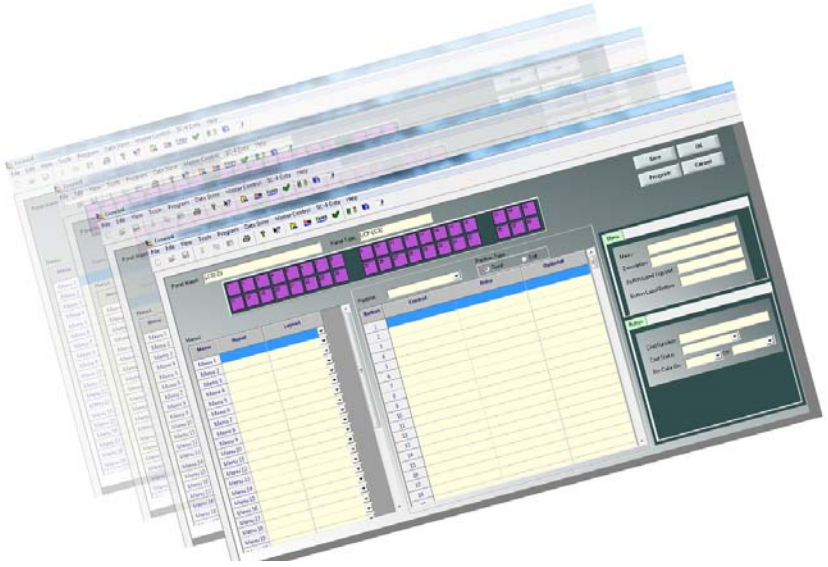
Utah Scientific

UCP LC 32/80

Basic Setup and Operation



UCP LC 32/80 - Setup and Operation Guide

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Utah Scientific, Inc.

4750 Wiley Post Way, Suite 150
Salt Lake City, Utah 84116-2878 U.S.A.

We declare our sole responsibility that the Utah-400 Digital Routing Switcher is in conformance with the following standards:

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- EN55022:1994+A1&A2

Immunity

- EN55024:1998
- EN61000-3-2
- EN61000-3-3

Safety

- IEC 60950-1:2001 /EN 60950-1:2001

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- EMC Directive 89/336/EED
- Low Voltage Electrical Directive 72/23/EEC

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CE

Important Safeguards and Notices

This section provides important safety guidelines for the Operator and Service Personnel. Specific warnings and cautions are found throughout the guide where they apply, but may not appear here. Please read and follow the important safety information, specifically those instructions related to risk of fire, electric shock, or injury to persons.

Safety Symbols

- Hazardous Voltage symbol

- Caution symbol. The product is marked with this symbol when it is necessary to refer to the manual to prevent damage to the product.

Warnings

Please observe the following important warnings:

- Any instructions in this guide that require opening the chassis, changing a power supply, or removing a board, should be performed by qualified personnel only. To reduce the risk of electric shock, do not perform any service unless you are qualified to do so.
- Heed all warnings on the unit and in the operating instructions.
- Do not use this product in or near water. Disconnect AC power before installing any options or servicing the unit unless instructed to do so by this manual.

- This product is grounded through the power cord ground conductor. To avoid electric shock, plug the power cord into a properly wired receptacle before connecting the product inputs or outputs.
- Route power cords and other cables so they won't be damaged.
- The AC receptacle (socket) should be located near the equipment and be easily accessible.
- Disconnect power before cleaning. Do not use any liquid or aerosol cleaner - use only a damp cloth.

- Dangerous voltages exist at several points in this product. To avoid personal injury, do not touch exposed conductors and components while power is on. Do not insert anything into either of the systems two-power supply cavities with power connected.
- Do not wear hand jewelry or watches when troubleshooting high current circuits, such as power supplies. During installation, do not use the door handles or front panels to lift the equipment as they may open abruptly and injure you.
- To avoid fire hazard when replacing fuses, use only the specified correct type, voltage and current rating as referenced in the appropriate parts list for this product. Always refer fuse replacement to qualified service personnel.
- Have qualified personnel perform safety checks after any service.

Cautions

Please observe the following important cautions:

- When installing this equipment do not install power cords to building surfaces. To prevent damage when replacing fuses, locate and correct the problem that caused the fuse to blow, before reconnecting power.
- Use only specified replacement parts

Company Information

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Section 1

Overview - LC 32/80 Panel Operation

Section 1

Overview - LC 32/80 Panel Operation

This guide describes the basic layout and operation of the LC 32/80 panel within the UCON interface.

Contents

Basic Chassis Configuration

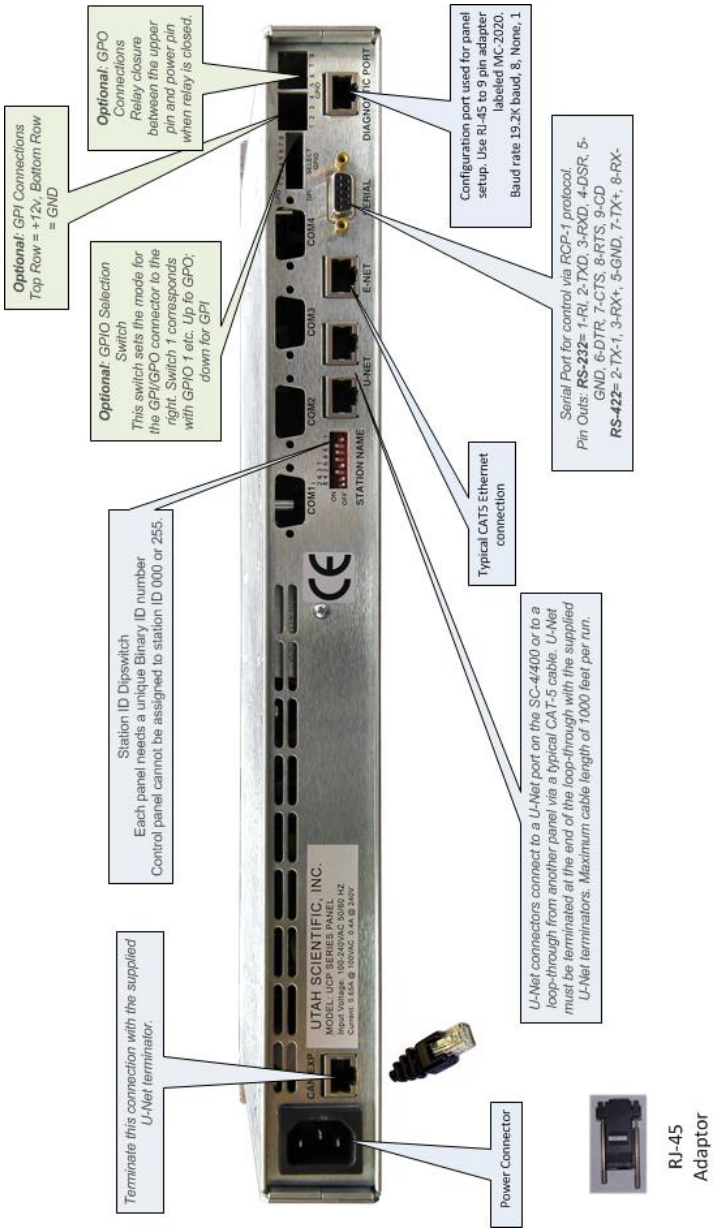


Figure 2-1. LC32 Configuration

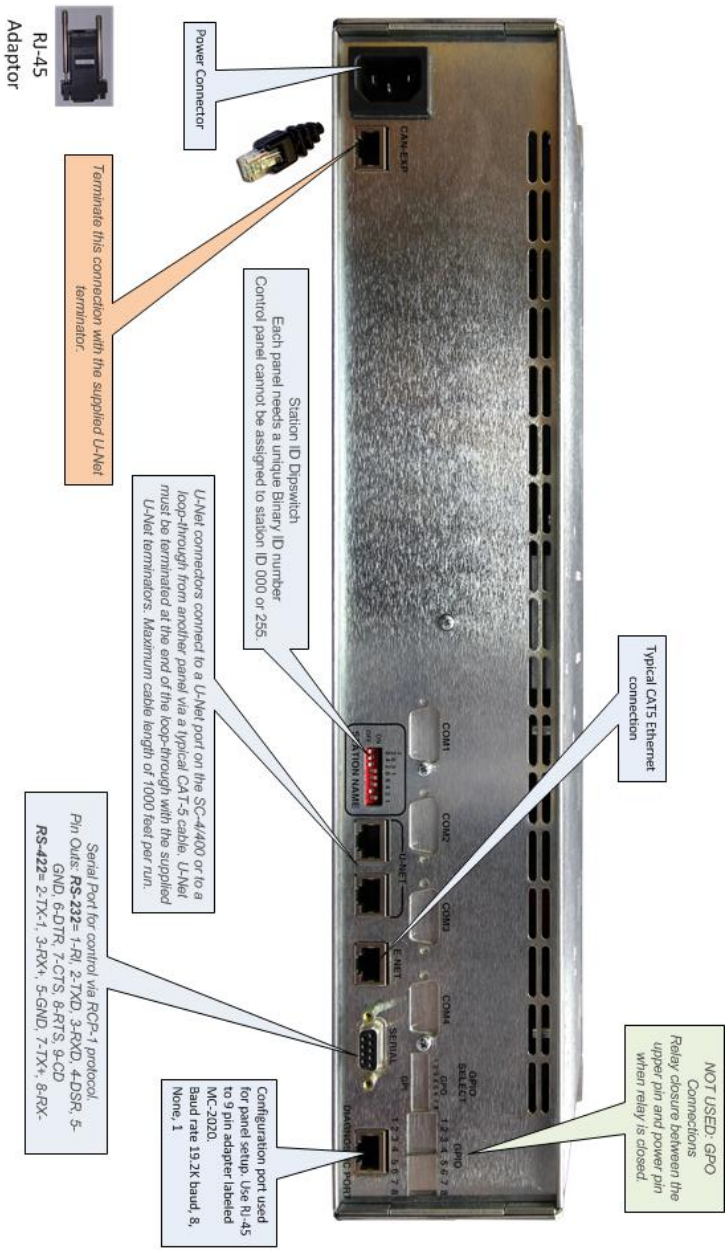


Figure 2-2. LC80 Configuration

Initial Layout Build

The Panel Layout selection is made by clicking the drop down menu (illustration below) and making a selection from the list provided.

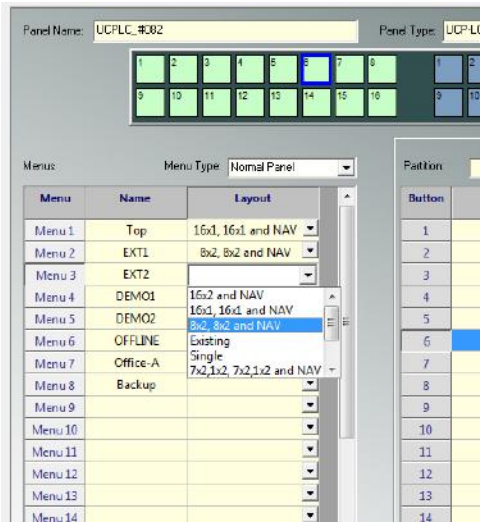
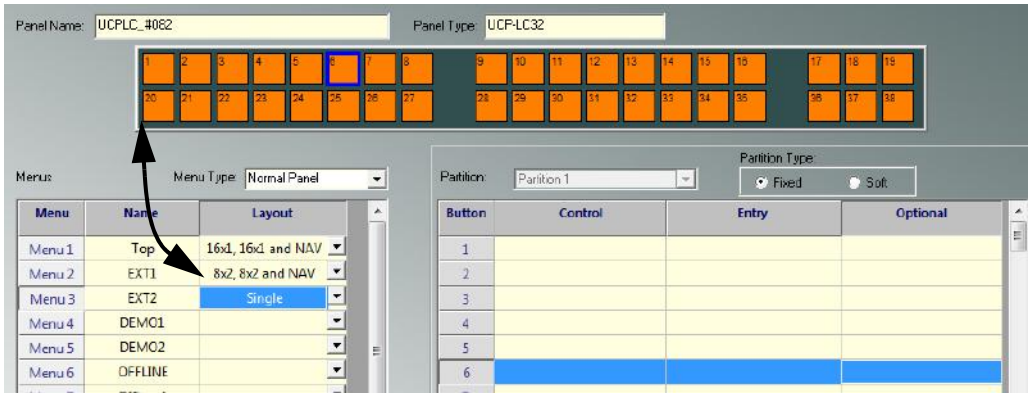


Figure 2-3. Initial Build

When a layout is selected, the ‘Fixed’ button (on the actual panel, upper left) will change the button color state of all Source buttons on the panel.



Panel Example

Layout Selection - Examples

The illustration below contains a partition (1) 16x2 navigation panel. Sixteen buttons along the top by two rows.

Figure 2-4. 16x2.

In the following config there is no ‘Partition 2’, as partition 2 would contain the navigation buttons, which are not modifiable.

Figure 2-5. 16x1 (containing 2 partitions)

The first partition corresponds to the light green buttons, while the section partition corresponds to the yellow buttons. The navigation buttons are also included (red buttons, far right). This 8x2 layout illustrated below is defined by two partitions - 8 buttons along the top by two rows (light green and blue buttons)

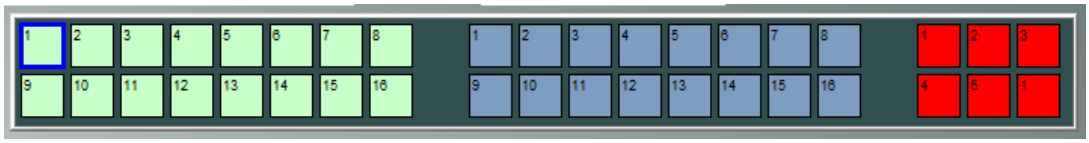


Figure 2-6. 8x2

The illustration below is a 'Single Mode' panel, which contains a total of 38 buttons

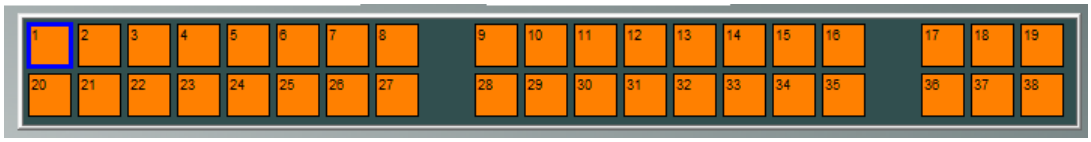


Figure 2-7. Single Layout

The buttons to the far right are typically used as navigation buttons, and can include page up and page down controls.

Important note concerning the ‘single mode' operation

- It is always a good idea to include a ‘back’ button for the purpose of returning to a previous menu layout, otherwise the user is isolated in the current button layout.

The Page Up and Page Down buttons are recommended for convenient navigation.

Drag the page up and down buttons from the location shown (lower right column) to the specified button number inside the table (middle). You simply drag this button definition to the specific button number for the specific location you’d like to assign this command.

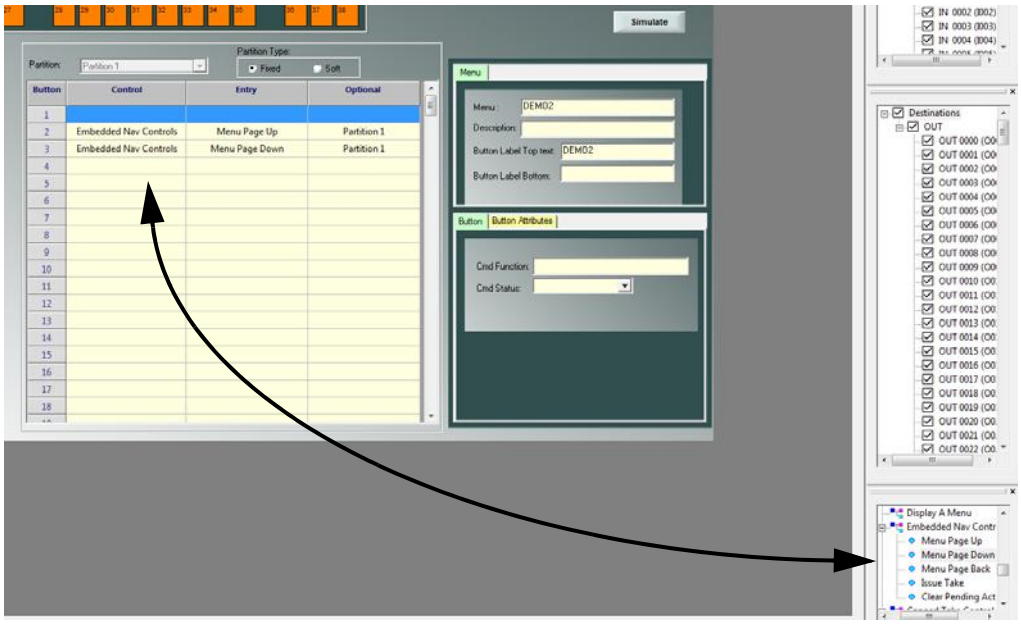


Figure 2-8. Page Navigation

Remember that page UP and page DOWN will cycle through sources and destinations. If you would like to step back to a previous layout however, use the ‘Back’ button, which is located in the same column as Page Up and Page Down.

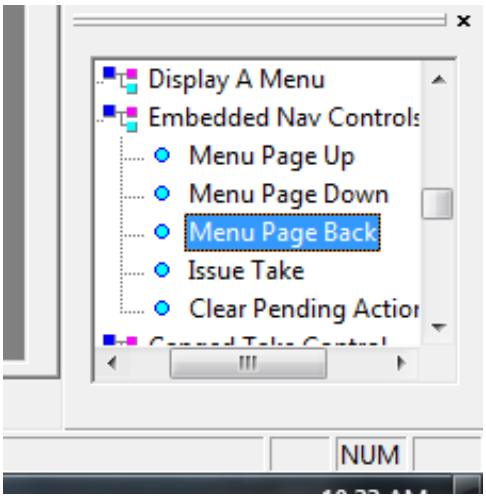
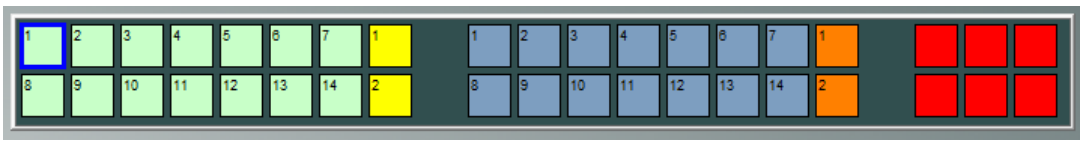


Figure 2-9. Back button

7x2 and 1x2

Partition one contains Seven buttons by two rows.The yellow and orange buttons correspond to a 1x2, which can contain a page up/page down, or back button. This configuration could contain sources on one group with destinations on the other. The navigation buttons are fixed; page up and down, and home buttons.



7x2

18x2

This corresponds to 18 inputs by two rows, all on the same partition. This layout allows all status visibility within the same partition.

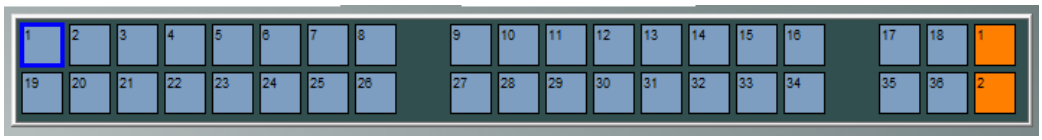


Figure 2-10. 18x2

Partition Display - 8x2 Configuration

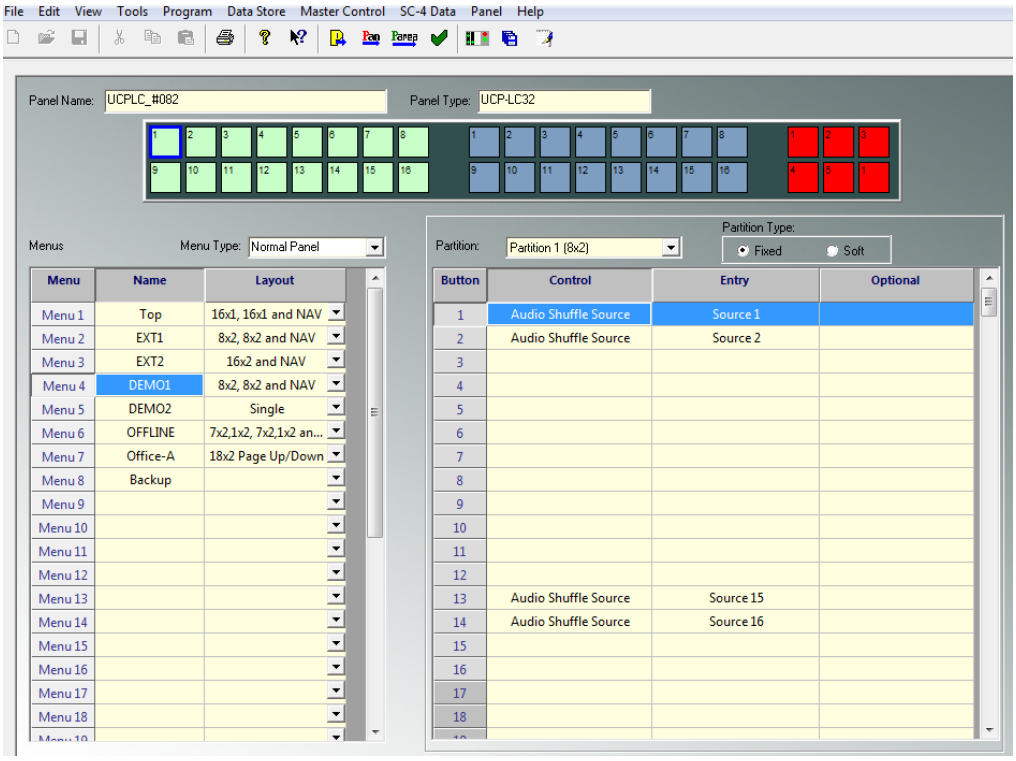


Figure 2-11. 8x2

In this configuration the Sources are displayed within the tables by clicking the light green buttons on the virtual panel.

The Destinations are shown in the tables by clicking the blue buttons on the virtual panel. The 3rd partition (red navigation buttons) are not modifiable.

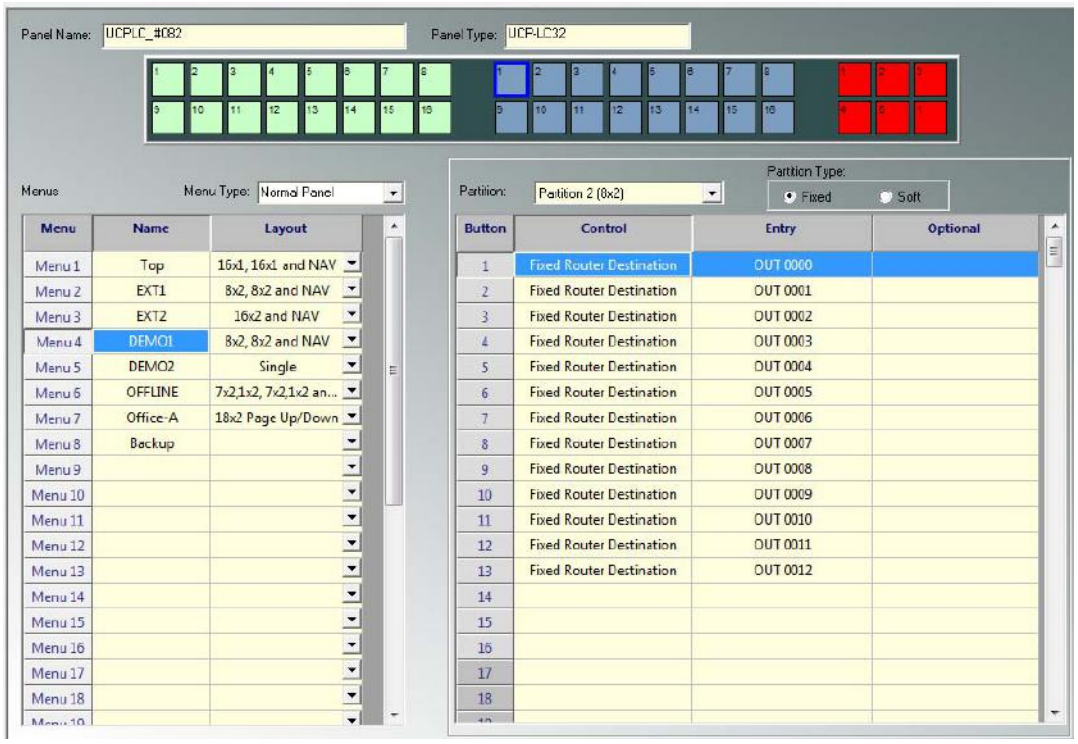


Figure 2-12. Destinations

The right (blue) buttons are populated with sources by making a list selection from the column shown and dragging all items to the middle table.

Blank Panel Setup

During an initial blank panel setup, all menus are defined from scratch within the left-most column, labeled 'menu'.

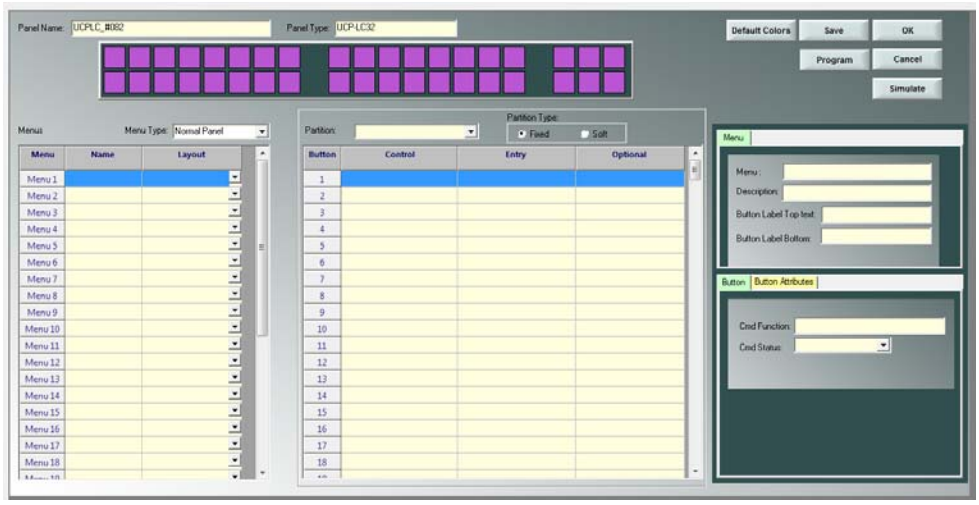


Figure 2-13. Blank panel

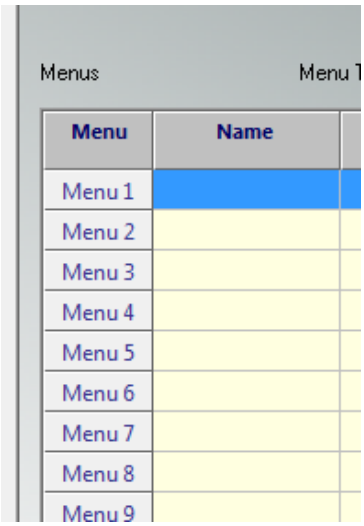


Figure 2-14. Menu column

Functions

The Function selection is located within the listing at the lower-right corner of the screen display. These individual functions are used to populate the actual function table (center of the screen) for each one of the panels created.

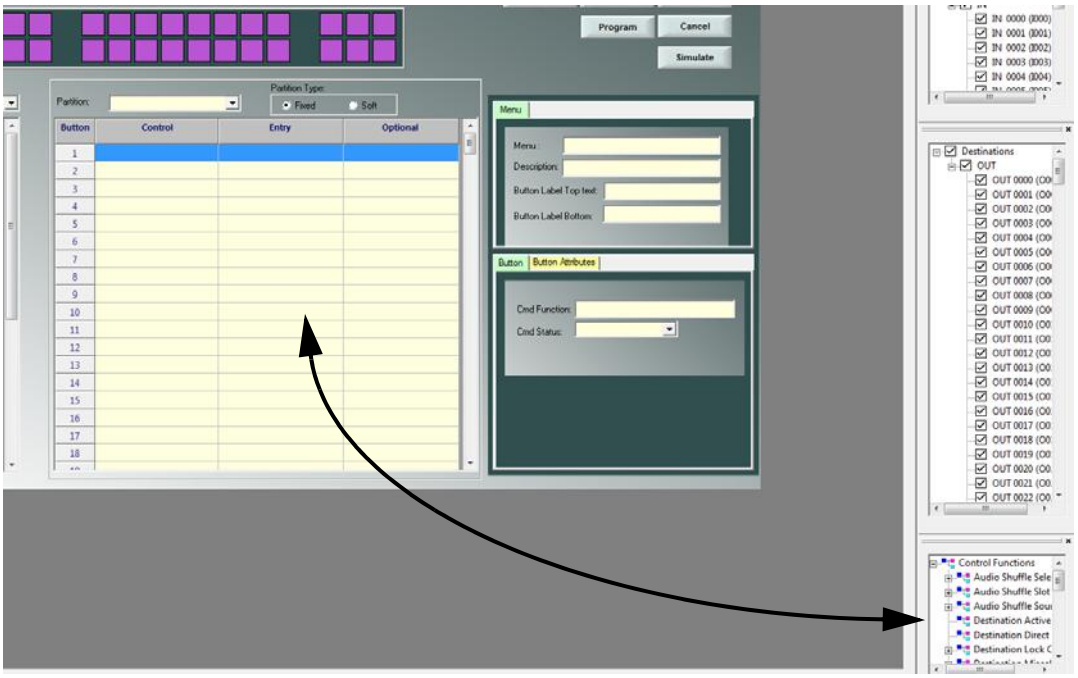


Figure 2-15. Functions selection

Basic Layout and Definitions

New menus are created inside the left-hand table, while corresponding functions are defined within the center table. The panel graphic at the top of the display is the actual 'menu view' of the panel being developed. You can click individual buttons within the graphic and watch the line items move inside the function table (below).

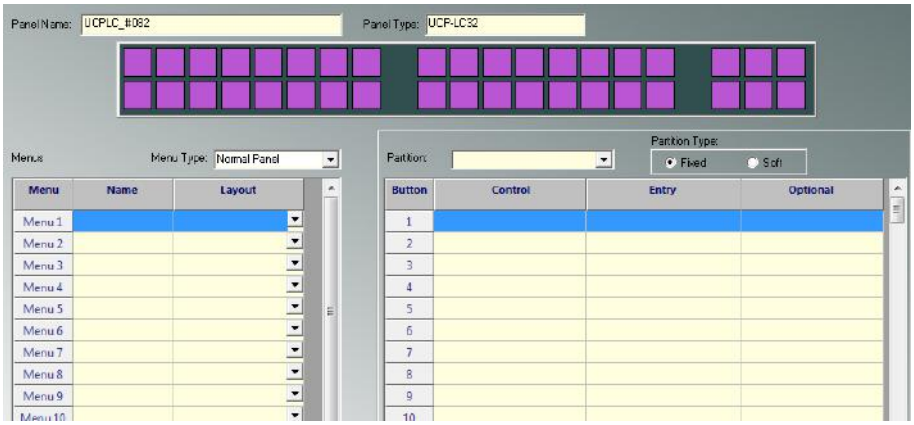


Figure 2-16. Basic Layout Definitions

Note: The button numbers within the graphic are literal. Meaning #25 on the graphic will correspond to the actual #25 within the function table. This is most applicable to a PAGE UP and PAGE DOWN button application. In the same manner, when menu items are clicked (left-hand table), the panel graphic will change to follow the different menu sets selected within the table. Panel Name (Located in the upper-left corner) This is the actual panel name that is programmed within UCON, and is also the name you will see underneath the panel's icon within the main UCON display.

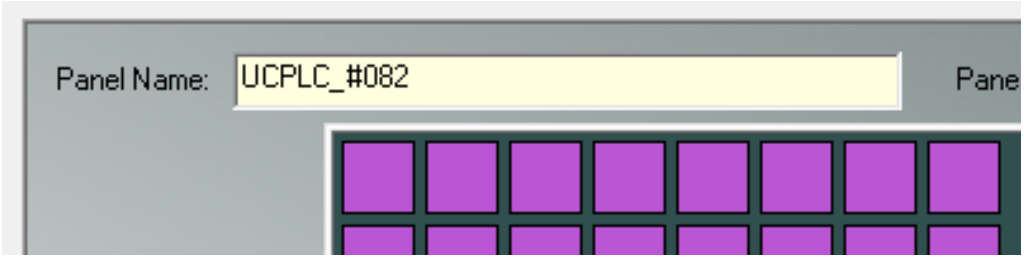


Figure 2-17. Panel Name

Panel Type (Top middle)

This is the actual panel type, the LC32 in our working example.

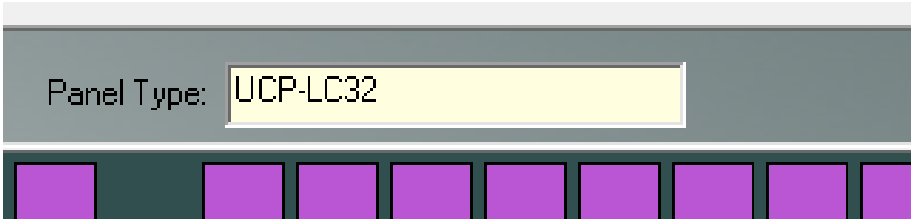


Figure 2-18. Panel Type

Default Colors

The default colors are typically assigned to the system's function buttons. This affects the items in the Function list within the lower-right display listing. The default colors are also used to define the ON and OFF button states.

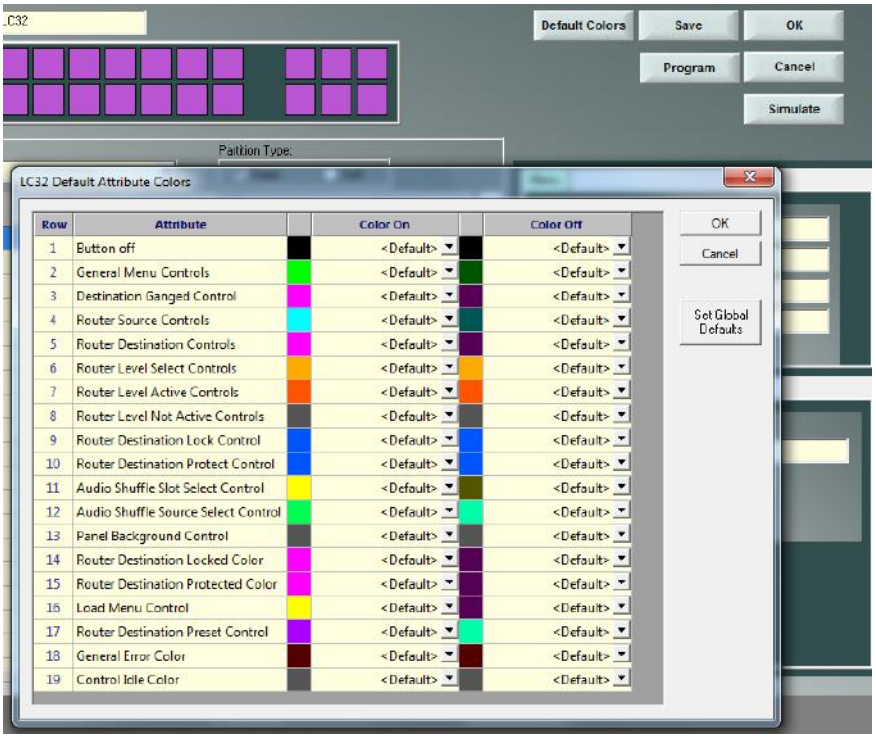


Figure 2-19. Default Colors

Save Button

The Save button commits all changes to the current screen in progress.

Figure 2-20. Save Button

Program

Panel is programmed from this location.

Figure 2-21. Program

Cancel

Ignores all changes made prior to exiting the screen.

Figure 2-22. Cancel Button

OK

Immediately Saves all work done (without a confirmation dialog), then exits.

Figure 2-23. OK Button

Menu Dialog Box (Upper-right area, middle of the display)

This dialog contains menu attributes, or definitions of the buttons in the menu table (left side of the display). Text can also be modified from this location.

Panel Operation

Setting the System up with a standard issue template

The first time a layout is defined you will be presented with an initial menu item called ‘Top’, which occupies the upper left-most cell.

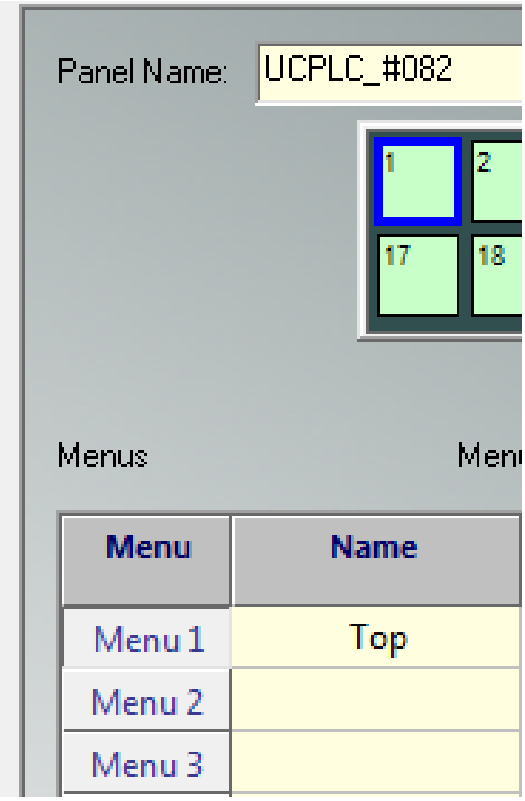


Figure 2-24. Top (menu item)

Top is hand typed in, and actually corresponds to a ‘top’ menu, meaning, this is the menu that is located farthest back (when Back his selected).

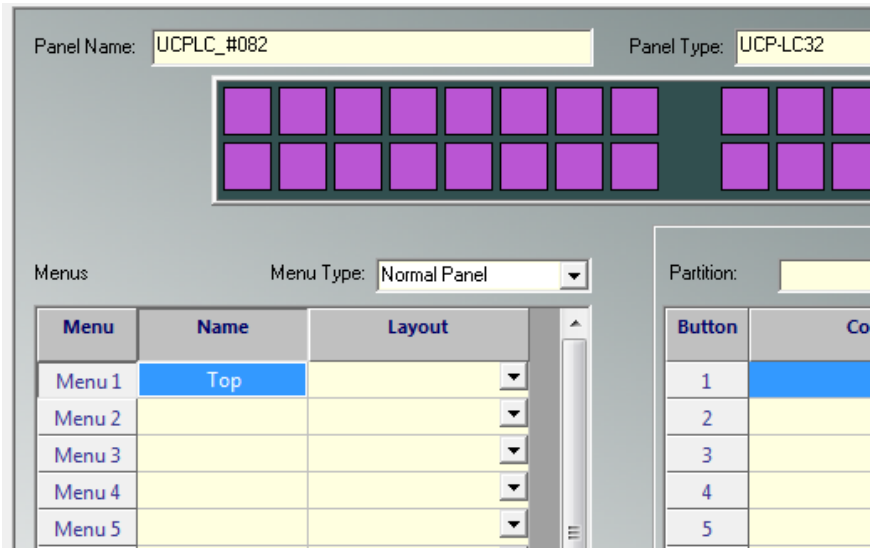


Figure 2-25. *Top* menu

The ‘Layout’ (one column over) is the actual panel layout that will be associated with the above menu when a drop-down selection is made. This is shown graphically at the top of the screen.

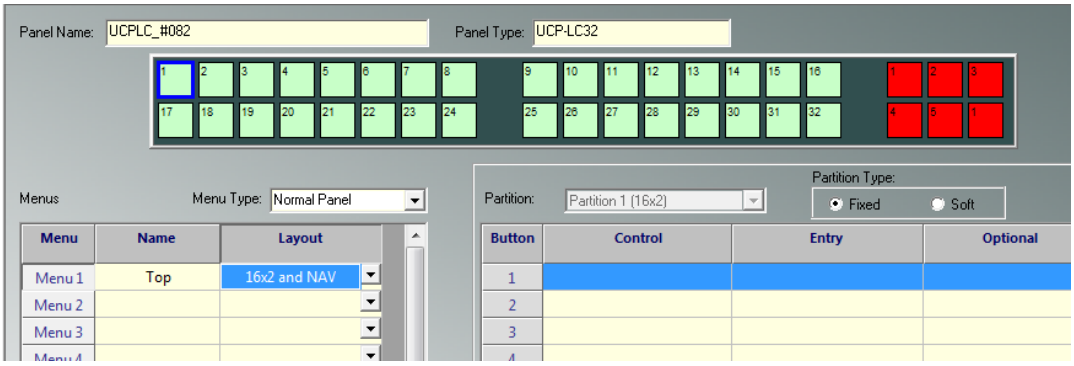


Figure 2-26. 16x2 display

The “x1” or “x2” following the layout title represents the number of partitions. For example defined as 16x1 will appear as follows:.

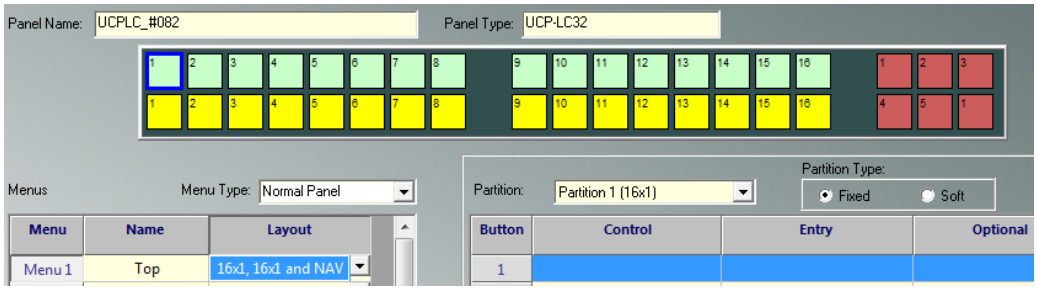


Figure 2-27. 16x1 example

The partition structure is represented inside the middle table, and can be displayed graphically by clicking the actual buttons (up or down) on the interface. With the row highlighted in the ‘Menu’ table (far left), menu items can be dragged from the lower-right listing to the Control column within the main table.

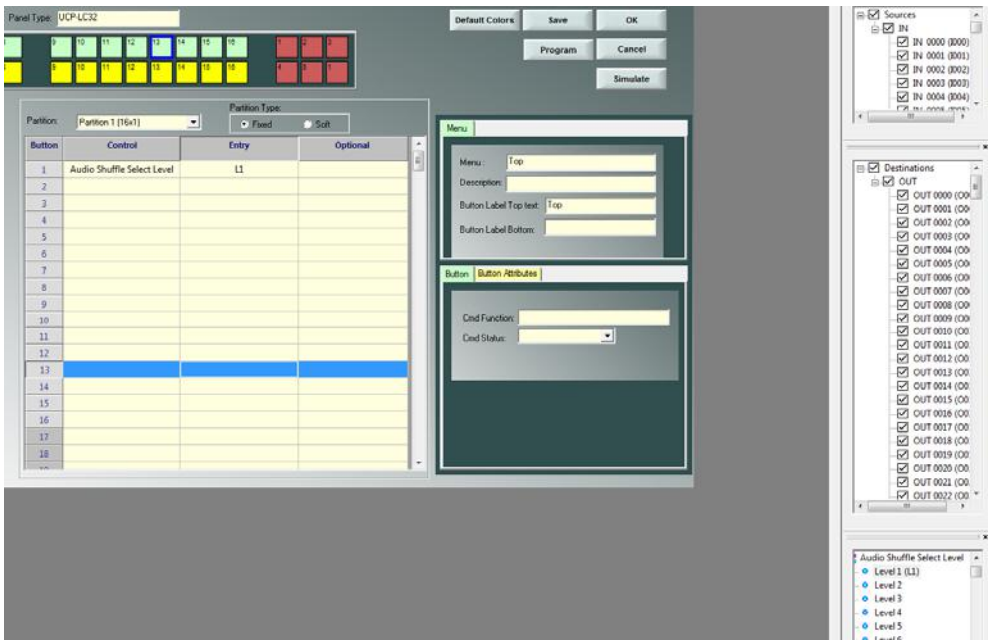


Figure 2-28. Button drag

In our example, specific menu items are selected from the corresponding ‘menu’ drop-down listing within the column at the lower right corner of the display interface.

Note that the Partition table remains blank at this point in the setup.

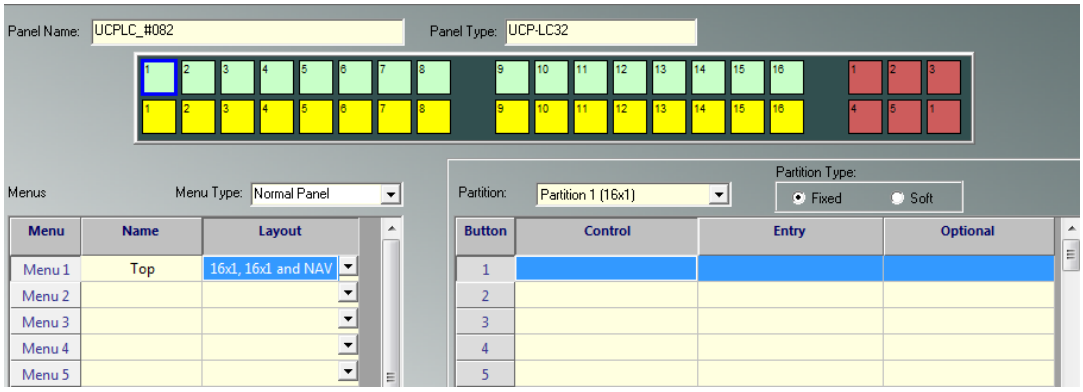


Figure 2-29. Blank partition table

The only menu item that exists is ‘Top’ along the Control Functions column (lower right of display).

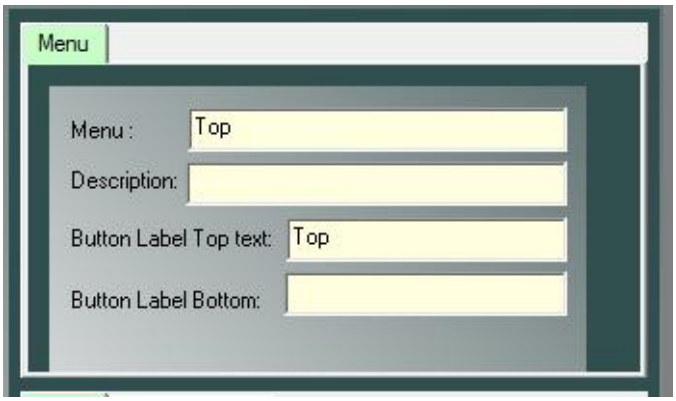


Figure 2-30. Top - name and description

Top Menu Button Population

The illustration below shows desired buttons for use dragged from the menu listing in the lower-right column to the 'Partition Type' table in the middle of the display.

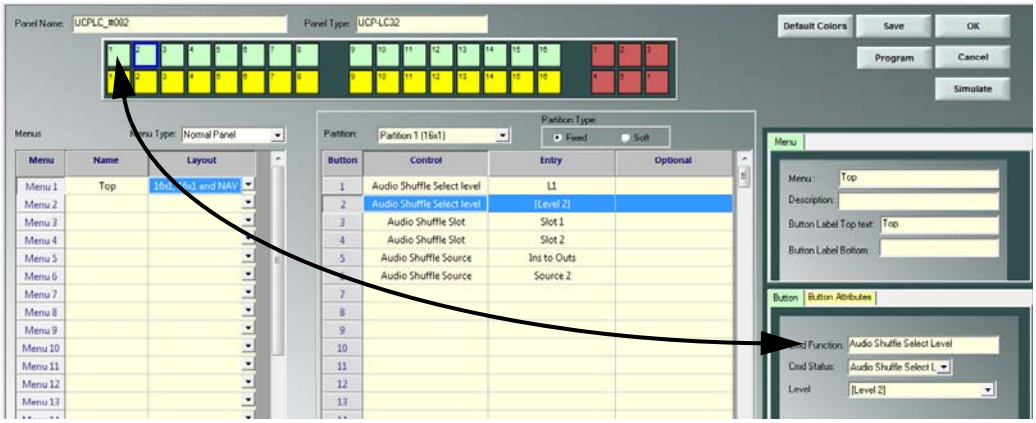


Figure 2-31. Partition List

In this scenario, pressing button #1 on the actual panel reveals all items listed in the Partition Type table.

Saving and Program

Before programming a panel configuration, save your current layout by clicking the corresponding 'Save' button. (The Save action is immediate, with no feedback dialog shown.)

Once this is done click the Program button. This will send the program layout to the actual panel. Once complete the panel will reboot with a flashing light sequence on the panel itself.

Setup - Review

- ‘Top menus’ are defined in the far left column.

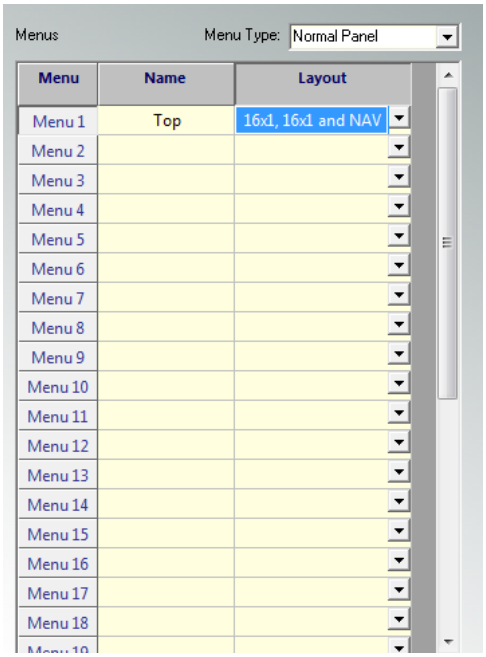


Figure 2-32. Top Column

- The panel type is designated in the drop-down to the immediate right of the top menu name.

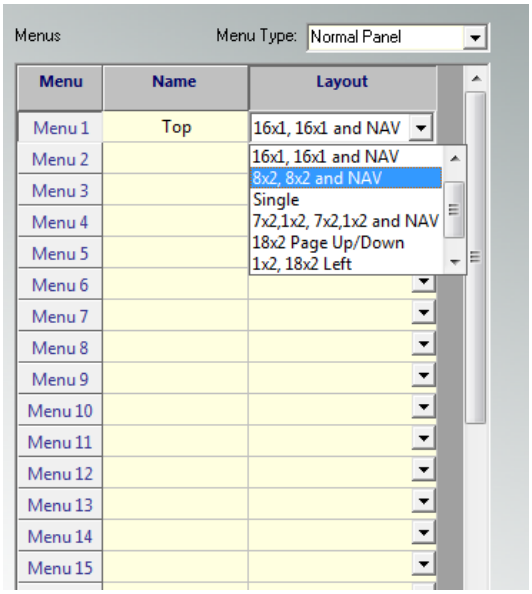


Figure 2-33. Panel Type

- Buttons (within that particular panel) are defined by dragging items from the lower-right table to the middle (Partition Type) table. Add, or designate entries in the Partition Type table by making your selections within the table shown (below) and dragging each to the desired column location.

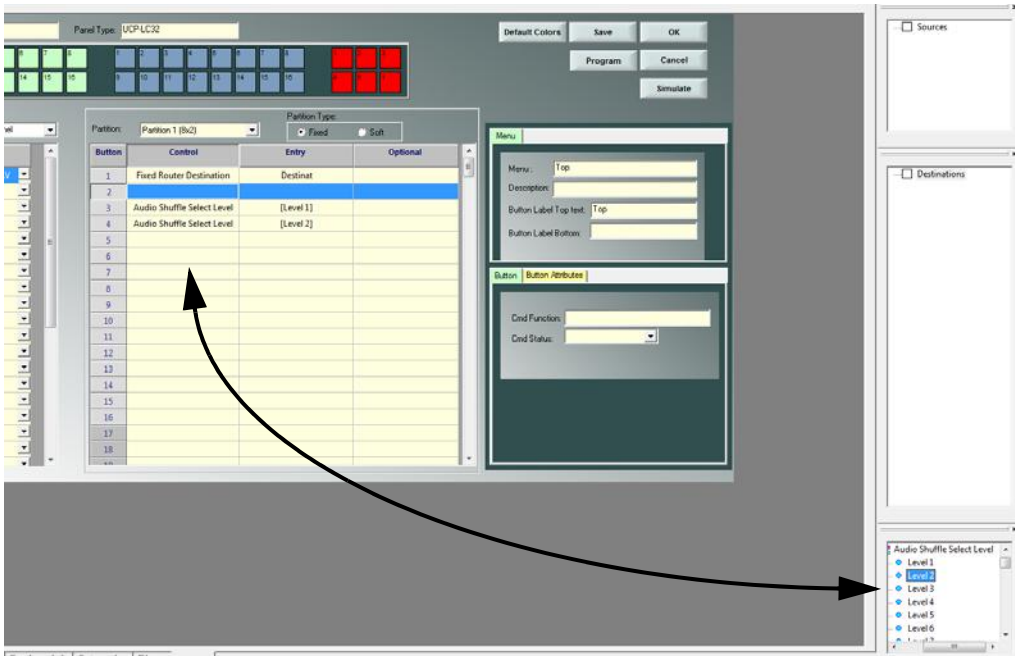


Figure 2-34. Partition button populate

The Attribute window contains specific button definitions. You can make font type and size modifications at this location.

Figure 2-35. Button Attribute

Programming - Review

To start your LC-32 panel configuration, double-click 'New Panel' icon immediately underneath 'Create New Device' along the upper-right hand column of the UCON interface.

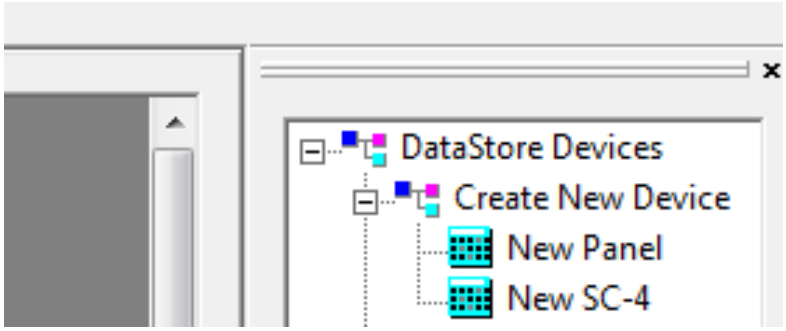


Figure 2-36. New Panel icon

A dialog will appear asking you to name the Panel.

Figure 2-37. Device Name

Once the panel is named, select a panel type from the dialog that appears.

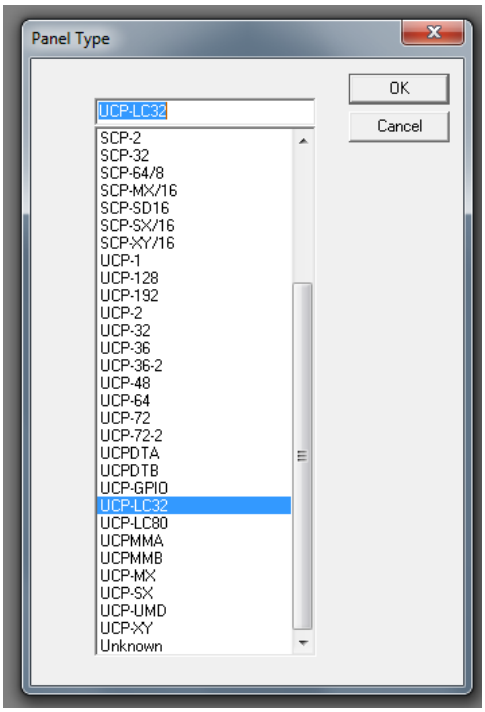


Figure 2-38. Panel Type

Next, double-click the newly created panel (icon) within the center section of the display.

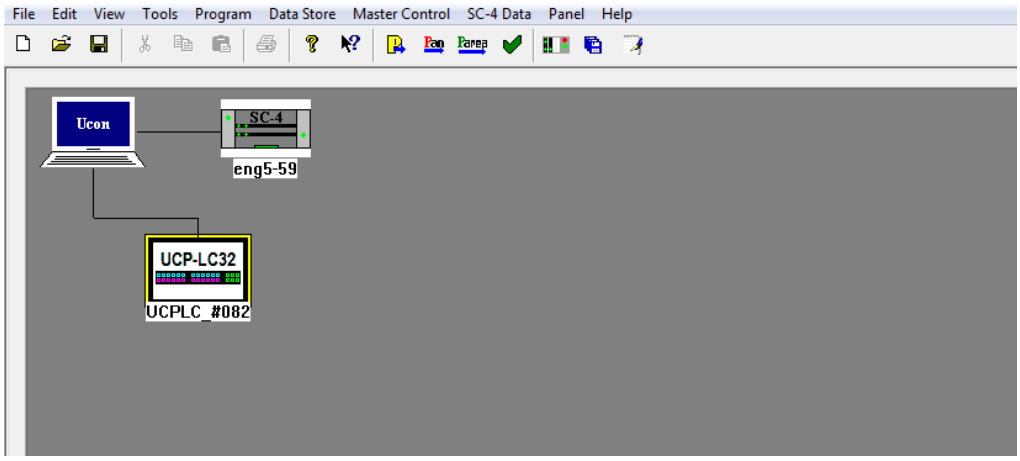


Figure 2-39. New Device - System view

The new device will include an associated tab at the bottom of the display. Double-clicking the device icon will activate the panel view.

Note: *You are supplied with panel templates, which are available when the Panel menu is accessed – UCP-LC-32 drop down menu – and from here a selection of templates appears within a drop-down menu.This will essentially provide a standardized panel template populated with defaults that the user can use to add their own Sources and Destinations.*

Simulating Your Panel Configuration

Click the **Simulate** button to activate a live representation of your panel layout directly within the UCON interface.

Figure 2-40. Simulate button

Your fully configured and operational panel will be presented on screen.

Figure 2-41. Panel simulation

Important: Use caution when performing the Take command, as the panel is now live on air.

Click the Program button (upper right within the display) when complete.

Note: When the Program button is clicked in U-CON, the U-CON interface will indicate the process as being ‘Done’, but there is a lag time of a few seconds in the actual panel.

System Salvo Entry

A system salvo is a desired set of outputs that correspond to a set of inputs, matched to a single Take. Salvos are created when a device is edited within UCON by right-clicking the device, then selecting edit from the pop-up menu.

Setting Up a Salvo

Right-click the controller icon in the UCON interface and click *Edit*.

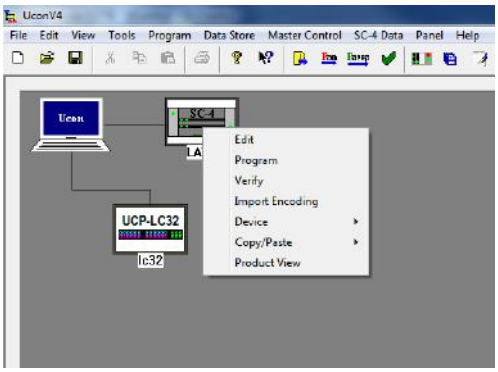


Figure 2-42.

The following screen will appear. Click the Salvos button to activate the Source and Destinations configuration dialog (next Figure).

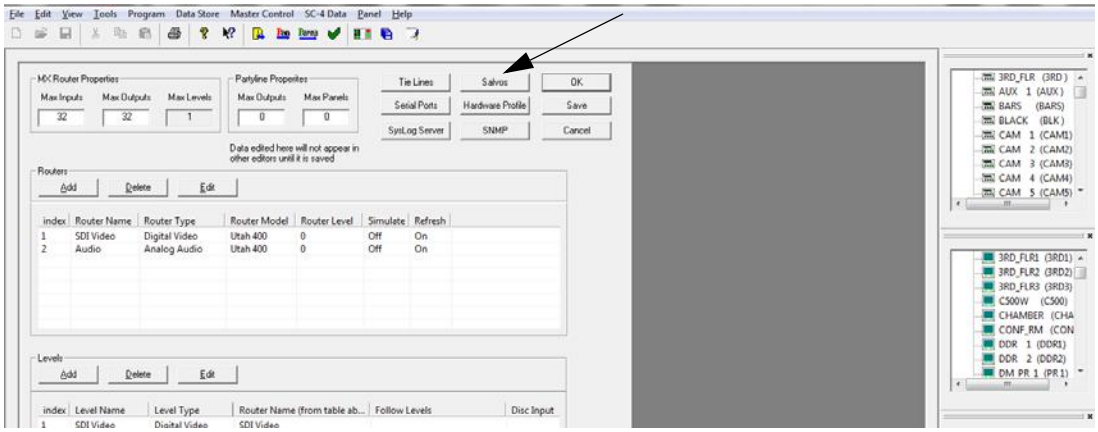


Figure 2-43.

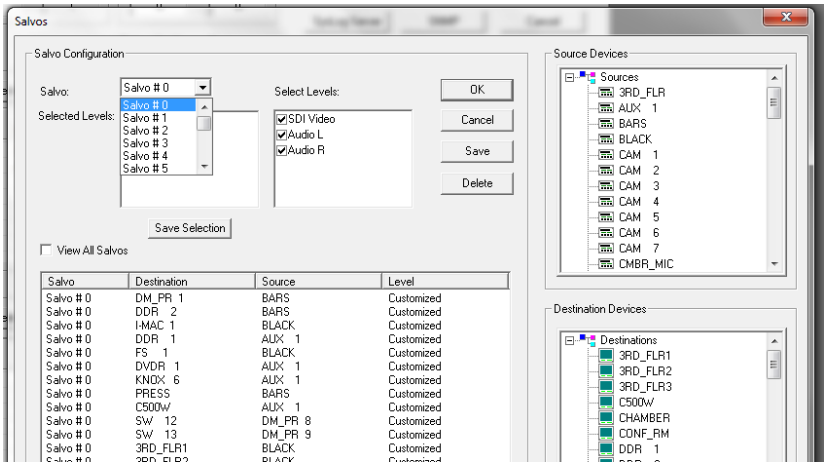


Figure 2-44.

Select the salvo to edit by using the drop-down menu (upper-left corner), then select the desired *Level* by clicking the check boxes in the ‘Selected Levels’ group area. Next, add Outputs (dragged from the lower-right column) and the Sources (upper-right column) that will be associated with the Outputs.

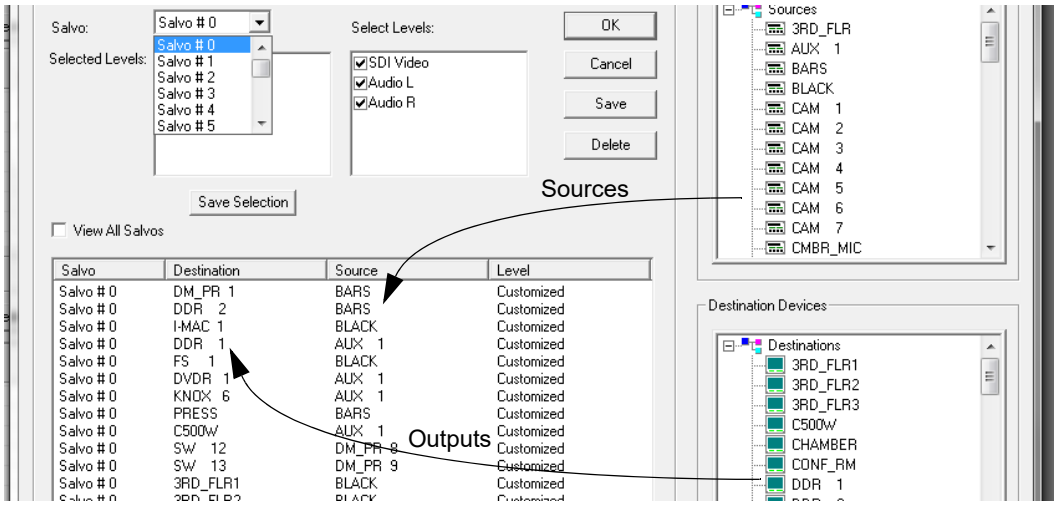


Figure 2-45.

When the salvo is defined (outputs and sources added), click the Save button.

Repeat the above process if you would like to create an additional Salvo. *For the purpose of this exercise we will set up one additional Salvo.* Click OK when you are finished defining Salvos. You are now returned to the previous dialog. Click the OK button to return to the UCON Home screen.

Panel Template Definition for Salvo Use

Right-click your panel icon and select Edit from the pop-up menu.

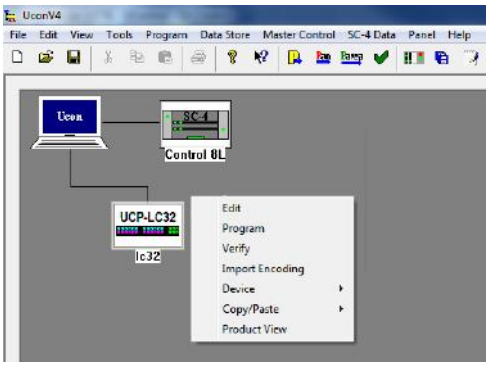


Figure 2-46.

A display similar to the following will appear.

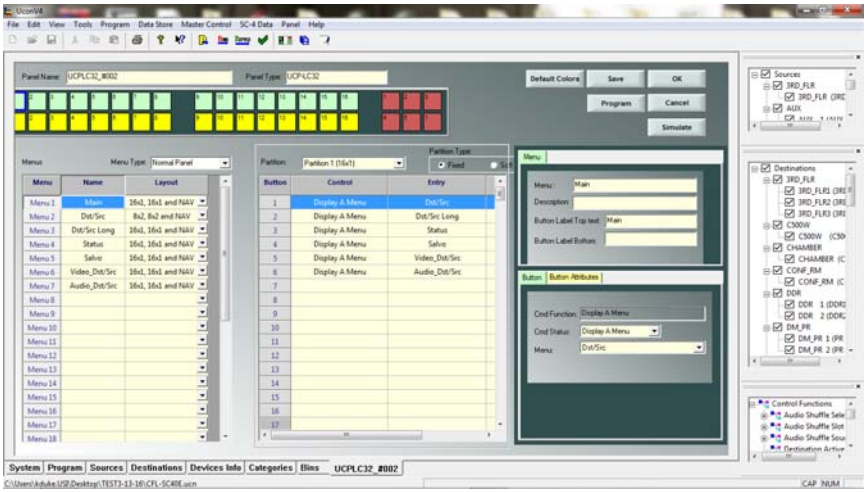


Figure 2-47.

Note: If you are working with a pre-existing template for salvo use, make your template selection from the Panel menu. Your display will resemble the Figure above once your template is loaded.

The Main menu is indicated with the highlighted cell at the upper-left corner of the display.

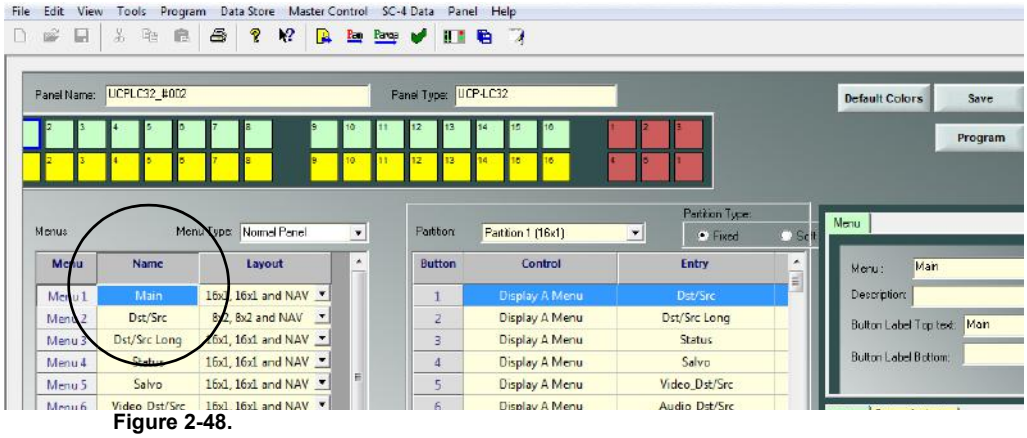


Figure 2-48.

Sources and Destinations are applied to the Control and Entry columns by dragging any and all source and destination from the listings at the right side of the display.

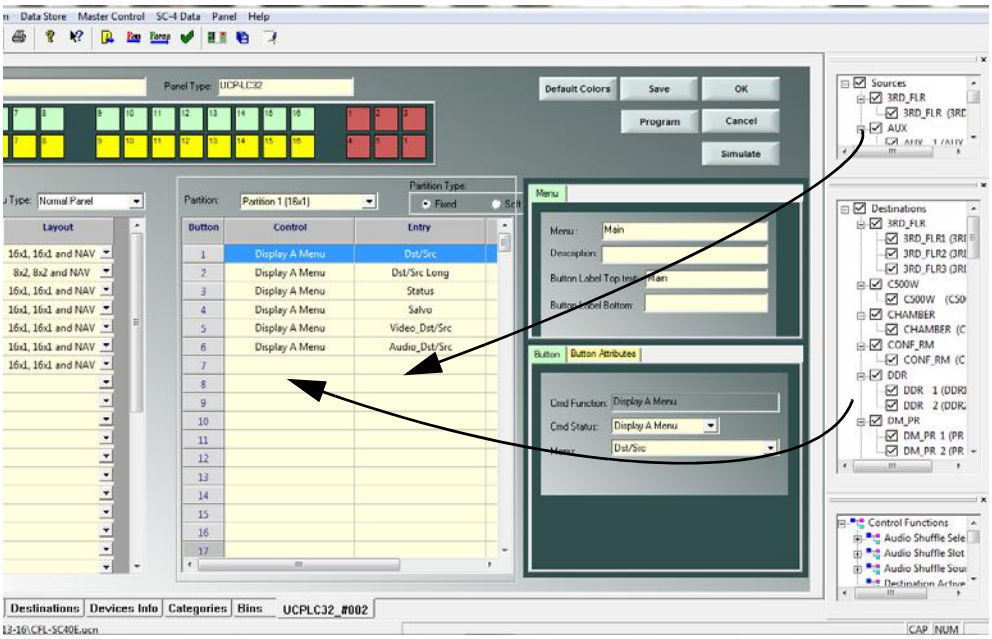


Figure 2-49.

Once a Source or Destination is dropped into a row, the Control and Entry columns will update, displaying the specific name (Entry column) and the router's Source or Destination (Control column).

Status menus can be added to the table by dragging the corresponding menu selection from the lower-right listing to a blank row, or an already populated row if you'd like to update the contents.

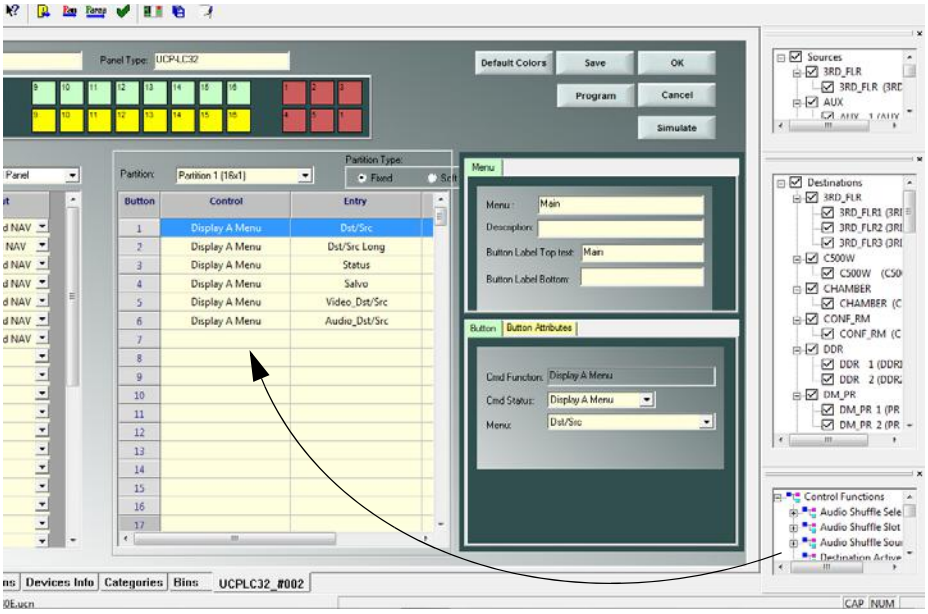


Figure 2-50.

In our example, the completed steps to this point have allowed us to define a set of buttons for the originally highlighted menu (see Figure 2-48).

System Salvo Definition

In the Name column (left-hand table) a salvo is indicated as a *new menu* item by typing ‘Salvo’ in the blank, highlighted cell. This will add the salvo to the panel menu.

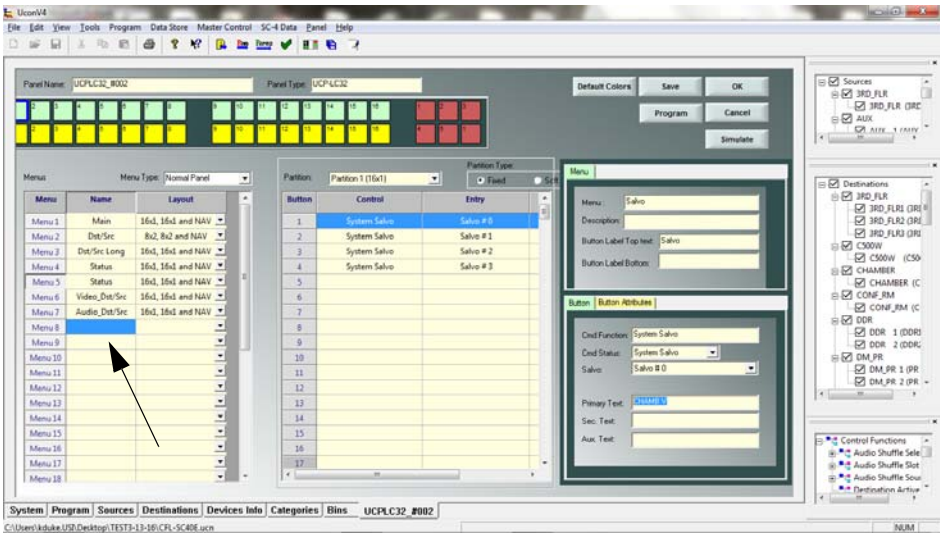


Figure 2-51.

Next, select the layout type from the drop-down menu.

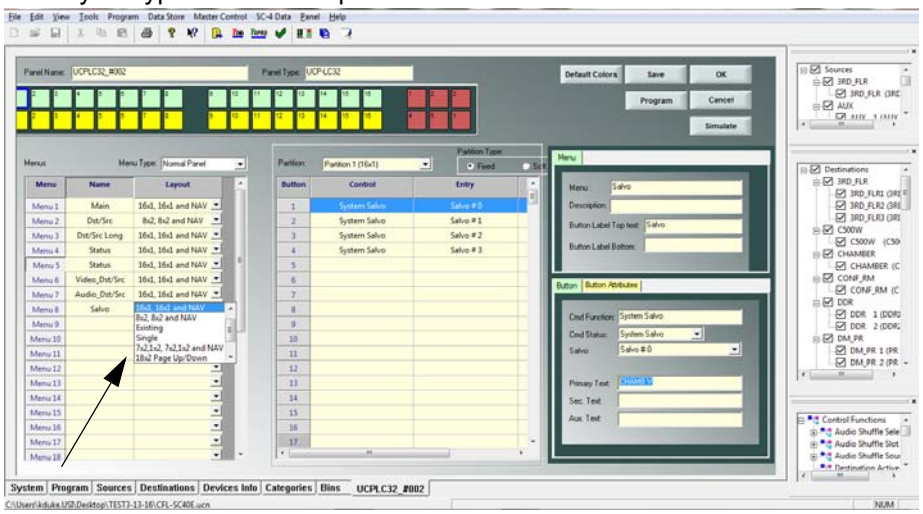


Figure 2-52.

Now, define the salvo by adding the control function to the column (shown below).

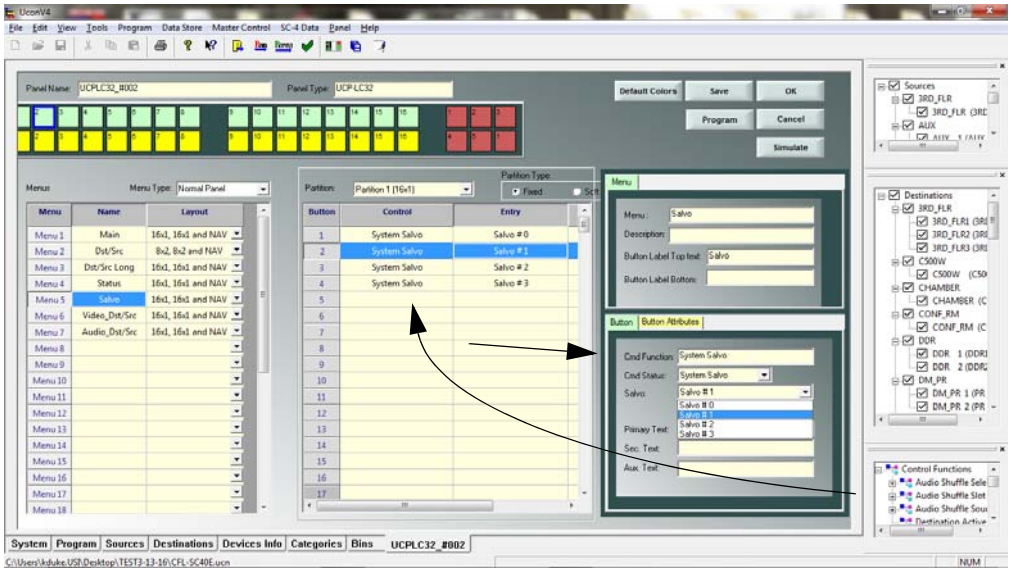


Figure 2-53.

As you make highlight selections (Control/Entry columns), the ‘Button’ tab area changes (blue arrow above). In our example, two salvos were set up (Salvo #0 and Salvo #1). For reference, see Figure 2-45.

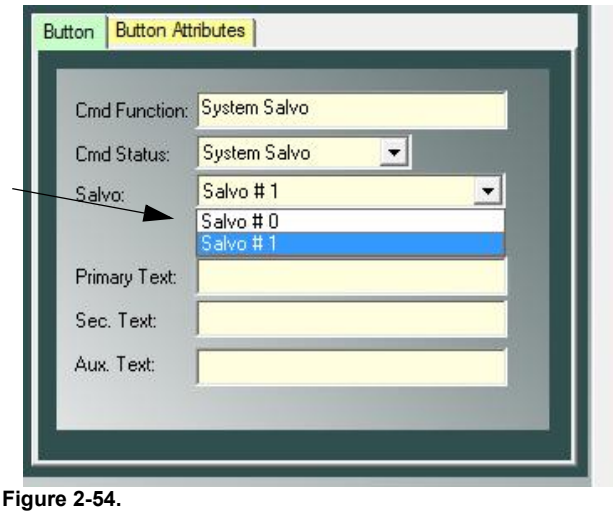


Figure 2-54.

Salvo Rename

If you would like to rename the salvo, select one of the salvos from the drop-down menu (shown above), and type a new name in the ‘Primary Text’ field to more appropriately depict its actual use (“control1”, “mobile2”, etc.).

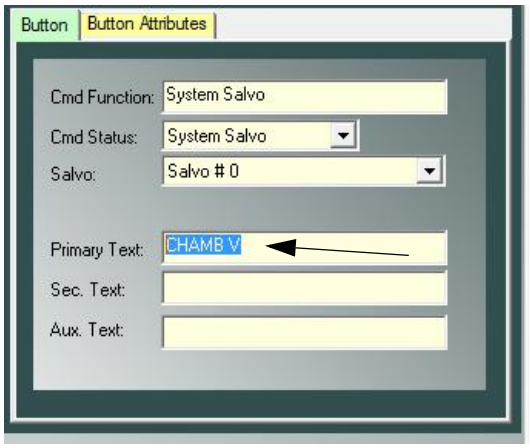


Figure 2-55.

At this point, two salvos have been defined and named, and will be loaded onto actual buttons when the panel is programmed. The rMan status screen will reflect the Takes as each occurs once the salvos are defined.

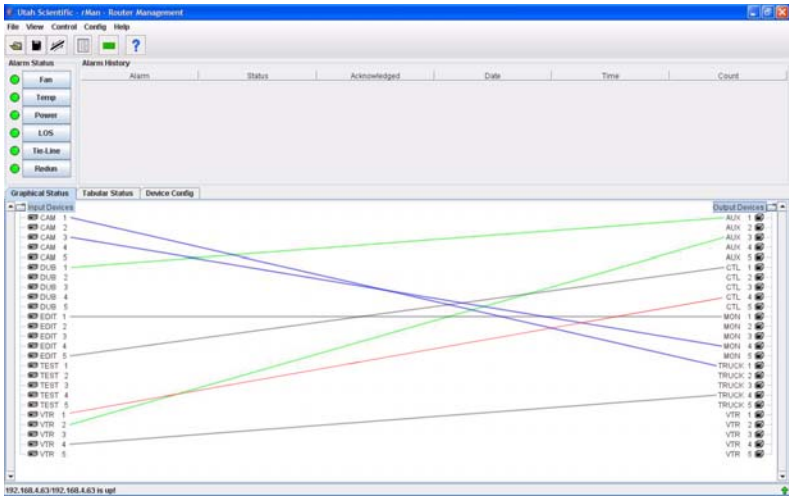


Figure 2-56.

Adding Existing Salvos to New Buttons

This sequence describes the salvo setup process when the salvo itself is already defined (see See “Setting Up a Salvo” on page 28.)

First, select the menu to which is the salvo to be added.

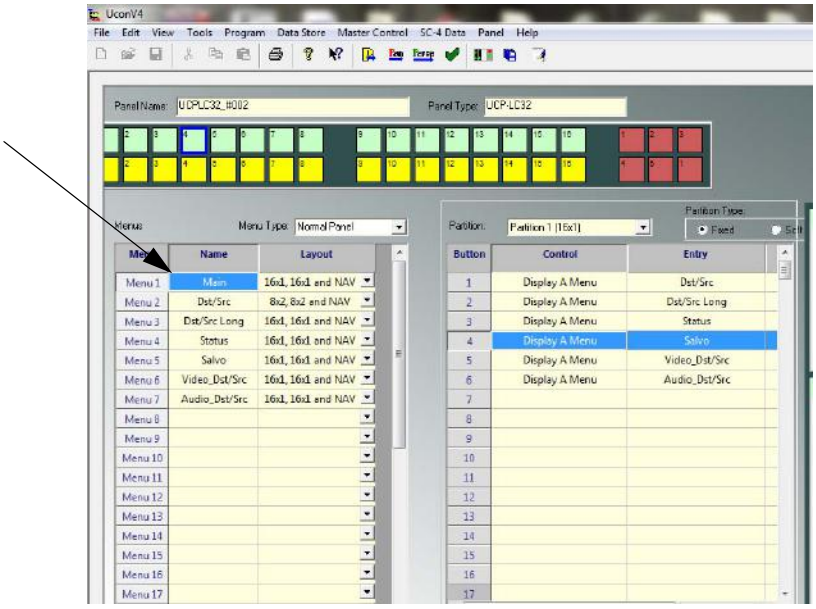


Figure 2-57.

You can select any menu within the listing. *(This menu item can be renamed at this column location if necessary.)*

Select the needed layout from the drop-down menu.

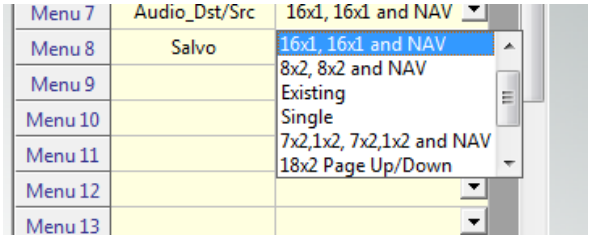


Figure 2-58.

Highlight the **Main** menu in the *Name* column, then select the ‘Menus’ listing in the lower-right selection dialog.

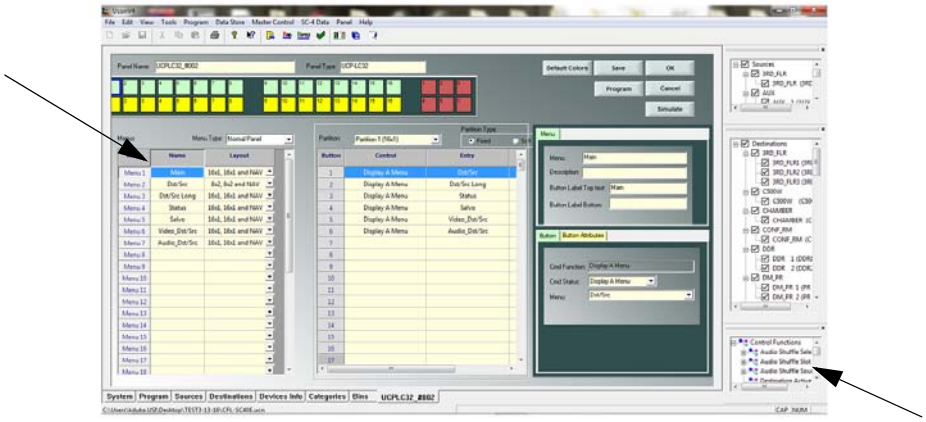


Figure 2-59.

The salvo just created (Figure 2-58) will appear in the lower-right listing. Drag this menu item to the Control/Entry columns (below).

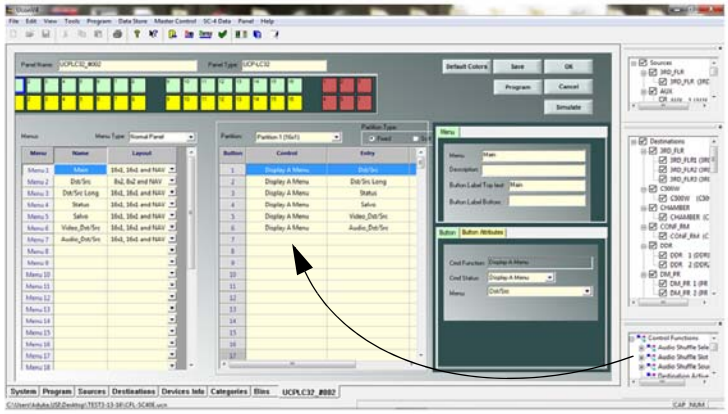


Figure 2-60.

Now highlight the new salvo listing in the *Name* column, then with the salvo highlighted in the Control/Entry columns, define the button attributes in the adjacent dialog window (see below).

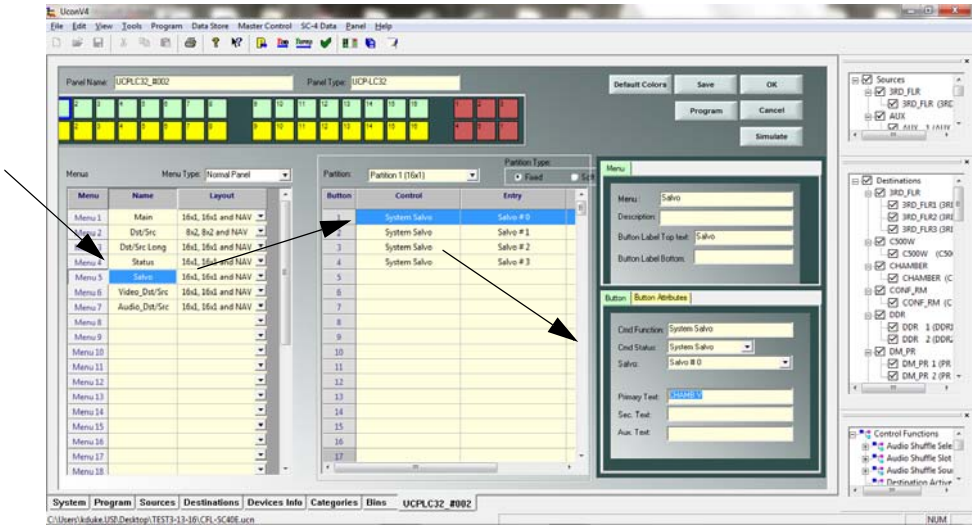


Figure 2-61.

Select one of the salvos from the drop-down menu, then rename it if desired.

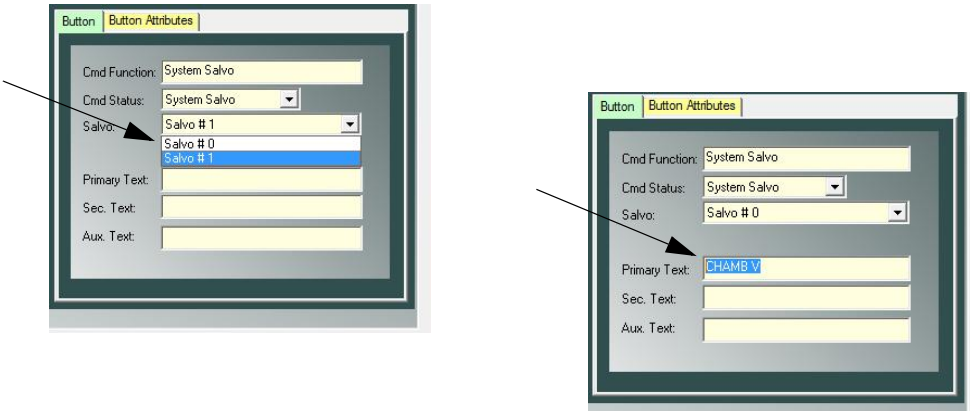


Figure 2-62.

Now click the **Button Attributes** tab and change the button color if needed.

Repeat the above step to add an additional salvo to a button.

Once the salvos are in place (added to buttons), click Save, then **OK** to return to the main UCON interface, or you can click **Program** to send the new button designation directly to the panel. The fixed panel will now contain button labels that correspond to the names and functionality designated in this exercise.

Operation

When opened, the rMan display will contain the live status of all input and output connections as each Take is made at the router.

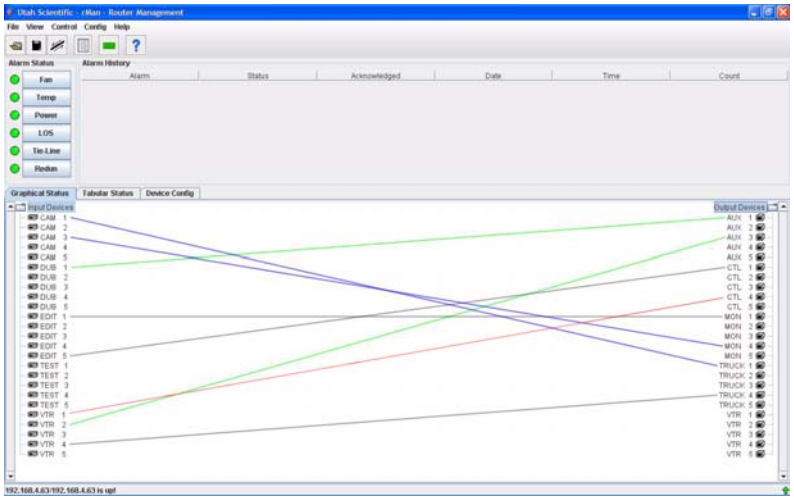


Figure 2-63.