TyLinx Pro Help V3

TyLinx Pro

Sierra Video Systems
Routing Switcher
Configure and Control Software

TyLinx Pro Help

Printed: November 2012

Table of Contents

Introduction

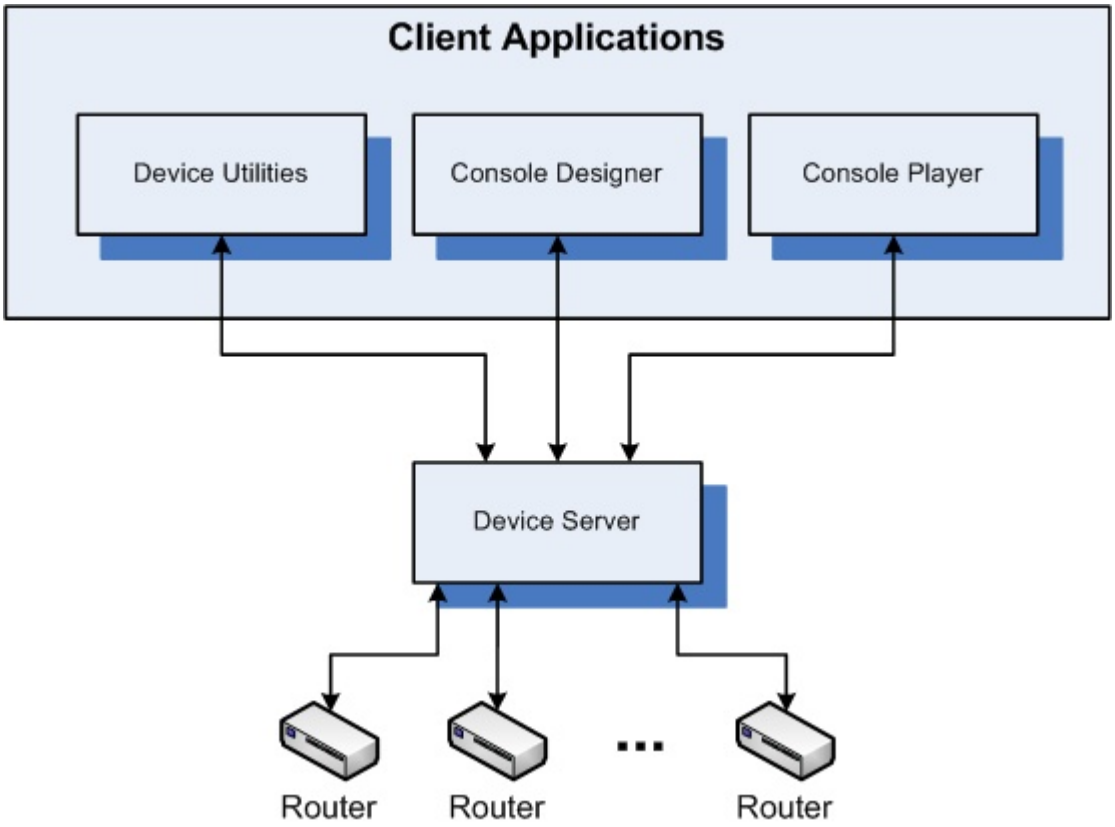
Part I

1 Introduction

TyLinx Pro™ is a suite of professional level tools that provides configuration, design and control of audio/video content routing and control environments. This documentation provides an overview of the TyLinx Pro™ solution along with detailed information concerning how to best use these tools.

1.1 Overview

TyLinx Pro™ is comprised of several software components that address the needs of the various job functions typically found in an audio/video routing environment. These job functions are Administrator, Designer, and Operator. The Administrator is the person responsible for installation, setup and configuration of routing resources and has the highest level of system accessibility. The Designer is the person who uses configured resources to create operational views for Operators. In many installations the Administrator and Designer will be the same person(s) and in some cases all three job functions shall be performed by one or more persons. The output of Designer activities is one or more Operator Consoles which are used to control routing switchers and other hardware resources. The Operator makes use of Operator Consoles to access audio/video content for staging, presentation, broadcast, and non-linear editing.



TyLinx Pro™ Architecture

Each of the three types of users interact with a system using three different client applications. Access to each of the client applications is controlled through a user login. Users configured in a given system are identified as either Administrator, Designer, or Operator. Administrators have authority to access all three client components but are primarily concerned with Device Utilities; Designers may access Console Designer and Console Player; and Operators may only access Console Player and only those consoles assigned to them by the Designer.

This section provides an overview of each of the Client Components that comprise TyLinx Pro™ and defines how each of these components serve to fulfill the needs of the Administrator, Designer and Operator.

1.1.1 Device Server

Device Server

The Device Server is a Windows Service that starts when the computer upon which it is installed starts. It sits in an idle state until called upon by one of the client applications. When called upon, the Device Server expects that all physical channels (serial, TCP/IP, and UDP/IP) to which routers are connected are immediately available for its use. However, when not active and when all client applications have been closed, the Device Server will free all physical channels.

To perform any device control functions, one or more devices must be configured into the TyLinxPro database. The Device Server then accesses device configuration to gain control over attached

devices.

1.1.2 Device Utilities

Device Utilities is a client application that is used by Administrators to add devices, test their connections, and perform various configuration level activities with respect to such devices.

1.1.3 Console Designer

The Console Designer is a client application used by Designers to create Operator control consoles. An Operator control console contains the controls needed to perform switching of audio/video routing switchers as well as control content sources and destinations.

1.1.4 Console Player

The Console Player is a client application used by Operators to control audio/video equipment. When a user logs in, Player loads only those console to which the user has been assigned access. Thus access to system resources is primarily controlled by the consoles which a particular user may access.

Installation

Part

2 Installation

Installation

Requirements for TyLinx Pro:

1. PC Compatible running Windows XP SP2 or Vista
2. 512MB of memory, 1GB or more recommended for routers larger than 32x32
3. 1GHz or faster processor
4. 1024x768 or higher resolution
5. Microsoft SQL Express 2005 (installs during TyLinx Pro installation)
6. .NET Framework 3.5 (install during TyLinx Pro installation)

To install TyLinx Pro, place the CD into the drive. If autorun is enabled the setup will start automatically. If autorun is not enabled, choose the CD drive from Windows Explorer and double click setup.exe. The setup wizard will ask you several question including agreeing to the end user's licensing agreement (EULA). Once agreed to click the Next button until the installation begins. You will be given the opportunity to set the installation folder for the application. It is recommended that you leave this at its default setting but not required.

After the installation process is complete you will have 3 new icons on your desktop called TyLinx Pro Device Utilities, TyLinx Pro Console Designer and TyLinx Pro Console Player. Please refer to the appropriate help sections for those applications.

Quick Start

Part III

3 Quick Start

Quick Start

The following section contains procedures to do a "simple and quick" setup of your router. For more advanced setup and configurations see details in the "Admin Utilities", "Console Designer", and "Console Player" sections of this manual.

Install TyLinx Pro from the CD included with your order. TyLinx Pro can also be downloaded from the Sierra Video Website http://sierravideo.com/en_software.html

Three icons are placed on your PC desktop.

Open “Admin Utilities”.

Enter the login name and password. Click on “Login”.

Note:

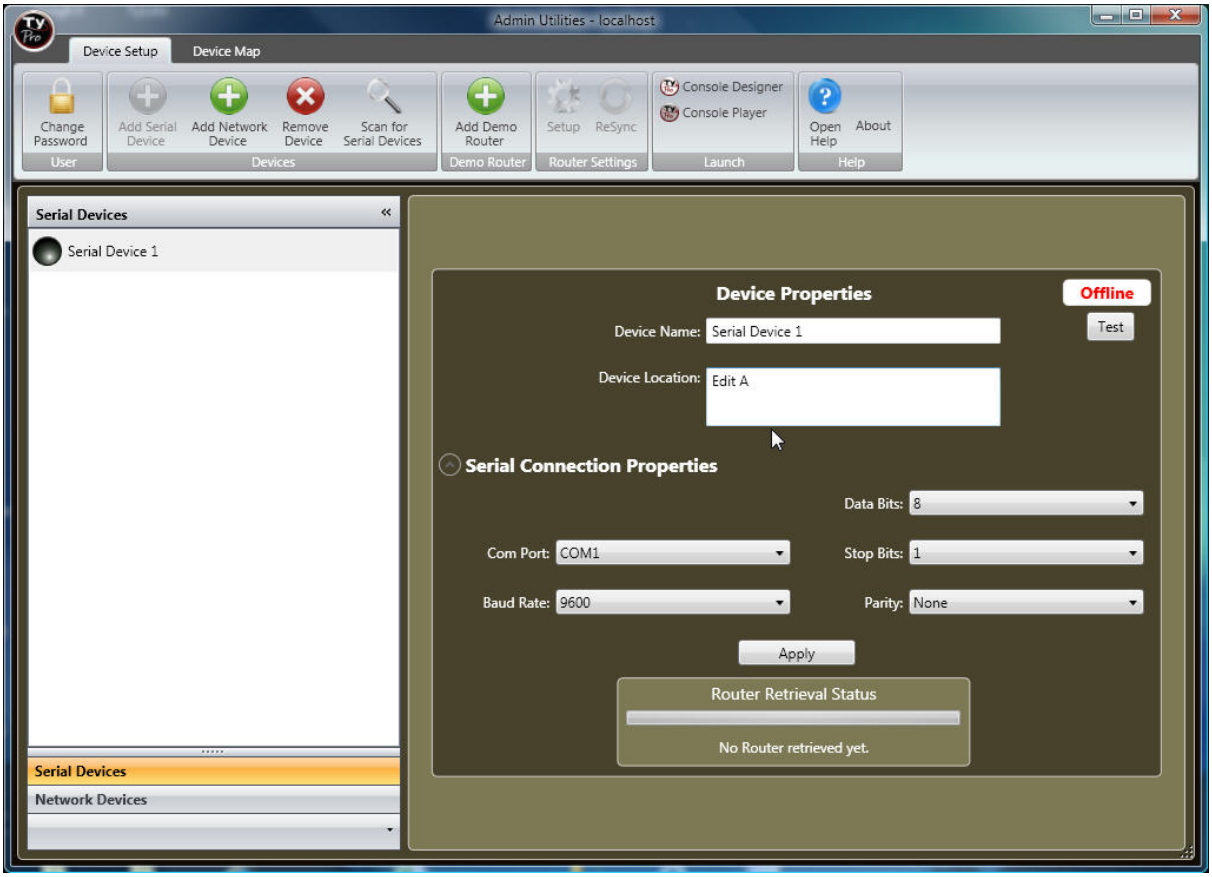
The factory default login name is “admin”; the Password is “password” (case sensitive).

From the Admin Utilities screen, select “Device Setup” tab.

To add a serial device;

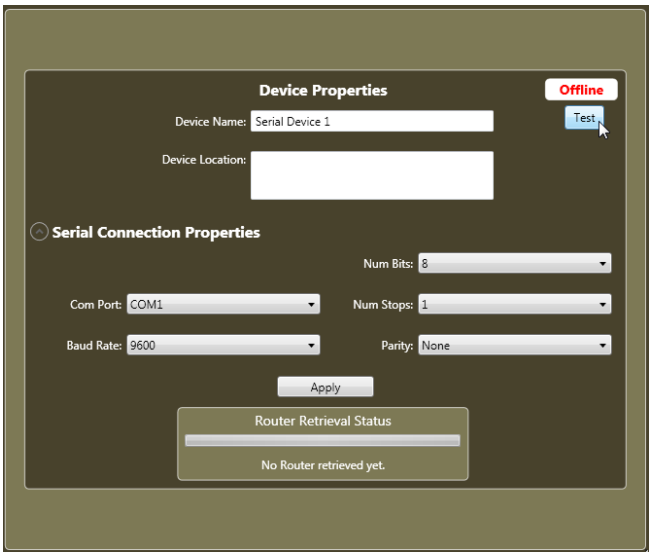
Select "Add Serial Device"

Enter the connection information for the device and select “Apply”.

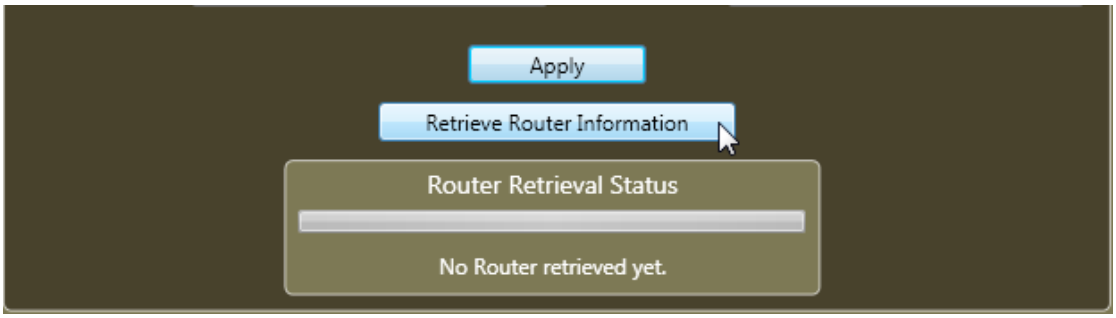


Note:

The connection can be tested by pressing "Test" before proceeding.



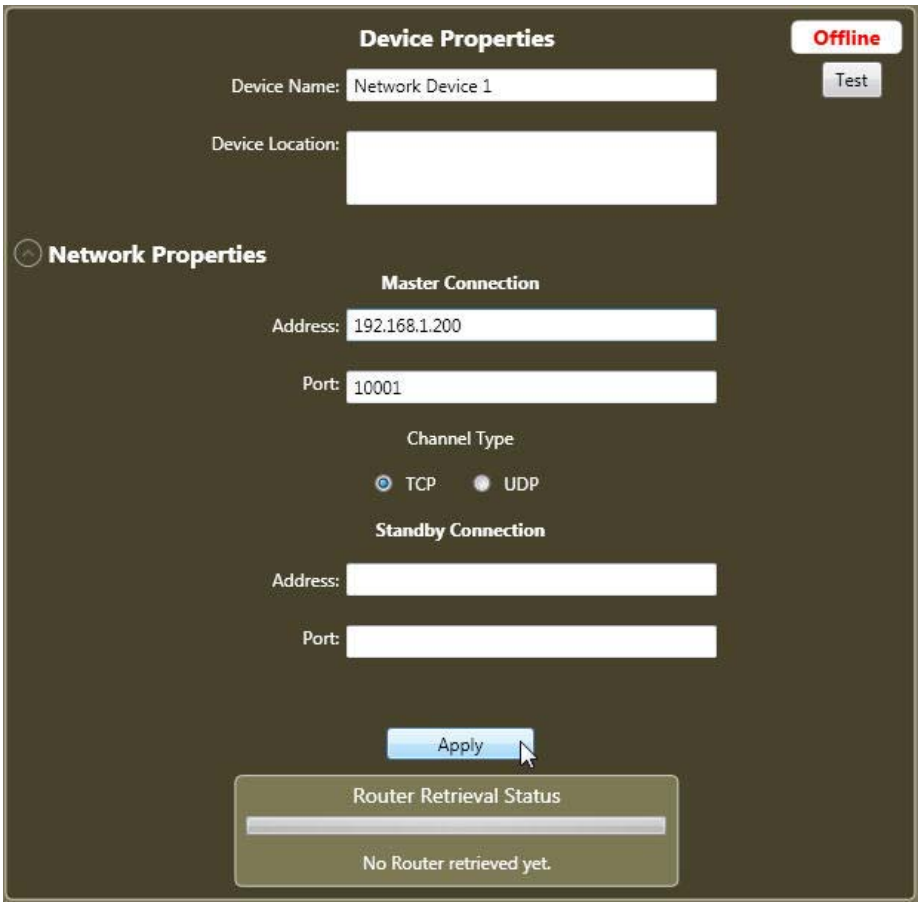
After selecting "Apply", select "Retrieve Router Information" to read the router's current configuration.



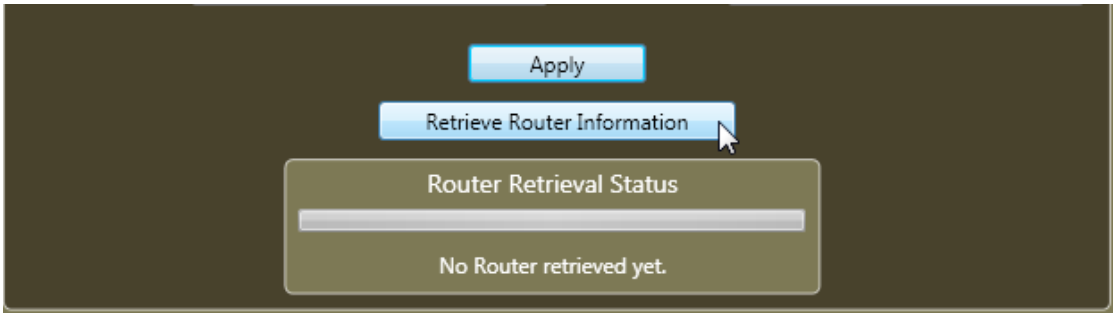
To add a Network device;

Select "Add Network Device"

Enter the connection information for the device and select “Apply”.



After selecting "Apply", select "Retrieve Router Information" to read the router's current configuration.

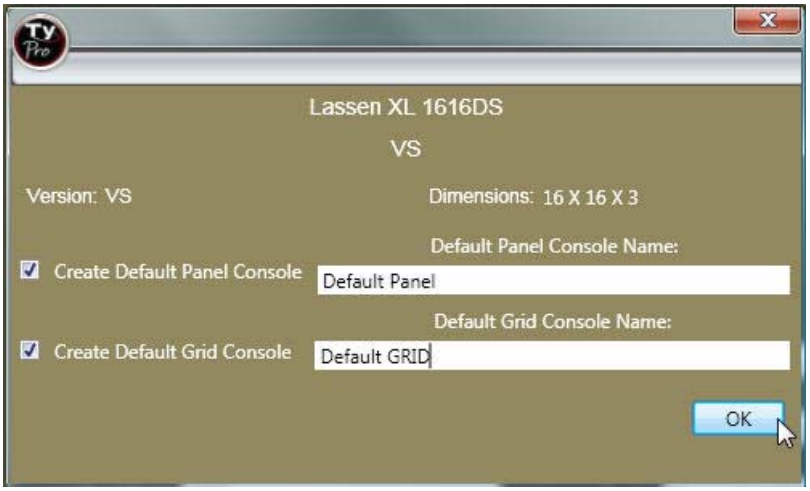


** A demo router can be added by clicking on "Add Demo Router". This will enable you to "simulate" a router without an actual router attached.
When a demo router is selected, proceed to "Player" or "Console Designer".

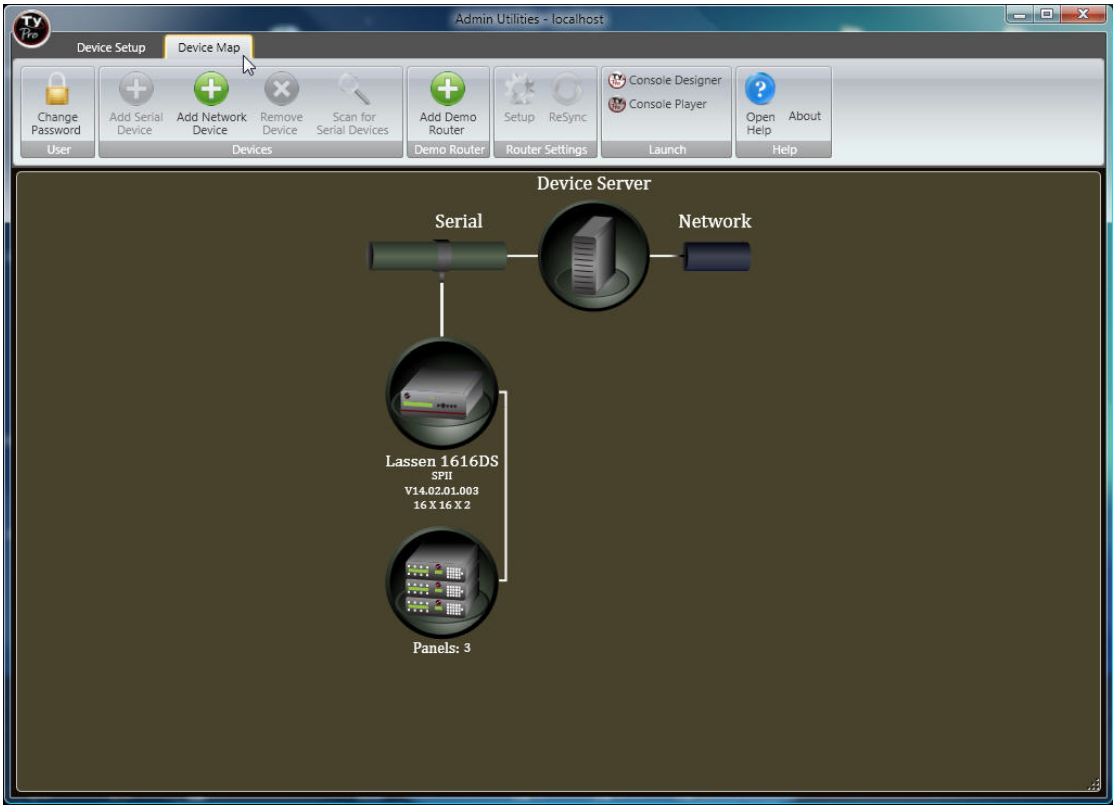
Note:

Connection settings must match the settings in the device. See specific device users guide for factory defaults or changing communication settings.
If a "Connection is Invalid" is displayed, check cabling and internal device settings.

A screen will display indicating the router's name, size, and version.
This screen allows you to configure the "Player" (router control) screen with basic default switching screens.
Place a check in the box and enter a name for the panel if you want to configure a "default" panel and/or grid screen.
Click OK when done. In this example the names "Default Panel" and "Default GRID" are used.

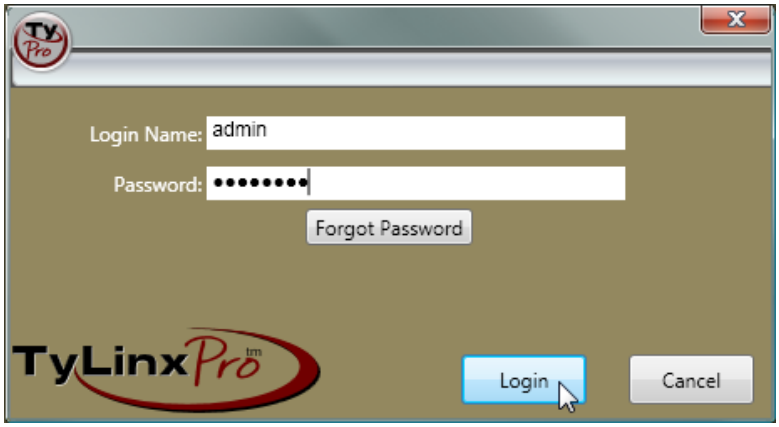


Select the "Device Map" tab.



The Device Map screen will show the "Device Server" (your PC), router, and any connected control panels.

From the Admin Utilities screen (or desktop Icon) select “Launch/ Console Player”.



Enter a login name and password (The factory default login name is “admin”; the Password is “password”, case sensitive).

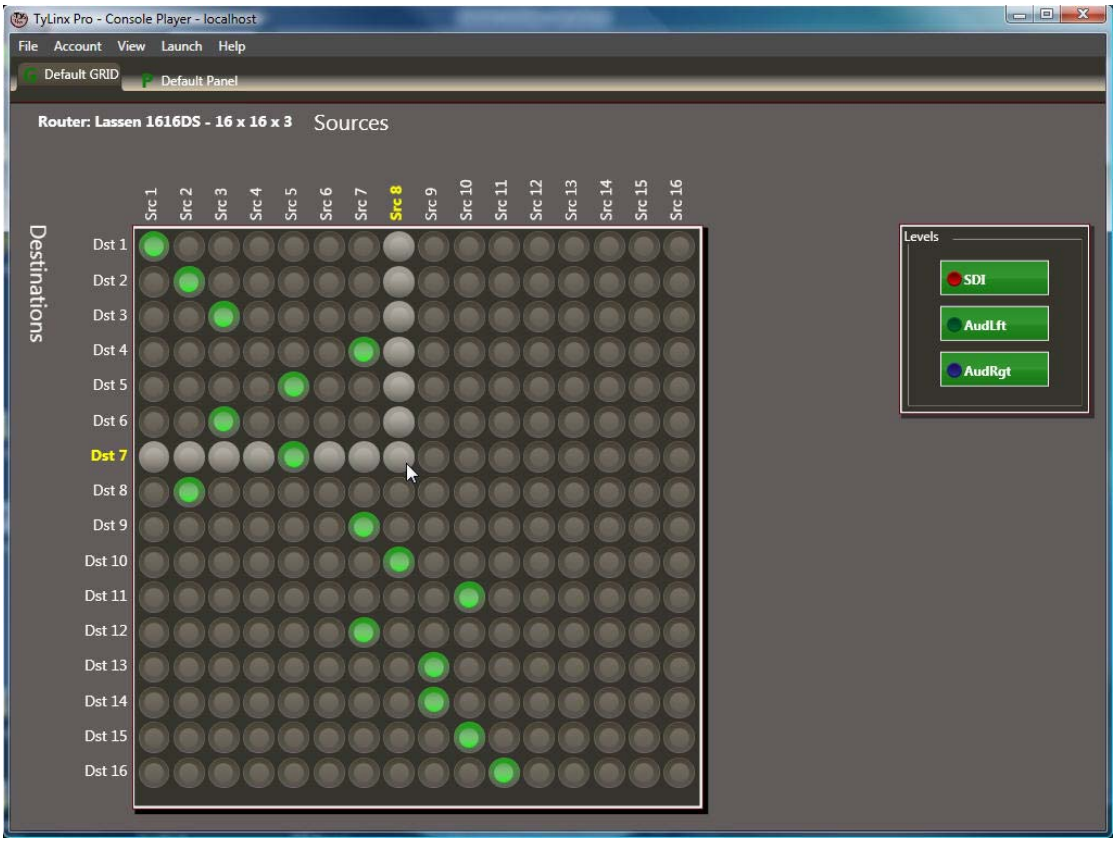
The Player screen will have the default consoles made in the previous instructions.

Click on the Default Panel tab.
To switch the router, click on a Destination.
Select a Source and the level buttons will illuminate, indicating "preset to switch" (enabled).
Clicking on a level button will "deselect" the level to be switched.
The take button will illuminate (preset).
Click on the Take button to initiate the switch.

Status can be read by hovering over a destination button, with the mouse pointer. The Source currently connected to that Destination will illuminate yellow.
You can also hover over a Source button and the Destination(s) that the Source is connected to will illuminate.

Click on the Default GRID tab.

To perform an all-levels take on the grid console, first select all levels (green indicates enabled) then click the node symbol that intersects the input and output. The illustration below demonstrates how to connect Dst 7 to Src 8:


TyLinx Pro - Console Player - localhost
File
Account
View
Launch
Help
Default GRID
Default Panel
Router: Lassen 1616DS - 16 x 16 x 3
Sources
Destinations
Src 1
Src 2
Src 3
Src 4
Src 5
Src 6
Src 7
Src 8
Src 9
Src 10
Src 11
Src 12
Src 13
Src 14
Src 15
Src 16
Dst 1
Dst 2
Dst 3
Dst 4
Dst 5
Dst 6
Dst 7
Dst 8
Dst 9
Dst 10
Dst 11
Dst 12
Dst 13
Dst 14
Dst 15
Dst 16
Levels
SDI
AudLft
AudRgt

Admin Utilities

Part IV

4 Admin Utilities

Admin Utilities

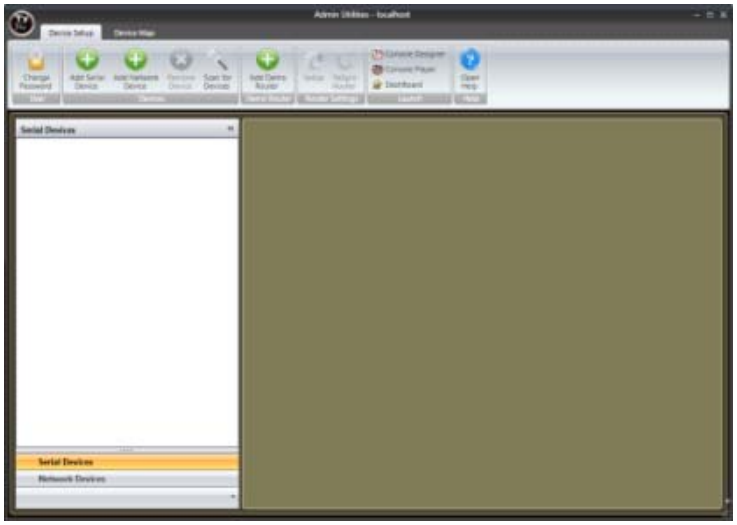
This section provides a detailed explanation of the Admin Utilities client and how the Administrator uses this tool to register devices into the system and configure them.

4.1 Overview

Overview

TyLinx Pro Admin Utilities version 2.0 introduces full featured configuration to the TyLinx Pro line-up. With this new release the software can do things such as: adjust gains, toggle equalizers, toggle slew rates, setup control panels, and many other options that were not available in the previous release. Admin Utilities is part of a three program suite that allows for the creation of a network of routers for configuration and control. It plays a vital role in this suite by allowing the addition and deletion of devices and the screens to configure the properties in them. This is a brief outline of those screens and what they will enable the user to setup and configure in Sierra Video routers.

Quick summary of Setup Screens



General Screens

- ***Device Setup*** – provides a typical view of the devices connected to TyLinx Pro. The devices are all listed on the outlook bar, which is the box to the far left of the screen that contains the serial and network category groups and devices within those categories. A device is any peripheral that is connected to TyLinx Pro; in the case of 2.0 these devices will only represent Sierra Video routers. With the Device Setup screen all the connection settings can be changed for devices added to TyLinx Pro.

- ***Device Map*** – provides a visual representation of the system topology. You cannot change connections settings on this screen; however, you can perform all the setup actions available on the Device Setup View. This view also tells you at a glance which of the routers has panels connected and there quantity. Once a device is loaded into TyLinx Pro this screen will show up on startup.

Setup Screens

- ***Router Communications*** – the first screen that appears when opening the router setup window. This screen is used to configure the network and serial port settings in the router.
- ***Names*** –changes the Destination, Source, and Level names in the router.
- ***Salvos*** – add, delete, and setup salvos in the router.
- ***Audio Gains*** – adjusts both the input and output gains in the router, if the levels support the feature.
- ***Output Slew*** – set the slew of an output to either SD or HD on supported levels.
- ***Input Equalizers*** –toggles input equalizers on or off for supported levels.
- ***Room Grouping*** – configures the room groups in supported routers.
- ***Alarm Setup Screen*** – setup the alarms in supported routers.
- ***Reclockers*** – adjust reclockers in supported routers.

Advanced Setup

- ***Dimensions*** – changes the virtual source, destination, and level size of the router.
- ***Mapping*** – virtually maps the router and import/export from Excel.
- ***Layers*** – configures the hardware layers in the router and maps them to virtual levels.

- ***Microprocessors*** – upgrades the microprocessor software in the router's boards.

**TyLinx Pro currently supports Sierra Video Systems routers only.*

4.2 Add a Device

Add a Device

Open Admin Utilities;

Select the "Device Map" tab.

The Device Map screen provides a visual representation of the system topology. You cannot change connections settings on this screen; however, you can perform all the setup actions available on the Device Setup View (see "Device Setup"). This view also tells you at a glance which of the routers has panels connected and there quantity. Once a device is loaded into TyLinx Pro this screen will show up on startup.

Device Setup Ribbon Buttons

Change Password – opens a screen where you the user's password can be changed.

Add Serial Device – adds a serial device to the server.

Add Network Device – adds a network device to the server.

Remove Device –removes a device from the server. The user is prompted with a confirmation dialog to ensure devices are not deleted accidentally.

Scan for Devices –scans all serial ports available to the server and looks for Sierra Video routers, if a router is discovered it will automatically be uploaded to TyLinx Pro.

Add Demo Router –adds a demo router to TyLinx Pro for demonstration purposes.

Setup –opens the general router setup screen.

ReSync – resynchronize TyLinx Pro with the router. Any changes that have been made to the router from an outside source will reflect in TyLinx Pro after the resynchronization is complete.

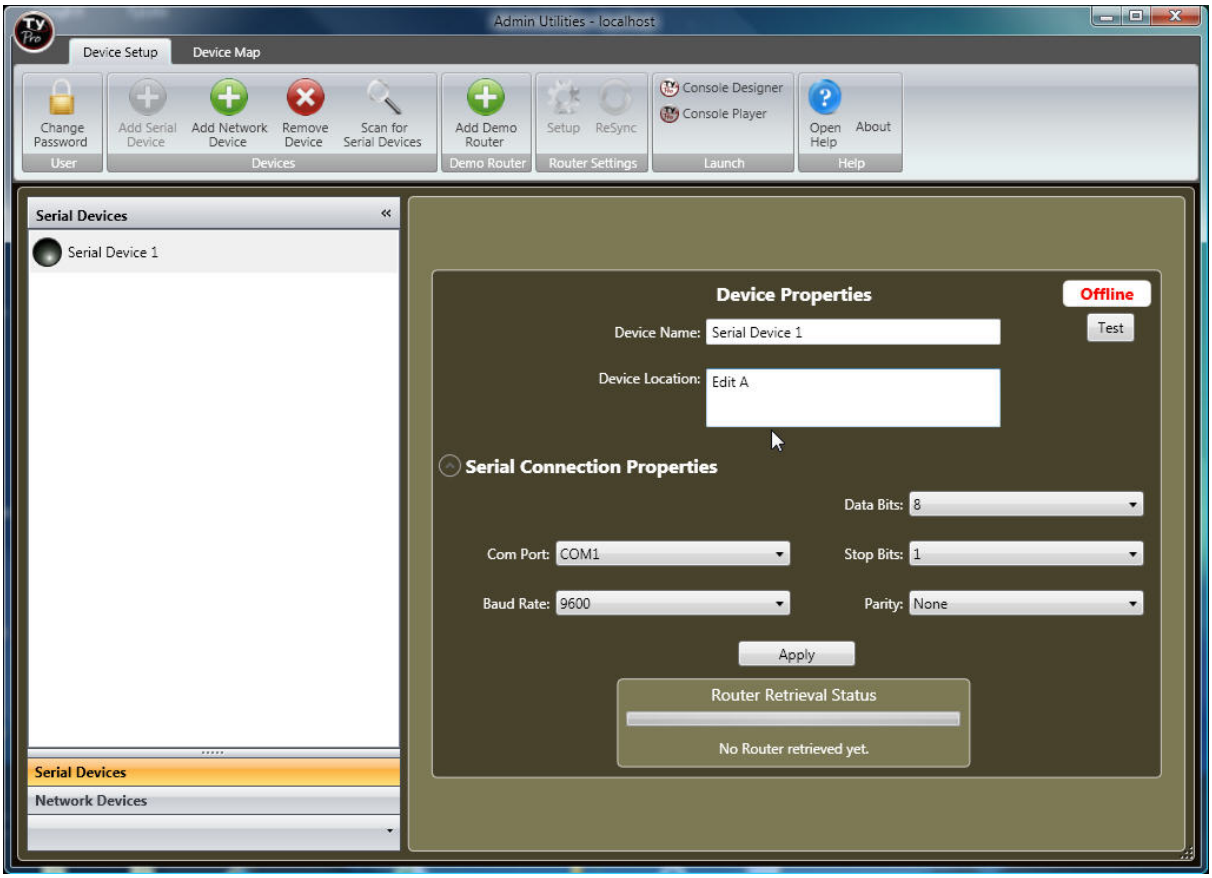
Launch Menu – The Launch menu provides a means to start other applications associated with TyLinx Pro operations. You can launch the other programs simply by clicking on their icon.

Add a Serial Device;

This section is if communication to the router is via a serial connection. For IP communication, skip to the section below "Add a Network Device".

Select Add Serial Device;

A dialog will now appear that looks like the following:



Enter the serial connections that apply to your router.

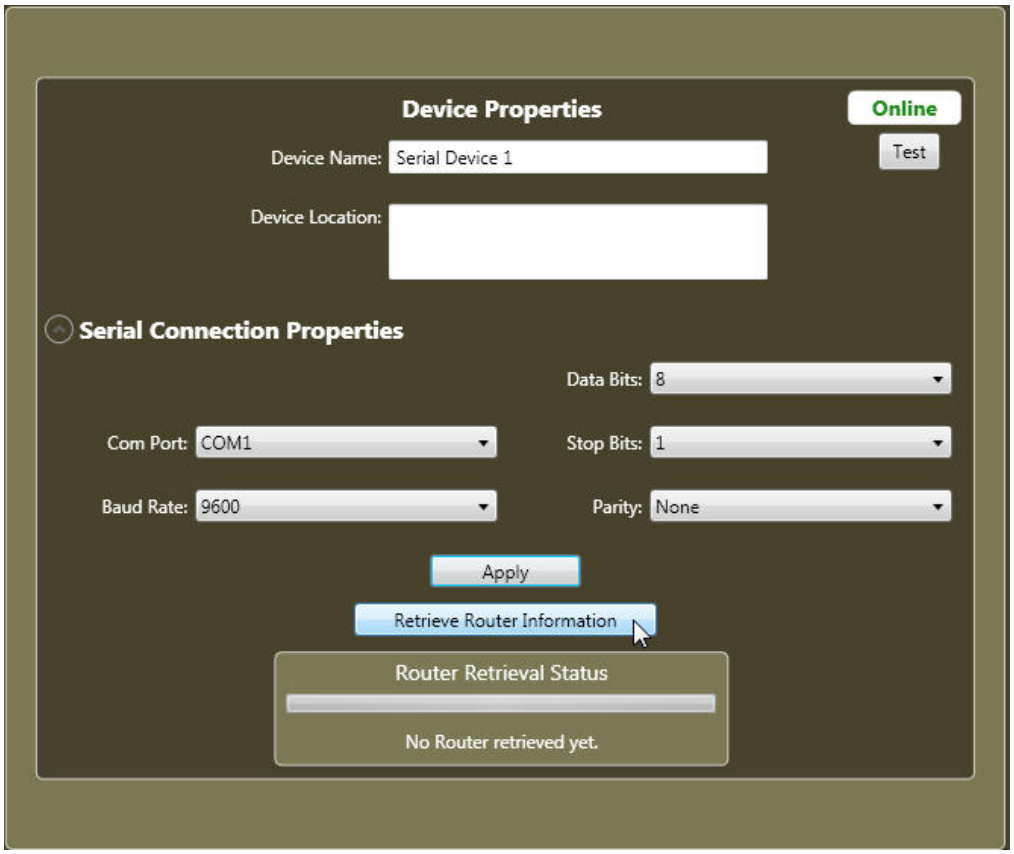
Note:

Connection settings must match the settings in the device. See specific device users guide for factory defaults or changing communication settings.

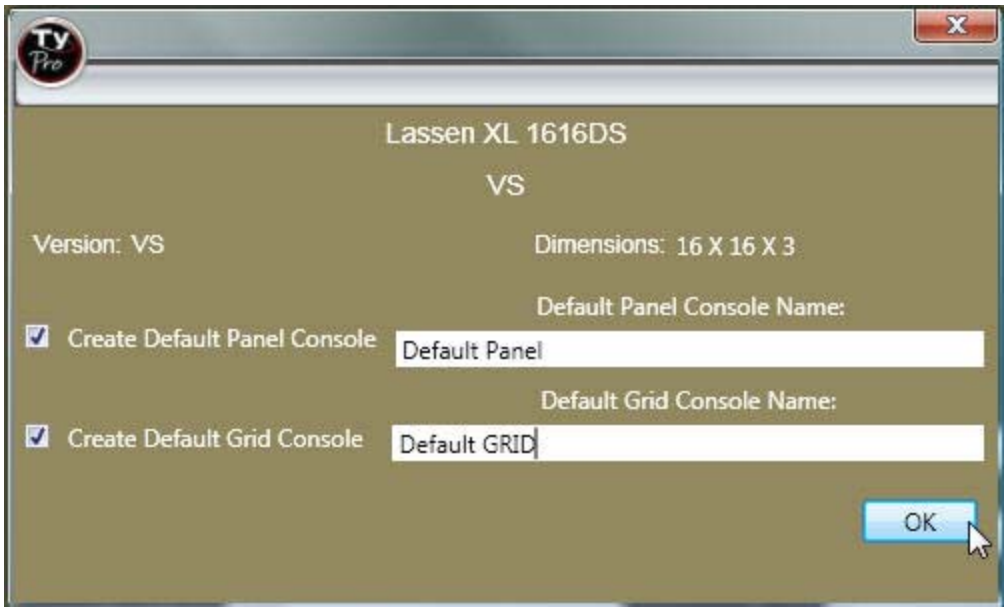
Select Apply;

When communication with the router is successful, the display in the upper right will indicate "Online".

After selecting "Apply", select "Retrieve Router Information" to read the router's current configuration.



A screen will display indicating the router's name, size, and version.
This screen allows you to configure the "Player" (router control) screen with basic default switching screens.
If you want to create a default control panel and/or Grid, place a check in the box and enter a name for the panel if you want to configure a "default" panel and/or grid screen.
Click OK when done. In this example the names "Default Panel" and "Default GRID" are used.

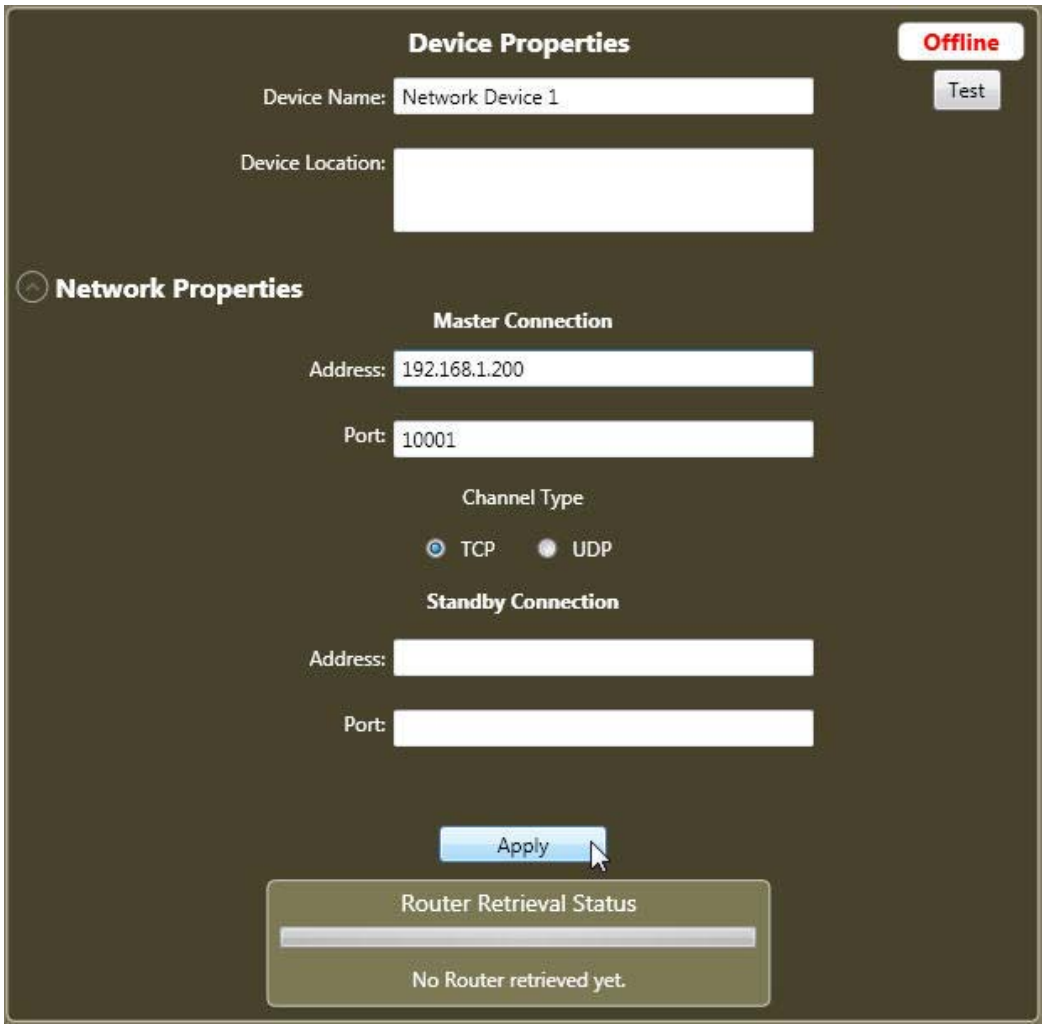


Add a Network Device;

Setting up a network device is very similar to setting up a serial device in Admin Utilities. The first step is to press the “Add Network Device” button located to the right of the “Add Serial Device” button. This will add a new network device into TyLinx Pro and select it.

Select Add Network Device;

A dialog will now appear that looks like the following:



The window has everything to configure the network device. It also has a second address field for redundant processors. The Standby Connection properties are required when the router has redundant processors with IP. Once the correct settings are entered press the apply button and if the router is online it will bring up the “Retrieve Router Information” button, press that and the rest of the steps are the same as adding a serial device.

Enter the Network connection information that applies to your router.

Once the correct settings are entered press the apply button and if the router is online it will bring up the “Retrieve Router Information” button, press that and the rest of the steps are the same as adding a serial device.

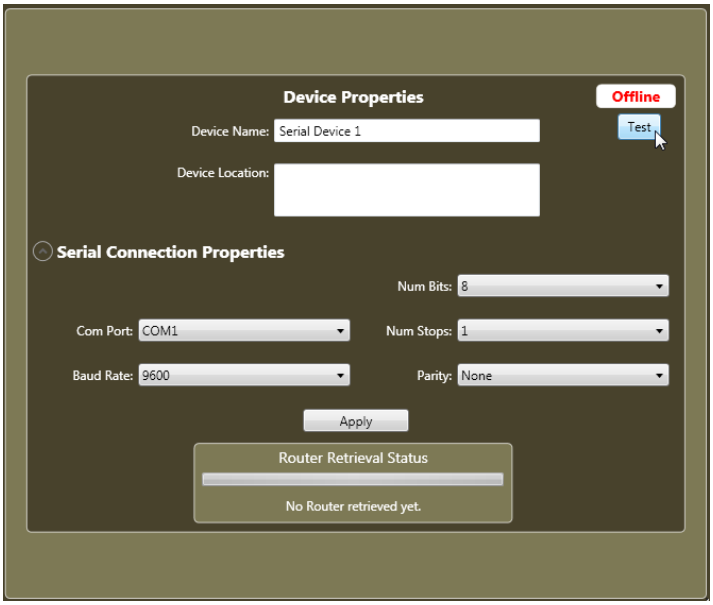
Note:

Connection settings must match the settings in the device. See specific device users guide for factory defaults or changing communication settings.

4.3 Testing a Connection

Testing a Connection

Click the Test Connection button on the Device Settings dialog to test the interface to a device. A test pass/fail indication will be presented following test. If the connection is valid, it means that TyLinx Pro has what it needs to communicate with the device.



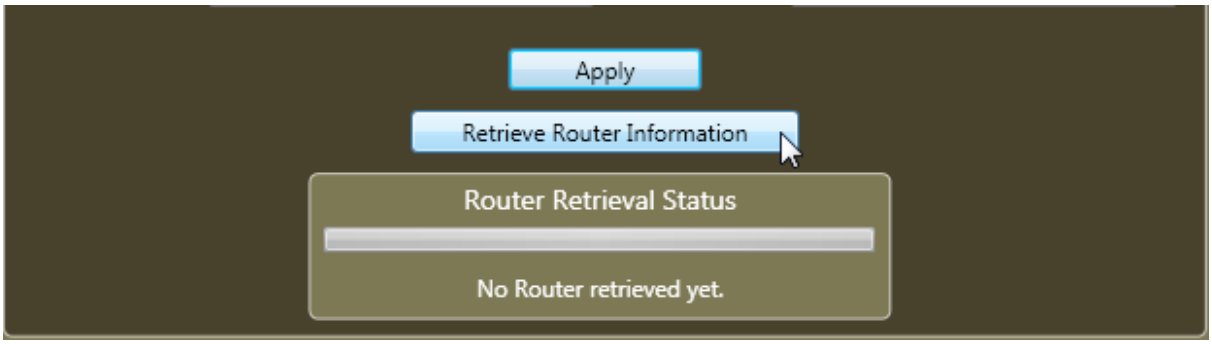
If invalid, then some trouble shooting may be required. Some questions to ask that may lead to the problem are:

- is the device powered?
- is the communications cable connected?
- is the Connection Type set properly?
- for serial connections; are properties like baud rate, number of bits, handshaking, etc. set to router's configuration?
- for network connections; are the IP address and/or port number set correctly for TCP or UDP connection?

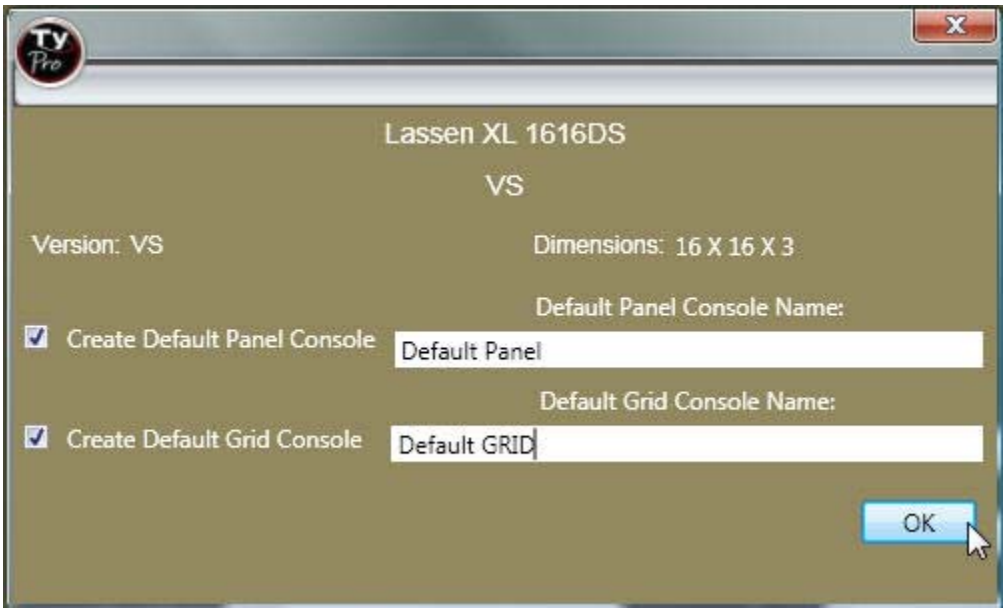
4.4 Retrieve Device Information

Retrieve Device Information

Once device communications configuration has been defined and tested, the Administrator should click the 'Retrieve Device Information' button. This will direct Device Utilities to interrogate the device for the initial device configuration for the database.



Once the information has been retrieved, the Administrator will be presented with a dialog that will permit them to create 2 default control consoles. The image below shows the Router Configuration dialog:



Notice on the dialog shown above, that 2 default control consoles may be created and named. Enter a meaningful name for both control consoles as they will be used later to identify consoles during operations. When complete, click the OK button and Device Utilities will create the default control consoles. Uncheck either Create Default Panel Console and/or Create Default Gird Console if one or more default console are not to be created.

4.5 Router Setup

Router Setup

The following sections apply to setting up the router's names and operational options.
Access to these features are available by selecting "Setup" from the menu bar on the Device Setup tab or double clicking on the router icon in the Device Map tab.

Not all setup options are available on all models. See the router's Users Manuals for information on options available.

4.5.1 Router Names

Router Names

The router comes with default names “Src” and “Dst”.

If the router inputs, outputs, and levels have been previously named, TyLinx Pro will display the names currently programmed in the router. You may want to change these names to meet your needs.

Names consist of a category and index, such as VTR 1. VTR (short for video tape recorder) as the category with the number 1 as the index. All VTRs would have the same category (VTR) with a different index for each video tape recorder.

This method allows you to categorize common inputs or outputs, making naming and switching of inputs and outputs simpler with the programmable SCP series of remote control panels.

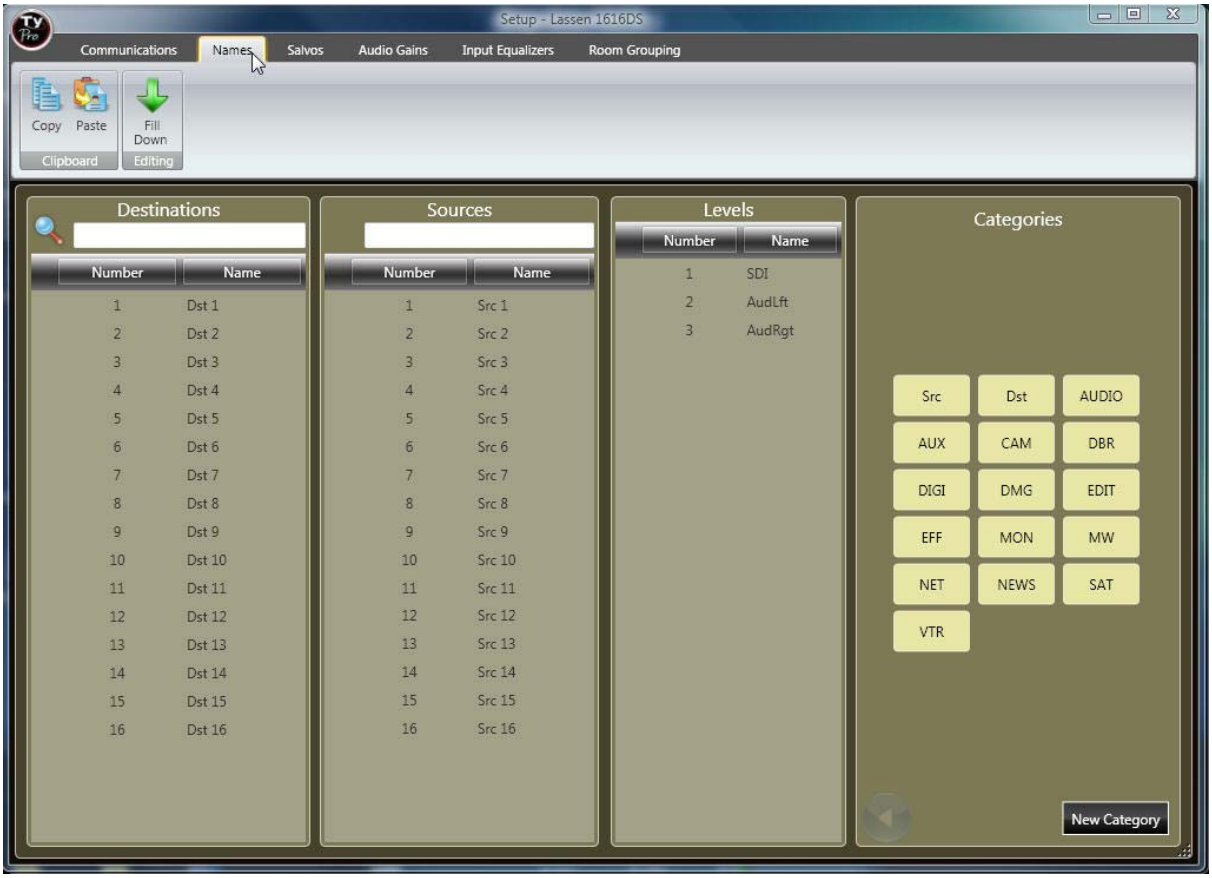
Note:

Names can also be typed in (not to exceed 8 characters).

To edit source, destination, and level names, select Setup from the menu.

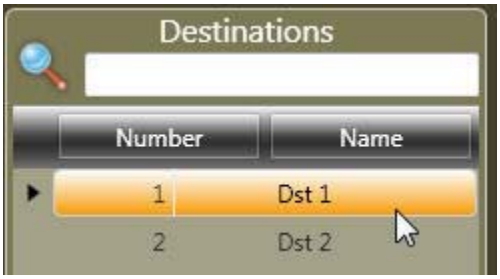
Then select the "Names" tab.

The edit names dialog appears as shown below:



Router Name Edit Dialog

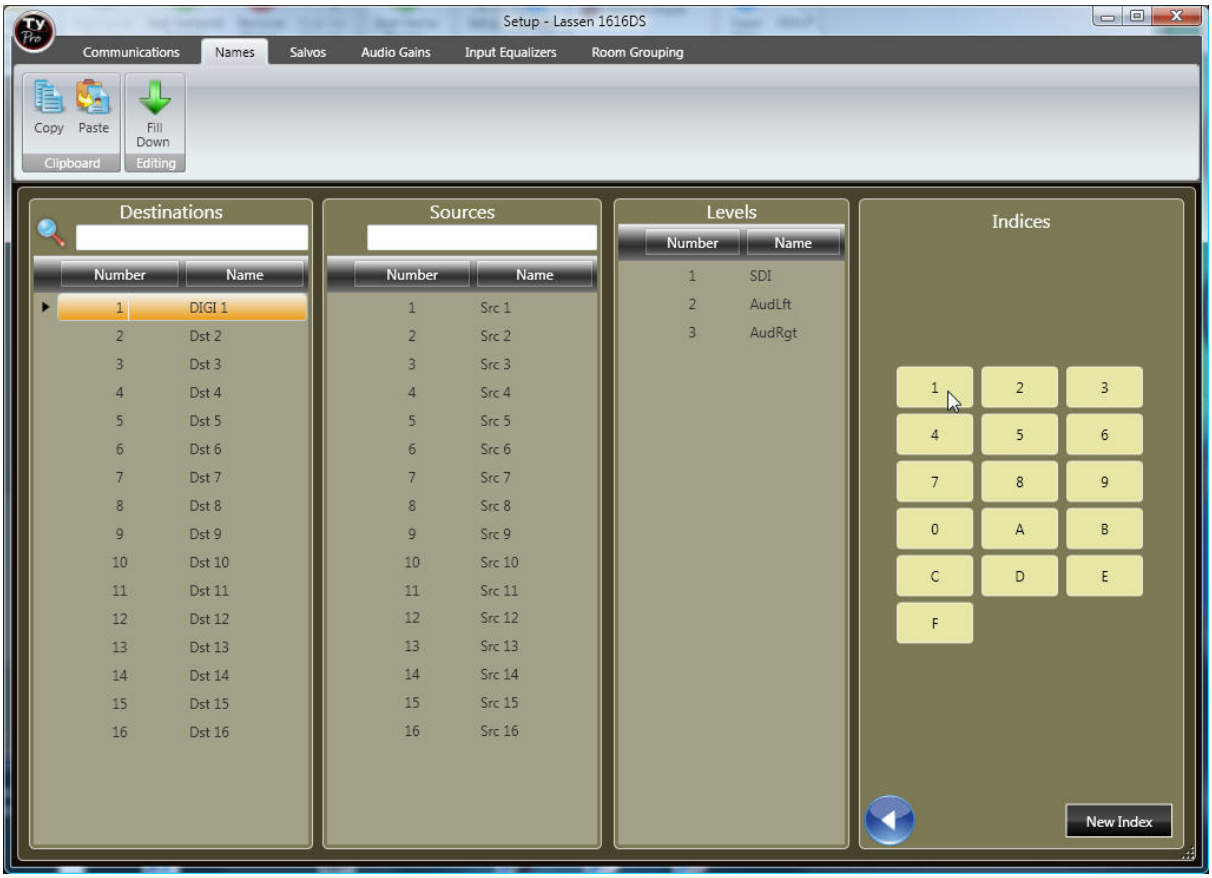
To change the names highlight the name to change by clicking on it and then enter a new name.



Select a category from the category list on the right. *(To enter a new category see "Categories" below.)*

The selected category will be entered and the window will switch to "Indices".

Then select an Index reference.*(To enter a new index reference see "Indices" below.)*



Categories

To add a new category, select "New Category".

Enter a new category name, press enter.

The new category will appear on the category window.

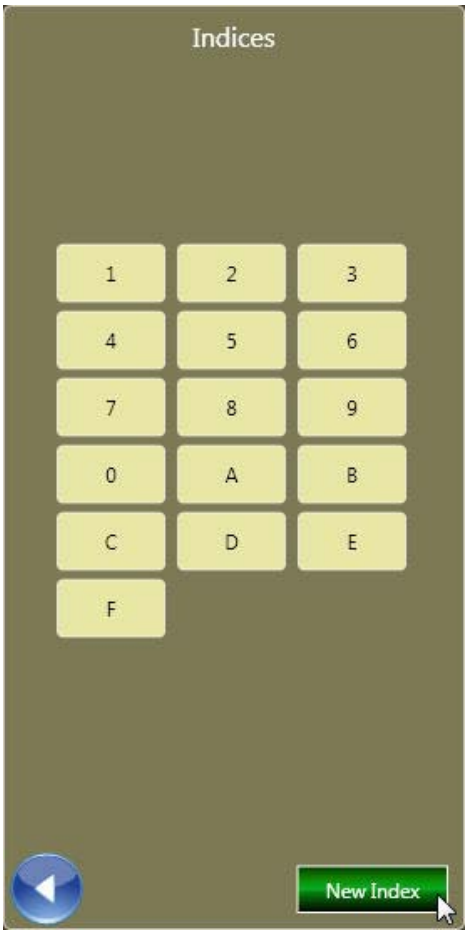
Note:

Category names may not exceed 5 characters.

A category may be renamed or deleted by right clicking on the category button and selecting the function.

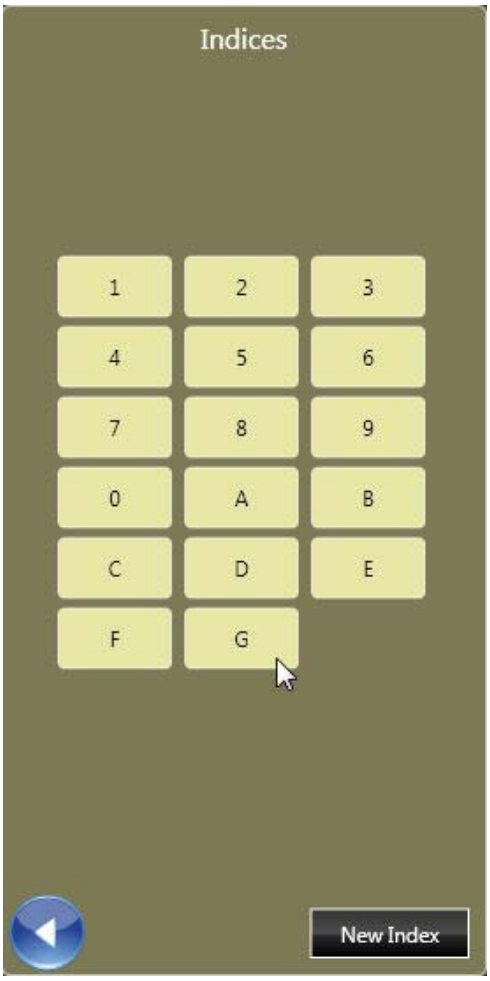
Indices

To add a new index, select "New Index" from the Indices window.



Enter a new index reference, press enter.

The new category will appear on the category window.



Note:

Index names may not exceed 5 characters.

An index may be renamed or deleted by right clicking on the category button and selecting the function.

Changes will be saved in the database and sent to the router as you change focus to other name fields or click close, thus there is no need for an explicit 'Save' action.

When names are changed in this screen the names are sent to the router and will be reflected on the front control panel and remote panels with displays.

Names are limited to 8 characters including spaces.

DO NOT repeat names in either the Source or Destination column. Source names can be repeated in the Destination column and vice-versa.

4.5.2 Salvos

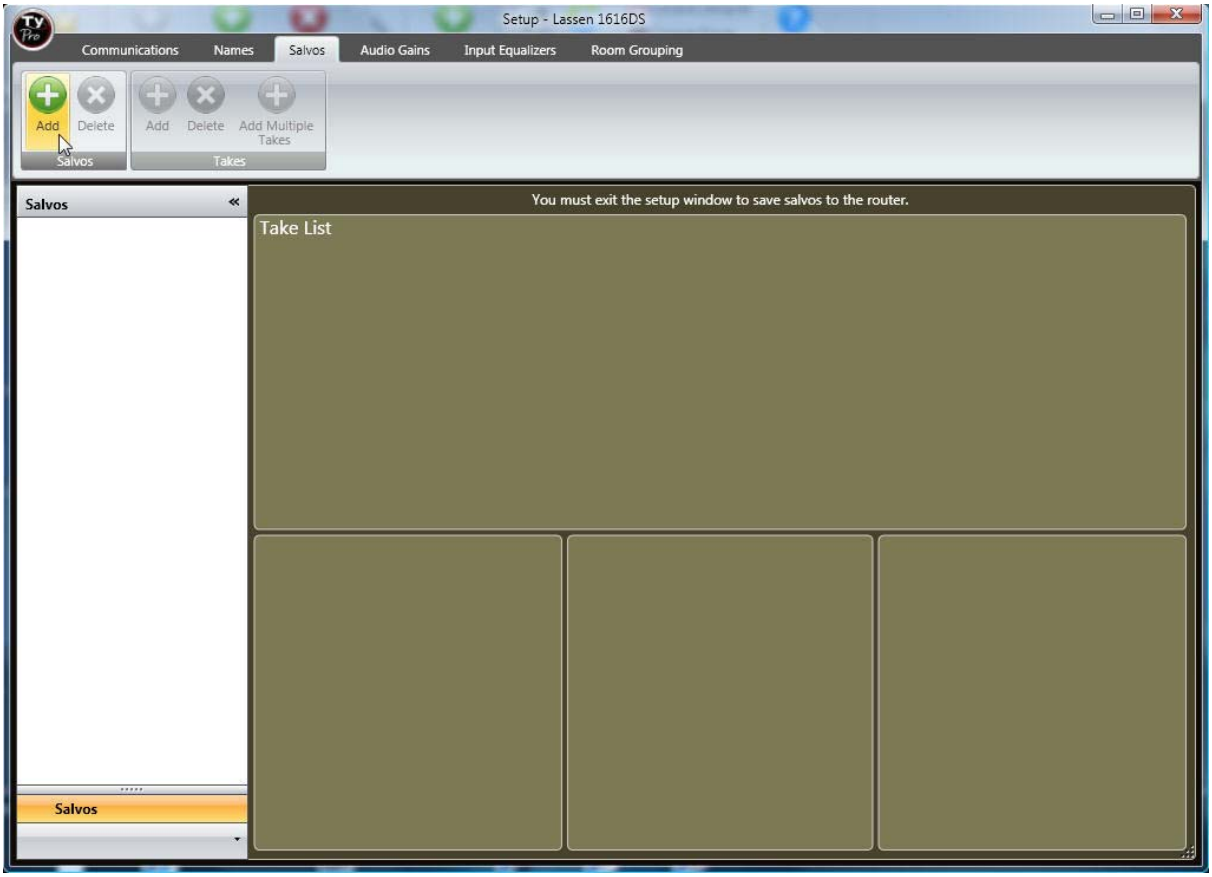
Salvos

A Salvo is a list of crosspoint switches that are downloaded to the routing switcher and switched by a single “Salvo Take” command.

Salvos are stored in the router's CPU and may be accessed by any or all users.

Salvo Setup

From the "Setup" window, select the Salvo tab and "Add"



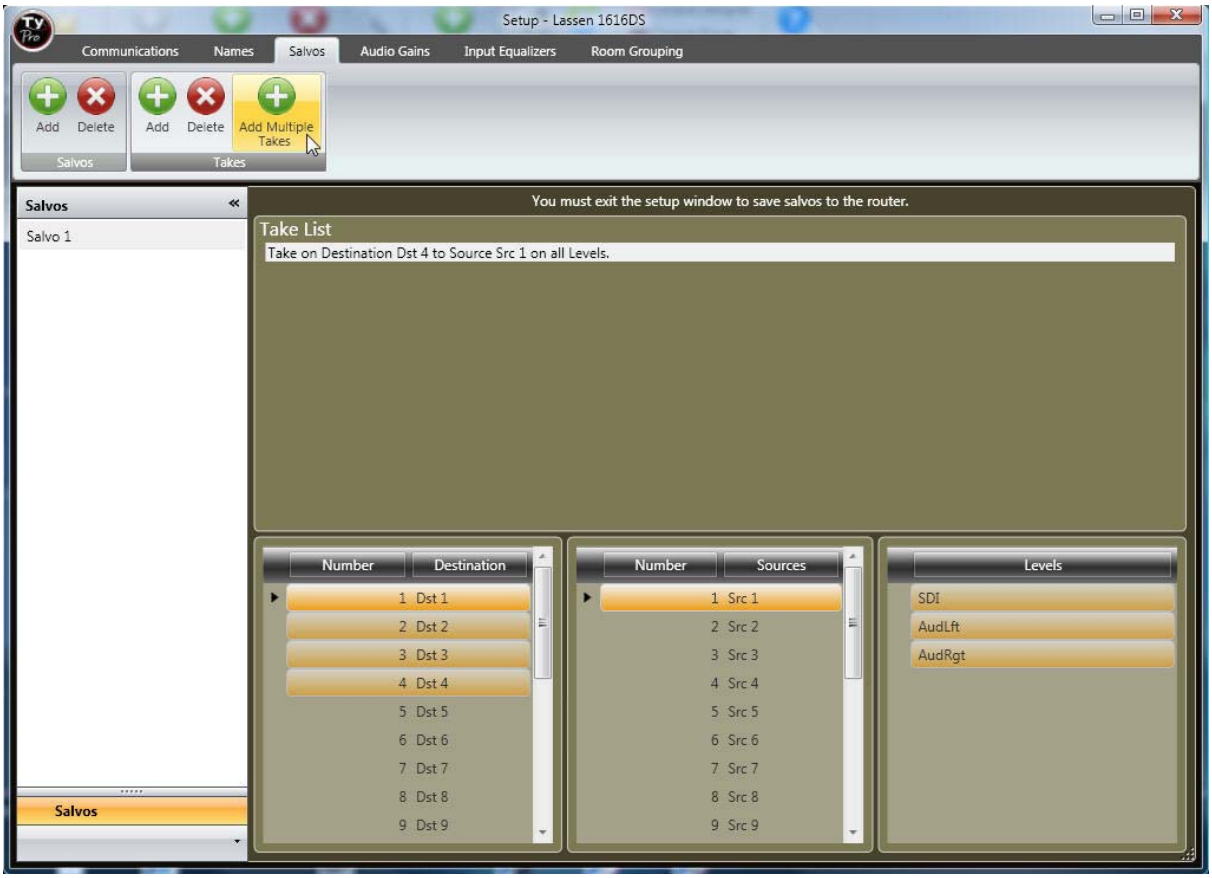
Enter a salvo name in the dialog box and click "OK".

Click on "Add" takes.

Configure the Salvo by selecting the destination(s), sources, and levels from the list below.

More than 1 destination may be selected by holding the "Shift" or "Ctrl" button on the keyboard and selecting multiple destinations.

When more than 1 destination is selected, the "Add Multiple Takes" must be selected to include all switches.



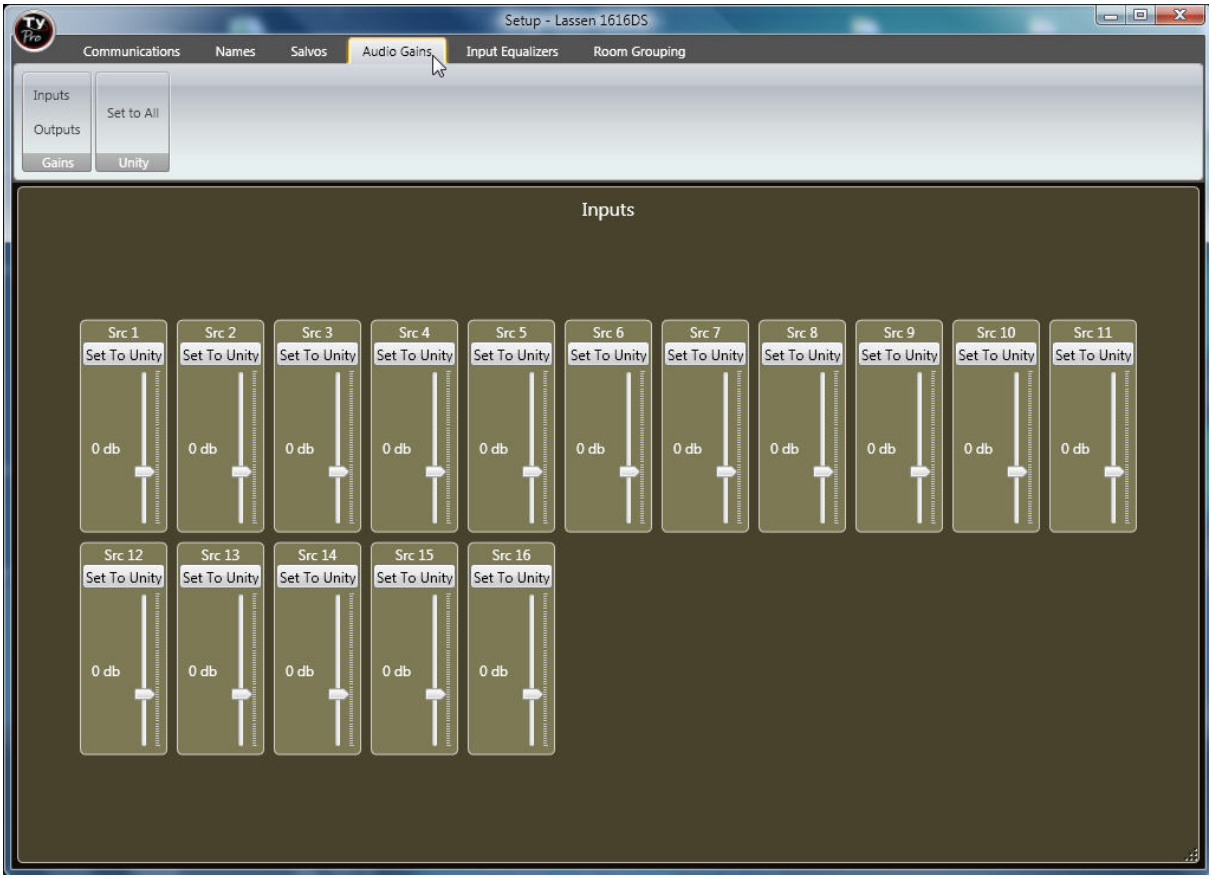
All Salvos are sent to the router's CPU when the Salvo window is closed.

4.5.3 Audio Gain

Audio Gain

For units with an adjustable audio gain option, select the "Audio Gains" tab from the Setup window.

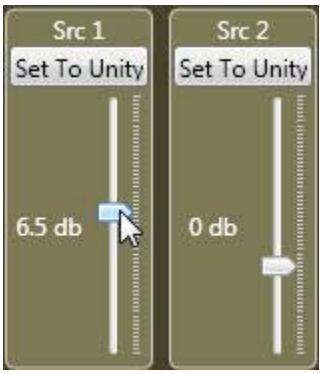
The current gain settings are read from the router when the "Audio Gains" window is opened.



Input Gain Adjust

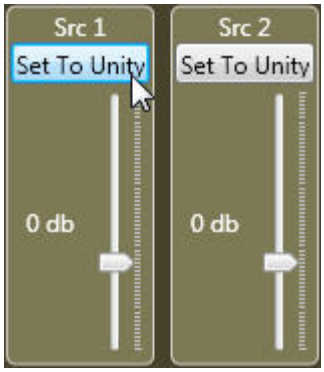
Select inputs.

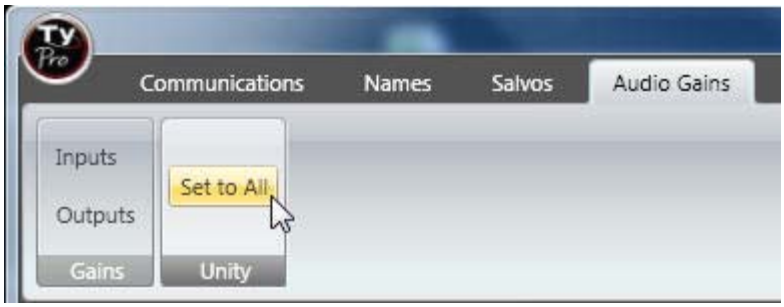
Gain is adjusted by hovering over the fader, holding down the left mouse button, and moving the fader up or down.



The amount of gain or attenuation is indicated to the left of the fader.

To set gain to unity, click on "Set to Unity" or to set all gains to unity select "Set to All".



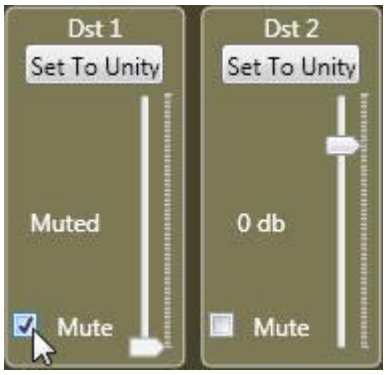


Output Gain Adjust

Select outputs.

Repeat process as described above for input gains.

Outputs can be set to "Mute" by placing a check in the appropriate box.



4.5.4 AV Muting

A/V Muting

Overview

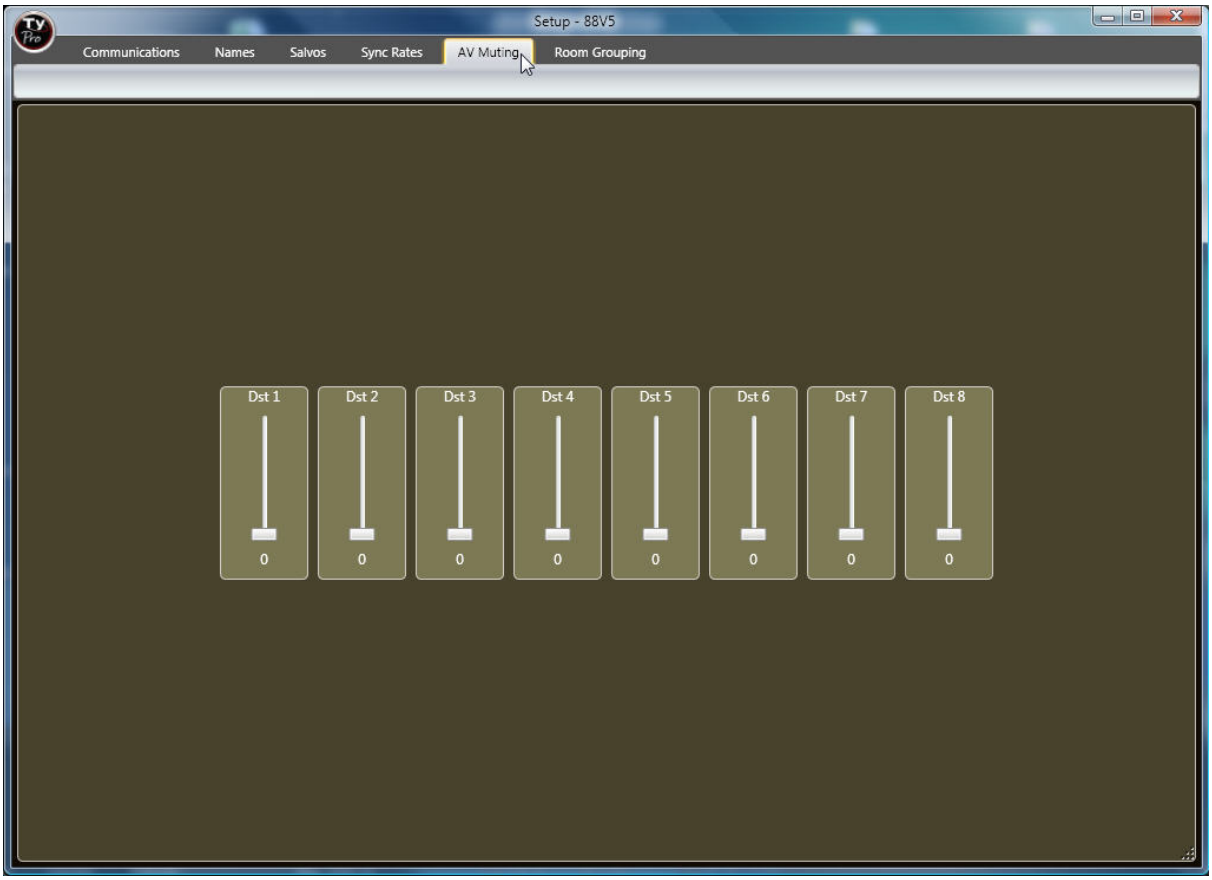
Some models of Sierra Video routers have the ability to adjust A/V Muting. If your router has this option, the following section describes the steps necessary to adjust A/V delay.

A/V muting (delay) is a function that “delays” the video and audio signal of an output for a “user adjustable” amount of time after a “take” command is sent to the processor. The sync signals will be immediately upon the “take” command; only the video and audio will be delayed.

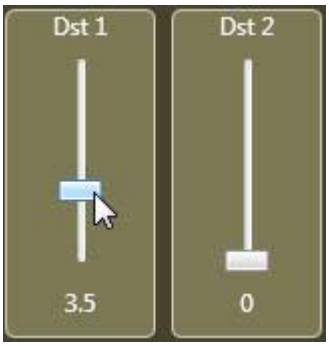
This enables the projector (or monitor) time, if input sync rates vary, to adjust to differing sync rates. The video will display black for a user set duration while the sync only is sent to the output device.

Setting Mute Delay

For Sierra Pro units with an "A/V Muting" option, select the "AV Muting" tab from the Setup window.



Mute Delay, in seconds, is adjusted by hovering over the fader, holding down the left mouse button, and moving the fader up or down.



Changes are immediately sent to the router.

4.5.5 Room Grouping

Room Grouping

Overview

Room Groupings are groups of user defined inputs and outputs. If your router is being switched from

several locations (rooms), you may want to restrict the inputs and/or outputs controlled by each location.

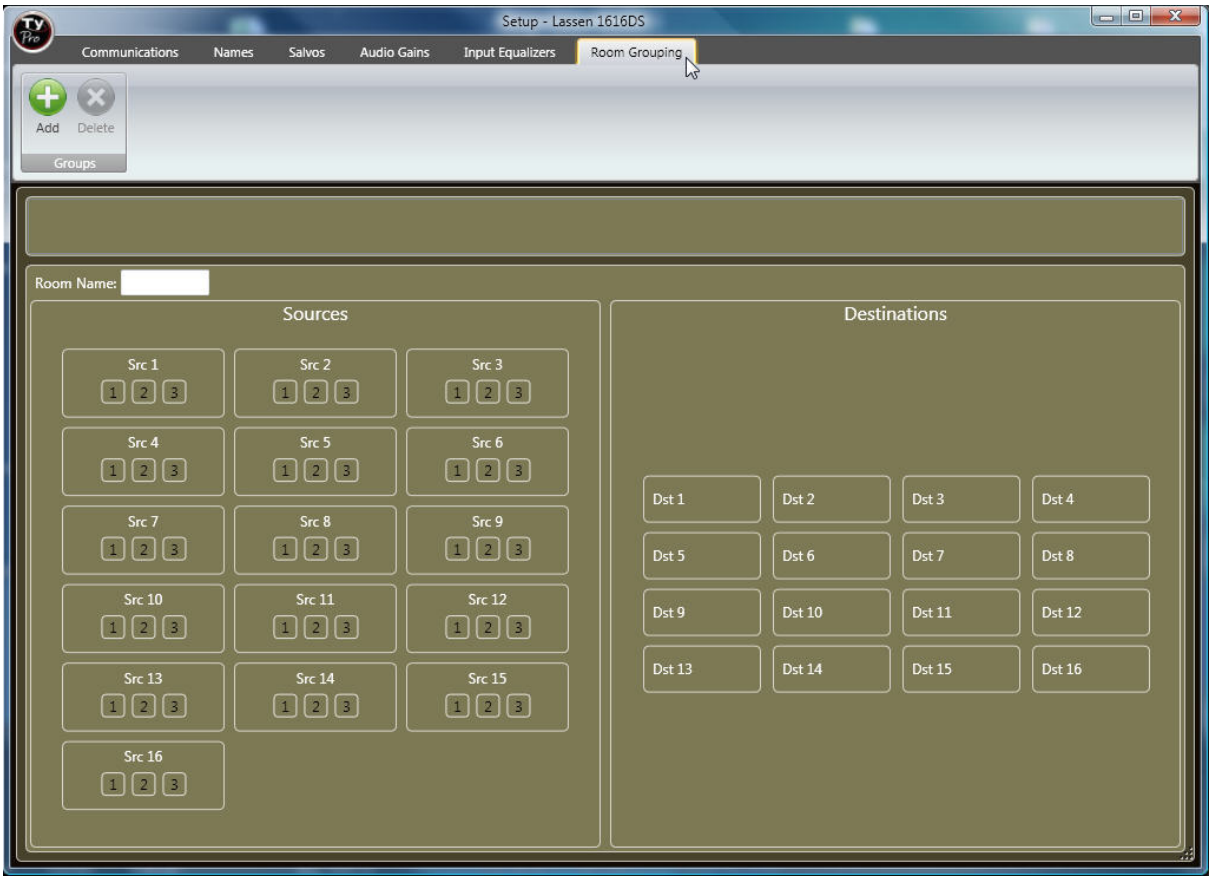
As an example, your router is being switched from two locations, a boardroom and a conference room and the boardroom uses different outputs and inputs than the conference room. To prevent accidental switching of the boardroom outputs or inputs from the conference room or vice versa, you can restrict the ability of input and output control of each location by setting up “rooms”.

You can also restrict the “level” the room can switch. If you have a video (level 1) and a audio level (level 2) for a given input, but only the boardroom to switch the audio (level 2), you can restrict the ability of the boardroom so that only the audio of that input is switched from that room group.

Sierra Video routers hold up to 4 room groups.

Group Setup

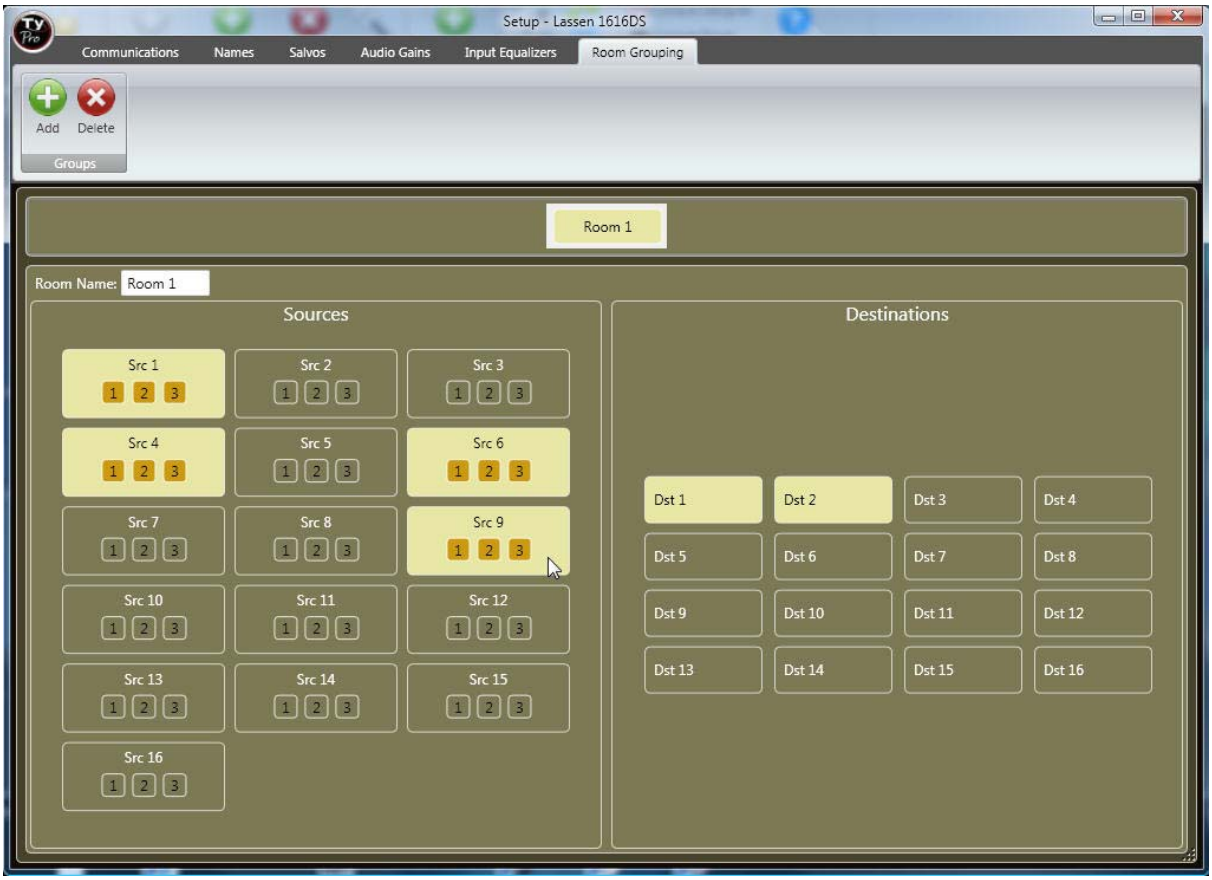
For Sierra Pro units with an "Room Grouping" option, select the "Room Grouping" tab from the Setup window.



Select "Add" Groups.

Enter a Room Name.

Inputs, outputs, and levels allowed in the room group are selected by clicking on the appropriate areas.



All Room Groups are sent to the router's CPU when the Room Grouping window is closed.

4.5.6 Sync Rate Reporting

Sync Rate Reporting

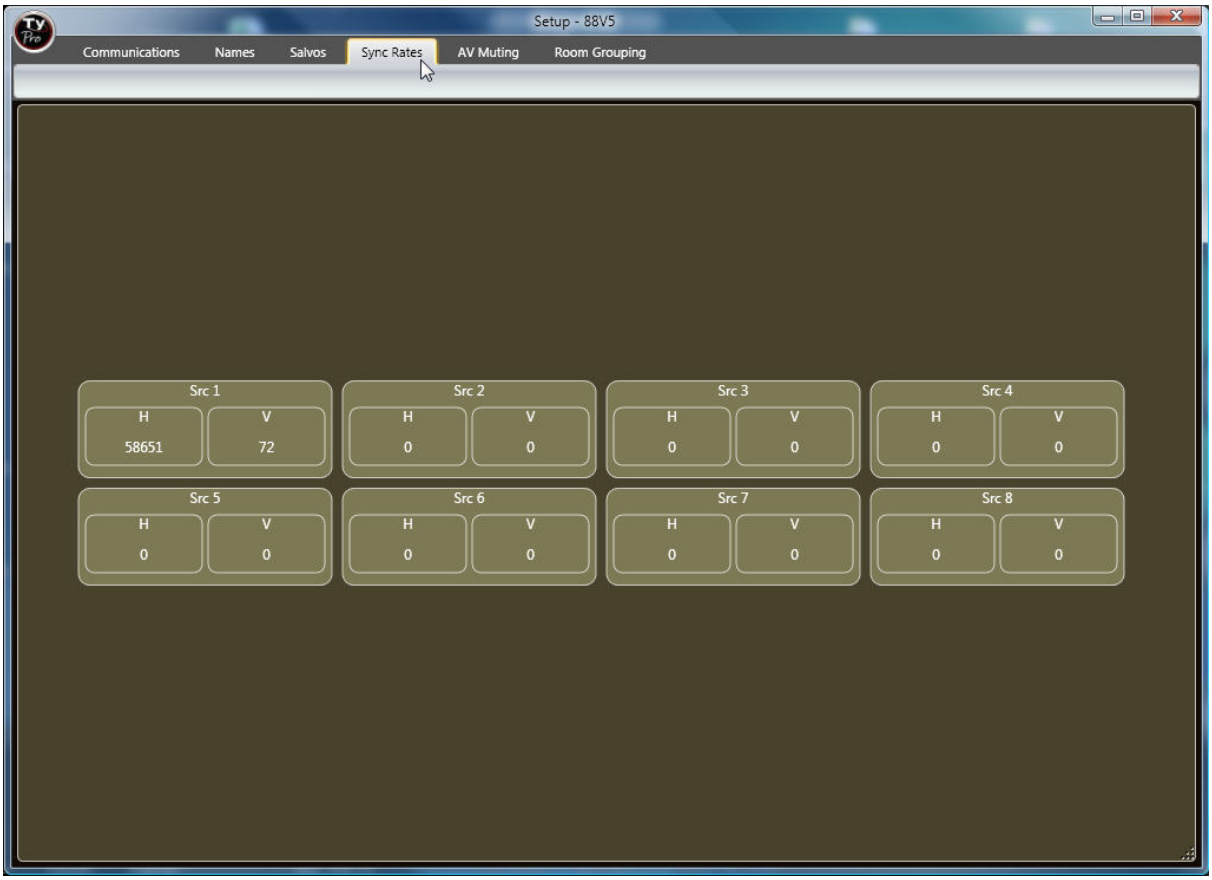
Overview

Some models of Sierra Video routers have the ability to report sync rate using TyLinx Pro. If your router has this option, the following section describes the steps necessary to report sync rate.

Reporting of the Sync Rate on an input can help troubleshoot installation wiring and determine if a scaler is required.

Reporting Sync Rates

For Sierra Pro units with an "Sync Rate Reporting" option, select the "Sync Rates" tab from the Setup window.



Sync rates are displayed in the individual source box(s).

4.5.7 Input Equalizers

Input Equalizers

Overview

Some models of Sierra Video Digital routers offer adjustable input equalizers. This function allows users to bypass any input's auto ranging equalizer.

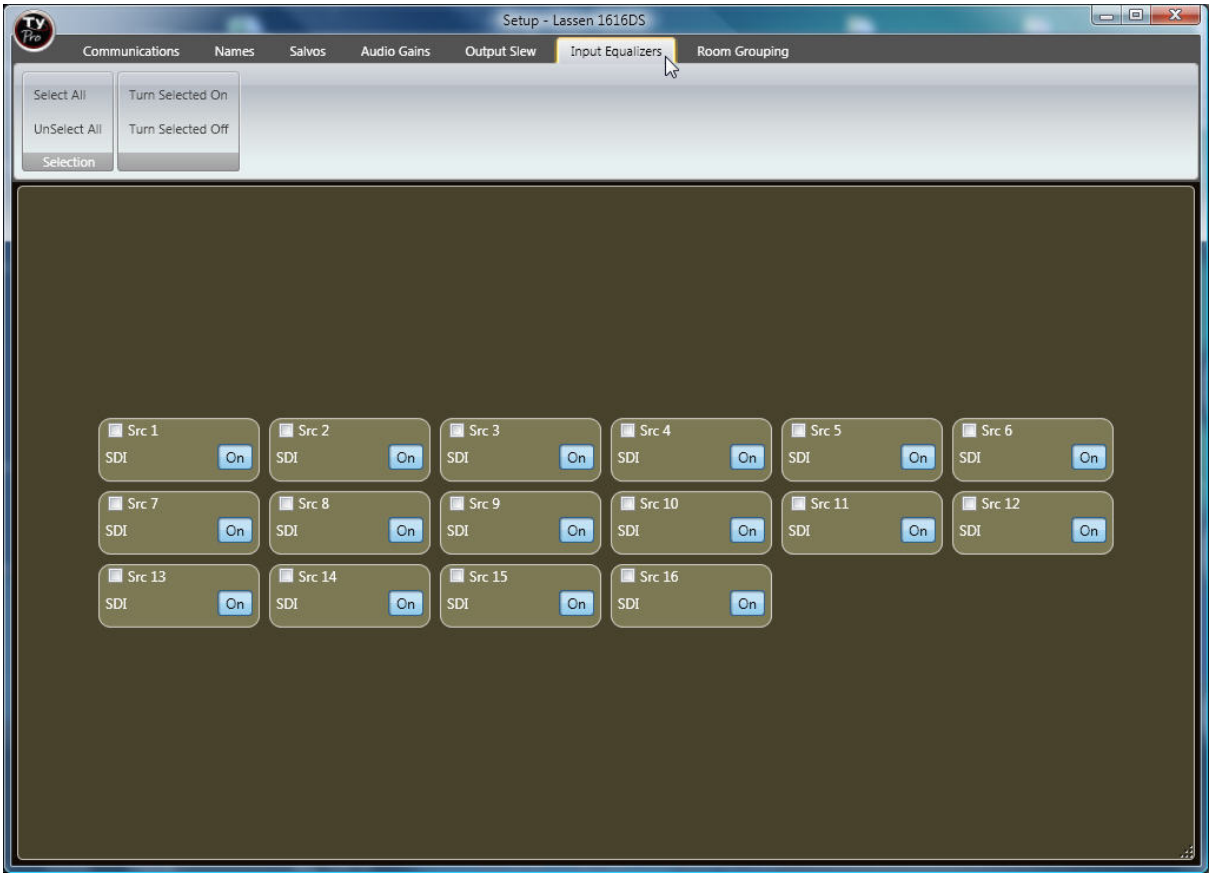
In the 'ON' mode: The input equalizer is enabled and the routing switcher will automatically adjust to the cable length connected to the input.

In the 'OFF' mode: The input equalizer is bypassed, and the routing switcher will not do any cable equalization.

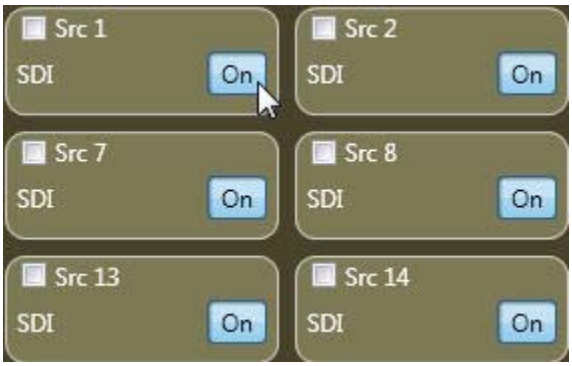
'ON' is the recommended and is the factory default setting.

Input Equalizer Setup

For units with an "Input Equalizer" option, select the "Input Equalizers" tab from the Setup window.



Equalizers are turned on and off by clicking on the On/Off button in the source box.



Multiple sources can be changed by placing a check in the source's box and selecting "Turn Selected On" or "Turn Selected Off" at the top of the window.

Changes are sent to the router upon selection.

4.5.8 Output Slew

Output Slew

Overview

Some models of Sierra Video Digital routers offer adjustable output slew rate. This function allows users to adjust the slew rate of each output to cope with the varying formats that the router accepts.

In the 'HD' mode: The router complies with the <= 270psec rise and fall time spec defined in the SMPTE 292M standard

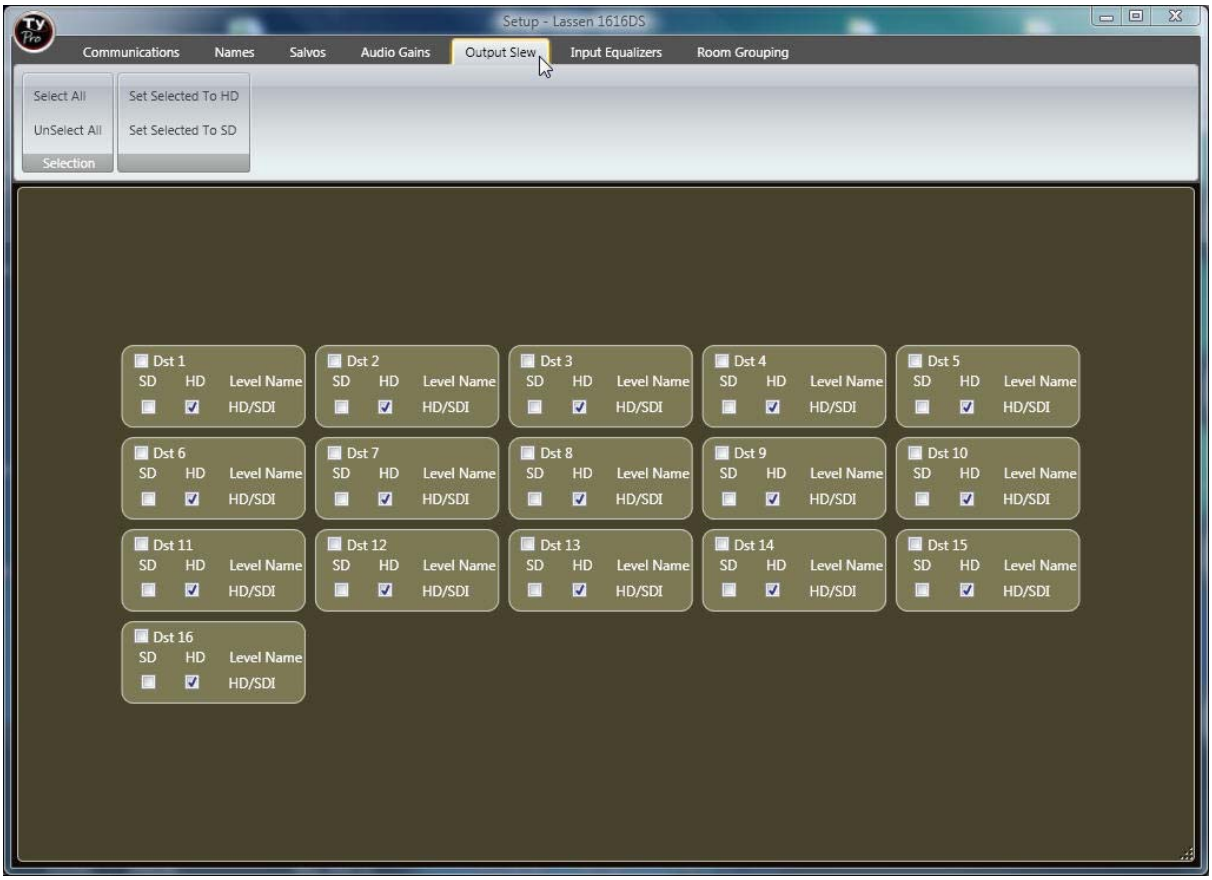
In the 'SD' mode: The router complies with the >= 400psec and <=1500psec rise and fall time spec defined in the SMPTE 259M standard.

'HD' is the factory default setting.

Note that if the Slew Rate is set to HD, the routing switcher will pass HD and SD signals correctly. However a HD signal will not be passed through the routing switcher if the Slew Rate is set to “SD”.

Output Slew Rate Setup

For units with an "Output Slew Rate" option, select the "Output Slew" tab from the Setup window.



Output Slew is changed by placing a check in the SD or HD box for the appropriate output.

Multiple outputs can be changed by placing a check in the output's box and selecting "Set Selected To HD" or "Set Selected To SD" at the top of the window.

Changes are sent to the router upon selection.

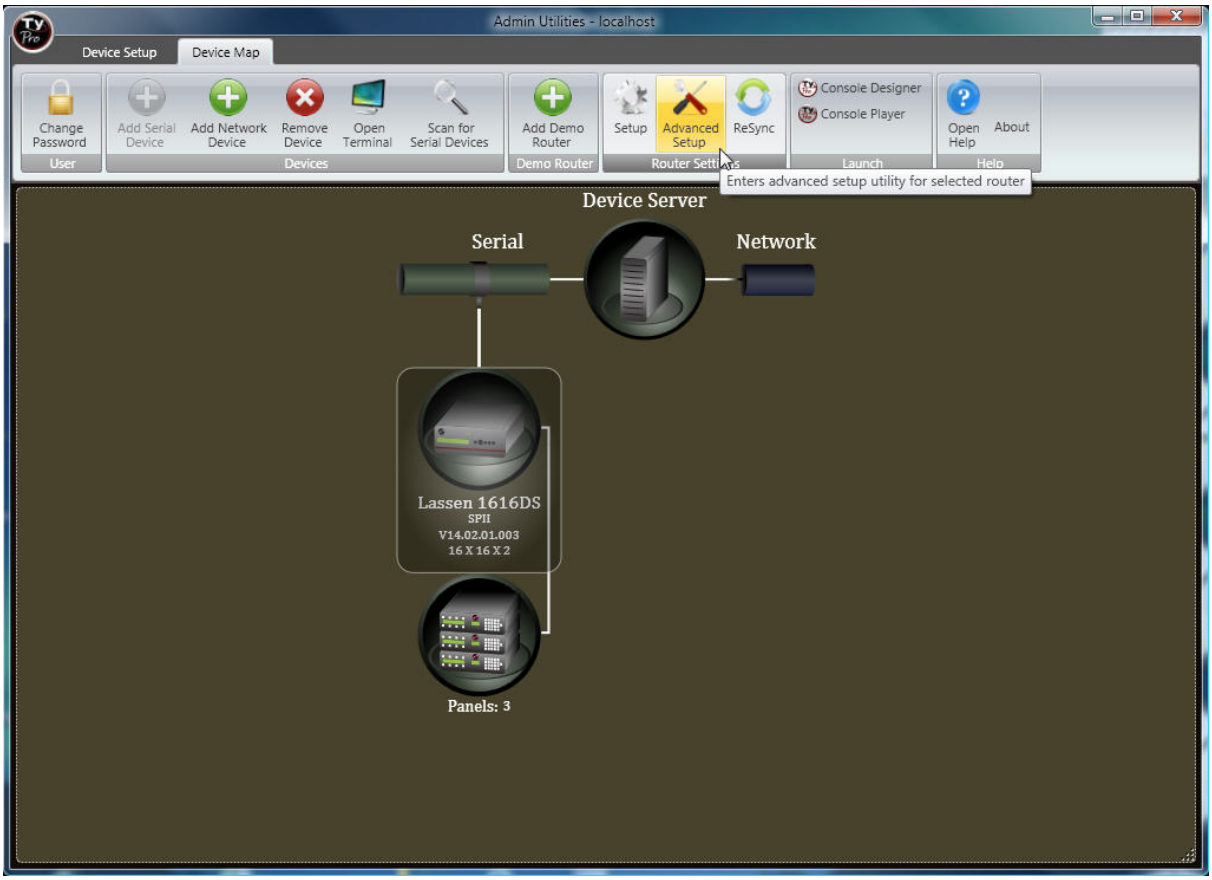
4.5.9 Advanced Setup

Advanced Setup

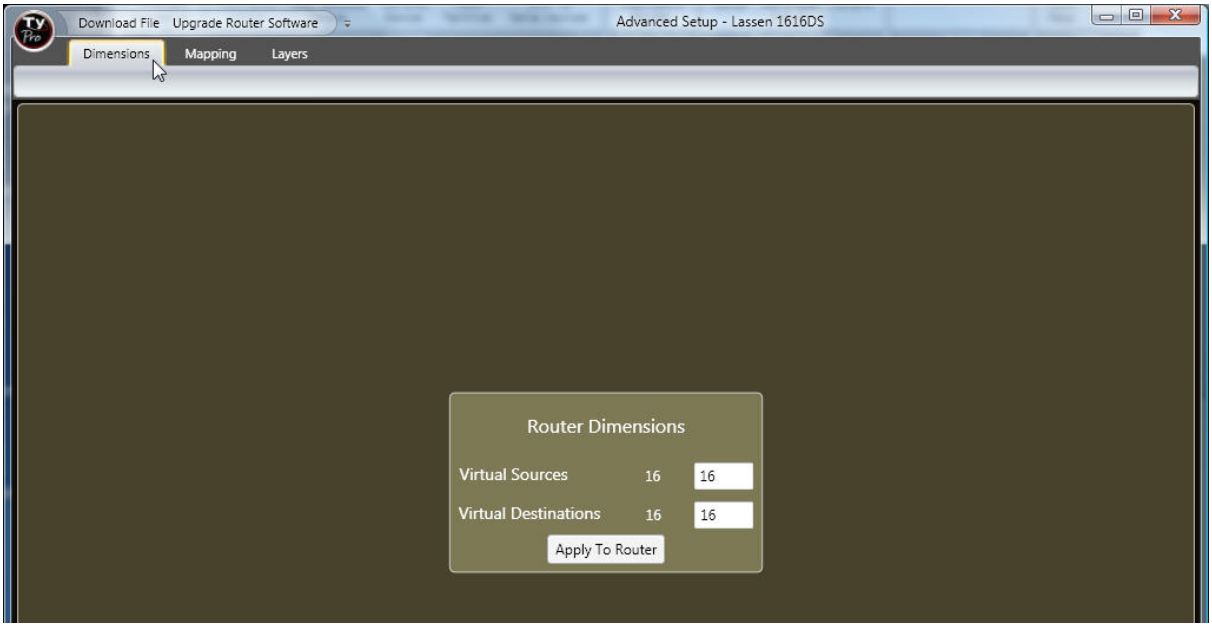
The Advanced Setup window contains functions that can cause the router to operate incorrectly or to not operate at all.
Any changes made to this window should be made with the assistance of a Sierra Video technician.

The following sections apply to setting up the router's Mapping.

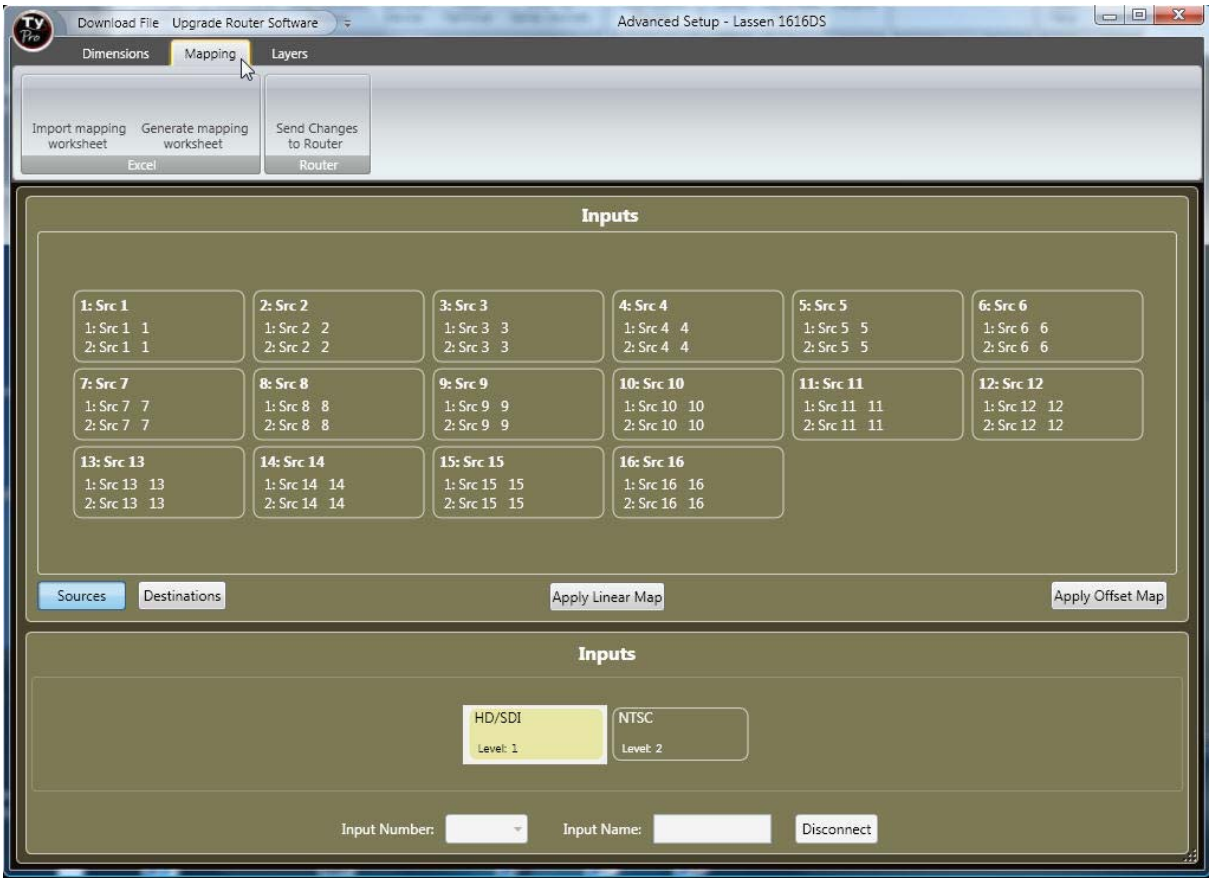
Access to these features are available by selecting the router icon in the Device Map tab and pressing "Ctrl/W" on the keyboard.



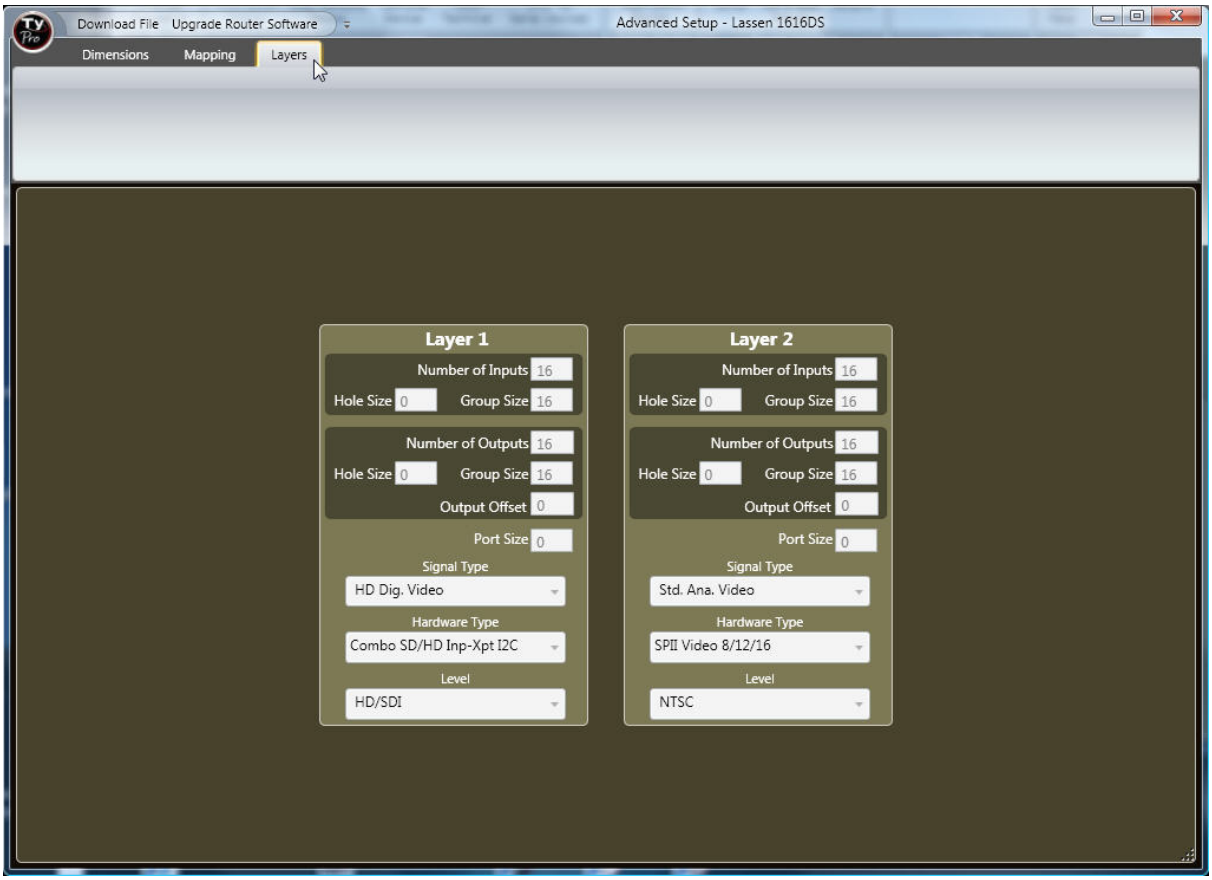
Select "Advanced Setup" from the menu bar to access the Advanced Setup window.



The "Dimensions" tab displays the current router size allowing entry of new dimensions (see following sections).



The "Mapping" tab displays the current "virtual" I/O verses the connector number related to the virtual I/O.
This screen allows changes to the router's mapping tables



The "Layers" tab displays the layer/level configuration of the router. This is a "read-only" screen and does not allow changes to the router.

4.5.9.1 Mapping

Mapping

Overview

Sierra Video routers are shipped configured as “linear mapped”. That is, all levels switch at the same time when an I/O is selected.

The term *one-to-one mapping,* or *linear mapping,* means that source 1 is assigned to physical input connector 1, source 2 to connector 2, etc. This is the default mapping that is shipped with each Sierra router. If one-to-one mapping is adequate, you do not need to follow the instructions in this section for setting the mapping tables.

In non-mapped (linear mapped) Sierra routers, when a control panel or control program calls for a connection, or “take”, from source 3 to destination 18, this means that the signal going to the physical input connector labeled “3” is to be connected to the physical output connector labeled “18”.

Sierra Video routers offer the option of “Virtual Mapping”. In virtual-mapped Sierra routers, a mapping table stands between the control panel “take” request, and the physical connectors that are switched. Its purpose is to give the user more flexibility in the way signals are connected to the router, and the way numbers are assigned to the signals by the router.

Source and destination names (virtual names) apply to all levels. That is, you cannot give different names to a given source on each level. You can only give it a single name that must apply to all levels. Think of *(virtual)* source names as names given to source numbers, and think of *(virtual)* destination names as names given to destination numbers. *Input and output names may be different on each level.* That is, an input may be given one name on level 1, and an entirely different name on level 2. Think of input names as names given to *input connectors,* and output names as names given to *output connectors.*

Often, an input's name will be the same on all levels, and likewise for an output's name. Furthermore, it will often be the case that a *source's name* will be the same as the name of the *input it is mapped to*, and likewise for destination names. However, it's your choice.

A user typically controls a routing switcher by using a control panel to enter and view destination, source, input and output *names and numbers*. Below is a summery of the typical process a user would go through to examine and take a destination using a control panel:

1. Destinations are shown and selected by the user using the *destination name and/or the destination number*. The physical output number that the destination maps to, or its name, *is not shown on the control panel.*
2. The crosspoint status of a destination is *usually* shown using the *physical input names and/or numbers on each level.* There are two reasons why the virtual source names/numbers are not used: (a) source names apply to all levels, while input names can be different on each level, and it is often important when displaying status to be able to see different names on each level; (b) if *multiple mapping* is used, displaying the input name rather than the source name reduces confusion by showing the actual physical signal name, which will be the same for two *different* source names with multiple mapping. Because names are often the same on all levels, and the same for a source and its mapped input, it will often be the case that if source names had been displayed instead, they would be the same.
3. Some control panels allow the crosspoint status of a destination to be viewed using source names and/or numbers rather than input names/numbers. The SCP series of control panels can be set to show status in either form (source names or input names). It is user selectable when programming the control panel using the SVS GRIP router control software.
4. Takes are composed by the user using *either source* or *input names, or source numbers.* A user may enter either a source name or an input name or a source number for each level of the *take* he is composing. An entered name is looked up in both the source and input name tables, to locate the source number to use for the take. If the name is found in the input name table, the *first source* that is mapped to that input is used. The behavior is slightly different depending on whether he is composing an all-levels (AFV) take, or a breakaway take. If an all-levels take is being composed, the name is first looked up in the *source name table,* and if not found, the *input name table is searched for the name.* If a breakaway take is being composed, the search order is just the opposite, with the input name table searched first, and then the source name table. In many cases the search order would make no difference, because the same names are used for source and its mapped input.

The number of sources and destinations in a Sierra virtual-mapped router can be configured by the user. It can be many more than the physical size of the router, which can be useful in different ways.

There are many uses for virtual mapping, such as:

1. Virtual sources can be mapped in such a way as to permit an all-levels take of that source to accomplish what would previously have to have been done with a breakaway take. You could map some virtual sources on all levels, while mapping others on only a few levels, and leaving other levels unmapped. This permits doing all-level takes that affect only some levels.
2. You may wish to keep all the signals from one type of machine grouped together in the same group of source or destination numbers, and yet you may want to have the flexibility to add more of these signals at a later time without having to move a lot of signals from one connector to another. Suppose that VTR1-VTR8 are assigned to input connectors 1-8, and CAM1-CAM12 are assigned to input connectors 9-20. The mapping table is set up so that sources 1-8 are VTR1-VTR8, and sources 9-20 are CAM1-CAM12. Later on, you add VTR9, and you want to make it be source 9, and make CAM1-CAM12 be sources 10-21. But at the same time you do not want to have to move

all the connectors CAM1-CAM12 down one. You could put VTR9 on input connector 21, and map source 9 to input 21. You would have to change the mapping of sources 10-21 so that they mapped to inputs 9-20.

3. In partially-stuffed routers with holes, mapping allows the holes to be “mapped away”, so that control panels see one continuous set of sources or destinations.
4. Two separate levels can be “joined together” into one level, by mapping first one level, then the other, to successive sources or destinations. For example, suppose you have two levels, each 16x16. Sources 1-16 could be mapped to level 1 inputs 1-16 with level 2 unmapped. Sources 17-32 could be mapped to level 2 inputs 1-16 with level 1 unmapped. Likewise for destinations. You would not be able to connect source 1 to destination 17, for example, but you could connect any source 1-16 to any destination 1-16, or any source 17-32 to any destination 17-32. You would not have to concern yourself with levels.
5. A more complete join of two levels could be done by cabling inputs of the two levels together. For example, if you had a router with two 64x64 analog video levels, you could connect 64 inputs to the first level and then cable them in parallel to the second level also, so that both levels received the same 64 inputs. Then, you could map destinations 1-64 to level 1 outputs 1-64, and destinations 65-128 to level 2 outputs 1-64. You would end up with a 64x128 single-level router.
6. One source could be mapped on all levels, while another one might be mapped only on audio levels. The first would be used to set up all levels of a destination, while the second would be used to change the audio while leaving the video unchanged. An all-levels take could be done with the second source, yet only the audio levels would change. Note that this is a use of multiple mapping.
7. If one level is a machine control level, you can selectively map that level only for those sources or destinations where you want machine control routing to take place.
8. Some signals may include video but not audio, or vice-versa. For these signals, mapping table entries can be unmapped on those levels where there is no signal. Router inputs and outputs need not be wasted. For example, if output 17 is used for a monitor’s video signal on level 1 and for a totally unrelated audio signal on level 2, separate destinations can be mapped to each level, permitting all-level takes of the MON that don’t affect the audio level, and vice-versa.

Offset Mapping

The most simple and common form of virtual mapping is to separate signal types. This is referred to as "offset" mapping. An example of this would be a 16x16 two level router. Level 1 being digital video and level 2 as analog video. Since selecting source 1 to destination 1 will switch both the digital and analog signals connected to connector 1, a "break-away switch must be made if only the digital video level is what is desired to switch.

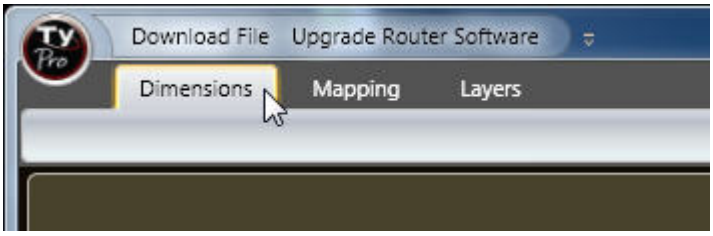
The router can be "mapped" to operate as a 32x32 router with I/O's 1 thru 16 as digital video and I/O's 17 thru 32 as analog video.

TyLinx Pro provides a simple method to accomplish this.

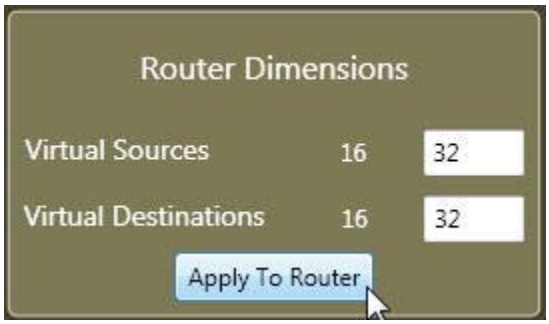
The following examples are for a 16x16 two level router, level 1 being digital video and level 2 as analog video.

The first step is to expand the router size.

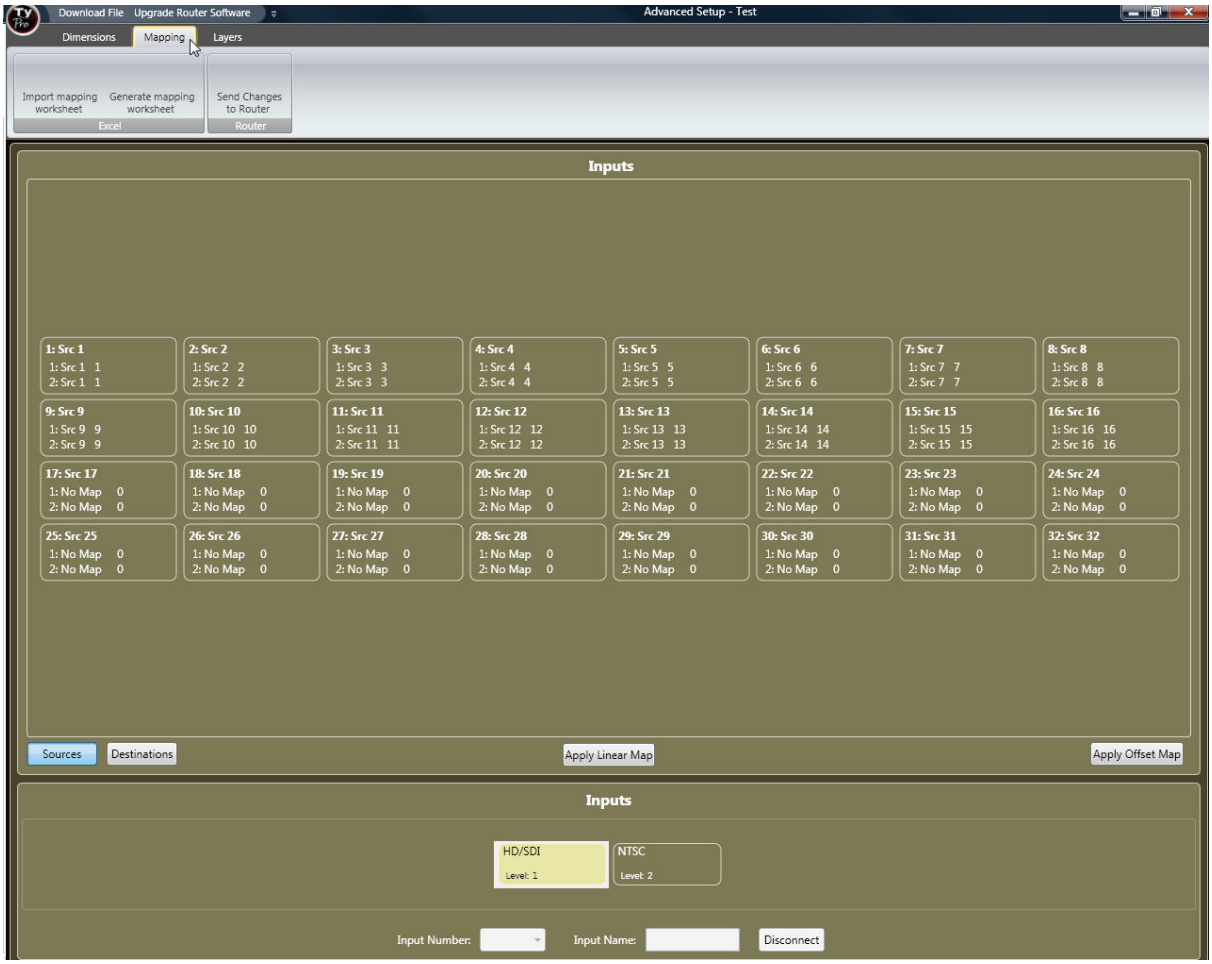
Select the "Dimensions" tab from the menu bar.



Enter the Virtual size the router is to be and select "Apply To Router".

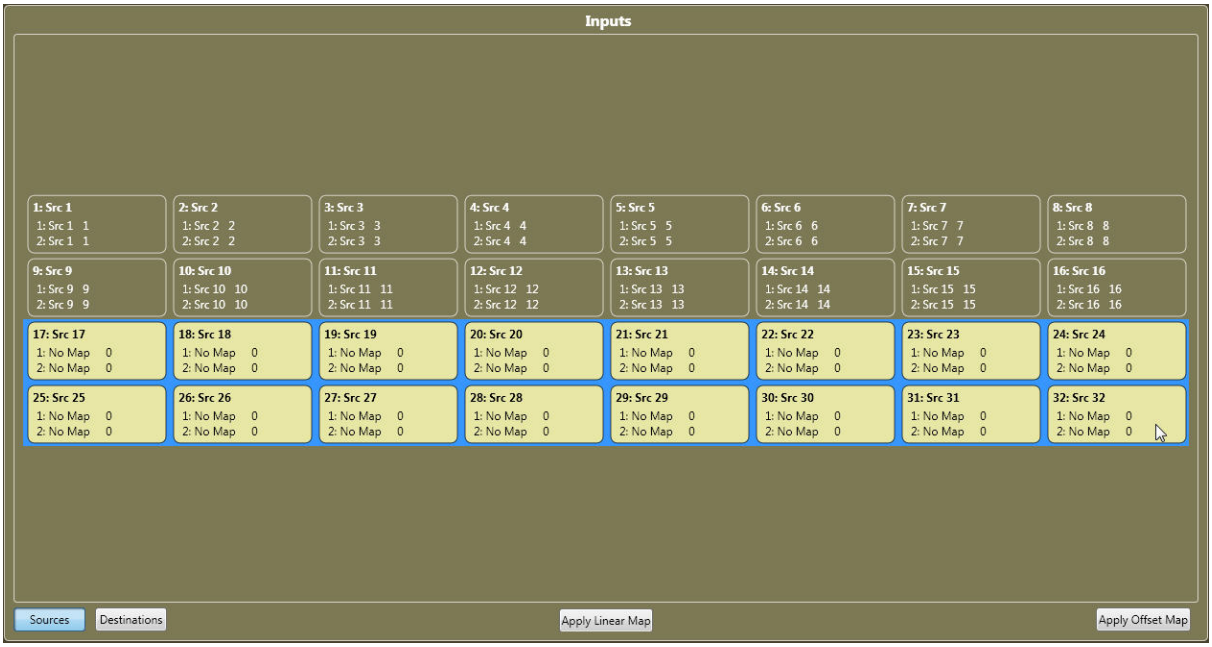


Then select the "Mapping" tab from the menu bar.



Select sources to offset.

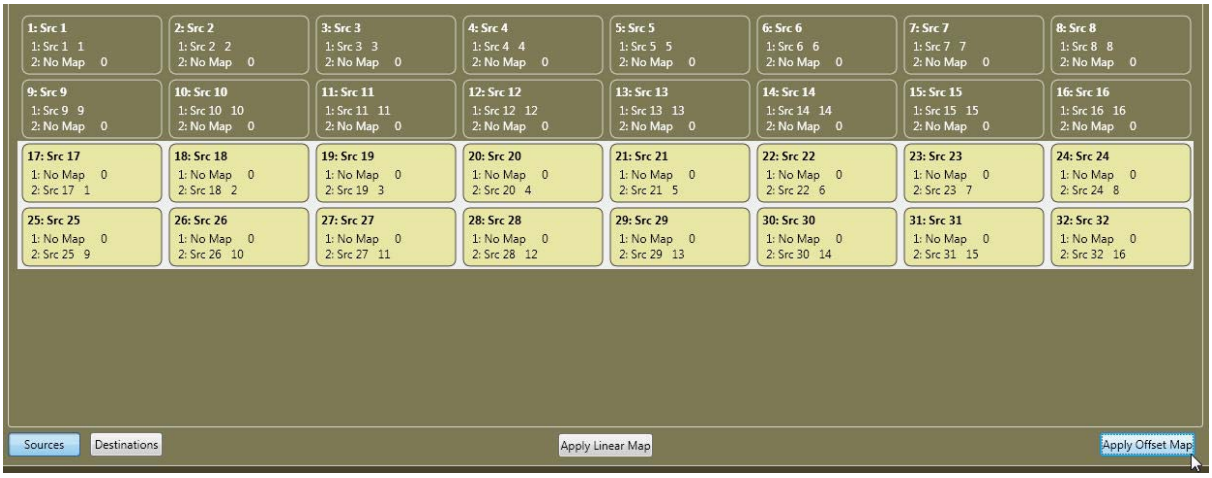
Highlight the sources you want to offset map.



Select the level(s) to to offset.

Press "Apply Offset Map".

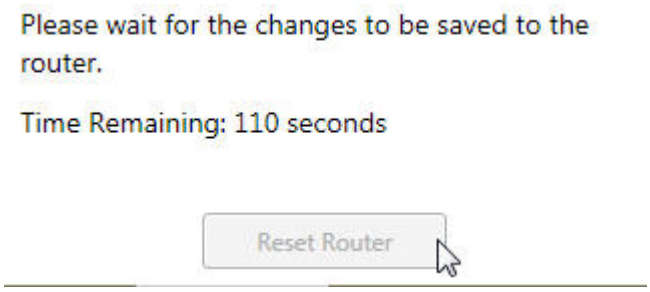
After applying offset map you will see the connector numbers change in the mapping table.



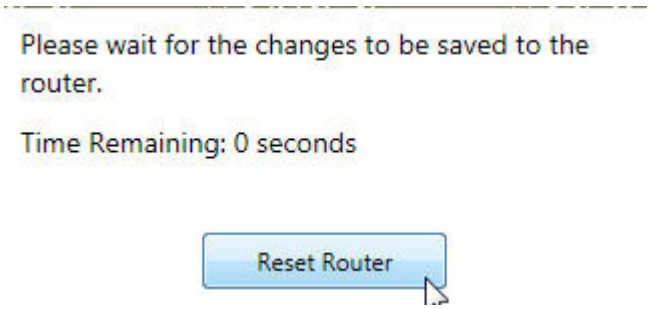
Repeat the process for the destinations.

When complete, press "Send Changes to Router".

A countdown window will appear while changes are sent.



When the countdown is complete, press "Reset Router" to store the changes in the router.



The router will reset and mapping will be complete.

The router is now configured to a virtual size of 32x32. The first 16 I/Os are digital video followed by I/Os 17 through 32 as analog video.

This allows for the operators to separate, by switching, the signal types without doing a “break-away” switch.

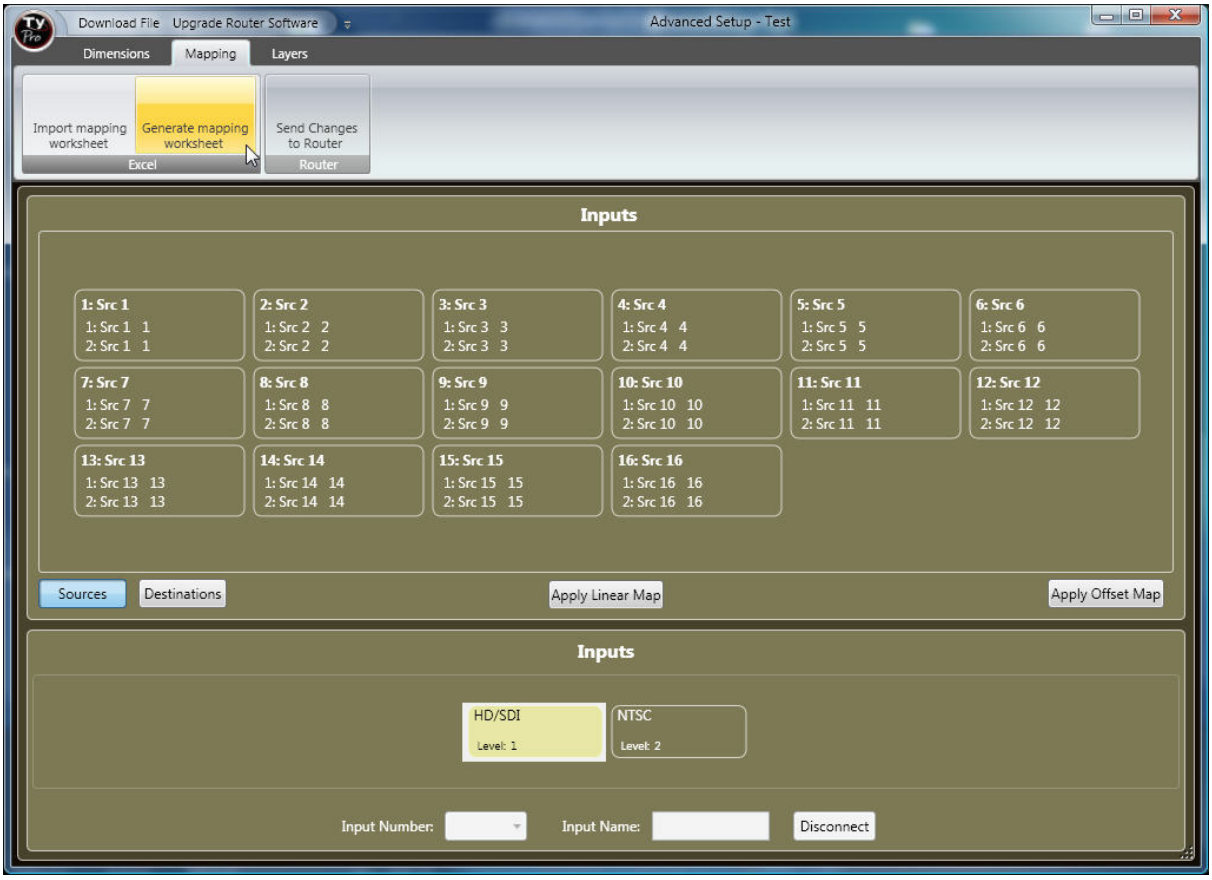
The two signal types will always switch separately.

Complex Router Mapping

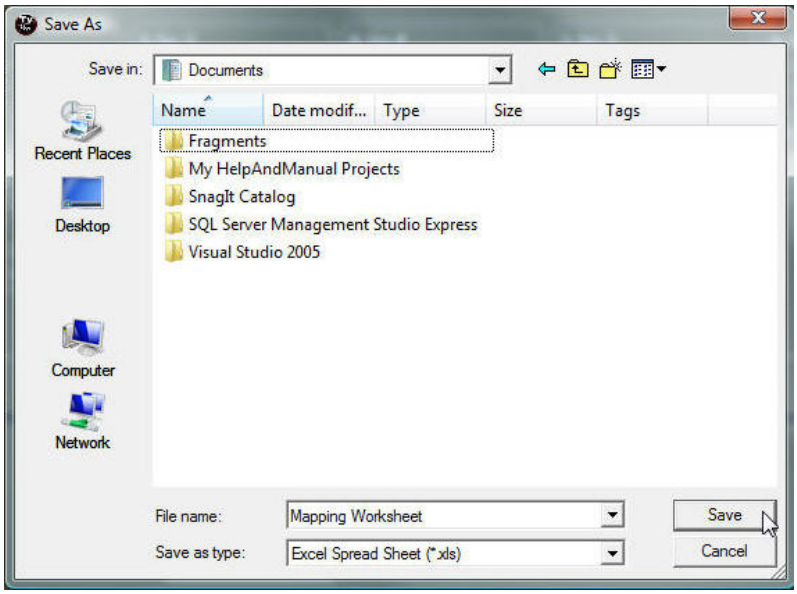
When a mapping scheme is required more complex than simple offset mapping. It is possible with

TyLinx Pro to generate a excel " Mapping Worksheet" that can be filled out and sent to the router.

From the Mapping tab, select "Generate Mapping Worksheet".



A windows "Save As" dialog box will appear. Enter a name and save.



Open the worksheet and you will see the current mapping and names in your router.

Router Sources					
Virtual Names		Level 1	16	Level 2	16
I/O	Sources	HD/SDI	Conn #	NTSC	Conn #
1	Src 1	Src 1	1	Src 1	1
2	Src 2	Src 2	2	Src 2	2
3	Src 3	Src 3	3	Src 3	3
4	Src 4	Src 4	4	Src 4	4
5	Src 5	Src 5	5	Src 5	5
6	Src 6	Src 6	6	Src 6	6
7	Src 7	Src 7	7	Src 7	7
8	Src 8	Src 8	8	Src 8	8
9	Src 9	Src 9	9	Src 9	9
10	Src 10	Src 10	10	Src 10	10
11	Src 11	Src 11	11	Src 11	11
12	Src 12	Src 12	12	Src 12	12
13	Src 13	Src 13	13	Src 13	13
14	Src 14	Src 14	14	Src 14	14
15	Src 15	Src 15	15	Src 15	15
16	Src 16	Src 16	16	Src 16	16

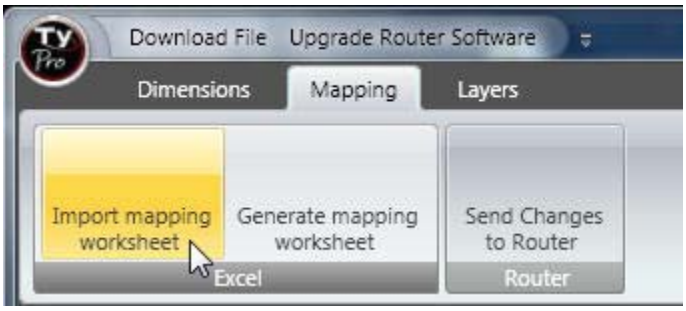
Router Destinations					
Virtual Names		Level 1	16	Level 2	16
I/O	Destinations	HD/SDI	Conn #	NTSC	Conn #
1	Dst 1	Dst 1	1	Dst 1	1
2	Dst 2	Dst 2	2	Dst 2	2
3	Dst 3	Dst 3	3	Dst 3	3
4	Dst 4	Dst 4	4	Dst 4	4
5	Dst 5	Dst 5	5	Dst 5	5
6	Dst 6	Dst 6	6	Dst 6	6
7	Dst 7	Dst 7	7	Dst 7	7
8	Dst 8	Dst 8	8	Dst 8	8
9	Dst 9	Dst 9	9	Dst 9	9
10	Dst 10	Dst 10	10	Dst 10	10
11	Dst 11	Dst 11	11	Dst 11	11
12	Dst 12	Dst 12	12	Dst 12	12
13	Dst 13	Dst 13	13	Dst 13	13
14	Dst 14	Dst 14	14	Dst 14	14
15	Dst 15	Dst 15	15	Dst 15	15
16	Dst 16	Dst 16	16	Dst 16	16

Enter connector numbers and names as desired.

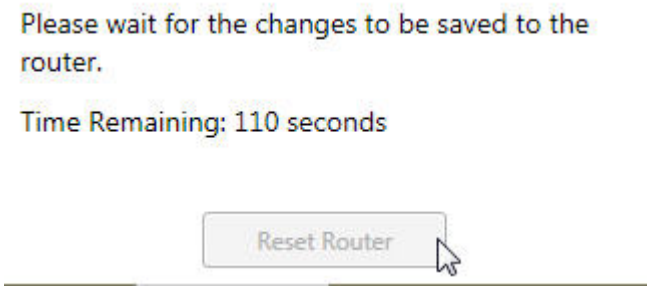
Adding rows will automatically change the virtual size of the router.

When complete, save and close worksheet.

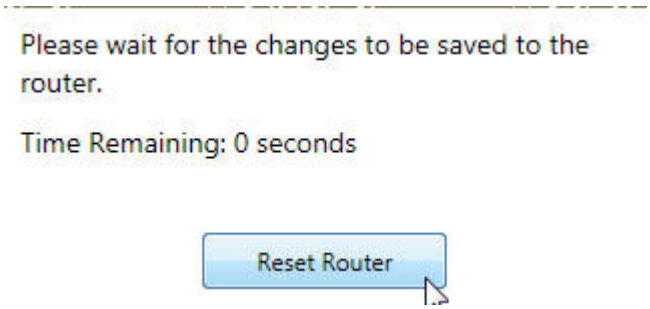
From the Mapping tab, select "Import Mapping Worksheet"



A countdown window will appear while changes are sent.



When the countdown is complete, press "Reset Router" to store the changes in the router.



The router will reset and mapping will be complete.

Mapping Examples

In this example the M-100 supports both analog and digital signals therefore both levels are switched together. VTR-1 is analog only. When VTR-1 is selected only the analog level (level 1) will be changed.

Overlapping Offset mapped router

		Router Sources			
Virtual Names		Level 1 8x8		Level 2 8x8	
I/O	Source	Analog Video	Conn #	Digital Video	Conn #

1	M-100	M-100	1	M-100	1
2	VTR 1	VTR 1	2		0
3	VTR 2	VTR 2	3		0
4	VTR 3	VTR 3	4		0
5	VTR 4	VTR 4	5		0
6	VTR 5	VTR 5	6		0
7	VTR 6	VTR 6	7		0
8	VTR 7	VTR 7	8		0
9	DIG 1		0	DIG 1	2
10	DIG 2		0	DIG 2	3
11	DIG 3		0	DIG 3	4
12	DIG 4		0	DIG 4	5
13	DIG 5		0	DIG 5	6
14	DIG 6		0	DIG 6	7
15	DIG 7		0	DIG 7	8

In this example there are mixed signal formats (audio and video). By mapping this way, when you select CD 1 only the audio level of the CD is switched. VTR 1 accepts both audio and video, therefore both levels are switched.

Mixed format mapping

		Router Sources			
Virtual Names		Level 1 8x8		Level 2 8x8	
I/O	Sources	Video	Conn #	Audio	Conn #
1	M-100	M-100	1	M-100	1
2	VTR 1	VTR 1	2	VTR 1	2
3	VTR 2	VTR 2	3	VTR 2	3
4	VTR 3	VTR 3	4	VTR 3	4
5	VTR 4	VTR 4	5	VTR 4	5
6	CG 1	CG 1	6		0
7	CD 1		0	CD 1	6

8	TBC 1	TBC 1	7		0
9	DVD 1	DVD 1	8	DVD 1	7
10	Audio Rm		0	Audio Rm	8

4.6 Control Panels

Control Panels

Overview

This section applies to **all** control panels using RS-485 (3 pin mini XLR connector) communication.

Tylinx Pro configures the router for control panels and programs the buttons on the SCP series programmable control panels.

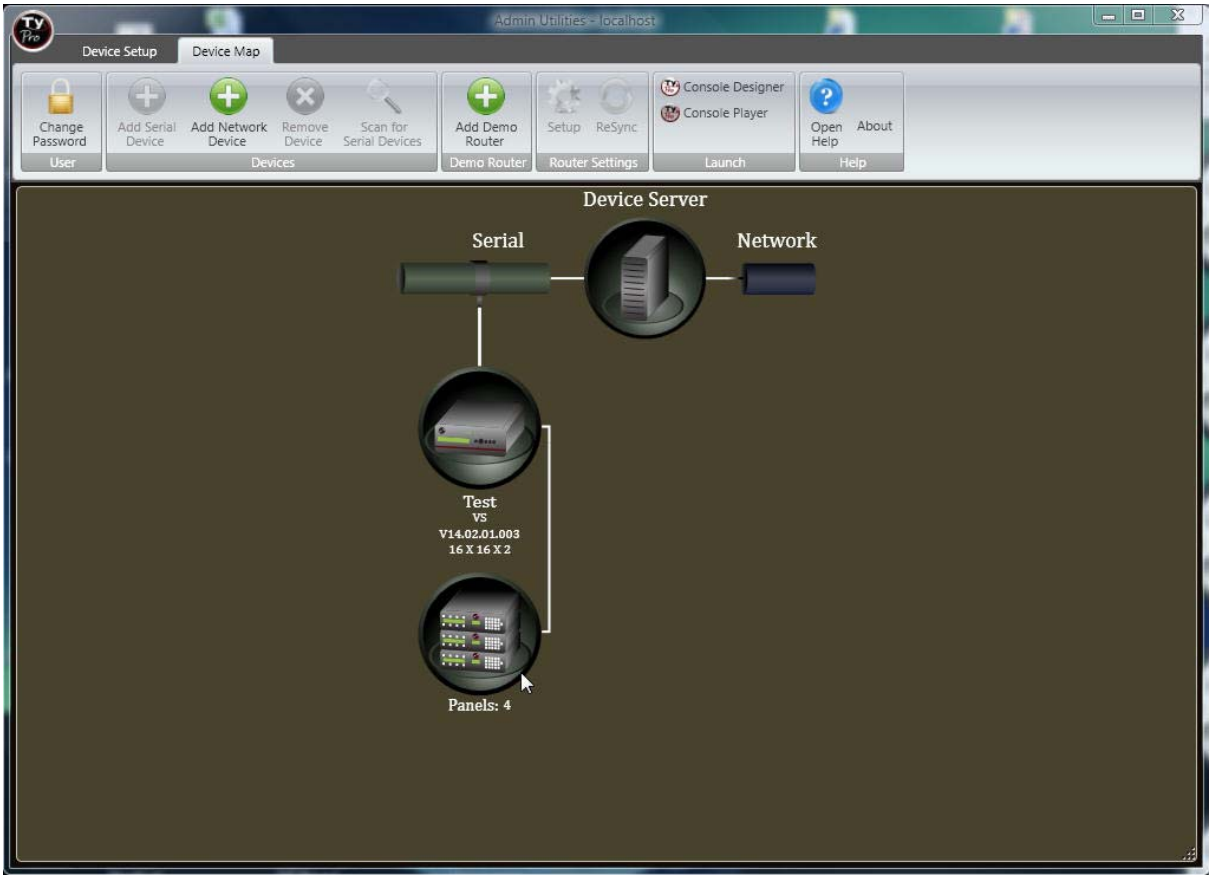
A Router Is Only As Good As Its Control System...
A good control system is reliable, yet flexible enough to allow the switcher to be controlled in a variety of ways. It will allow the use of a large number of different control panels. Simple Push Button control panels to fully programmable panels customized to your individual installation can be configured with TyLinx Pro.

The physical network structure is RS-485 extended to accommodate a total of up to 64 panels (100 on some models) on a common bus of up to 5,000 feet. The Control System uses a serial protocol that allows for controlling video and audio levels, AFV, or breakaway. The panel network software is based on fast polling protocol, the most reliable software method for networking devices on a common bus. Control panels on the bus can never take over the bus. Instead, the polling master -- which also is the network interface to the routing switcher -- is always in control.

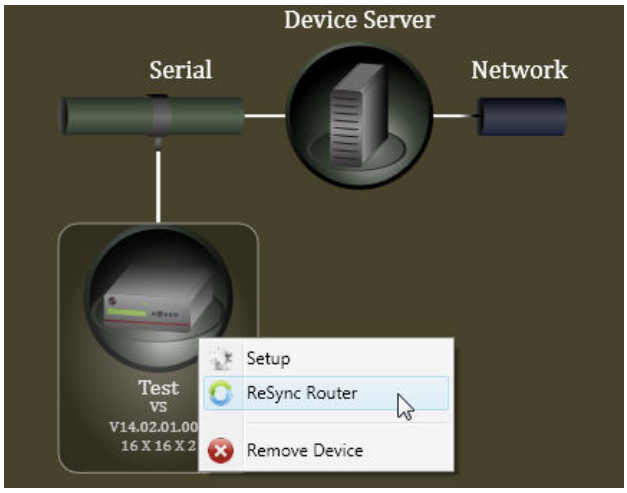
The Button per Input control panels come in a variety of configurations. These less complex and easy-to-use panels simply assign a single button to a single input. Single-Bus buttons are assignable to one output and any combination of levels; the single operation of pressing a switch selects the desired input. XY Matrix panels have two groups of switches: First press an OUTPUT button to enable the desired output, then use the row of IN or SOURCE Buttons to initiate the switch.

Configuring Control Panels

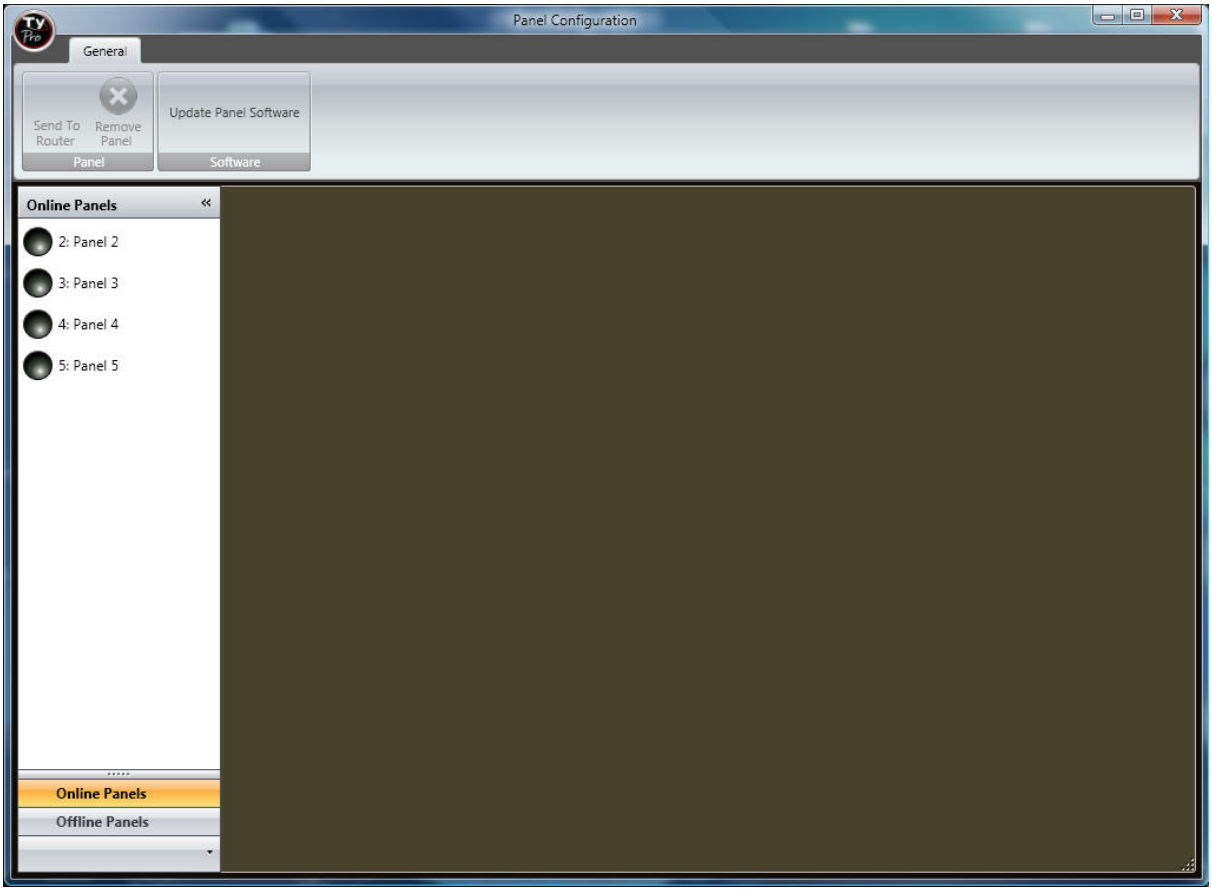
After retrieving the router's information a control panel icon will display on the "Device Map" window.



If control panels are added after the router's information is retrieved, select "ReSync" from the menu bar or right click on the router icon and select "ReSync Router".



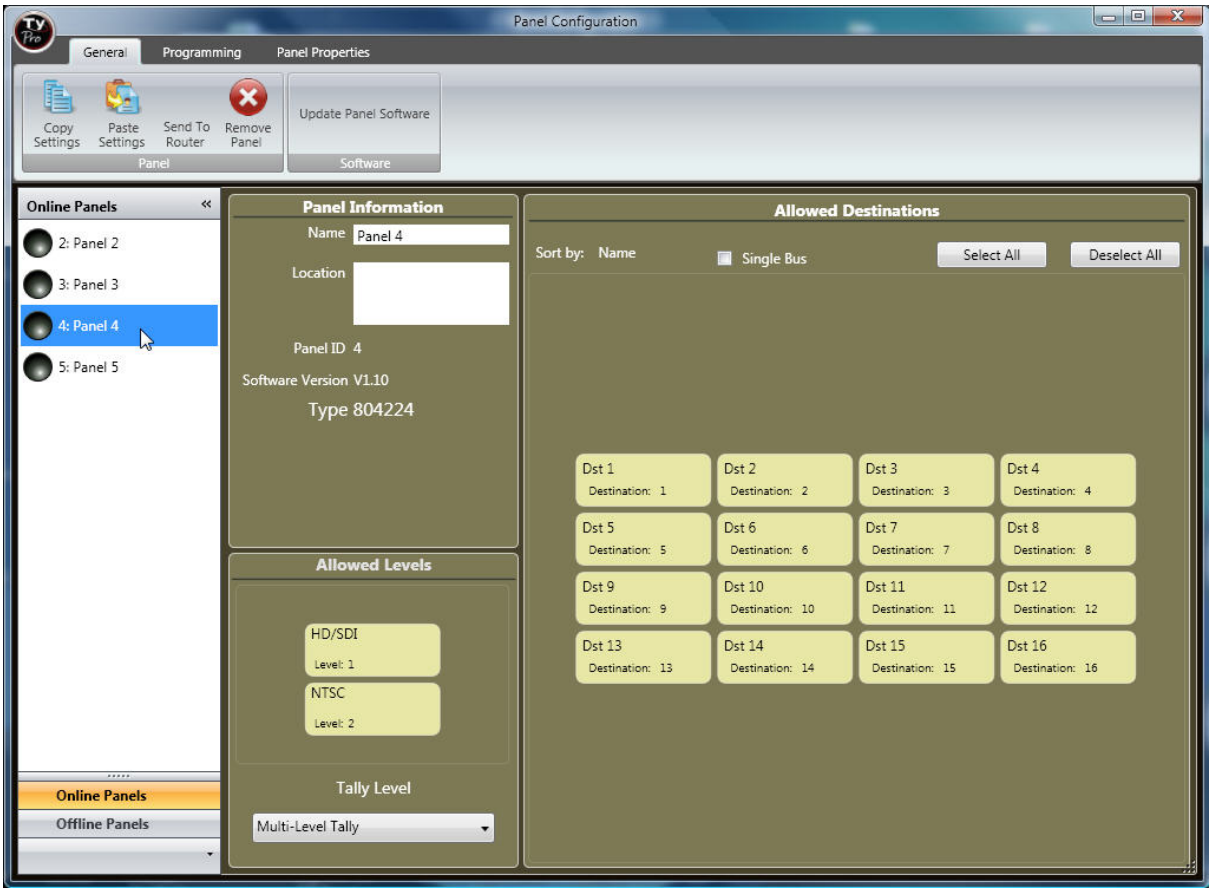
Double click on the Control Panel icon.



Then select a control panel from the left hand list. Default names for control panels are based on their specific ID number.

Each control panel must have its own unique ID number (see the specific control panel's manual for

details on setting ID numbers).



This window will indicate the control panel type, panel ID number, and software version.

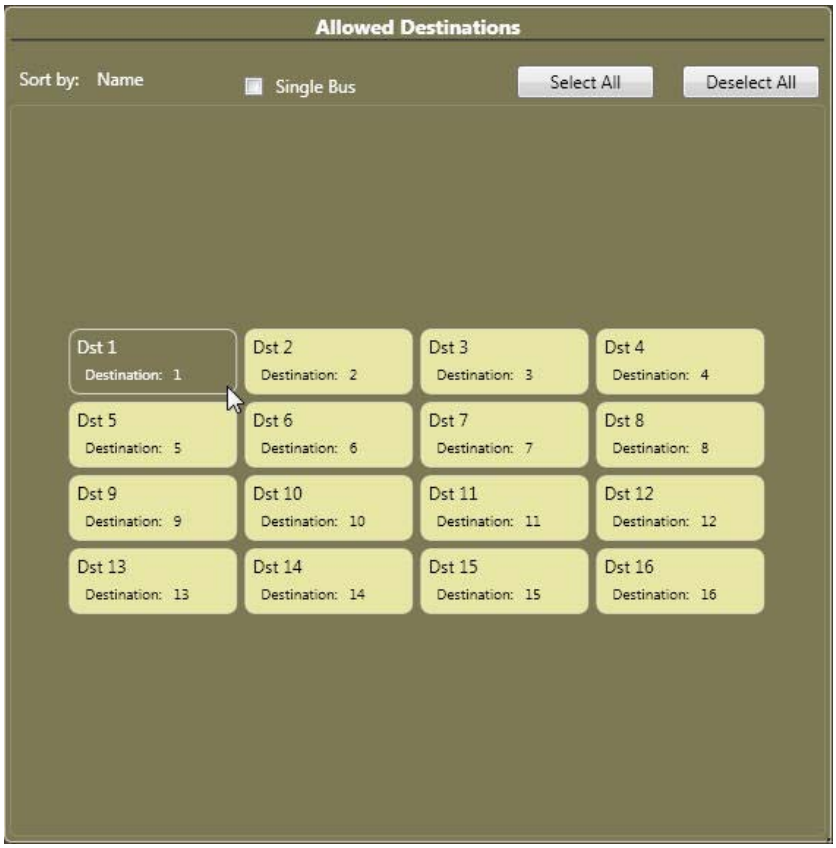
A control panel name and/or location can be entered (*not required).

Destinations and/or Levels can be blocked from control by a panel.

The output(s) the panel can control are selected by "toggling" the destination buttons on or off in the "Allowed Destinations" window.

Note:

Single bus panels can only control 1 destination.



All, or specific levels, can be controlled by a panel. Select the level(s) to be controlled by the panel by "toggling" the level buttons on or off in the "Allowed Levels" window.

The “Tally Level” selects which level a Pushbutton panel’s lamps will follow.

Select the Tally Level from the drop down list.

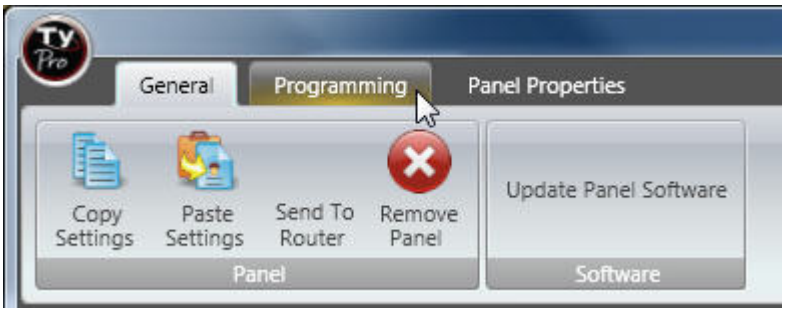
If this is a Single Bus control Panel, place a check in the "Single Bus" box.

Configuring Programmable (SCP) Control Panels

The SCP family of panels panels are designed to allow for maximum flexibility in the categorization of buttons. A button can have multiple functions depending how it is programmed and where the user is in the sequence of pushes. As an example, the first push on a Button could write “VTR” on the display. The second push on the same button could add a “1” to “VTR” as a suffix so we would see “VTR1” on the display. If another number programmed button were pushed, such as a 3, we could see “VTR13” on the display. The Second Push row would remain enabled until the “Shift”, “Clear”, or the “Take” button were selected and would force the panel into a different set of actions.

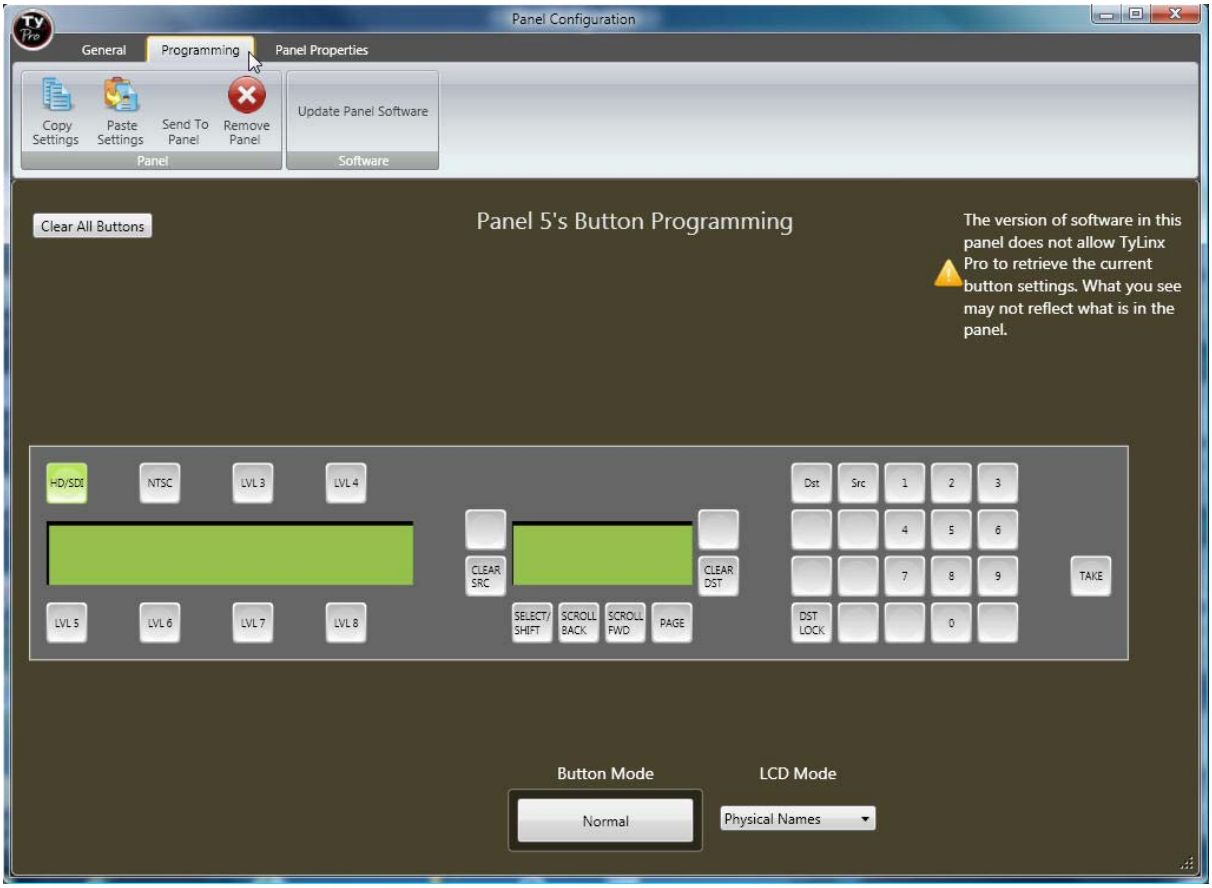
The Shift Push is similar to the Ctrl key on the PC, which allows different functions to be performed on the panel, such as toggling between “Alpha” and “Sort” on numerical values during a scroll function. All Buttons in the SCP line of control panels are soft key. That is, every key can be programmed. As an example, the SCP-112 can become a 12-button salvo panel, or only a 6 destinations and 6 sources control panel.

When SCP Programmable panels are selected, 2 extra tabs display on the menu bar.



Programming

Select the "Programming" tab.

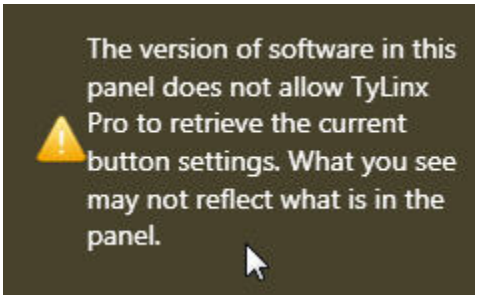


A graphical display of the selected panel will display. (This example is of an SCP-240 programmable panel.)

Some versions of control panel software allow TyLinx Pro to read the current programming of the

buttons on a panel. This does not necessarily mean you have out of date software.

If the version of software in your panel does not allow current button programming to be read the display will reflect the factory default settings of a panel and the following message will display on the upper right of the window.



Programming Buttons

There are 3 button modes for the panels;

Normal- The normal mode is the action that takes place when a button is pressed.

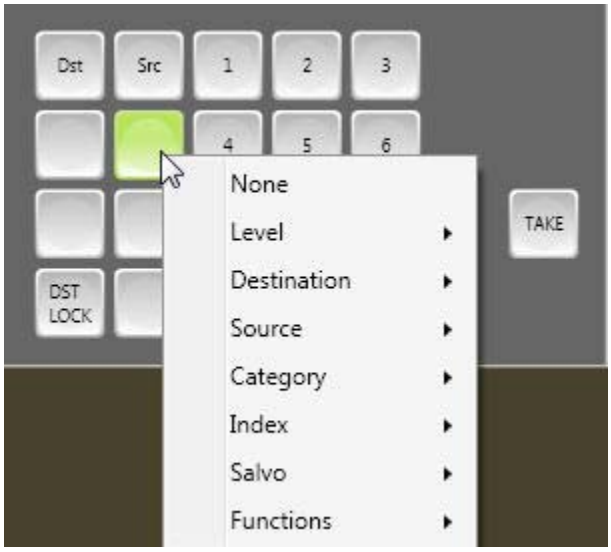
Shift- The shift mode is the action that takes place when a "Shift" button is programmed and held down. This is similar to a PC keyboard operation.

Special Push- The special push mode only applies the the SCP-112 panel. When “Special Push” is enabled the action of the button becomes the first push command with the “Normal” row of buttons becoming the subsequent commands until “Take”, “Select”, or “Clear” is pushed. "Special Push" is

enabled as the factory default.

Details of SCP control panel functions and programming can be found in the following sections.

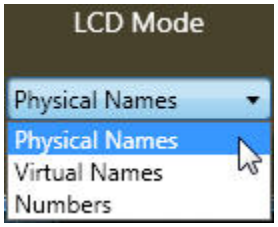
To program a button, place the mouse pointer over the button and right click.



Select from the drop down list and its sub menus the button programming desired.

LCD Mode

The LCD mode determins the "look" of the LCD display on the panel.



Physical Names- This will display the physical (or actual) names in the router. This should be used

when the individual names in a level differ from the virtual (switching) name.

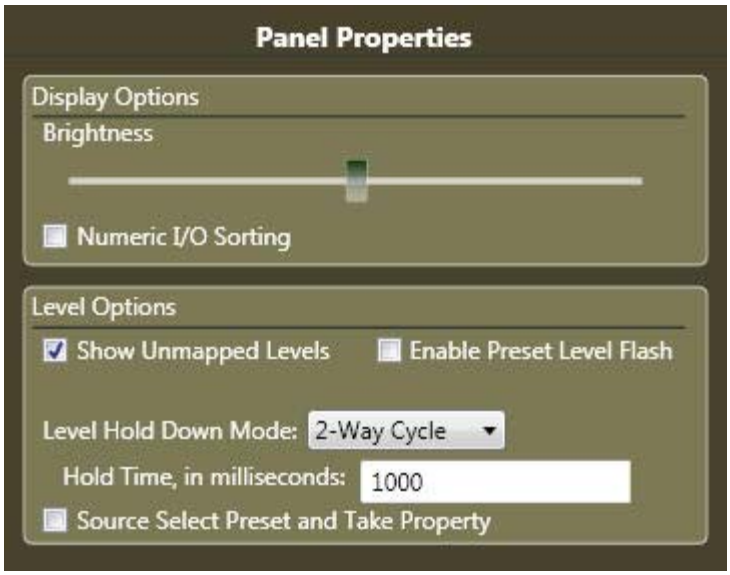
Virtual Names- This will display the virtual name that is used for switching an I/O.

Numbers- This will display the I/O number rather than the I/O name.

Panel Properties

Select the "Panel Properties" tab.

The Panel Properties window sets the "general" look and action of the panel.



Brightness- Controls the brightness of the LCD screen.

Numeric I/O Sorting- Unchecked I/Os are sorted alphanumerically, checked the I/Os are sorted in numeric order.

Show Unmapped Levels- In a mapped router the panel will display levels that are unmapped by displaying "Not Mapped" in the status. This will have no affect on the LCD display on mapped routers

and should be left checked.

Enable Preset Level Flash- When this box is checked, a level button that is preset to switch will flash. Unchecked the level button will steadily illuminate.

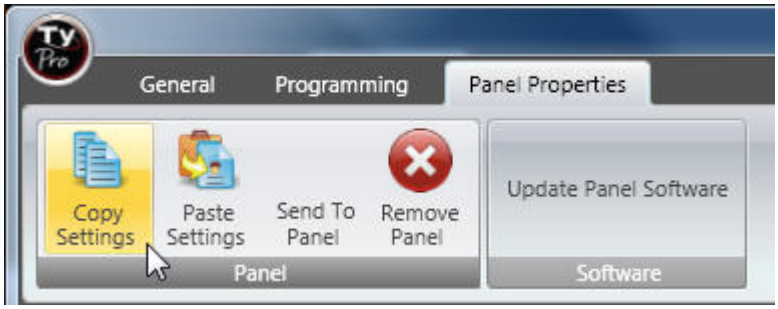
Level Hold Down Mode- The level hold down mode affects the response cycle of a level button when held down. Holding a level button can cycle the level enable from on and all others off, off and all others on, etc...

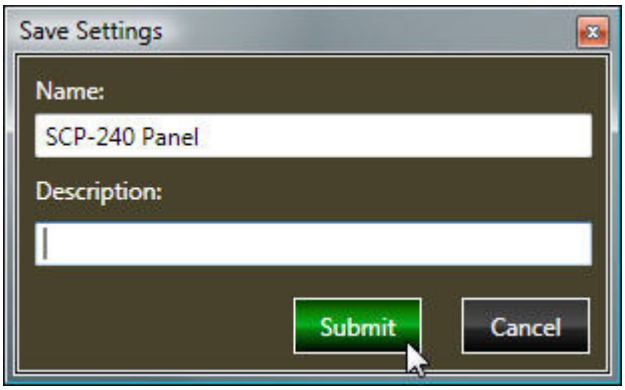
Source Select Preset and Take Property- When this box is checked a panel will "take" as soon as a valid source is entered eliminating the need to program a "Take" button.

When programming the panel is complete, click on "Send To Panel" to complete the process.

The panel programming can be copied to apply to a different panel in the future.

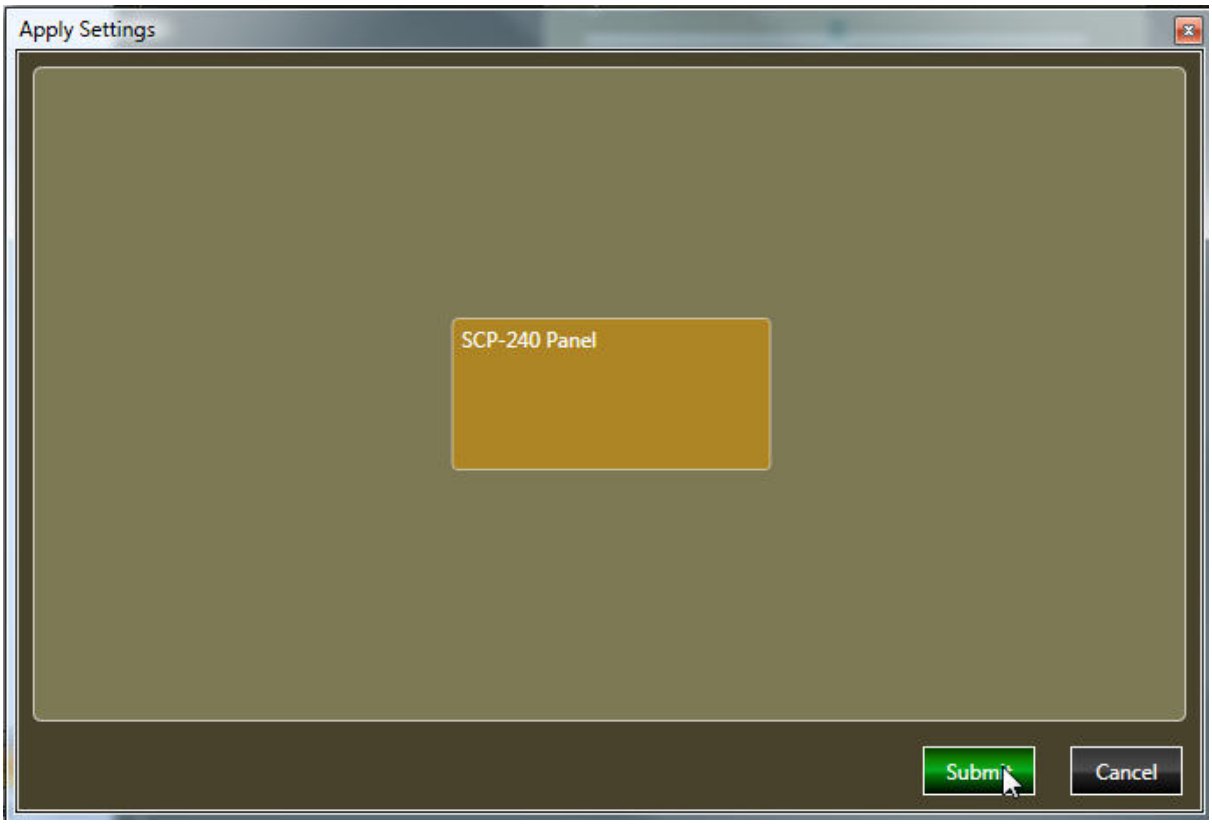
Select "Copy Settings" and enter a name and/or description, then select "Submit".





To retrieve the copied settings to apply to another panel, select "Paste Settings". Select the file to

paste and select "Submit".



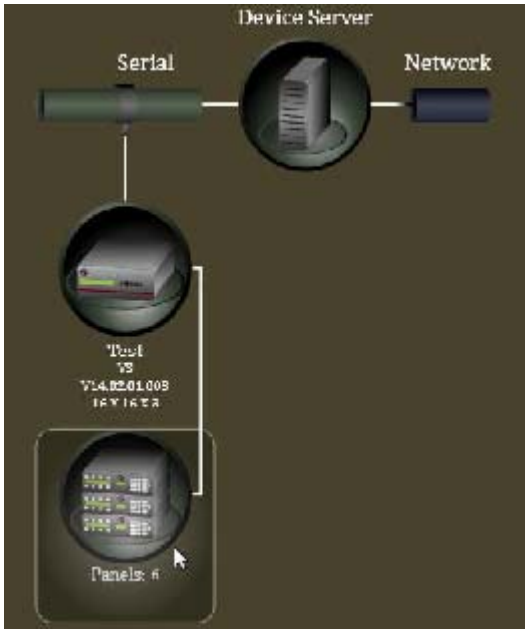
Send to Panel and the copied settings are complete.

4.6.1 SCP-20

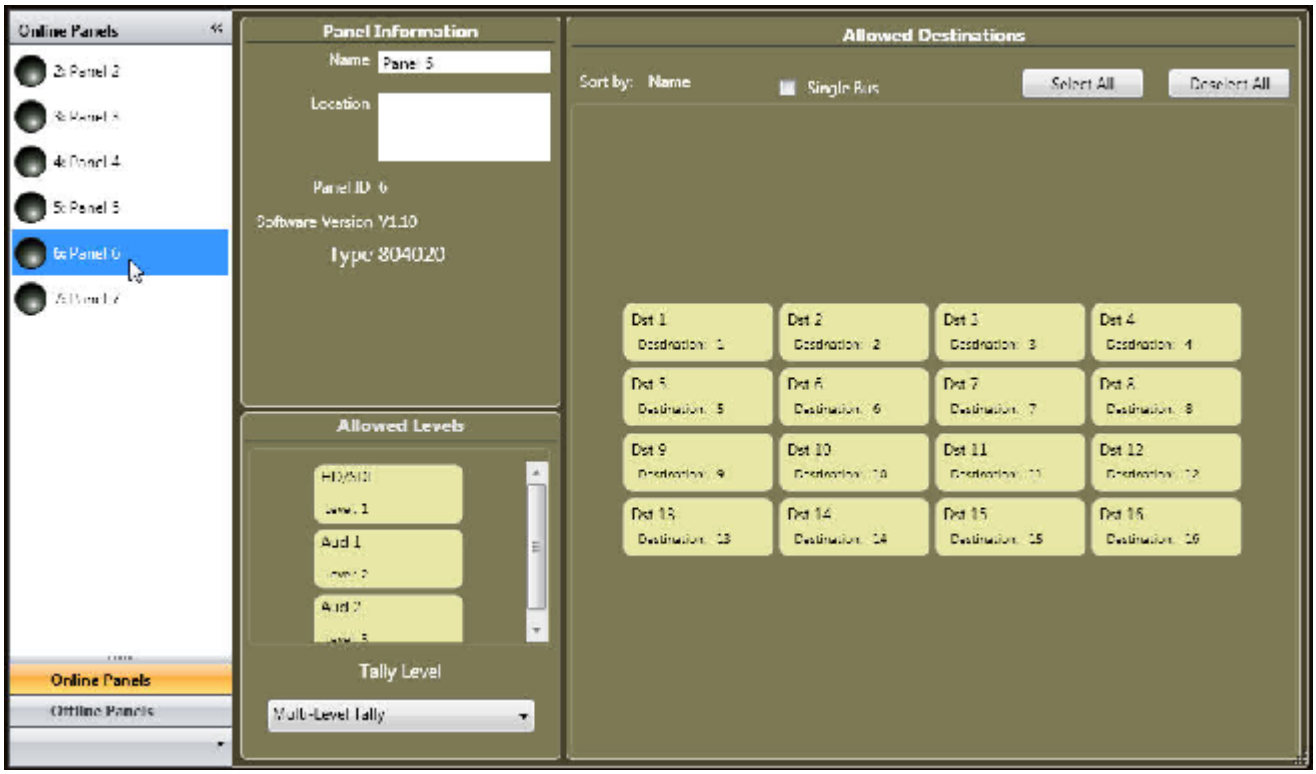
General Settings

The “General Settings” window is the first step to programming an SCP panel. The “General” window allows you to set the output(s) and level(s) you want the panel to control.

From the Device Map window on TyLinx Pro, double click on the control panel icon.



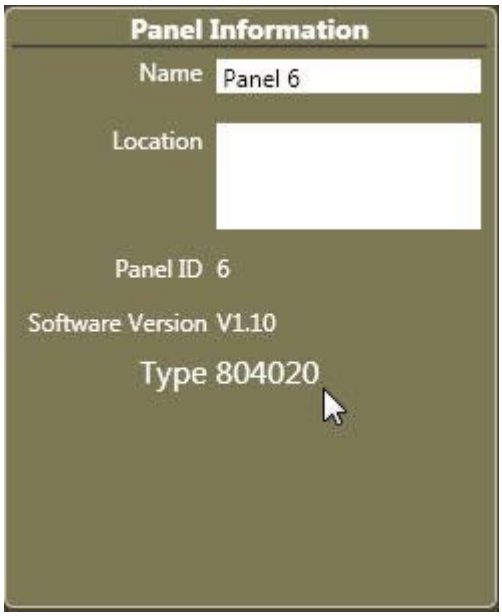
Select the Panel number (ID) of the SCP-20 panel you want to program.



Note:

The General Settings must be configured before proceeding to the Programming screen.

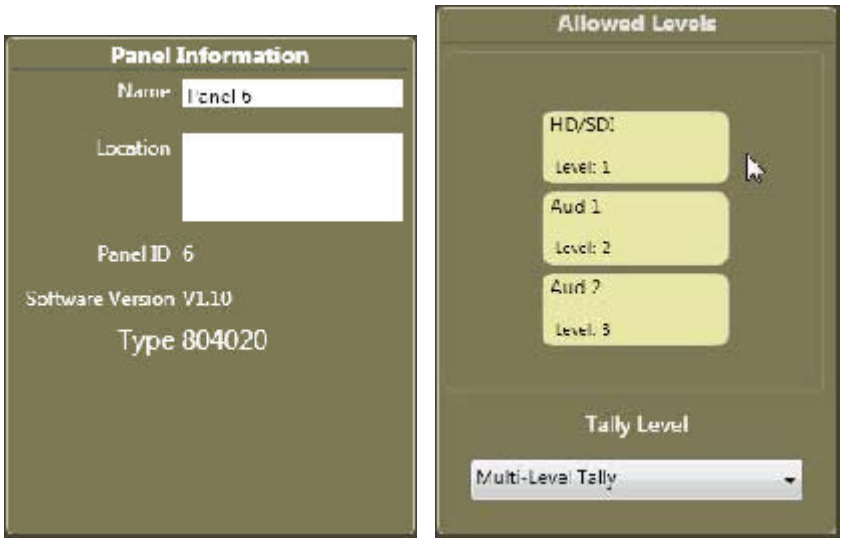
The "Panel Information" window will display the part number and software version of the selected panel. The SCP-20 panel's part number is 804020.



You can enter a panel name and/or location (optional).

Select the level(s) the panel is to control (toggle on and off).

Select the output(s) the panel is to control.

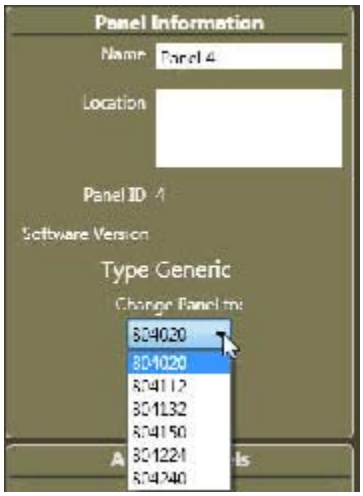


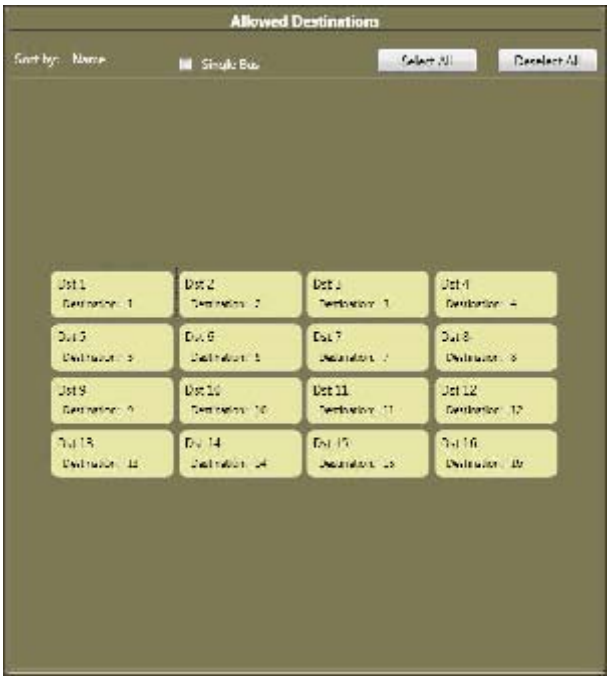
Note:

Some older versions of Control Panel software do not allow TyLinx Pro to identify the SCP control panel type.

If the SCP control panel you have selected is identified as "Type Generic" you may have an older version of software. Older versions of software may still be programmed.

Select the panel Type from the dropdown window under "Change Panel to:" and continue.





All control panels can have outputs blocked, this allows the control panel to status an output, but prevents the panel from selecting inputs on that output.

Select the outputs you want this panel to control.

Panels can also have levels blocked. “Enable/Disable” the levels you want this panel to control by clicking on the level boxes in the lower part of the screen.

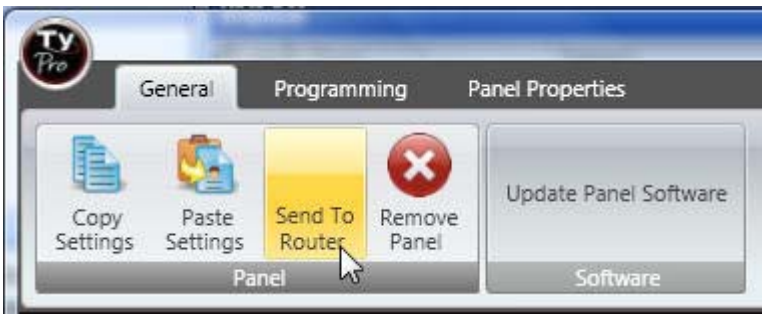
The “LED Tally Level” section does not apply to the SCP-20 control panel.

If the panel is to be a “Single Bus” (only controls 1 output), place a check in the “Single Bus” box.

Placing a check in the “Single Bus” box will cause the panel to only access and switch the single selected output.

If there is no check in the box and only one output is selected for the panel to control, the panel can status the blocked outputs but only switch the selected output.

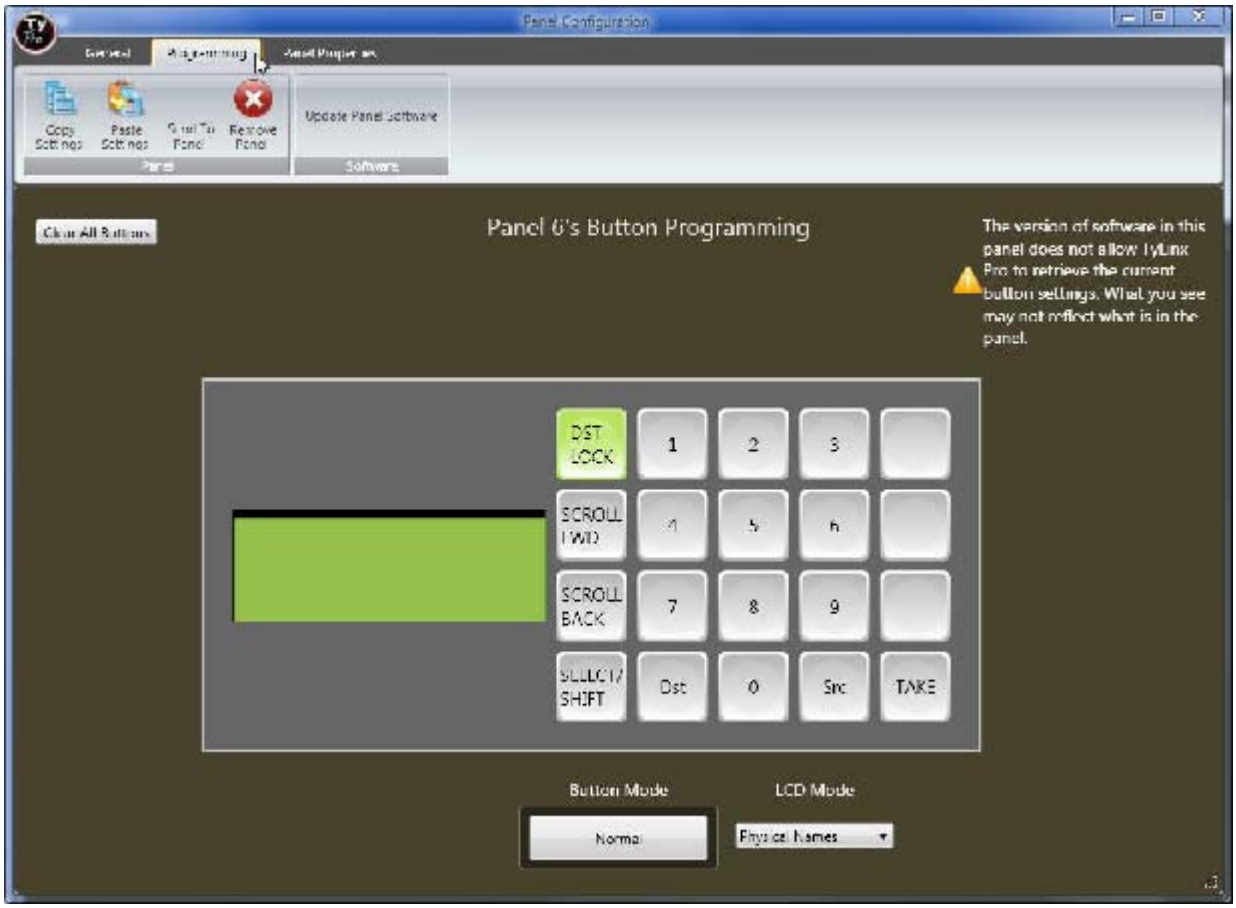
When selection of allowed outputs and levels is complete, click on “Send to Router”.



Programming Panel Buttons

Click on the “Programming” tab at the top of the window.

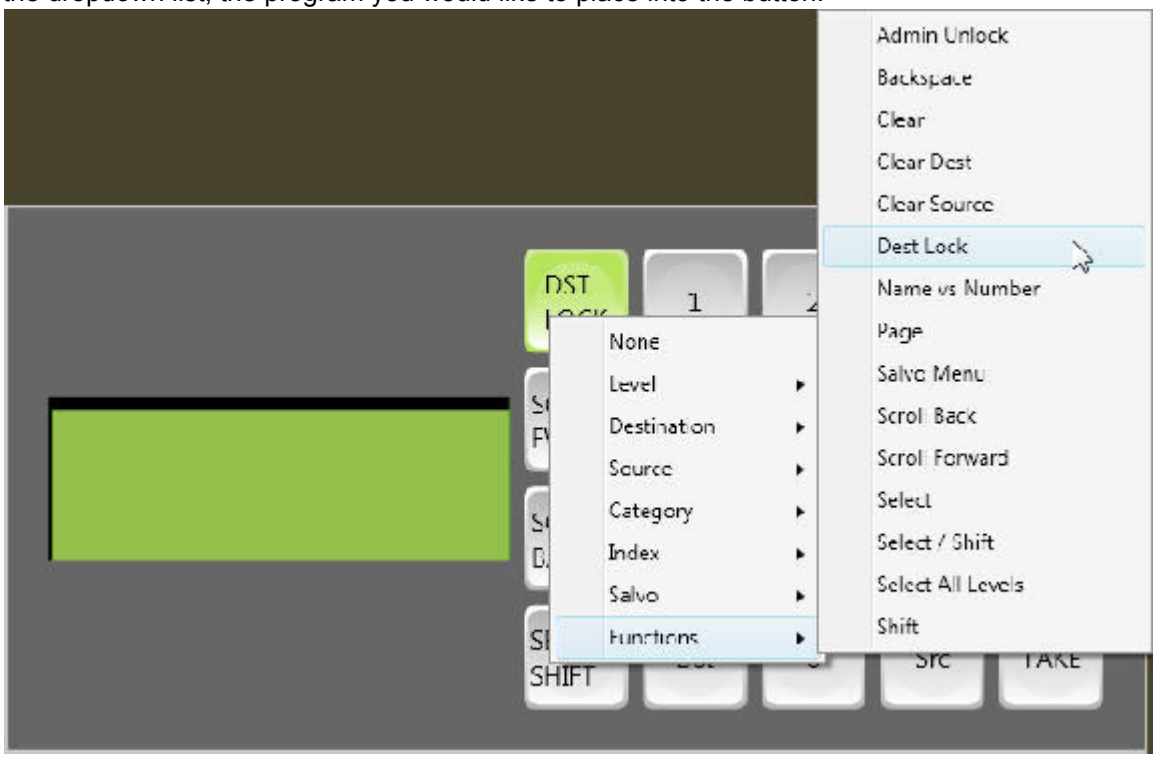
This will take you to the button programming window.



Note:

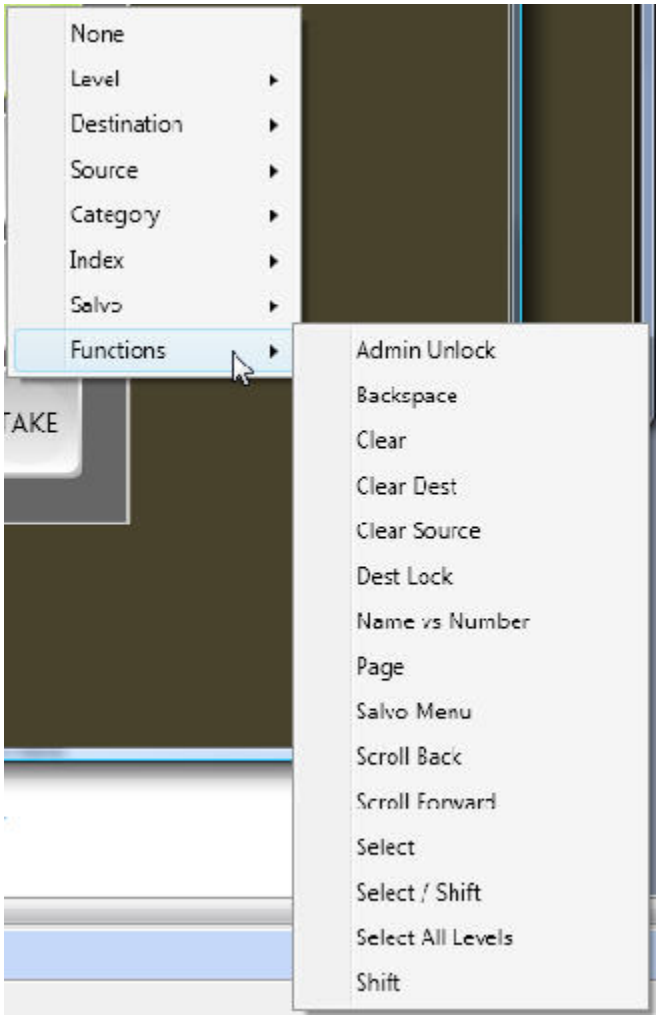
If your panel does not have software that does not allow TyLinx Pro to read the current programming of the buttons, this screen will reflect the factory default programming.

To program a button hover over the button with the mouse pointer, right click, and select from the dropdown list, the program you would like to place into the button.



Continue this process for each button you want to program.

Functions; This is a list of functions that can be applied to the panel buttons.



Admin Unlock- Unlocks selected destination. Overrides lock made by any user.

Backspace- Causes cursor to move back one character space.

Clear- Clears current entry.

Clear Dest- Clears destination entry and places the cursor in the destination field.

Clear Source- Clears source entry and places the cursor in the source field.

Dest Lock- Locks current destination from changing to another source.

Name vs Number- Toggles between Alpha and Numeric sort.

Page- Changes display to next page. If there are more levels than show in LCD display, Page will display next set of levels.

Salvo Menu- The “Salvo Menu” function will display the list of Salvos in the LCD of

the panel for selection.

Scroll Back- Causes lists to display from higher number to lower.

Scroll Forward- Causes lists to display from lower number to higher.

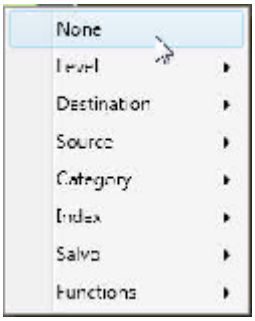
Select- Moves cursor.

Select/Shift- “Select/Shift” is a dual mode function. Pressing once is the “Select” function (moves cursor). Holding down the button is the “Shift” function similar to a standard computer keyboard.

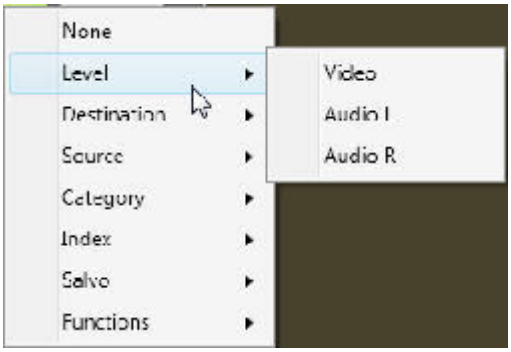
Select All Levels- Enables all levels Note; all levels are enabled as a default. This function restores all levels to enable if the previous switch was other than all levels.

Take- Initiates command

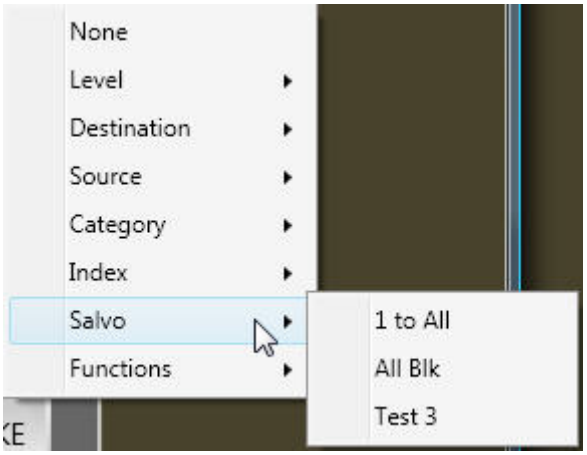
None- This removes any programming from the button.



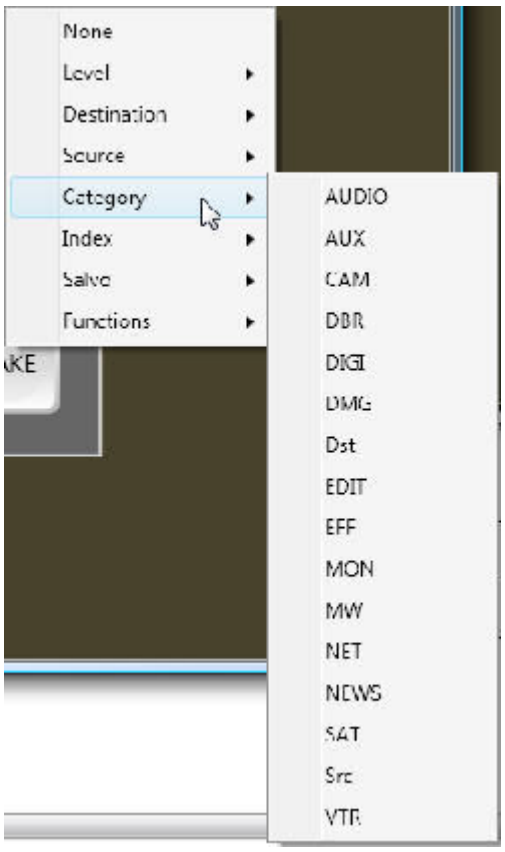
Level; This list contains the levels of control active on the router. When this function is applied to a panel button the LED for that button will light allowing individual level selection. After a destination is selected all level buttons will light. Pressing a level button will unselect the level indicated by extinguishing the light. Holding down the button will cause the panel to cycle from enabling only the level selected to all levels enabled.



Salvo; This window is the list of Salvos. Selecting a Salvo from this list and applying it to a button gives you a direct link to the Salvo selected.
*A "Salvo Menu" function can be found in the **Functions** window. This will display the list of Salvos in the LCD of the panel for selection.

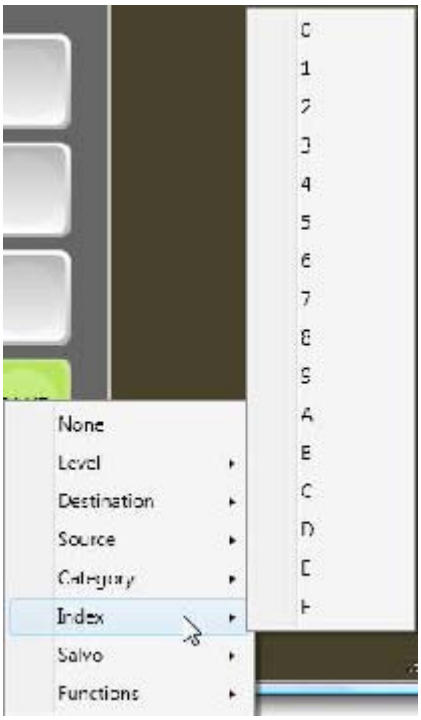


Category; This list contains the categories as entered in the names screen in TyLinx Pro. This programs the button to enter the category name awaiting an index number to complete the entry.

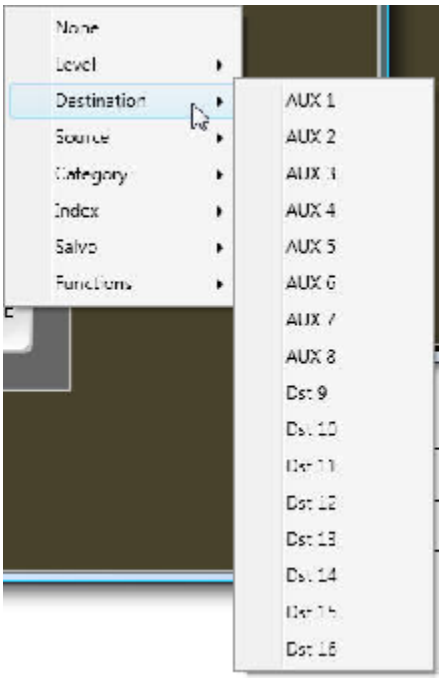


Index: This list contains the Indices as entered in the names screen in TyLinx Pro. This

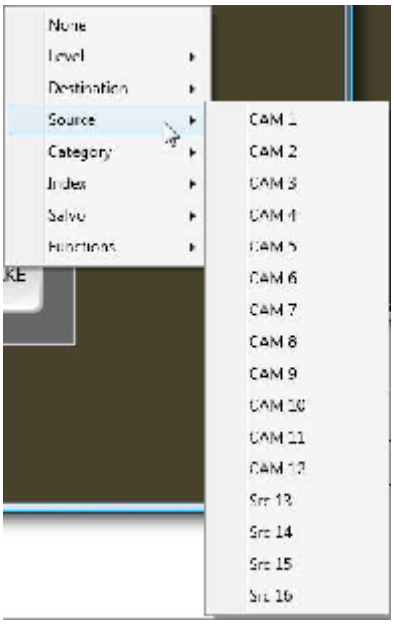
programs the button to enter the index reference of a category to complete the entry.



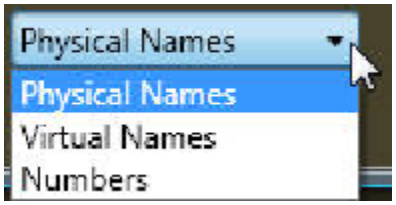
Destination; This is a list of outputs, by name, providing a direct routing path to a selected output.



Source; This is a list providing a direct routing path to a selected input.

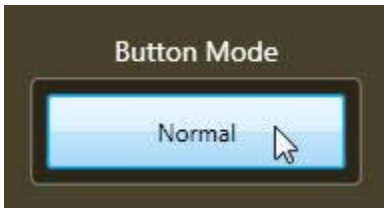


LCD Mode; Selecting the different setups will adjust the display of the in the "Source Status" window on the panel. Some models, depending on LCD size, do not support all setups.



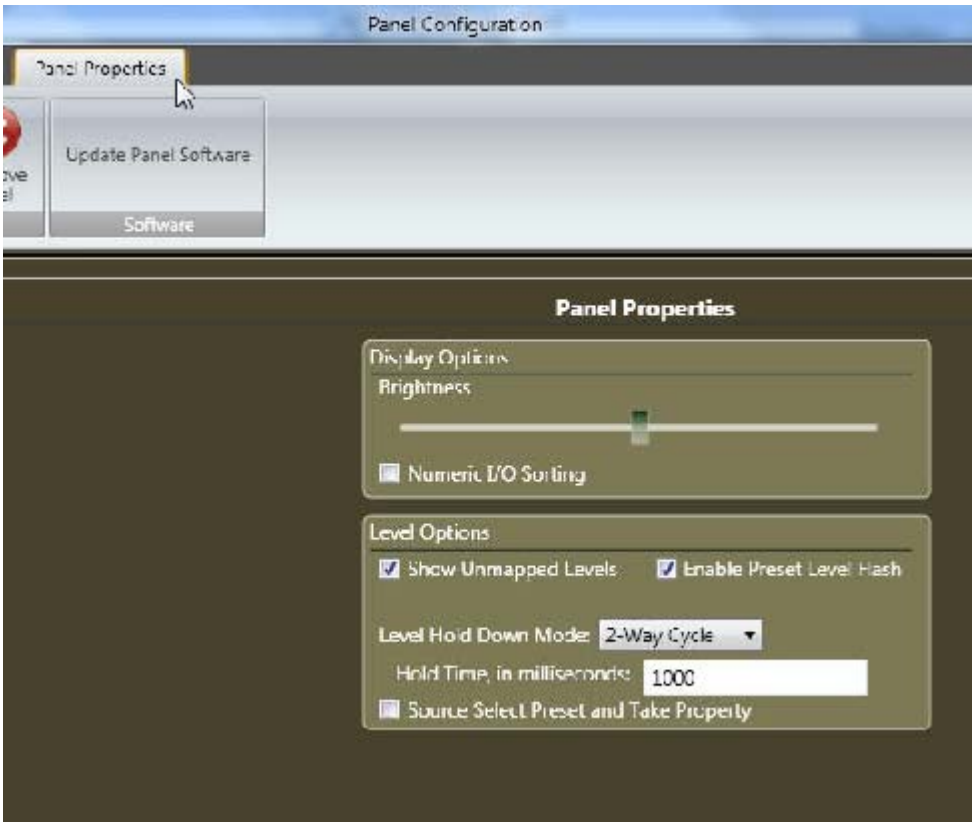
Physical Names displays the actual source names by level.
Virtual Names displays the virtual source name in all levels.
Numbers displays the physical I/O numbers (numeric only).

Button Mode; Clicking on the "Button Mode" button mode button toggles between "normal" and "shift". Selecting "shift" allows you to program buttons on a "shift" row. The "shift" row acts similar to a PC keyboard. If a button is programmed is programmed as "Select/Shift", holding down that button accesses anything programmed in the "shift" row.



Panel Properties

Select the panel properties tab.



Numeric I/O sorting- Panel lists will display sorted by input or output number. Un-checked panel will display lists by alpha sort.

Show UnMapped Levels- Levels that are unmapped will be displayed in status. Unchecked will hide unmapped levels.

Enable Preset Level Flash- When checked this will cause level display to flash when preset to switch. ** If level button is programmed as a shift function, checking this box has no effect on level button function.*

Source Select Preset and Take Property- If this box is checked, router will “Take” when source is selected. Un-checked will require a “Take” button to be pressed to initiate switch.

Level Hold Down Mode- When level buttons are held down for 3 seconds they will cycle through a series of enabled and disabled. In the 2-Way Cycle mode, holding down the level button toggles between all on to only the selected on. 3-Way Cycle Mode, holding down the level button toggles between selected on, all on, and selected off others on.

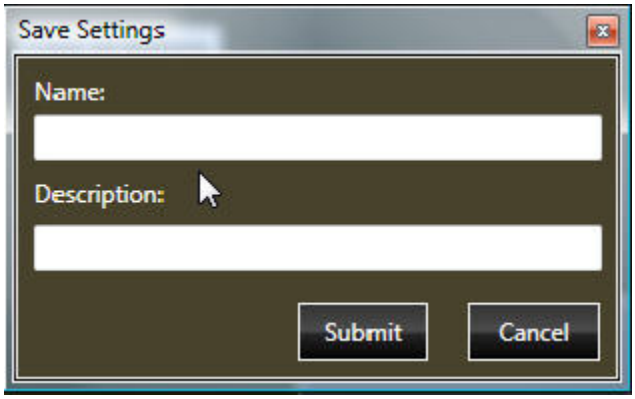
When programming is complete, click on “Send To Panel” to apply programming to the panel.

The LCD screen on the panel will indicate that the buttons are being programmed and the panel will reset when complete.

Once you have programmed a setup you may save the setup to paste to other panels. Settings are saved in the TyLinx Pro data base and can be selected to paste to another SCP-20 in the future.

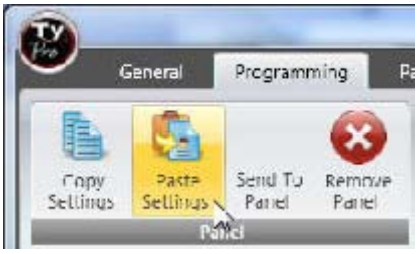
Click on “Copy Settings”.

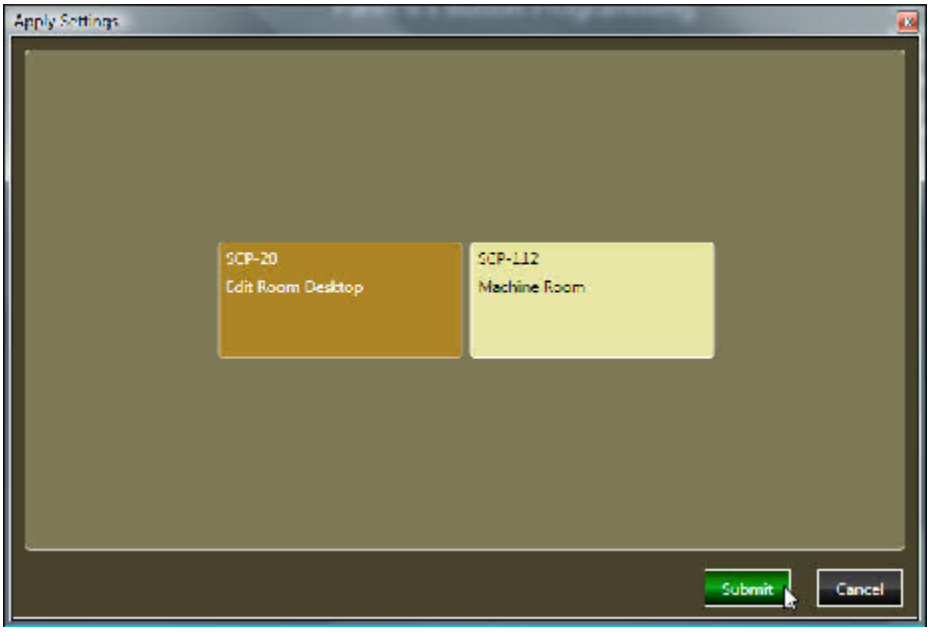
A “Save Settings” dialog window will appear allowing entry of a name and description of the saved settings.



To recall saved settings, click on “Paste Settings” and select the settings you want to apply

and click on “Submit”..





Operational Notes

Enter the destination first. After the destination is entered, the button programmed “Select/Shift” will flash indicating a valid entry. Press either “Select/Shift” to move the cursor to the “Source” field, and enter the Source. After the “Source” is entered, pressing “Take” will complete the route.

Names are stored in the router’s CPU. Enter names in the router before programming the panel.
See the “names” section of the TyLinx Pro help file for details.

When a panel displays a question mark it is an indication that the name entered is not recognized as a name in the router’s CPU.

The control panel downloads names from the router on power up. If the names in the router are changed, remove power from the control panel for 10 seconds. Re-applying power will cause the panel to download the new names.

Note:

The display area of the SCP-20 is limited to 6 characters. Names longer than than 6 characters will be

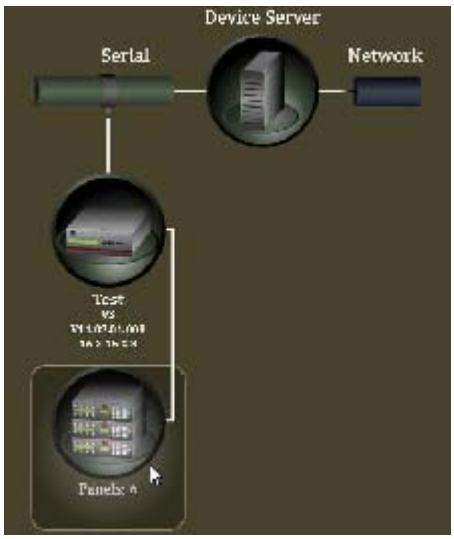
shortened from the beginning of the name.

4.6.2 SCP-112

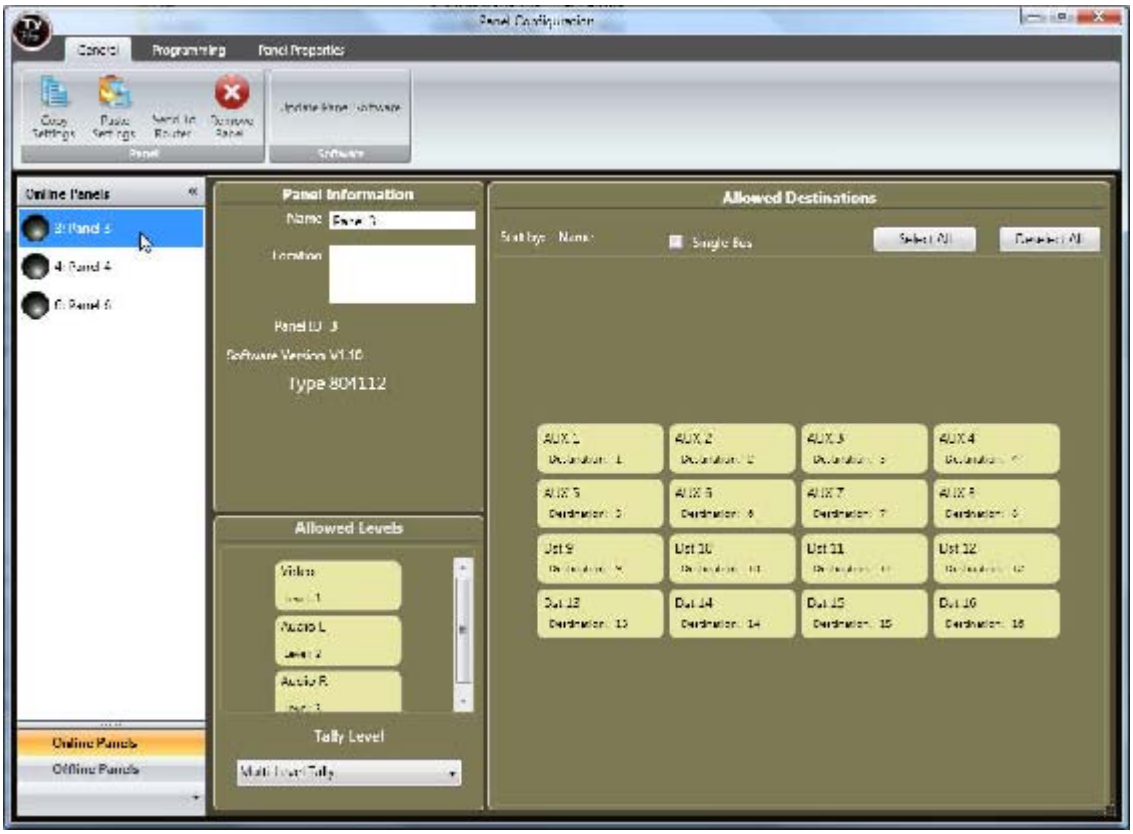
General Settings

The “General Settings” window is the first step to programming an SCP panel. The “General” window allows you to set the output(s) and level(s) you want the panel to control.

From the Device Map window on TyLinx Pro, double click on the control panel icon.



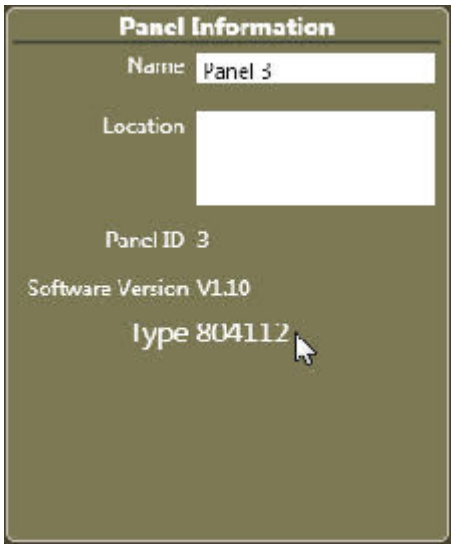
Select the Panel number (ID) of the SCP-112 panel you want to program.



Note:

The General Settings must be configured before proceeding to the Programming screen.

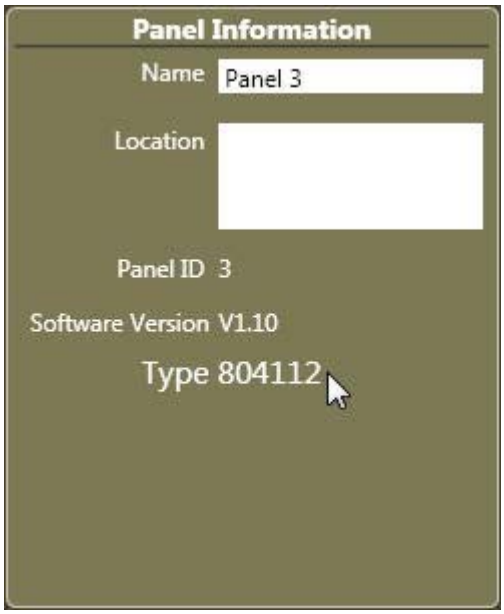
The “Panel Information” window will display the part number and software version of the selected panel. The SCP-112 panel’s part number is 804112.



You can enter a panel name and/or location (optional).

Select the level(s) the panel is to control (toggle on and off).

Select the output(s) the panel is to control.

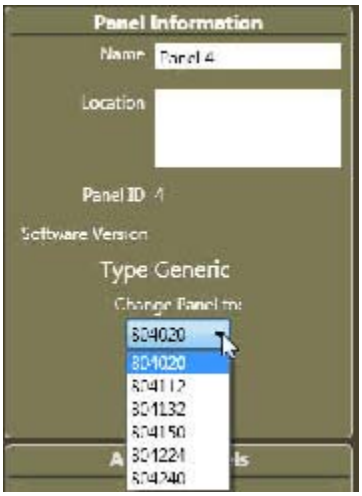


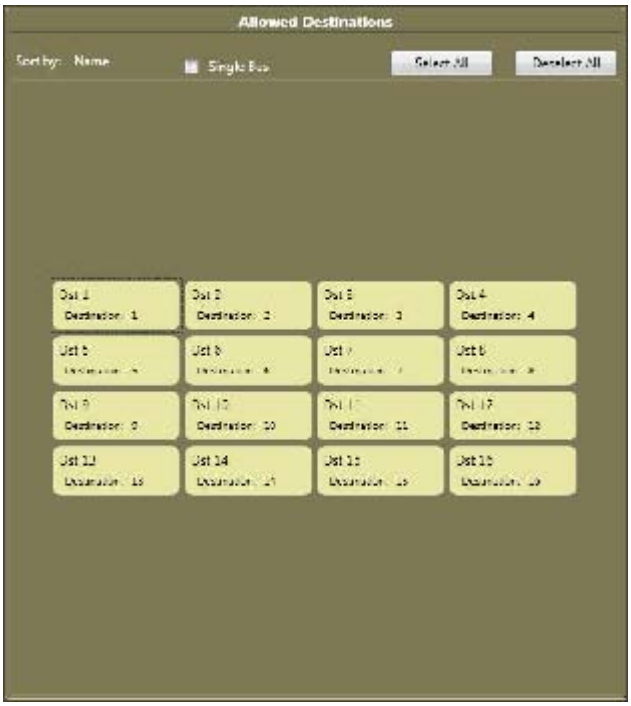
Note:

Some older versions of Control Panel software do not allow TyLinx Pro to identify the SCP control panel type.

If the SCP control panel you have selected is identified as “Type Generic” you may have an older version of software. Older versions of software may still be programmed.

Select the panel Type from the dropdown window under “Change Panel to:” and continue.





All control panels can have outputs blocked, this allows the control panel to status an output, but prevents the panel from selecting inputs on that output.

Select the outputs you want this panel to control.

Panels can also have levels blocked. “Enable/Disable” the levels you want this panel to control by clicking on the level boxes in the lower part of the screen.

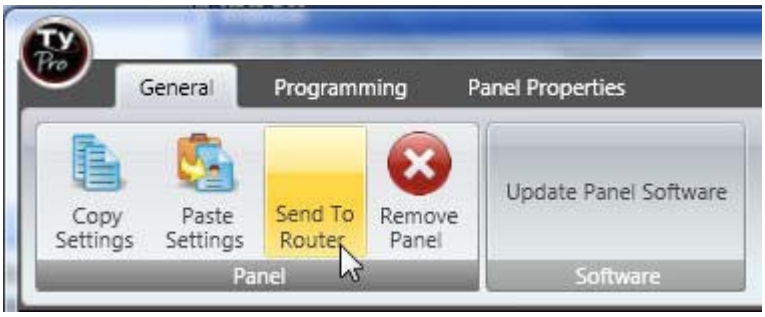
The “LED Tally Level” section does not apply to the SCP-112 control panel.

If the panel is to be a “Single Bus” (only controls 1 output), place a check in the “Single Bus” box.

Placing a check in the “Single Bus” box will cause the panel to only access and switch the single selected output.

If there is no check in the box and only one output is selected for the panel to control, the panel can status the blocked outputs but only switch the selected output.

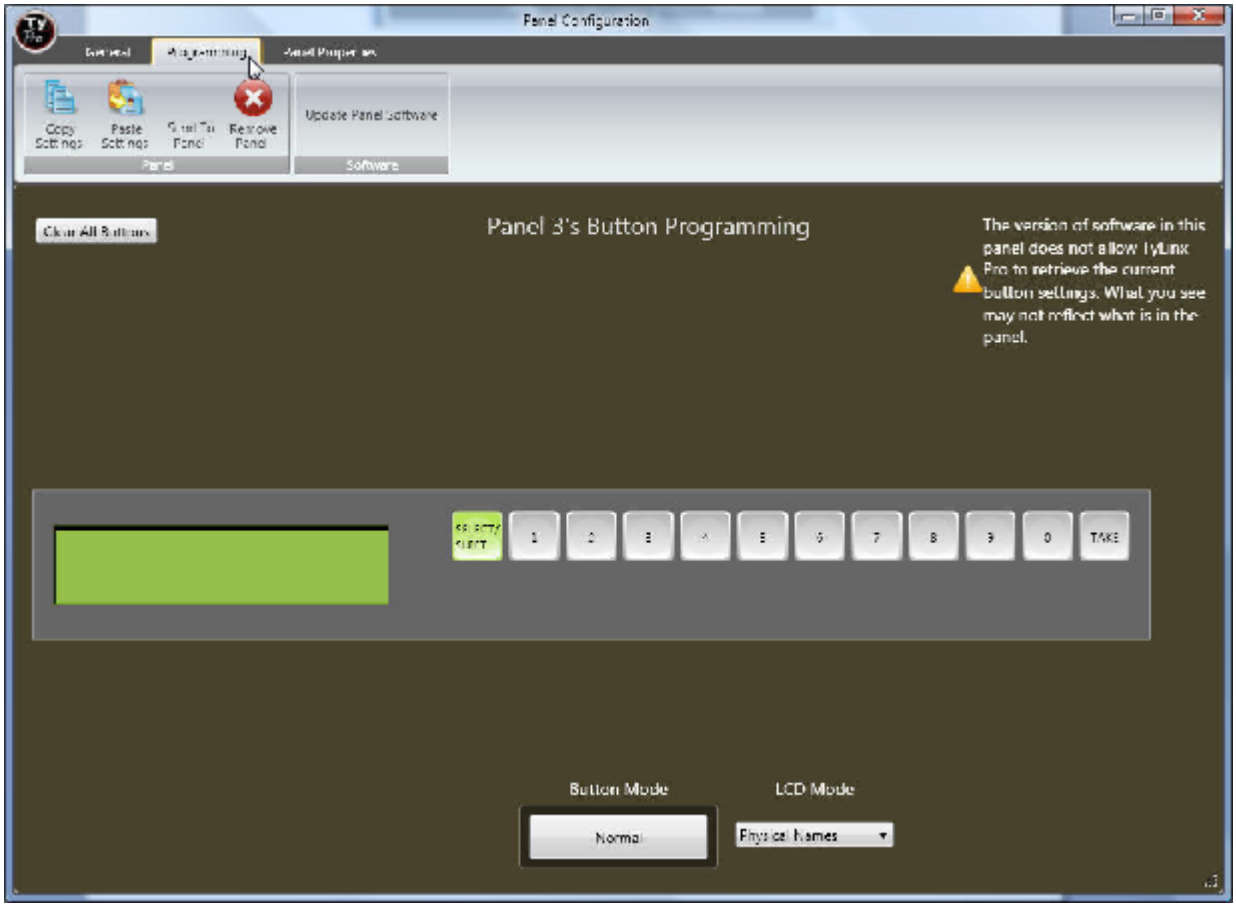
When selection of allowed outputs and levels is complete, click on “Send to Router”.



Programming Panel Buttons

Click on the “Programming” tab at the top of the window.

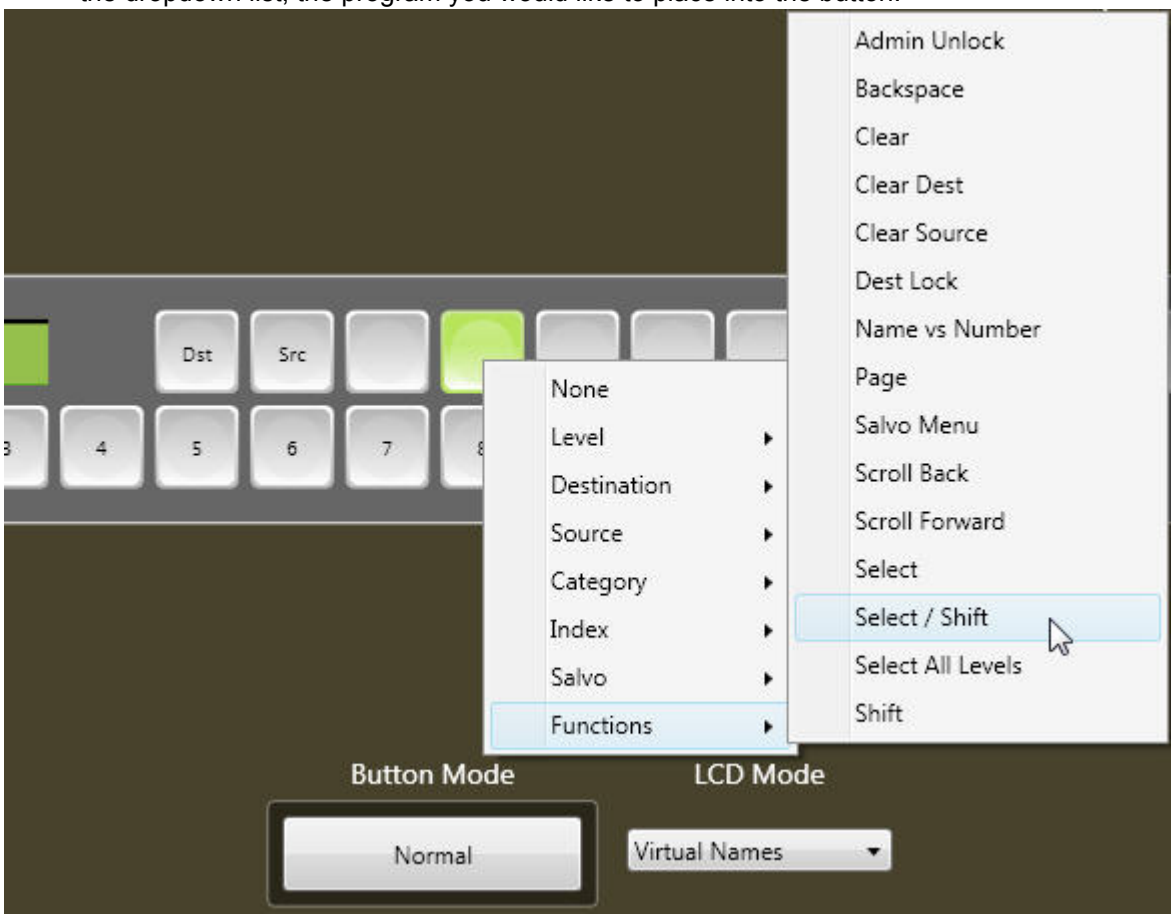
This will take you to the button programming window.



Note:

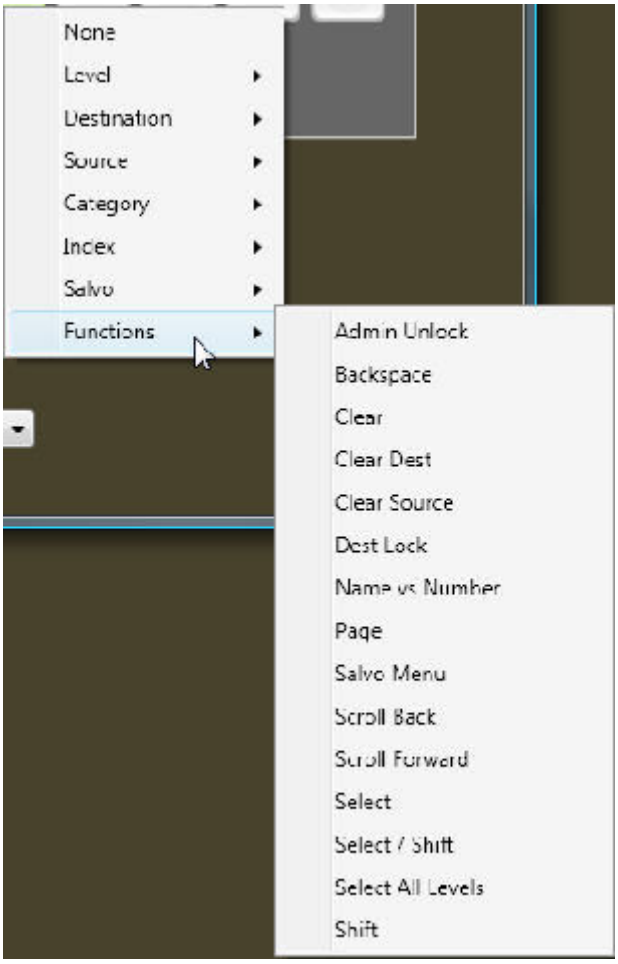
If your panel does not have software that does not allow TyLinx Pro to read the current programming of the buttons, this screen will reflect the factory default programming.

To program a button hover over the button with the mouse pointer, right click, and select from the dropdown list, the program you would like to place into the button.



Continue this process for each button you want to program.

Functions; This is a list of functions that can be applied to the panel buttons.



Admin Unlock- Unlocks selected destination. Overrides lock made by any user.

Backspace- Causes cursor to move back one character space.

Clear- Clears current entry.

Clear Dest- Clears destination entry and places the cursor in the destination field.

Clear Source- Clears source entry and places the cursor in the source field.

Dest Lock- Locks current destination from changing to another source.

Name vs Number- Toggles between Alpha and Numeric sort.

Page- Changes display to next page. If there are more levels than show in LCD display, Page will display next set of levels.

Salvo Menu- The “Salvo Menu” function will display the list of Salvos in the LCD of the panel for selection.

Scroll Back- Causes lists to display from higher number to lower.

Scroll Forward- Causes lists to display from lower number to higher.

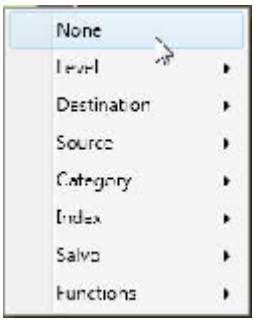
Select- Moves cursor.

Select/Shift- “Select/Shift” is a dual mode function. Pressing once is the “Select” function (moves cursor). Holding down the button is the “Shift” function similar to a standard computer keyboard.

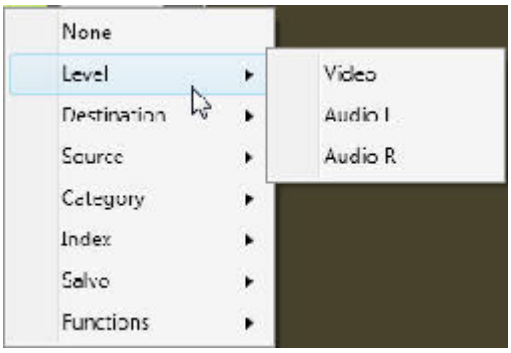
Select All Levels- Enables all levels Note; all levels are enabled as a default. This function restores all levels to enable if the previous switch was other than all levels.

Take- Initiates command

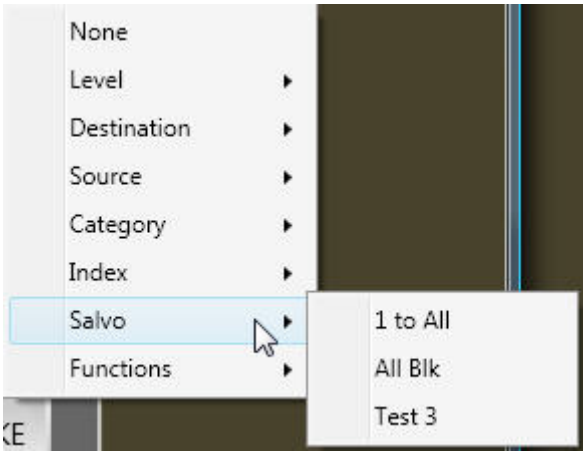
None- This removes any programming from the button.



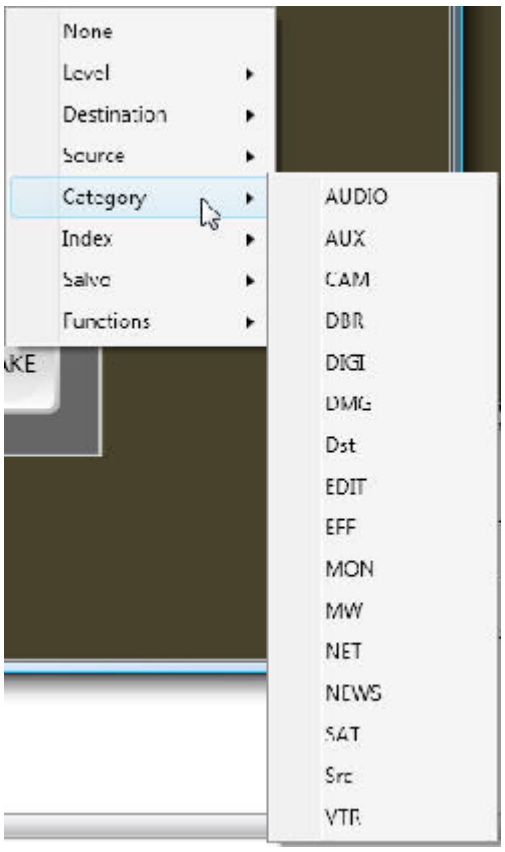
Level; This list contains the levels of control active on the router. When this function is applied to a panel button the LED for that button will light allowing individual level selection. After a destination is selected all level buttons will light. Pressing a level button will unselect the level indicated by extinguishing the light. Holding down the button will cause the panel to cycle from enabling only the level selected to all levels enabled.



Salvo; This window is the list of Salvos. Selecting a Salvo from this list and applying it to a button gives you a direct link to the Salvo selected.
*A “Salvo Menu” function can be found in the **Functions** window. This will display the list of Salvos in the LCD of the panel for selection.

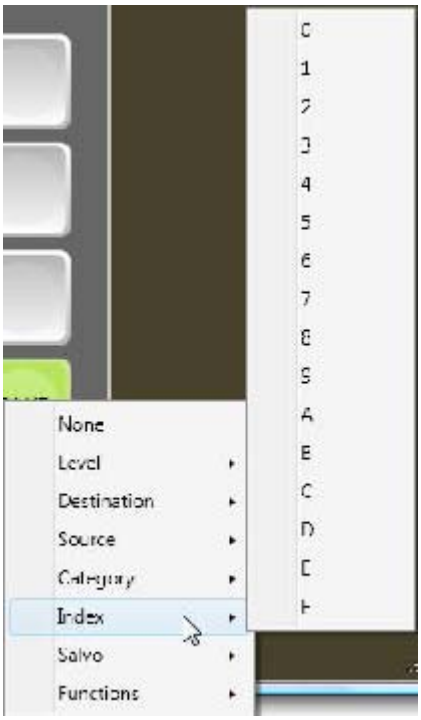


Category; This list contains the categories as entered in the names screen in TyLinx Pro. This programs the button to enter the category name awaiting an index number to complete the entry.

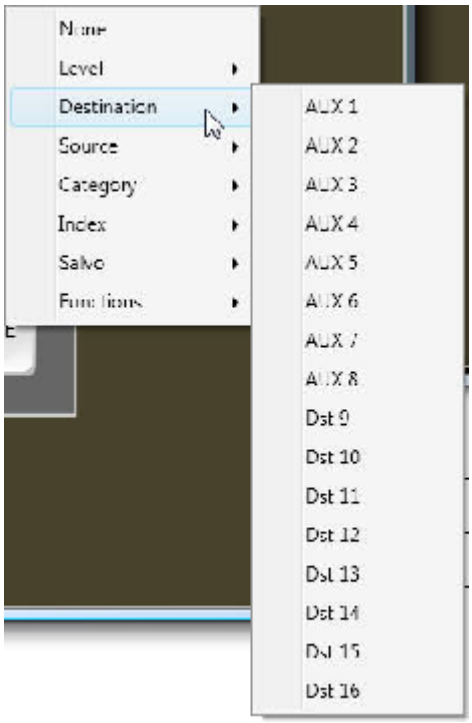


Index: This list contains the Indices as entered in the names screen in TyLinx Pro. This

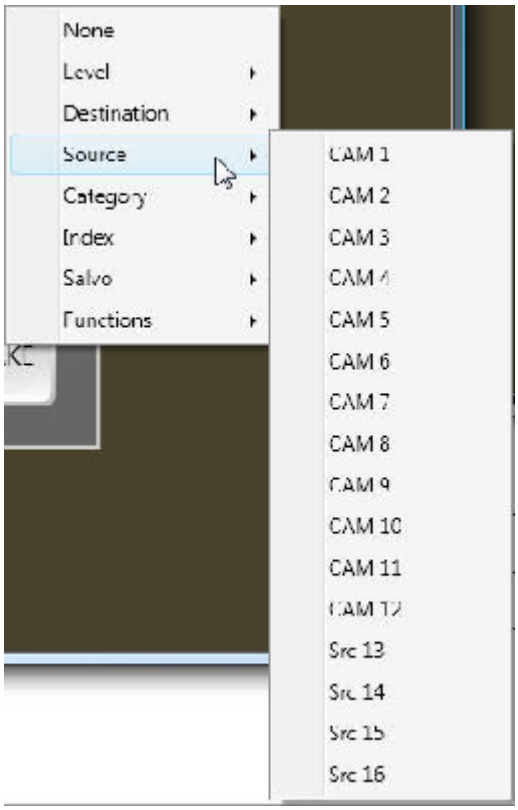
programs the button to enter the index reference of a category to complete the entry.



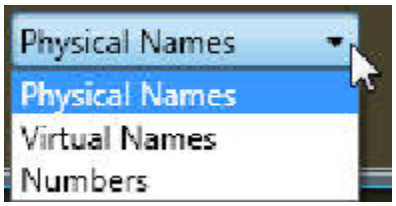
Destination; This is a list of outputs, by name, providing a direct routing path to a selected output.



Source; This is a list providing a direct routing path to a selected input.



LCD Mode; Selecting the different setups will adjust the display of the in the "Source Status" window on the panel. Some models, depending on LCD size, do not support all setups.

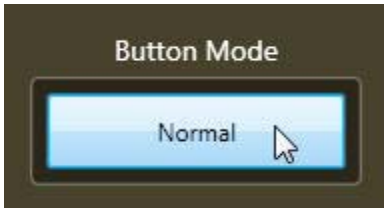


Physical Names displays the actual source names by level.
Virtual Names displays the virtual source name in all levels.
Numbers displays the physical I/O numbers (numeric only).

Button Mode; Clicking on the “Button Mode” button mode button toggles between “Normal”, “Shift”, and “Special” Push. Selecting “shift” allows you to program buttons on a “shift” row. The “shift” row acts similar to a PC keyboard. If a button is programmed is programmed as “Select/Shift”, holding down that button accesses anything programmed in the “shift” row.

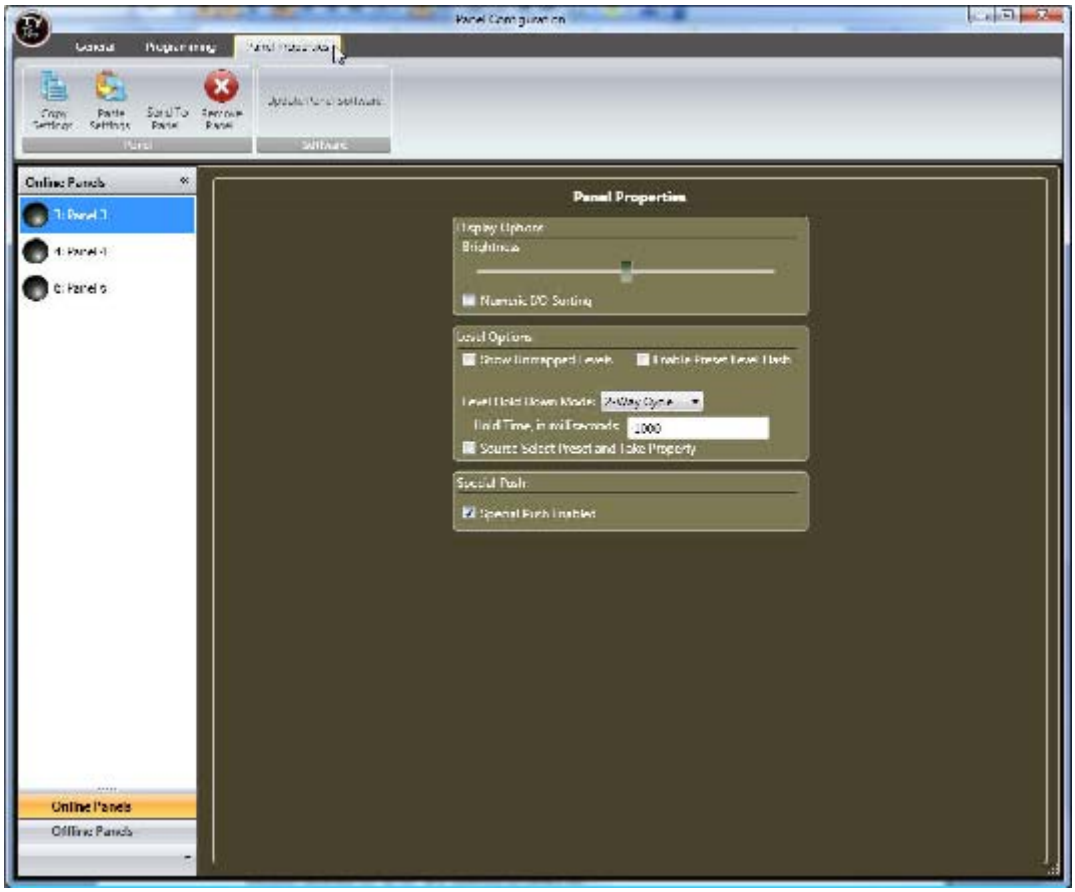
The SCP-112 has a “Special Push” row that can be enabled to increase the functionality options (see the Panel Properties section). Factory default is “Special Push” enabled. The “Special Push” row is ideal for category names.

*If “Special Push” is enabled the action of the button becomes the first push command with the “First Push” row of buttons becoming the subsequent commands until “Take”, “Select”, or “Clear” is pushed.



Panel Properties

Select the panel properties tab.



Numeric I/O sorting- Panel lists will display sorted by input or output number. Un-checked panel will display lists by alpha sort.
Show UnMapped Levels- Levels that are unmapped will be displayed in status. Unchecked will hide unmapped levels.
Enable Preset Level Flash- When checked this will cause level display to flash when preset to switch. * *If level button is programmed as a shift function, checking this box has no effect on level button function.*
Source Select Preset and Take Property- If this box is checked, router will "Take" when source is selected. Un-checked will require a "Take" button to be pressed to initiate switch.
Level Hold Down Mode- When level buttons are held down for 3 seconds they will cycle through a series of enabled and disabled. In the 2-Way Cycle mode, holding down the level button toggles between all on to only the selected on. 3-Way Cycle Mode, holding down the level button toggles between selected on, all on, and selected off others on.
Special Push Enable- When the box is checked the action of this row of buttons becomes the first push command with the "First Push" row of buttons becoming the subsequent commands until "Take", "Select", or "Clear" is pushed.

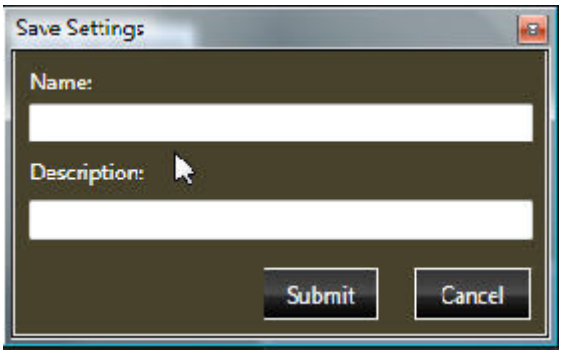
When programming is complete, click on "Send To Panel" to apply programming to the panel.

The LCD screen on the panel will indicate that the buttons are being programmed and the panel will reset when complete.

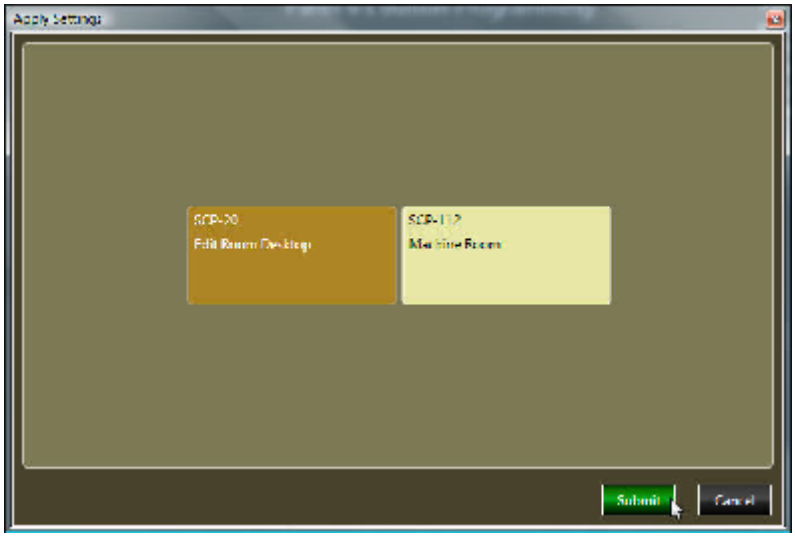
Once you have programmed a setup you may save the setup to paste to other panels. Settings are saved in the TyLinx Pro data base and can be selected to paste to another SCP-112 in the future.

Click on “Copy Settings”.

A “Save Settings” dialog window will appear allowing entry of a name and description of the saved settings.



To recall saved settings, click on “Paste Settings” and select the settings you want to apply and click on “Submit”.



Operational Notes

Enter the destination first. After the destination is entered, the button programmed “Select” or “Select/Shift” will light indicating a valid entry. You can press either “Select” or “Take” to move the cursor to the “Source” field, and enter the Source. After the “Source” is entered, pressing “Take” will complete the route.

Names are stored in the router’s CPU. Enter names in the router before programming the panel.
See the “names” section of the TyLinx Pro help file for details.

When a panel displays a question mark it is an indication that the name entered is not recognized as a name in the router’s CPU.

The control panel downloads names from the router on power up. If the names in the router are changed, remove power from the control panel for 10 seconds. Re-applying power will cause the panel to download the new names.

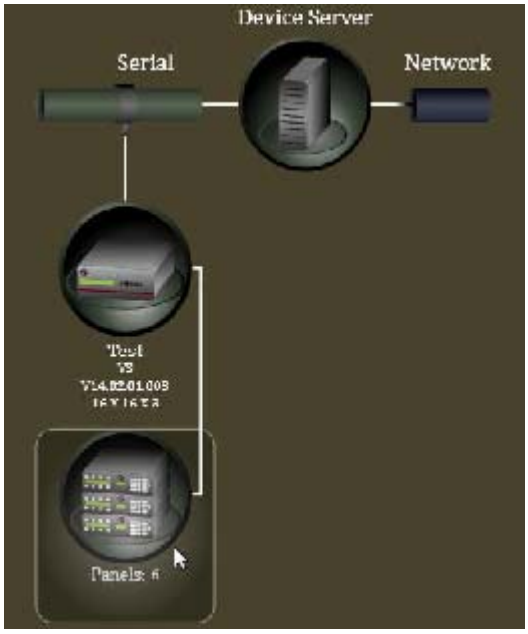
Pressing buttons 7, 8, and 9 simultaneously causes the panel to reset.

4.6.3 SCP-132

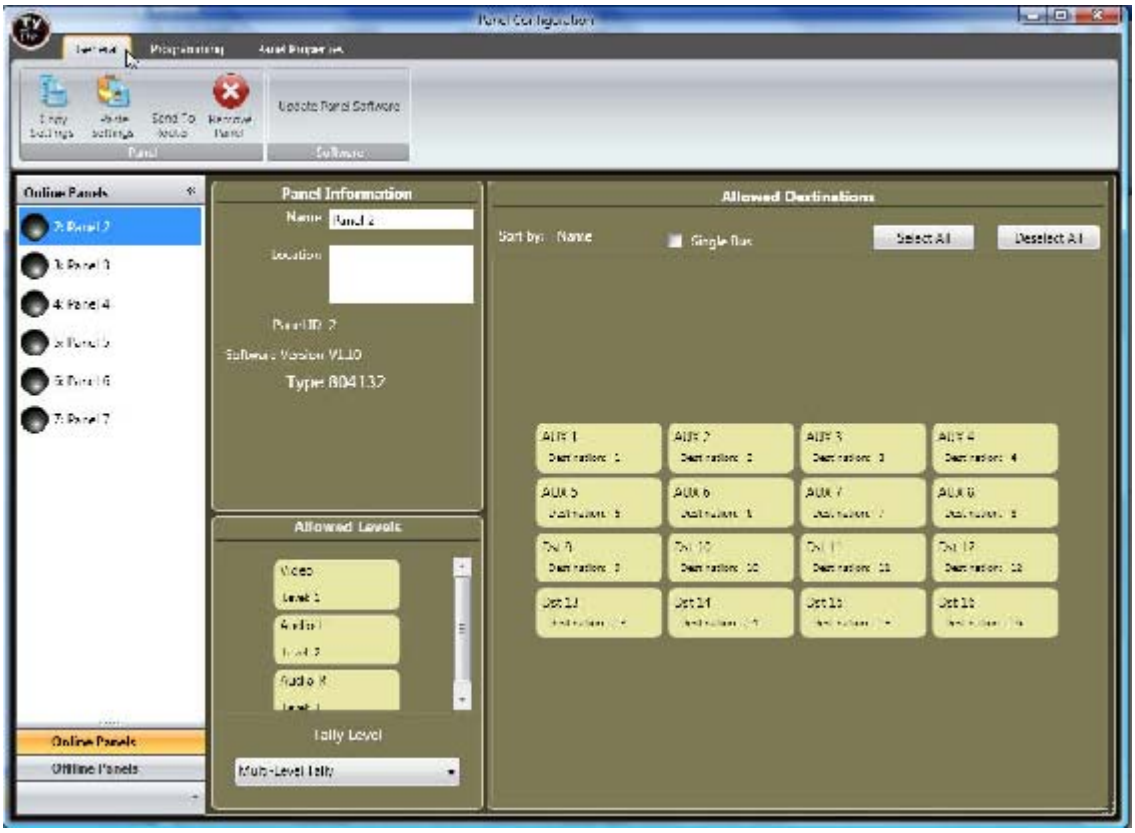
General Settings

The “General Settings” window is the first step to programming an SCP panel. The “General” window allows you to set the output(s) and level(s) you want the panel to control.

From the Device Map window on TyLinx Pro, double click on the control panel icon.



Select the Panel number (ID) of the SCP-132 panel you want to program.



Note:

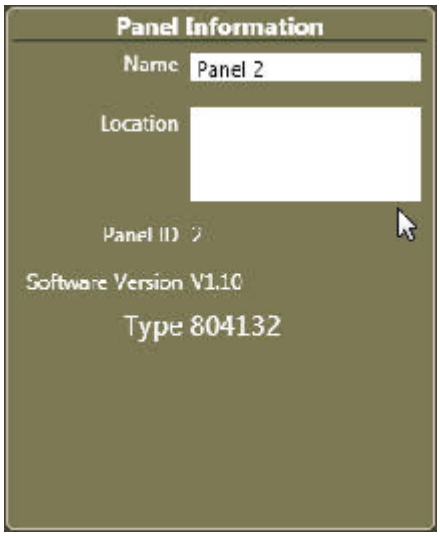
The General Settings must be configured before proceeding to the Programming screen.

The “Panel Information” window will display the part number and software version of the selected panel. The SCP-132 panel’s part number is 804132.

You can enter a panel name and/or location (optional).

Select the level(s) the panel is to control (toggle on and off).

Select the output(s) the panel is to control.

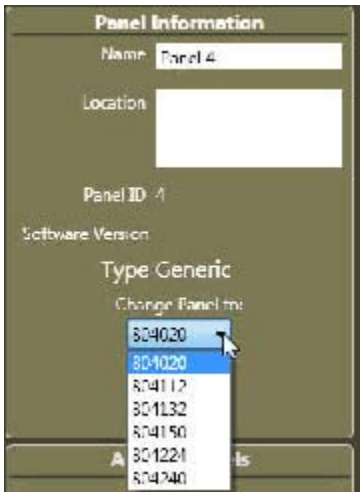


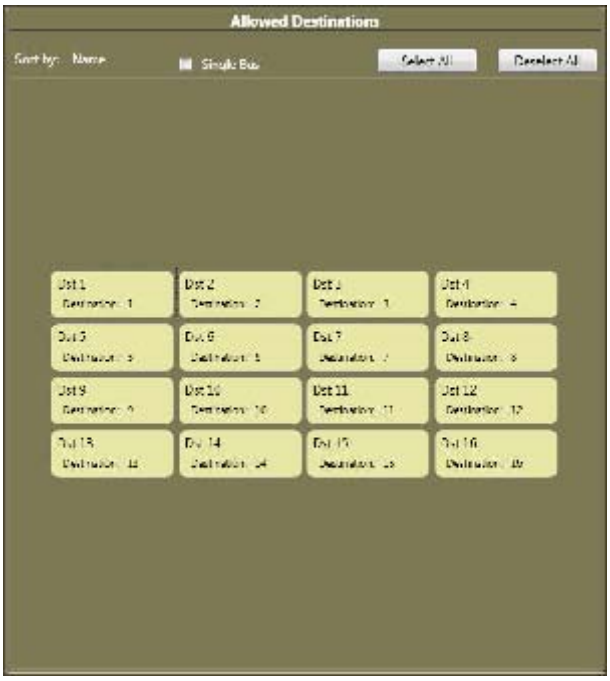
Note:

Some older versions of Control Panel software do not allow TyLinx Pro to identify the SCP control panel type.

If the SCP control panel you have selected is identified as "Type Generic" you may have an older version of software. Older versions of software may still be programmed.

Select the panel Type from the dropdown window under "Change Panel to:" and continue.



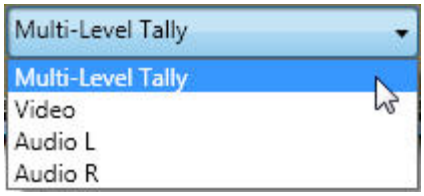


All control panels can have outputs blocked, this allows the control panel to status an output, but prevents the panel from selecting inputs on that output.

Select the outputs you want this panel to control.

Panels can also have levels blocked. “Enable/Disable” the levels you want this panel to control by clicking on the level boxes in the lower part of the screen.

The “LED Tally Level” selects the level the button lights will follow when in the XY mode. Multi-Level follows all levels and will show break-away switching.

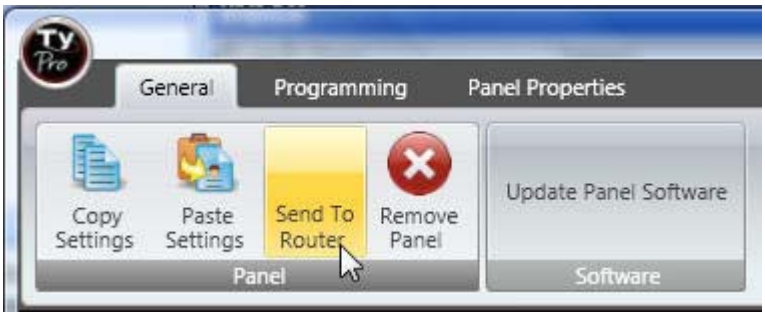


If the panel is to be a “Single Bus” (only controls 1 output), place a check in the “Single Bus” box.

Placing a check in the “Single Bus” box will cause the panel to only access and switch the single selected output.

If there is no check in the box and only one output is selected for the panel to control, the panel can status the blocked outputs but only switch the selected output.

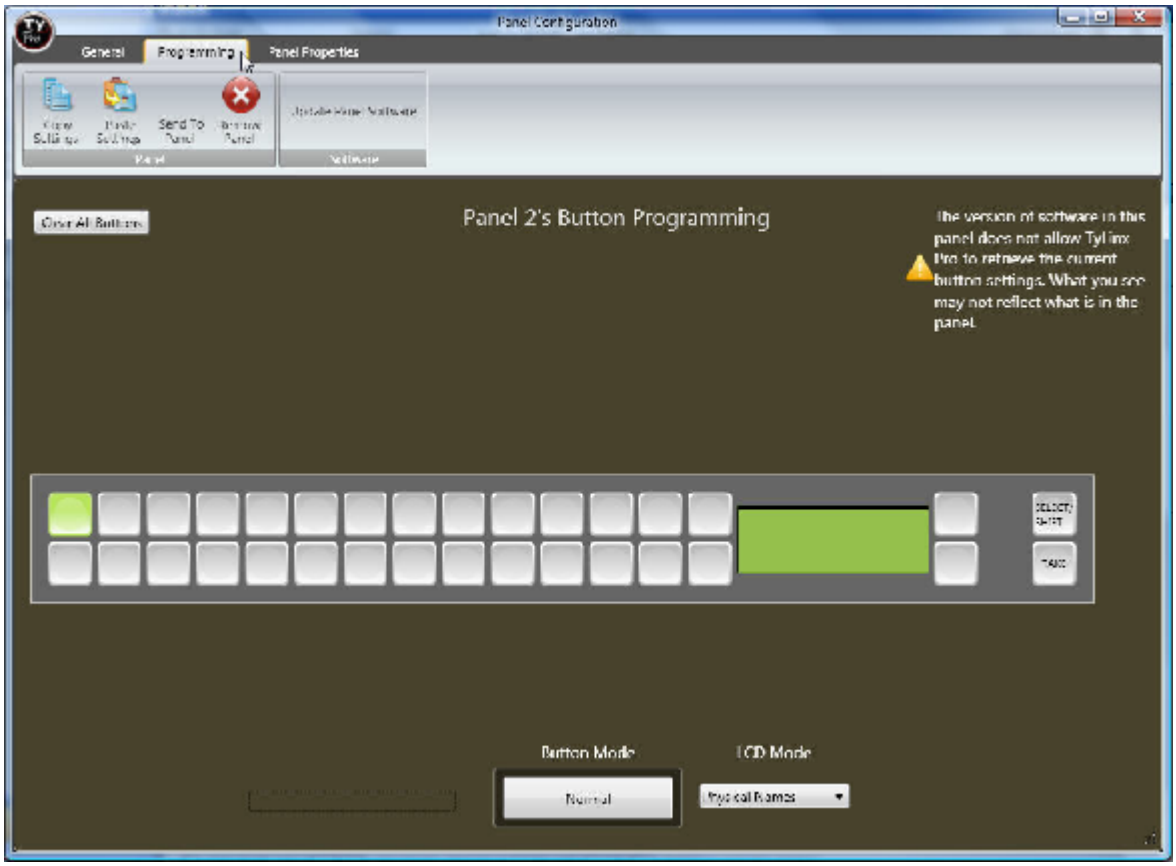
When selection of allowed outputs and levels is complete, click on “Send to Router”.



Programming Panel Buttons

Click on the “Programming” tab at the top of the window.

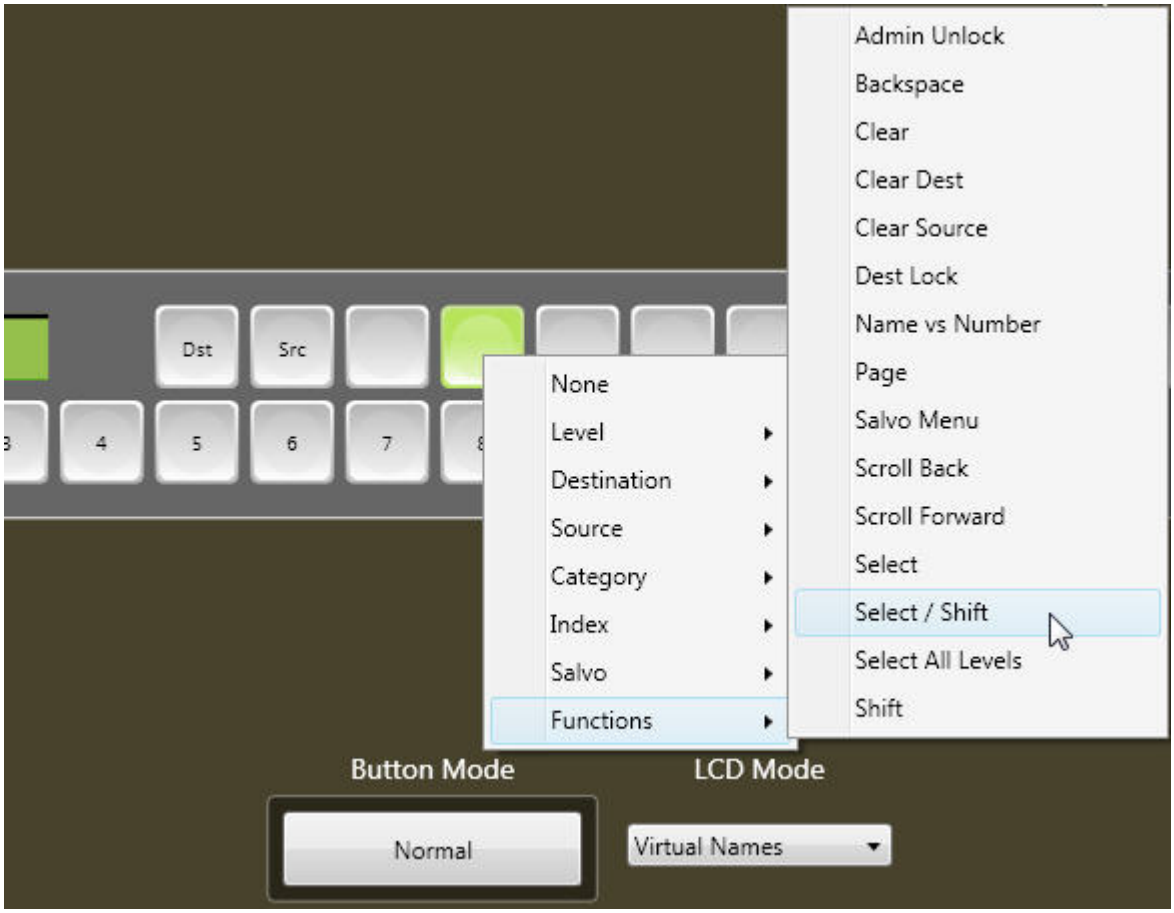
This will take you to the button programming window.



Note:

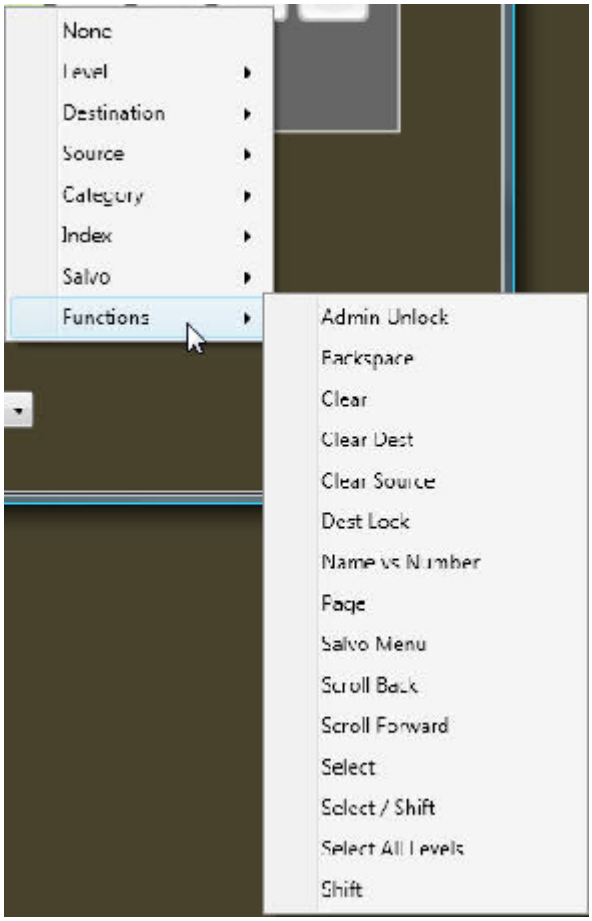
If your panel does not have software that does not allow TyLinx Pro to read the current programming of the buttons, this screen will reflect the factory default programming.

To program a button hover over the button with the mouse pointer, right click, and select from the dropdown list, the program you would like to place into the button.



Continue this process for each button you want to program.

Functions; This is a list of functions that can be applied to the panel buttons.



Admin Unlock- Unlocks selected destination. Overrides lock made by any user.

Backspace- Causes cursor to move back one character space.

Clear- Clears current entry.

Clear Dest- Clears destination entry and places the cursor in the destination field.

Clear Source- Clears source entry and places the cursor in the source field.

Dest Lock- Locks current destination from changing to another source.

Name vs Number- Toggles between Alpha and Numeric sort.

Page- Changes display to next page. If there are more levels than show in LCD display, Page will display next set of levels.

Salvo Menu- The “Salvo Menu” function will display the list of Salvos in the LCD of the panel for selection.

Scroll Back- Causes lists to display from higher number to lower.

Scroll Forward- Causes lists to display from lower number to higher.

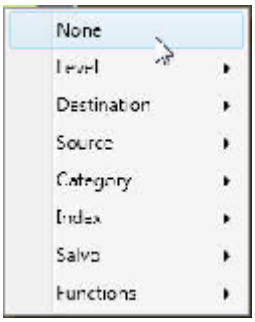
Select- Moves cursor.

Select/Shift- “Select/Shift” is a dual mode function. Pressing once is the “Select” function (moves cursor). Holding down the button is the “Shift” function similar to a standard computer keyboard.

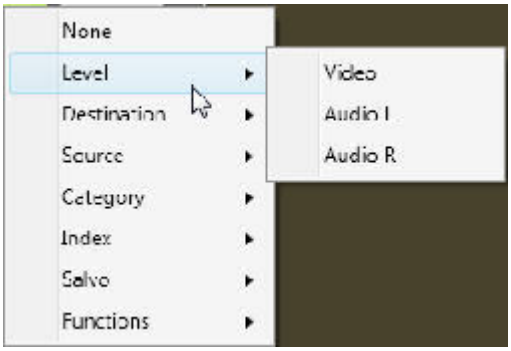
Select All Levels- Enables all levels Note; all levels are enabled as a default. This function restores all levels to enable if the previous switch was other than all levels.

Take- Initiates command

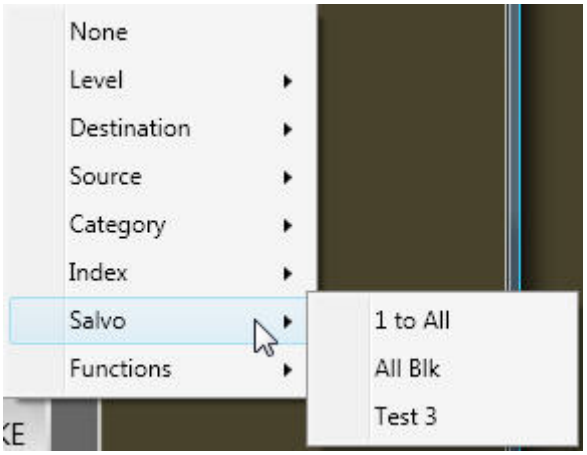
None- This removes any programming from the button.



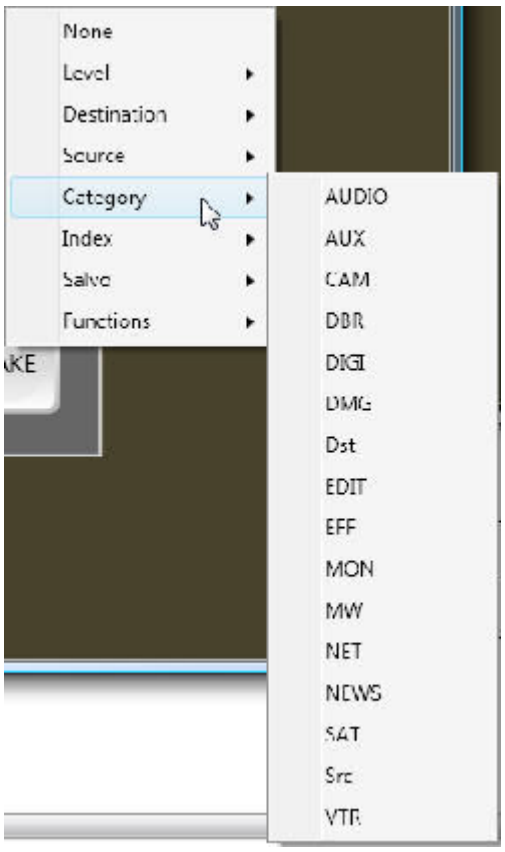
Level; This list contains the levels of control active on the router. When this function is applied to a panel button the LED for that button will light allowing individual level selection. After a destination is selected all level buttons will light. Pressing a level button will unselect the level indicated by extinguishing the light. Holding down the button will cause the panel to cycle from enabling only the level selected to all levels enabled.



Salvo; This window is the list of Salvos. Selecting a Salvo from this list and applying it to a button gives you a direct link to the Salvo selected.
*A “Salvo Menu” function can be found in the **Functions** window. This will display the list of Salvos in the LCD of the panel for selection.

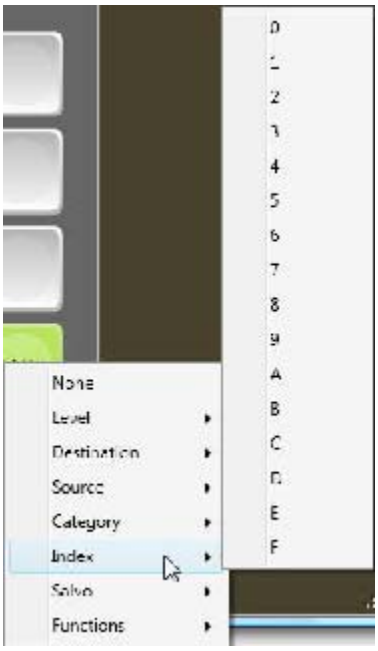


Category; This list contains the categories as entered in the names screen in TyLinx Pro. This programs the button to enter the category name awaiting an index number to complete the entry.

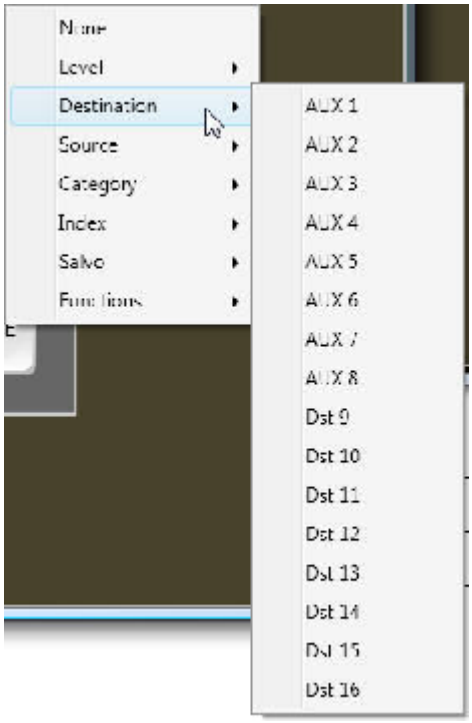


Index: This list contains the Indices as entered in the names screen in TyLinx Pro. This

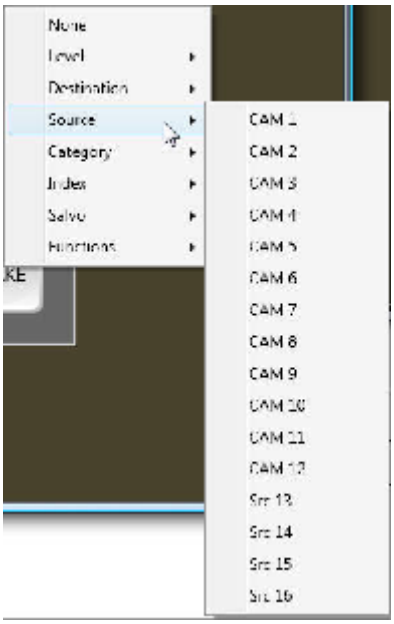
programs the button to enter the index reference of a category to complete the entry.



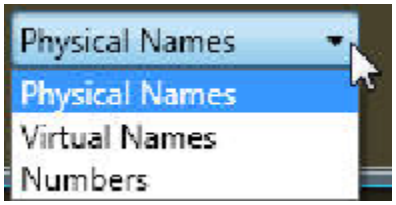
Destination; This is a list of outputs, by name, providing a direct routing path to a selected output.



Source; This is a list providing a direct routing path to a selected input.

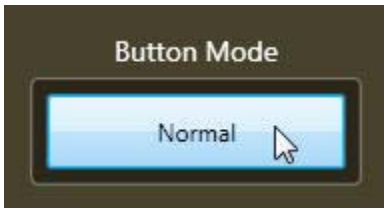


LCD Mode; Selecting the different setups will adjust the display of the in the “Source Status” window on the panel. Some models, depending on LCD size, do not support all setups.



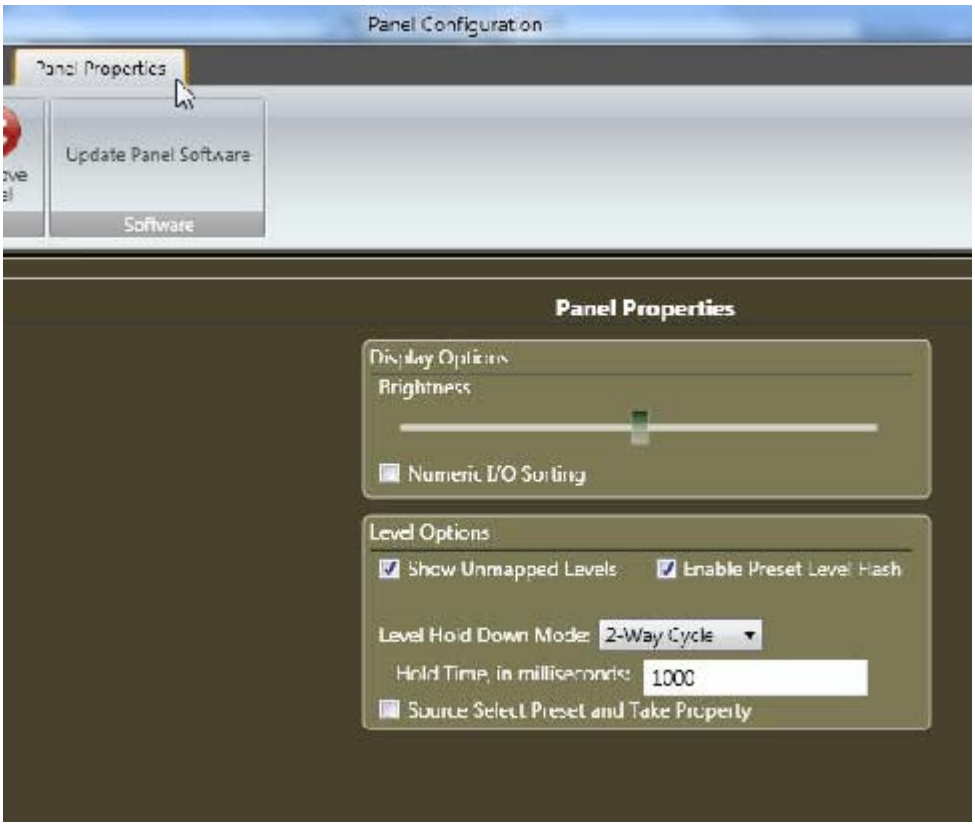
Physical Names displays the actual source names by level.
Virtual Names displays the virtual source name in all levels.
Numbers displays the physical I/O numbers (numeric only).

Button Mode; Clicking on the “Button Mode” button mode button toggles between “normal” and “shift”. Selecting “shift” allows you to program buttons on a “shift” row. The “shift” row acts similar to a PC keyboard. If a button is programmed is programmed as “Select/Shift”, holding down that button accesses anything programmed in the “shift” row.



Panel Properties

Select the panel properties tab.



Numeric I/O sorting- Panel lists will display sorted by input or output number. Un-checked panel will display lists by alpha sort.

Show UnMapped Levels- Levels that are unmapped will be displayed in status. Unchecked will hide unmapped levels.

Enable Preset Level Flash- When checked this will cause level display to flash when preset to switch. ** If level button is programmed as a shift function, checking this box has no effect on level button function.*

Source Select Preset and Take Property- If this box is checked, router will “Take” when source is selected. Un-checked will require a “Take” button to be pressed to initiate switch.

Level Hold Down Mode- When level buttons are held down for 3 seconds they will cycle through a series of enabled and disabled. In the 2-Way Cycle mode, holding down the level button toggles between all on to only the selected on. 3-Way Cycle Mode, holding down the level button toggles between selected on, all on, and selected off others on.

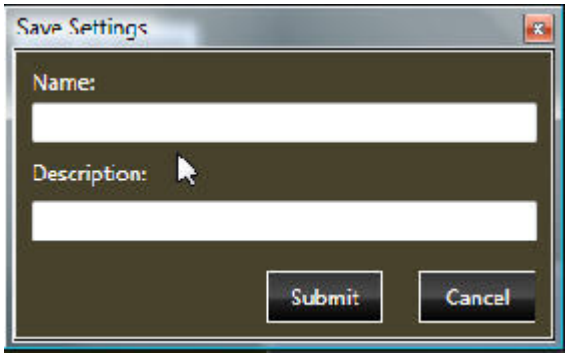
When programming is complete, click on “Send To Panel” to apply programming to the panel.

The LCD screen on the panel will indicate that the buttons are being programmed and the panel will reset when complete.

Once you have programmed a setup you may save the setup to paste to other panels. Settings are saved in the TyLinx Pro data base and can be selected to paste to another SCP-224 in the future.

Click on “Copy Settings”.

A “Save Settings” dialog window will appear allowing entry of a name and description of the saved settings.



To recall saved settings, click on “Paste Settings” and select the settings you want to apply and click on “Submit”.

Operational Notes

Enter the destination first. After the destination is entered, the button programmed “Select/Shift” will flash indicating a valid entry. Press either “Select/Shift” to move the cursor to the “Source” field, and enter the Source. After the “Source” is entered, pressing “Take” will complete the route.

Names are stored in the router’s CPU. Enter names in the router before programming the panel.
See the “names” section of the TyLinx Pro help file for details.

When a panel displays a question mark it is an indication that the name entered is not recognized as a name in the router’s CPU.

The control panel downloads names from the router on power up. If the names in the router are changed, remove power from the control panel for 10 seconds. Re-applying power will cause the panel to download the new names.

The buttons to the left of the LCD display can be programmed as an XY panel with a check in

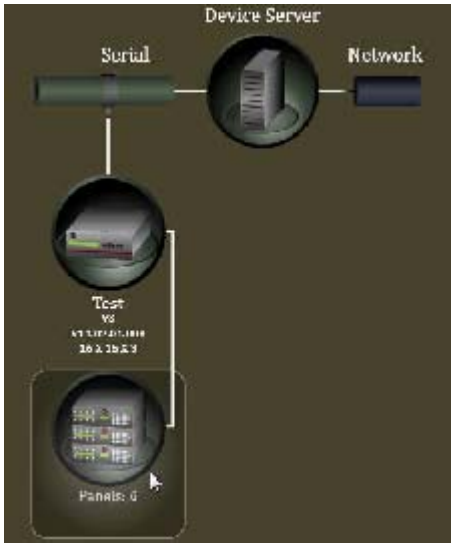
the “Source Select Preset and Take Property” box and a “Take” button programmed. The XY portion of the panel will “auto take” with the rotary knob selections causing a preset switch waiting for the “Take” button to be pressed.

4.6.4 SCP-150

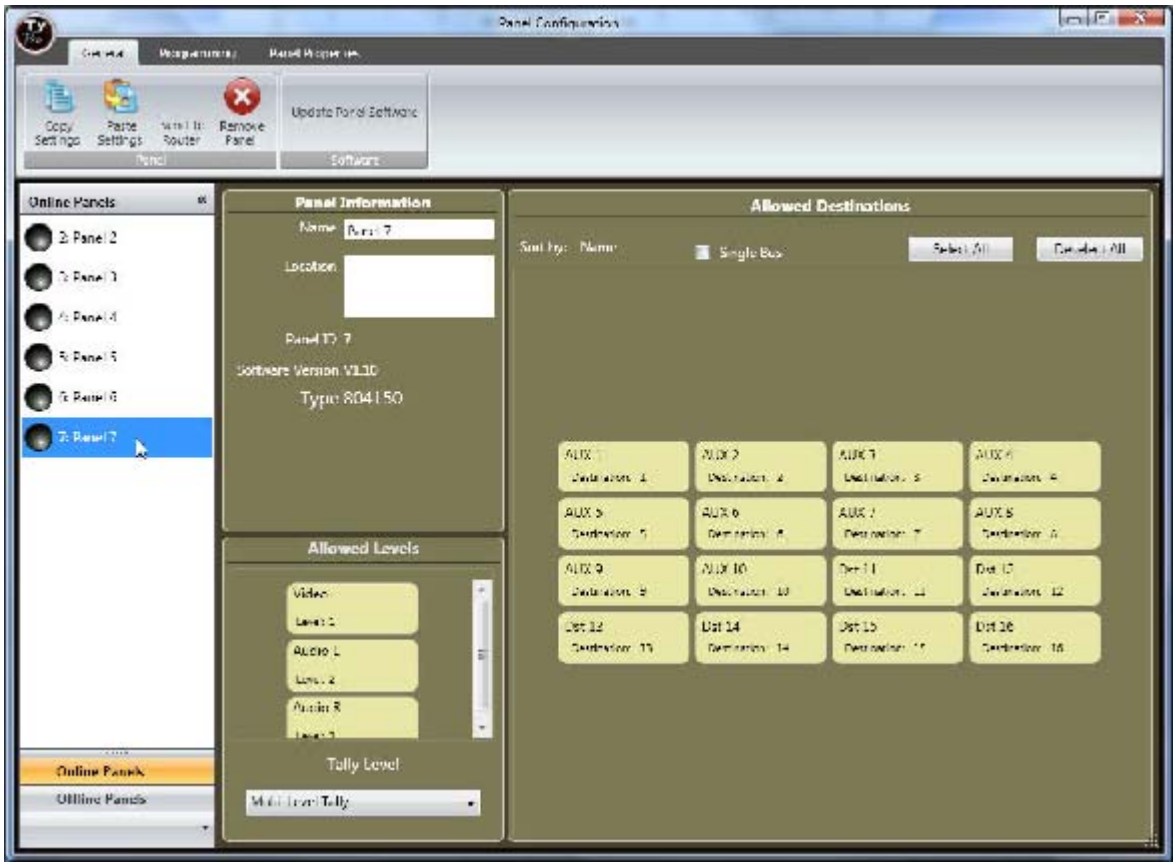
General Settings

The “General Settings” window is the first step to programming an SCP panel. The “General” window allows you to set the output(s) and level(s) you want the panel to control.

From the Device Map window on TyLinx Pro, double click on the control panel icon.



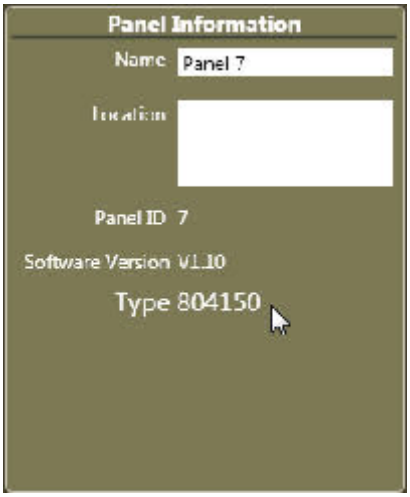
Select the Panel number (ID) of the SCP-150 panel you want to program.



Note:

The General Settings must be configured before proceeding to the SCP Series setup screen.

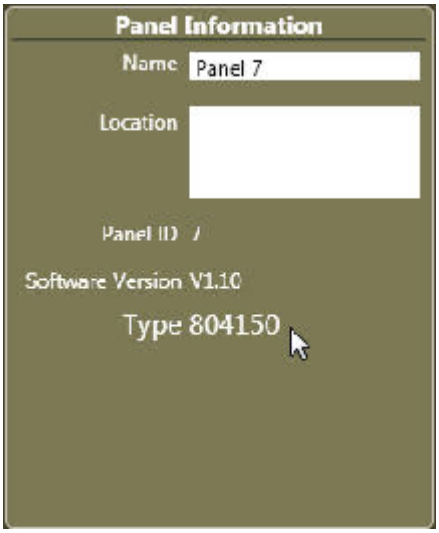
The “Panel Information” window will display the part number and software version of the selected panel. The SCP-150 panel’s part number is 804150.



You can enter a panel name and/or location (optional).

Select the level(s) the panel is to control (toggle on and off).

Select the output(s) the panel is to control.

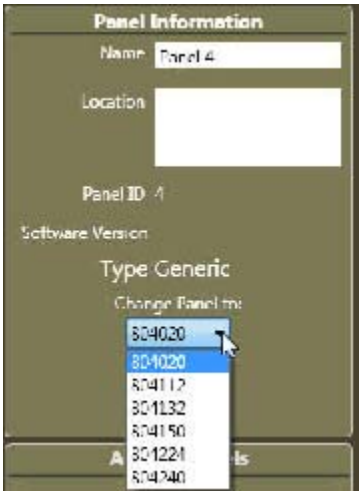


Note:

Some older versions of Control Panel software do not allow TyLinx Pro to identify the SCP control panel type.

If the SCP control panel you have selected is identified as "Type Generic" you may have an older version of software. Older versions of software may still be programmed.

Select the panel Type from the dropdown window under "Change Panel to:" and continue.

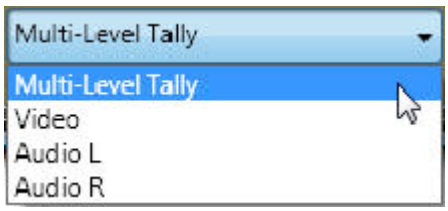


All control panels can have outputs blocked, this allows the control panel to status an output, but prevents the panel from selecting inputs on that output.

Select the outputs you want this panel to control.

Panels can also have levels blocked. “Enable/Disable” the levels you want this panel to control by clicking on the level boxes in the lower part of the screen.

The “LED Tally Level” selects the level the button lights will follow when in the XY mode. Multi-Level follows all levels and will show break-away switching.



If the panel is to be a “Single Bus” (only controls 1 output), place a check in the “Single Bus” box.

Placing a check in the “Single Bus” box will cause the panel to only access and switch the single selected output.

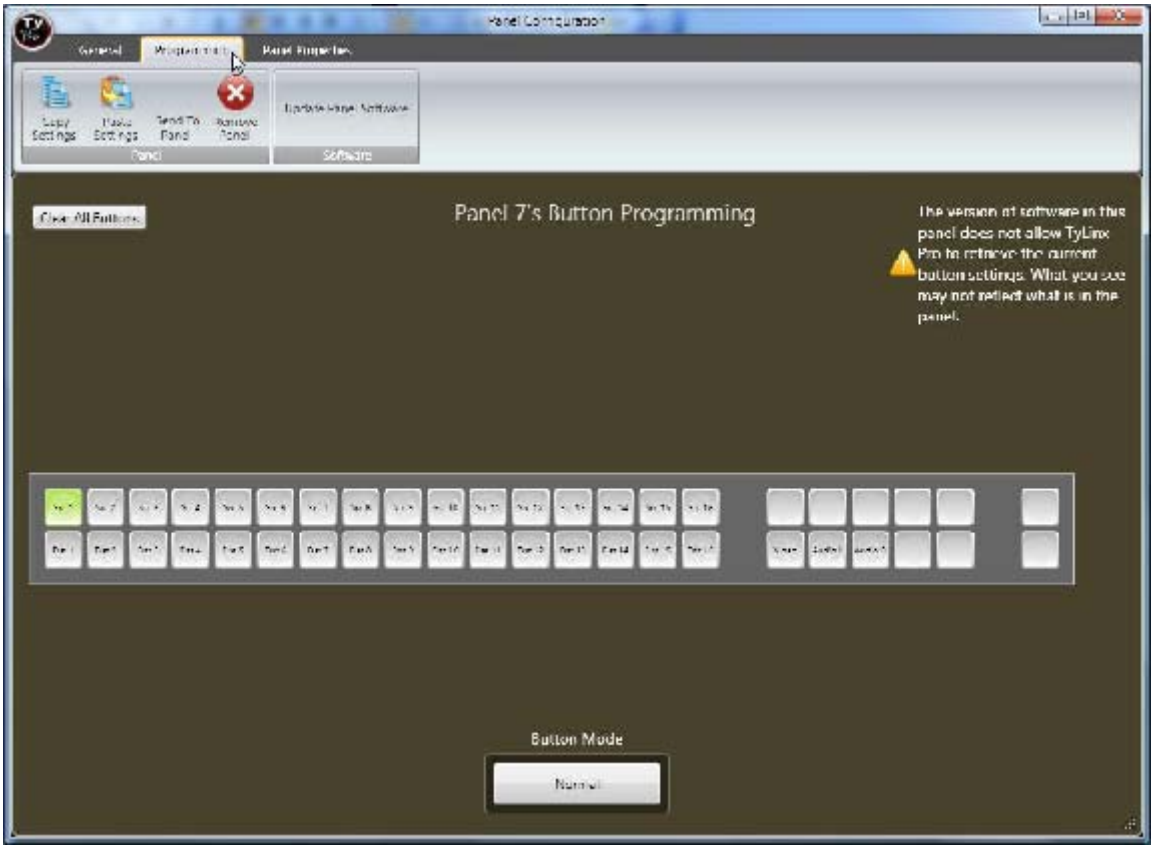
If there is no check in the box and only one output is selected for the panel to control, the panel can status the blocked outputs but only switch the selected output.

When selection of allowed outputs and levels is complete, click on “Send to Router”.

Programming Panel Buttons

Click on the “Programming” tab at the top of the window.

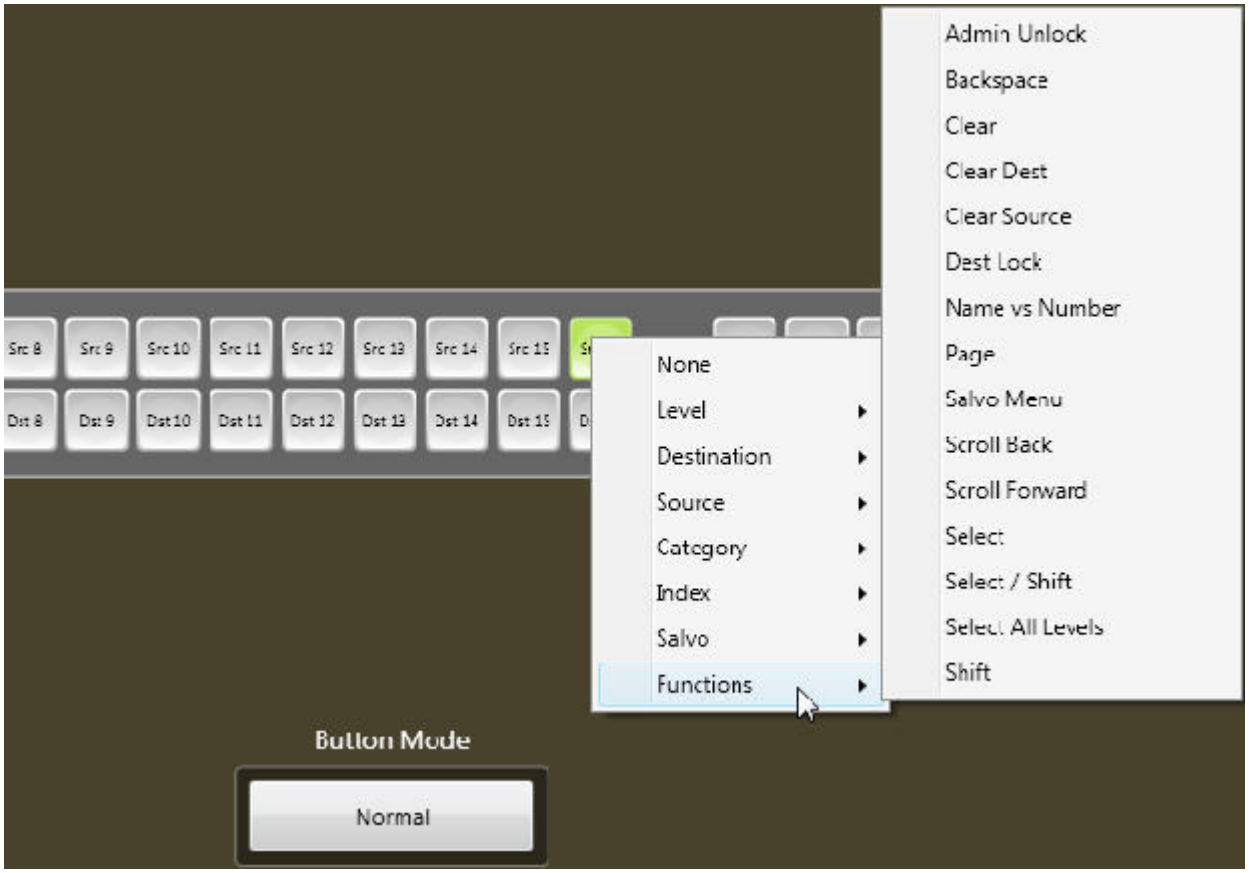
This will take you to the button programming window.



Note:

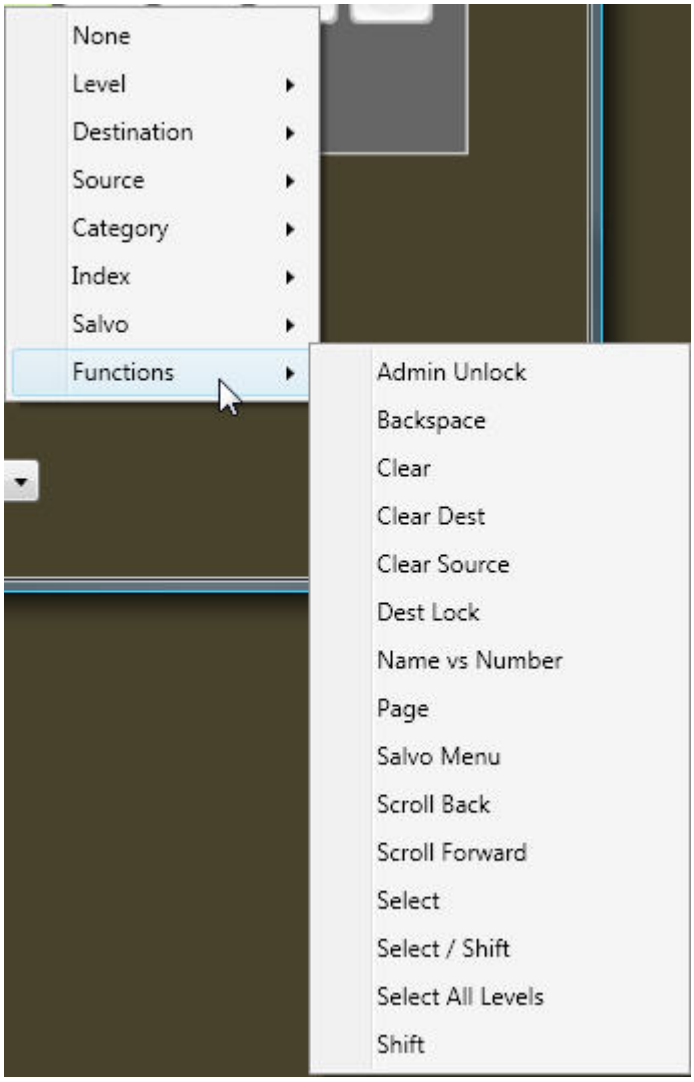
If your panel does not have software that does not allow TyLinx Pro to read the current programming of the buttons, this screen will reflect the factory default programming.

To program a button hover over the button with the mouse pointer, right click, and select from the dropdown list, the program you would like to place into the button.



Continue this process for each button you want to program.

Functions; This is a list of functions that can be applied to the panel buttons.



Admin Unlock- Unlocks selected destination. Overrides lock made by any user.

Backspace- Causes cursor to move back one character space. N/A for the SCP-150.

Clear- Clears current entry.

Clear Dest- Clears destination entry and places the cursor in the destination field. N/A for the SCP-150.

Clear Source- Clears source entry and places the cursor in the source field. N/A for the SCP-150.

Dest Lock- Locks current destination from changing to another source.

Name vs Number- Toggles between Alpha and Numeric sort. N/A for the SCP-150.

Page- This function is not available in the SCP-150

Salvo Menu- This function is not available in the SCP-150

Scroll Back- Causes lists to display from higher number to lower. N/A for the SCP-150.

Scroll Forward- Causes lists to display from lower number to higher. N/A for the SCP-150.

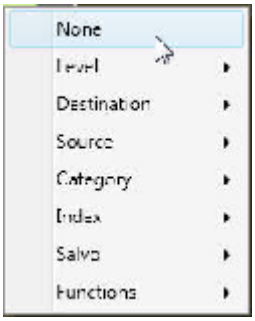
Select- Moves cursor. N/A for the SCP-150.

Select/Shift- "Select/Shift" is a dual mode function. Pressing once is the "Select" function (moves cursor). Holding down the button is the "Shift" function similar to a standard computer keyboard.

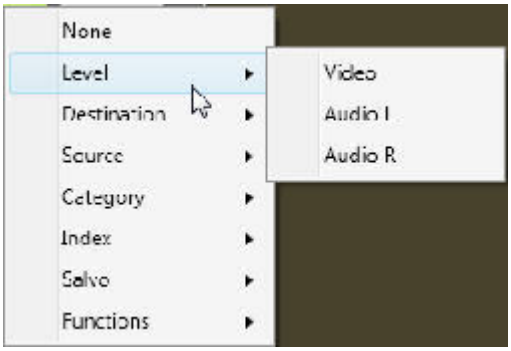
Select All Levels- Enables all levels Note; all levels are enabled as a default. This function restores all levels to enable if the previous switch was other than all levels.

Take- Initiates command

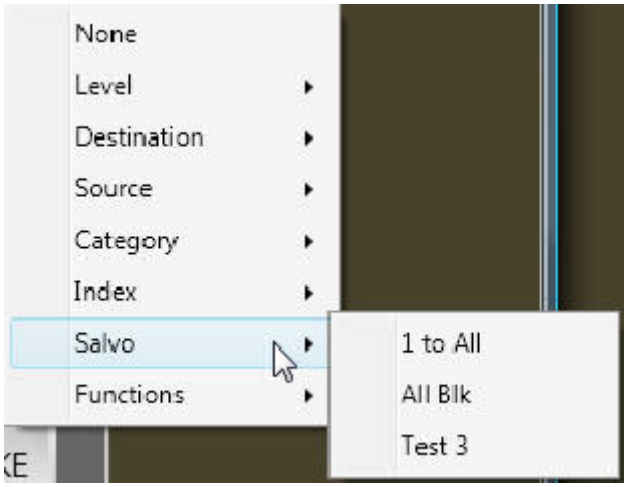
None- This removes any programming from the button.



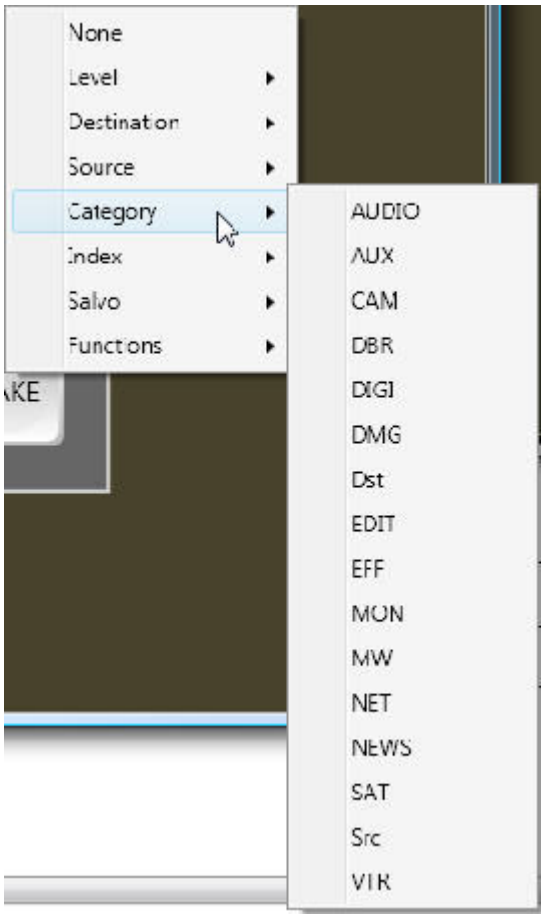
Level; This list contains the levels of control active on the router. When this function is applied to a panel button the LED for that button will light allowing individual level selection. After a destination is selected all level buttons will light. Pressing a level button will unselect the level indicated by extinguishing the light. Holding down the button will cause the panel to cycle from enabling only the level selected to all levels enabled.



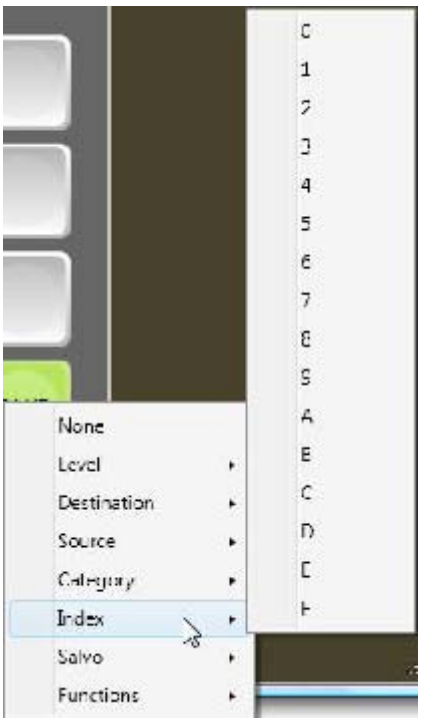
Salvo; This window is the list of Salvos. Selecting a Salvo from this list and applying it to a button gives you a direct link to the Salvo selected.



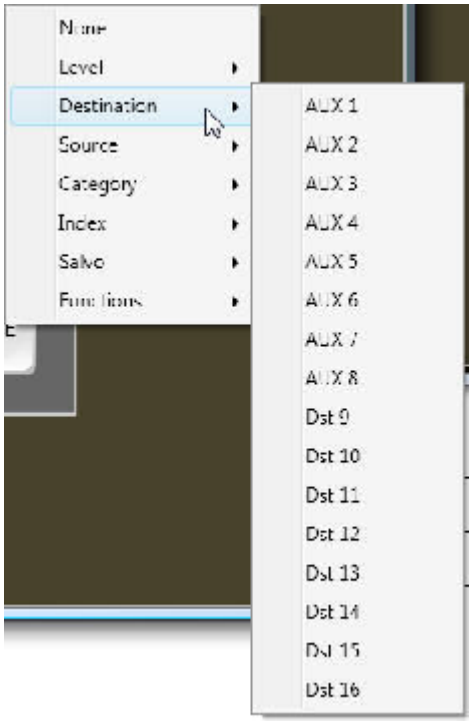
Category; This list contains the categories as entered in the names screen in TyLinx Pro. This programs the button to enter the category name awaiting an index number to complete the entry.



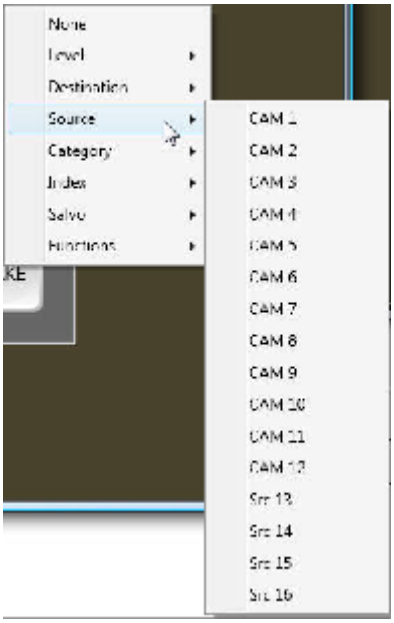
Index: This list contains the Indices as entered in the names screen in TyLinx Pro. This programs the button to enter the index reference of a category to complete the entry.



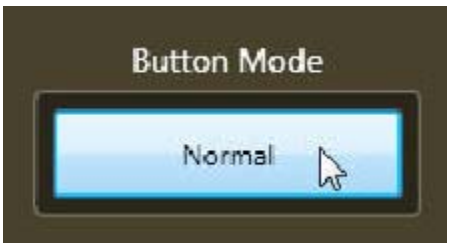
Destination; This is a list of outputs, by name, providing a direct routing path to a selected output.



Source; This is a list providing a direct routing path to a selected input.

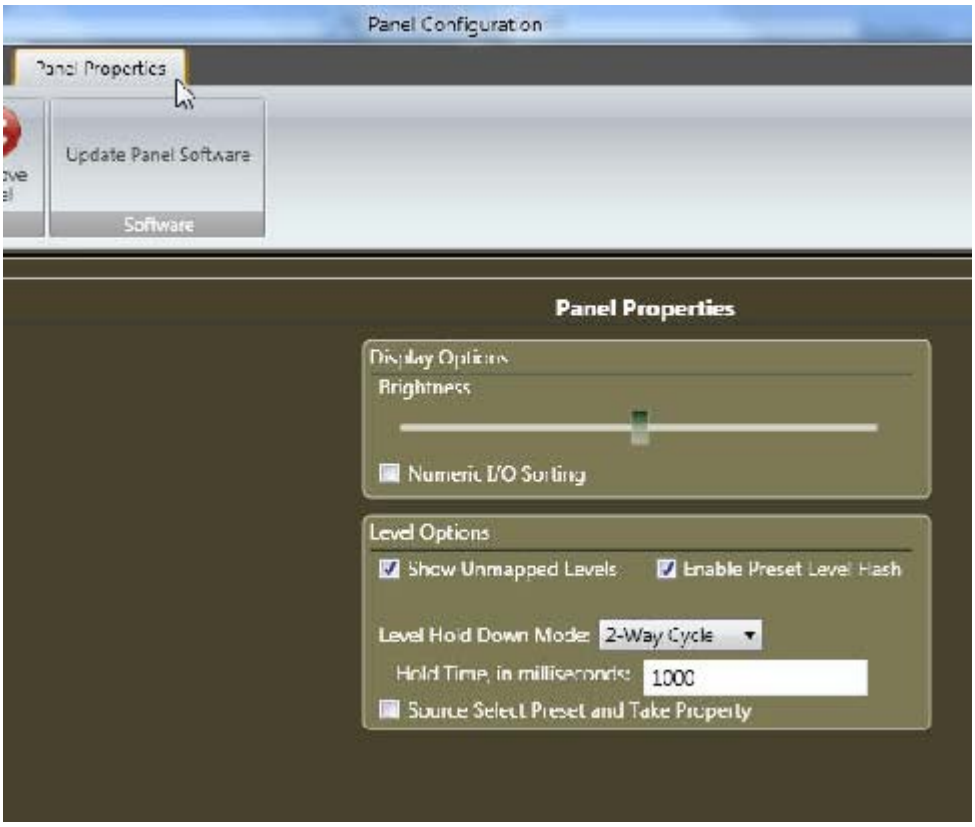


Button Mode; Clicking on the “Button Mode” button mode button toggles between “normal” and “shift”. Selecting “shift” allows you to program buttons on a “shift” row. The “shift” row acts similar to a PC keyboard. If a button is programmed is programmed as “Select/Shift”, holding down that button accesses anything programmed in the “shift” row.



Panel Properties

Select the panel properties tab.



Numeric I/O sorting- Panel lists will display sorted by input or output number. Un-checked panel will display lists by alpha sort.

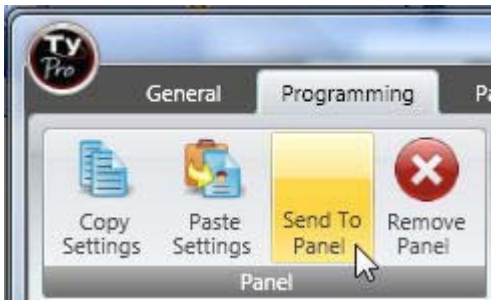
Show UnMapped Levels- Levels that are unmapped will be displayed in status. Unchecked will hide unmapped levels.

Enable Preset Level Flash- When checked this will cause level display to flash when preset to switch. ** If level button is programmed as a shift function, checking this box has no effect on level button function.*

Source Select Preset and Take Property- If this box is checked, router will “Take” when source is selected. Un-checked will require a “Take” button to be pressed to initiate switch.

Level Hold Down Mode- When level buttons are held down for 3 seconds they will cycle through a series of enabled and disabled. In the 2-Way Cycle mode, holding down the level button toggles between all on to only the selected on. 3-Way Cycle Mode, holding down the level button toggles between selected on, all on, and selected off others on.

When programming is complete, click on “Send To Panel” to apply programming to the panel.

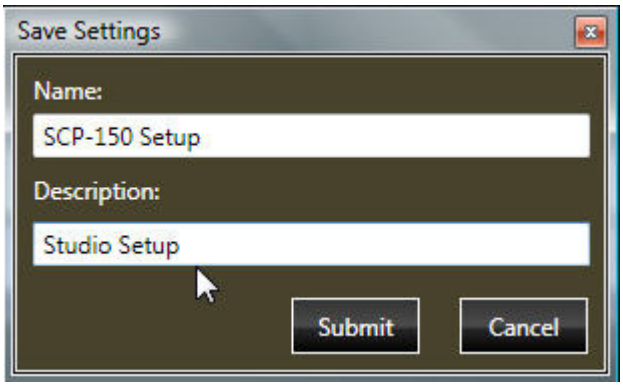


The panel will reset when programming is complete.

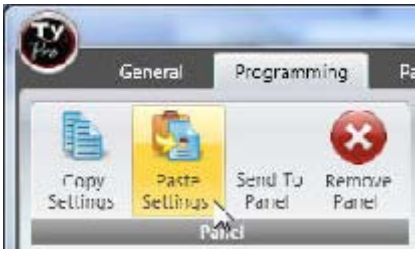
Once you have programmed a setup you may save the setup to paste to other panels. Settings are saved in the TyLinx Pro data base and can be selected to paste to another SCP-150 in the future.

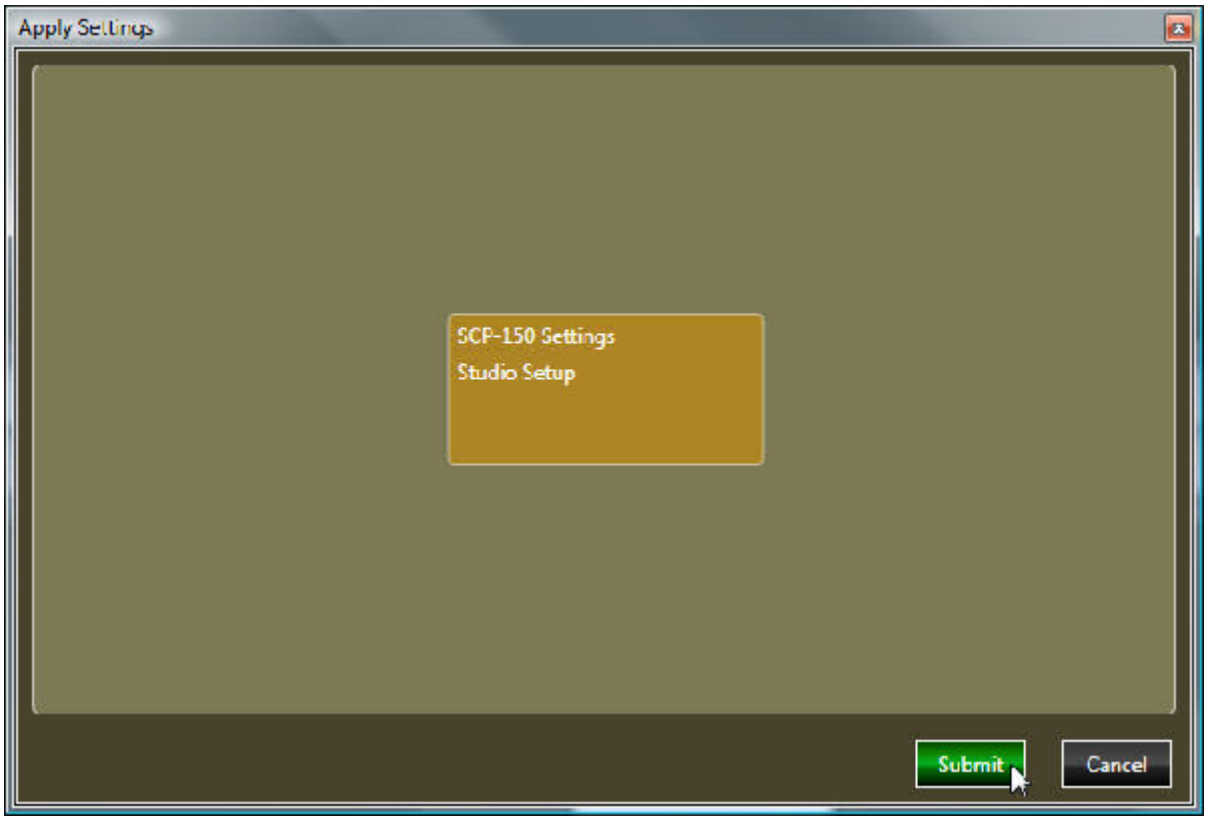
Click on “Copy Settings”.

A “Save Settings” dialog window will appear allowing entry of a name and description of the saved settings.



To recall saved settings, click on “Paste Settings” and select the settings you want to apply and click on “Submit”.





Operational Notes

Enter the destination first. A source button will light indicating the current source connected to the destination. After the destination is entered, select a source. The “Take” button will flash. Pressing “Take” will complete the route.

The SCP-150 panel is best programmed as an XY or Salvo panel, although it can be programmed to do many other functions as well.

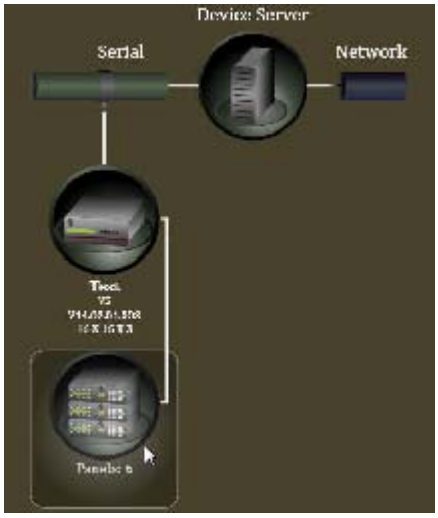
If the panel properties window has a check in the “Source Select Preset and Take Property” box, the panel will switch as soon as a source is selected.

4.6.5 SCP-224

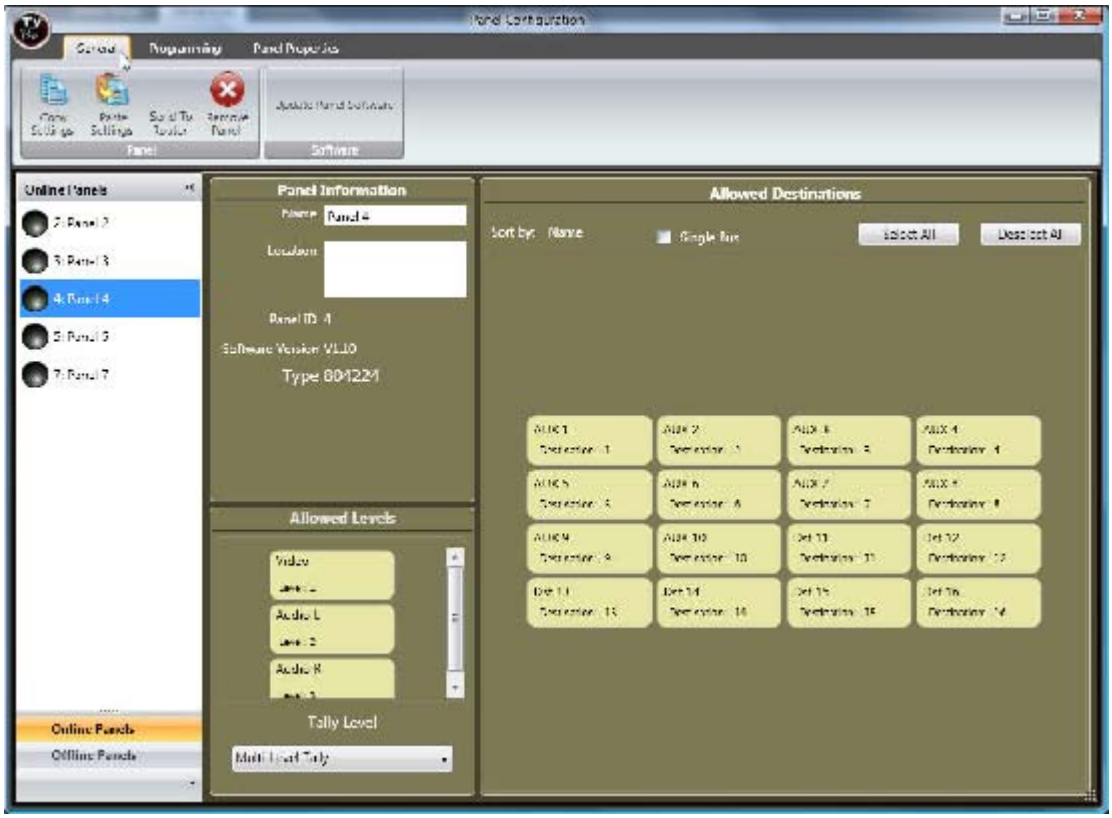
General Settings

The “General Settings” window is the first step to programming an SCP panel. The “General” window allows you to set the output(s) and level(s) you want the panel to control.

From the Device Map window on TyLinx Pro, double click on the control panel icon.



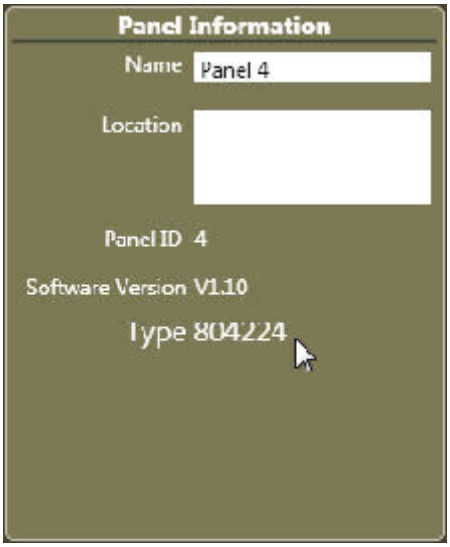
Select the Panel number (ID) of the SCP-224 panel you want to program.



Note:

The General Settings must be configured before proceeding to the Programming screen.

The “Panel Information” window will display the part number and software version of the selected panel. The SCP-224 panel’s part number is 804224.



You can enter a panel name and/or location (optional).

Select the level(s) the panel is to control (toggle on and off).

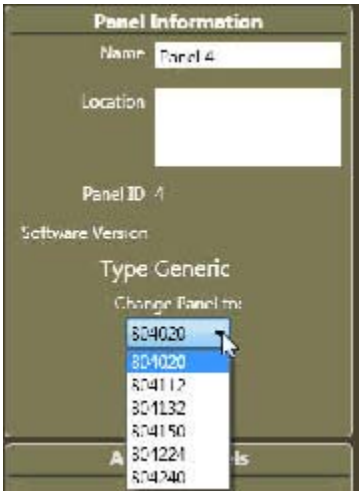
Select the output(s) the panel is to control.

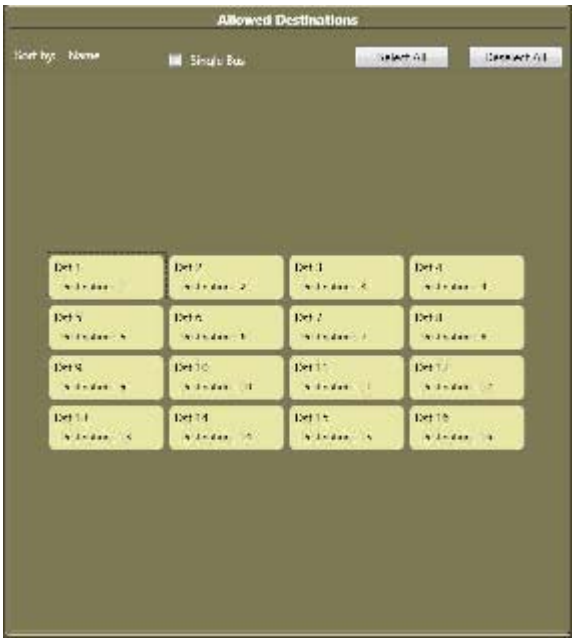
Note:

Some older versions of Control Panel software do not allow TyLinx Pro to identify the SCP control panel type.

If the SCP control panel you have selected is identified as "Type Generic" you may have an older version of software. Older versions of software may still be programmed.

Select the panel Type from the dropdown window under "Change Panel to:" and continue.



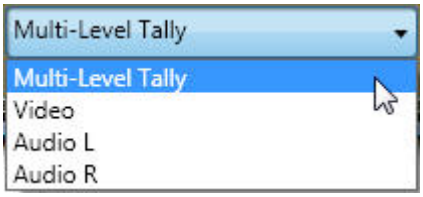


All control panels can have outputs blocked, this allows the control panel to status an output, but prevents the panel from selecting inputs on that output.

Select the outputs you want this panel to control from the “Allowed Destinations” window..

Panels can also have levels blocked. “Enable/Disable” the levels you want this panel to control by clicking on the level boxes in the lower part of the screen.

The “LED Tally Level” selects the level the button lights will follow when in the XY mode. Multi-Level follows all levels and will show break-away switching.

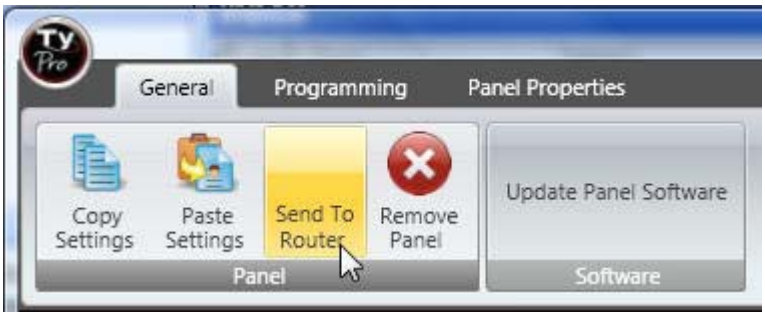


If the panel is to be a “Single Bus” (only controls 1 output), place a check in the “Single Bus” box.

Placing a check in the “Single Bus” box will cause the panel to only access and switch the single selected output.

If there is no check in the box and only one output is selected for the panel to control, the panel can status the blocked outputs but only switch the selected output.

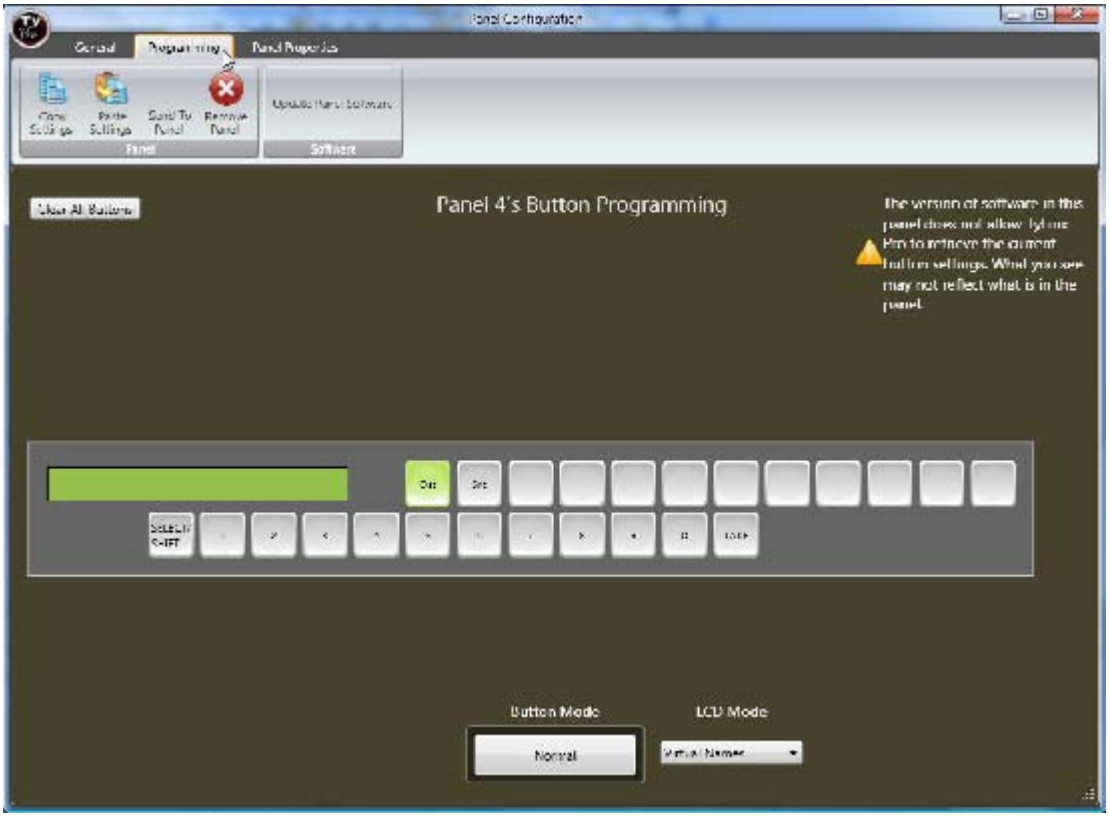
When selection of allowed outputs and levels is complete, click on “Send to Router”.



Programming Panel Buttons

Click on the “Programming” tab at the top of the window.

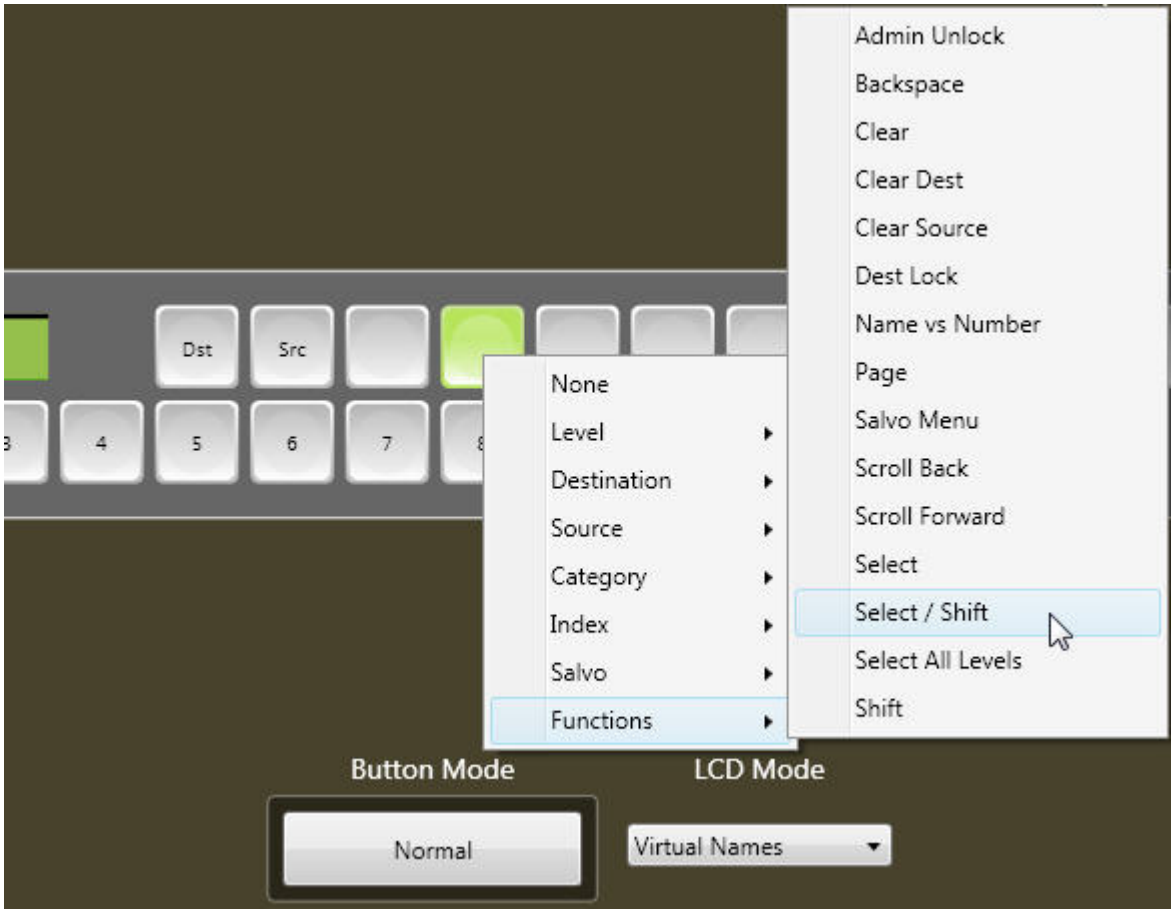
This will take you to the button programming window.



Note:

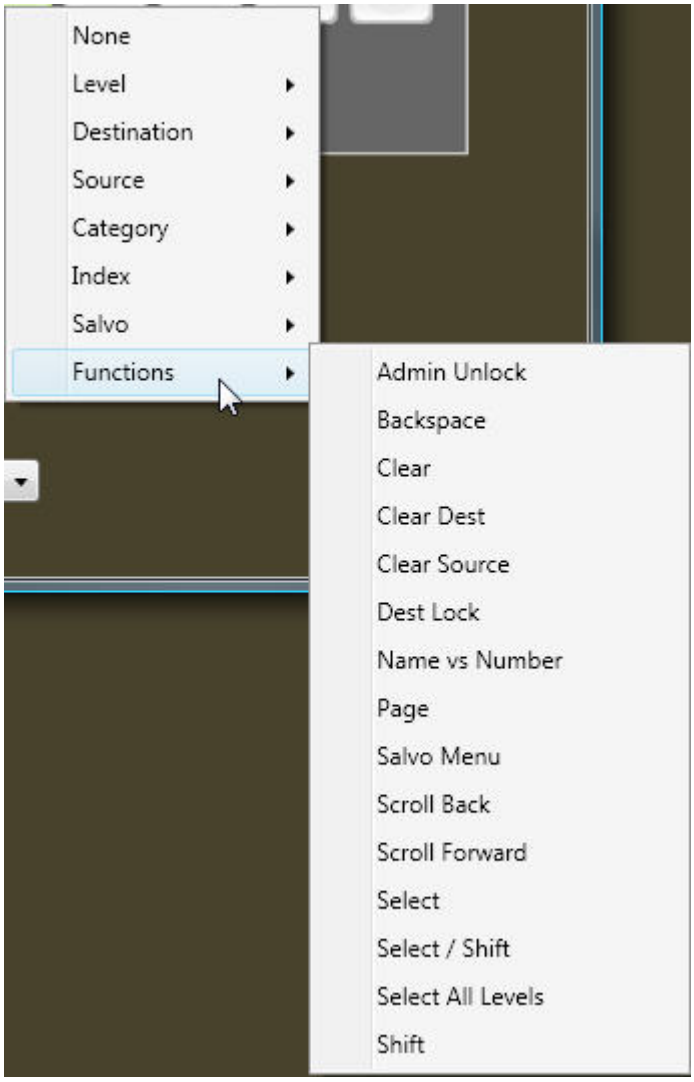
If your panel does not have software that does not allow TyLinx Pro to read the current programming of the buttons, this screen will reflect the factory default programming.

To program a button hover over the button with the mouse pointer, right click, and select from the dropdown list, the program you would like to place into the button.



Continue this process for each button you want to program.

Functions; This is a list of functions that can be applied to the panel buttons.



Admin Unlock- Unlocks selected destination. Overrides lock made by any user.

Backspace- Causes cursor to move back one character space.

Clear- Clears current entry.

Clear Dest- Clears destination entry and places the cursor in the destination field.

Clear Source- Clears source entry and places the cursor in the source field.

Dest Lock- Locks current destination from changing to another source.

Name vs Number- Toggles between Alpha and Numeric sort.

Page- Changes display to next page. If there are more levels than show in LCD display, Page will display next set of levels.

Salvo Menu- The “Salvo Menu” function will display the list of Salvos in the LCD of the panel for selection.

Scroll Back- Causes lists to display from higher number to lower.

Scroll Forward- Causes lists to display from lower number to higher.

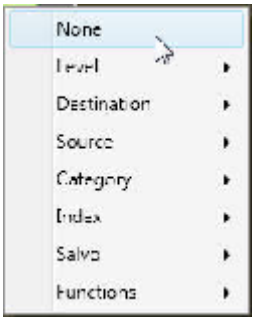
Select- Moves cursor.

Select/Shift- “Select/Shift” is a dual mode function. Pressing once is the “Select” function (moves cursor). Holding down the button is the “Shift” function similar to a standard computer keyboard.

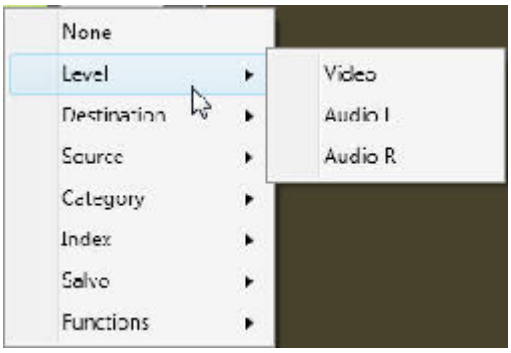
Select All Levels- Enables all levels Note; all levels are enabled as a default. This function restores all levels to enable if the previous switch was other than all levels.

Take- Initiates command

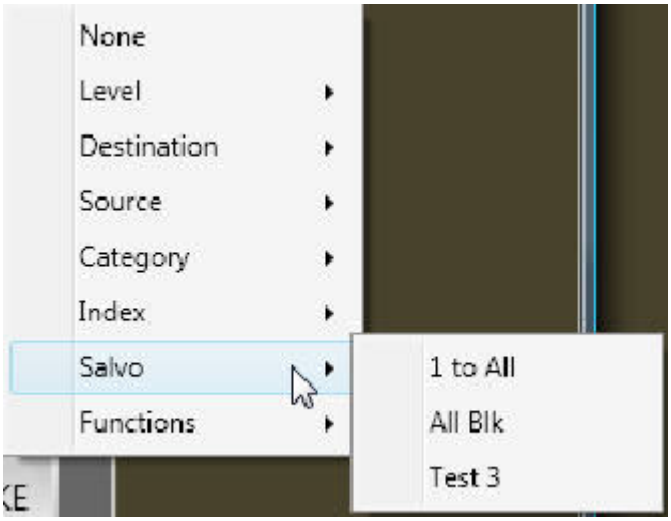
None- This removes any programming from the button.



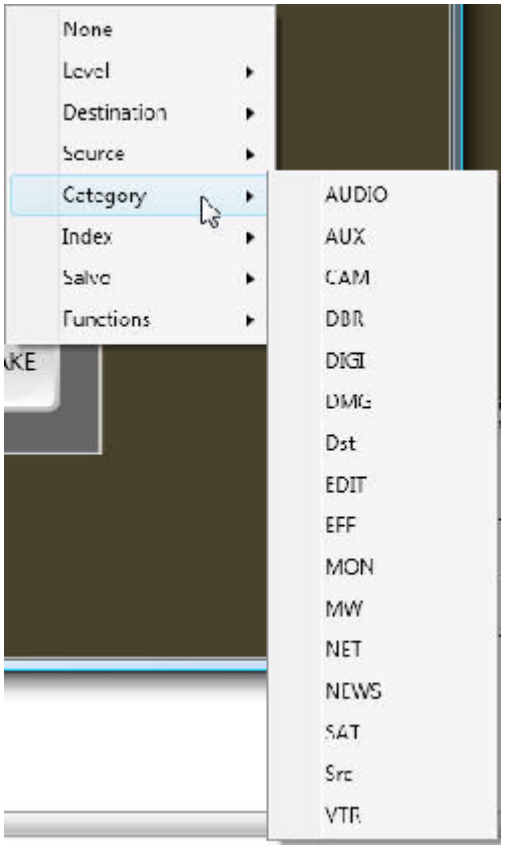
Level; This list contains the levels of control active on the router. When this function is applied to a panel button the LED for that button will light allowing individual level selection. After a destination is selected all level buttons will light. Pressing a level button will unselect the level indicated by extinguishing the light. Holding down the button will cause the panel to cycle from enabling only the level selected to all levels enabled.



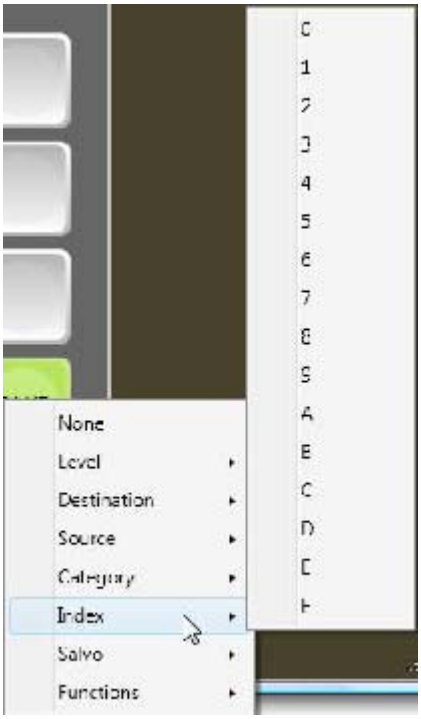
Salvo; This window is the list of Salvos. Selecting a Salvo from this list and applying it to a button gives you a direct link to the Salvo selected.
*A "Salvo Menu" function can be found in the **Functions** window. This will display the list of Salvos in the LCD of the panel for selection.



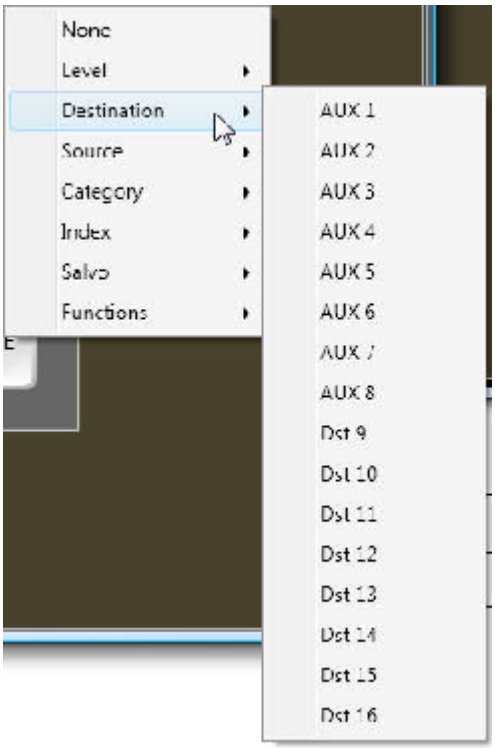
Category; This list contains the categories as entered in the names screen in TyLinx Pro. This programs the button to enter the category name awaiting an index number to complete the entry.



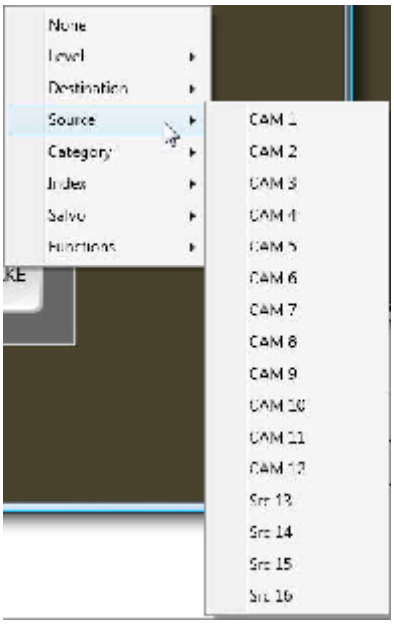
Index: This list contains the Indices as entered in the names screen in TyLinx Pro. This programs the button to enter the index reference of a category to complete the entry.



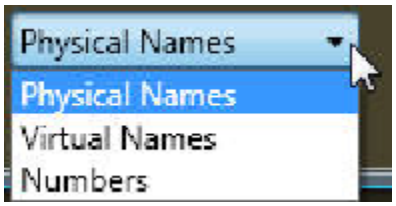
Destination; This is a list of outputs, by name, providing a direct routing path to a selected output.



Source; This is a list providing a direct routing path to a selected input.

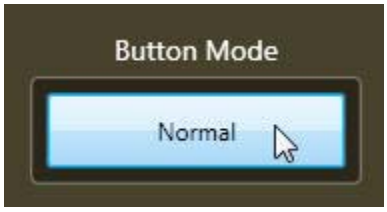


LCD Mode; Selecting the different setups will adjust the display of the in the “Source Status” window on the panel. Some models, depending on LCD size, do not support all setups.



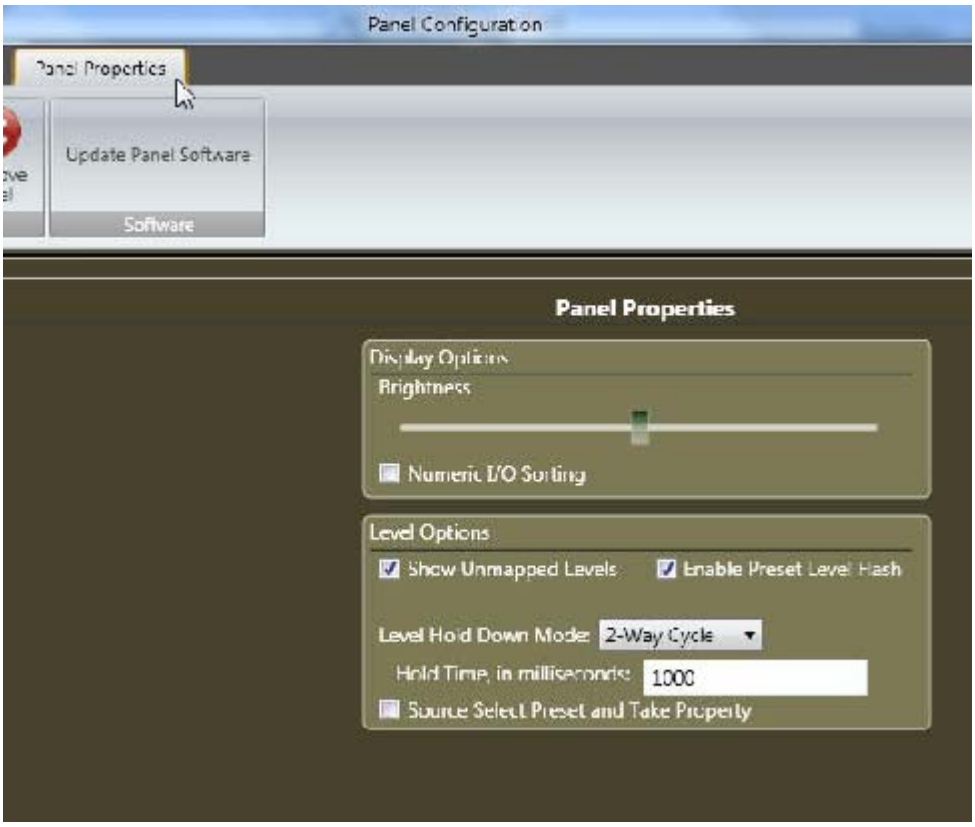
Physical Names displays the actual source names by level.
Virtual Names displays the virtual source name in all levels.
Numbers displays the physical I/O numbers (numeric only).

Button Mode; Clicking on the “Button Mode” button mode button toggles between “normal” and “shift”. Selecting “shift” allows you to program buttons on a “shift” row. The “shift” row acts similar to a PC keyboard. If a button is programmed is programmed as “Select/Shift”, holding down that button accesses anything programmed in the “shift” row.



Panel Properties

Select the panel properties tab.



Numeric I/O sorting- Panel lists will display sorted by input or output number. Un-checked panel will display lists by alpha sort.

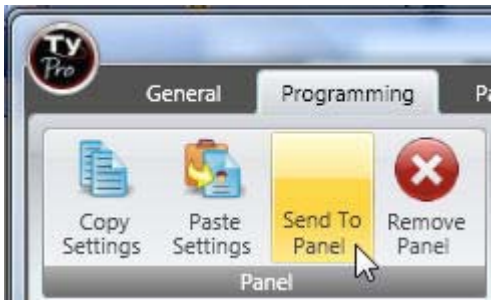
Show UnMapped Levels- Levels that are unmapped will be displayed in status. Unchecked will hide unmapped levels.

Enable Preset Level Flash- When checked this will cause level display to flash when preset to switch. ** If level button is programmed as a shift function, checking this box has no effect on level button function.*

Source Select Preset and Take Property- If this box is checked, router will “Take” when source is selected. Un-checked will require a “Take” button to be pressed to initiate switch.

Level Hold Down Mode- When level buttons are held down for 3 seconds they will cycle through a series of enabled and disabled. In the 2-Way Cycle mode, holding down the level button toggles between all on to only the selected on. 3-Way Cycle Mode, holding down the level button toggles between selected on, all on, and selected off others on.

When programming is complete, click on “Send To Panel” to apply programming to the panel.

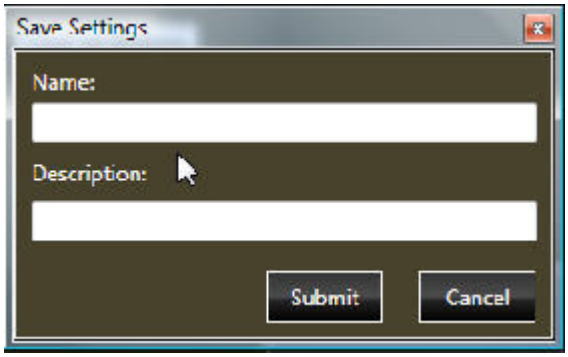


The LCD screen on the panel will indicate that the buttons are being programmed and the panel will reset when complete.

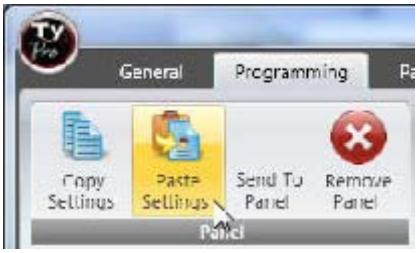
Once you have programmed a setup you may save the setup to paste to other panels. Settings are saved in the TyLinx Pro data base and can be selected to paste to another SCP-224 in the future.

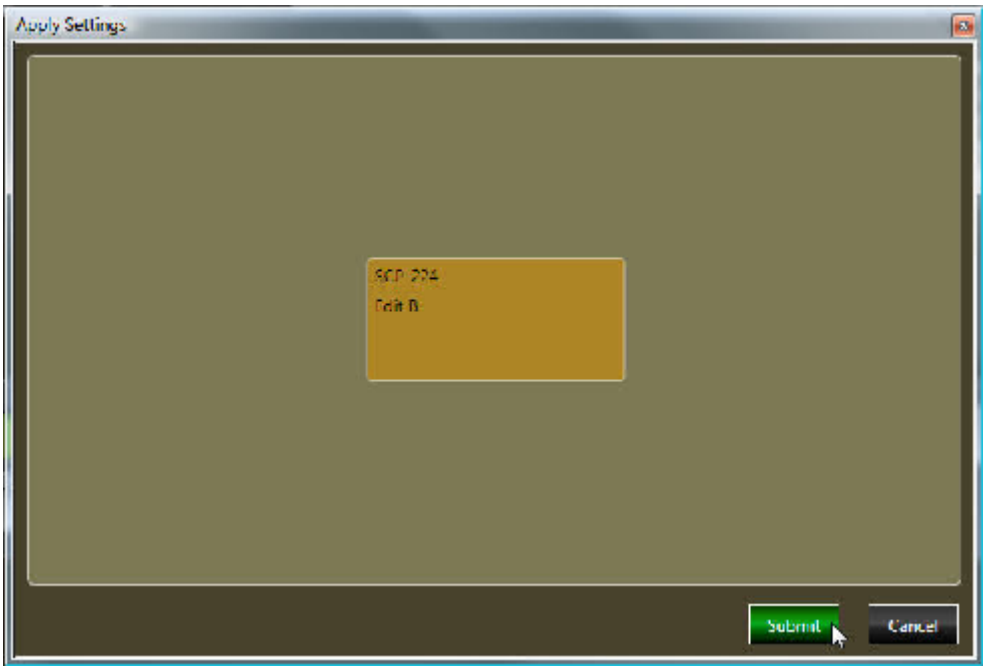
Click on “Copy Settings”.

A “Save Settings” dialog window will appear allowing entry of a name and description of the saved settings.



To recall saved settings, click on “Paste Settings” and select the settings you want to apply and click on “Submit”.





Operational Notes

Enter the destination first. After the destination is entered, the button programmed “Select/Shift” will flash indicating a valid entry. Press either “Select/Shift” to move the cursor to the “Source” field, and enter the Source. After the “Source” is entered, pressing “Take” will complete the route.

Names are stored in the router’s CPU. Enter names in the router before programming the panel.
See the “names” section of the TyLinx Pro help file for details.

When a panel displays a question mark it is an indication that the name entered is not recognized as a name in the router’s CPU.

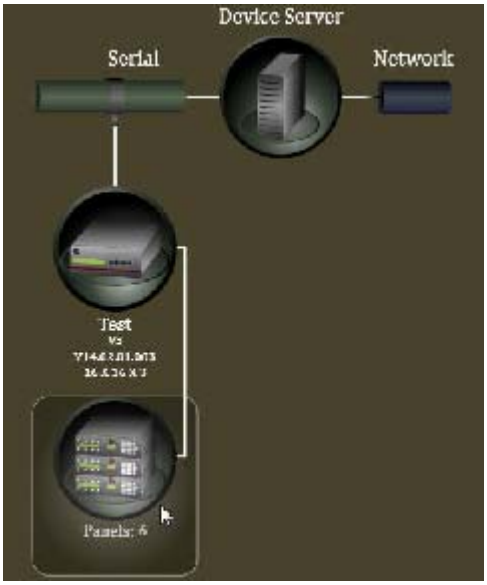
The control panel downloads names from the router on power up. If the names in the router are changed, remove power from the control panel for 10 seconds. Re-applying power will cause the panel to download the new names.

4.6.6 SCP-240

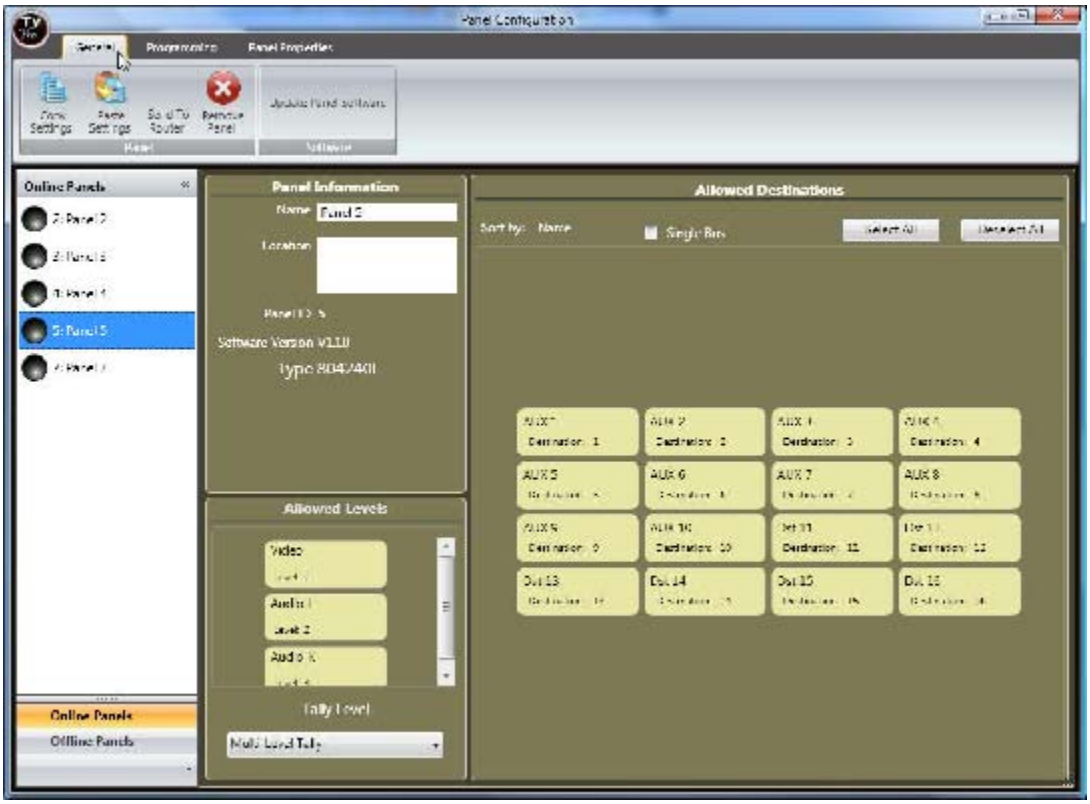
General Settings

The “General Settings” window is the first step to programming an SCP panel. The “General” window allows you to set the output(s) and level(s) you want the panel to control.

From the Device Map window on TyLinx Pro, double click on the control panel icon.



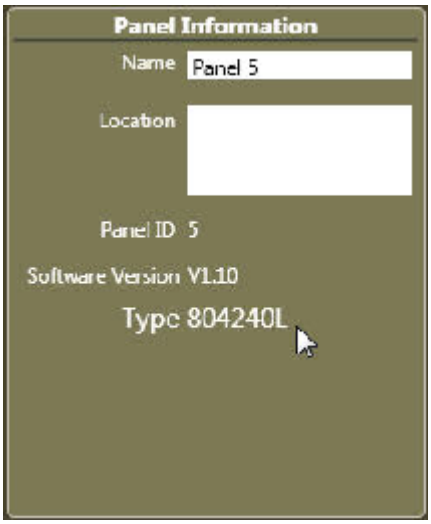
Select the Panel number (ID) of the SCP-240 panel you want to program.



Note:

The General Settings must be configured before proceeding to the Programming screen.

The “Panel Information” window will display the part number and software version of the selected panel. The SCP-240 panel’s part number is 804240.



You can enter a panel name and/or location (optional).

Select the level(s) the panel is to control (toggle on and off).

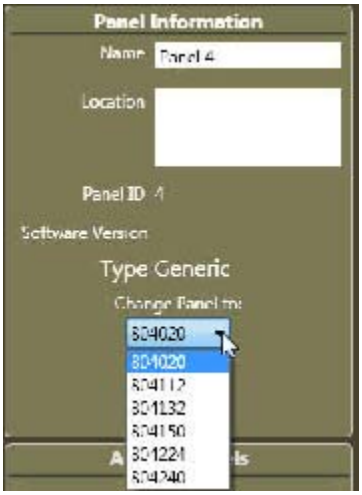
Select the output(s) the panel is to control.

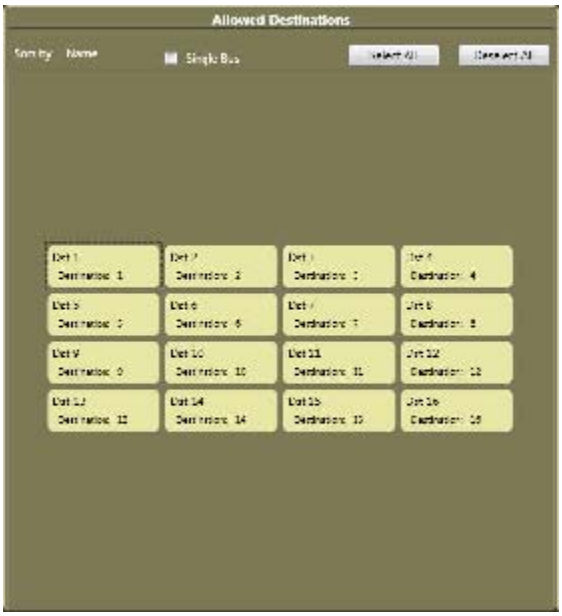
Note:

Some older versions of Control Panel software do not allow TyLinx Pro to identify the SCP control panel type.

If the SCP control panel you have selected is identified as "Type Generic" you may have an older version of software. Older versions of software may still be programmed.

Select the panel Type from the dropdown window under "Change Panel to:" and continue.



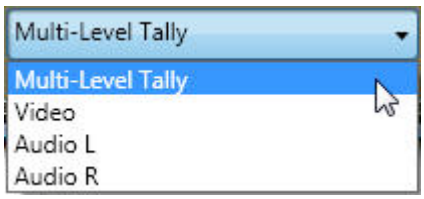


All control panels can have outputs blocked, this allows the control panel to status an output, but prevents the panel from selecting inputs on that output.

Select the outputs you want this panel to control.

Panels can also have levels blocked. “Enable/Disable” the levels you want this panel to control by clicking on the level boxes in the lower part of the screen.

The “LED Tally Level” selects the level the button lights will follow when in the XY mode. Multi-Level follows all levels and will show break-away switching.



If the panel is to be a “Single Bus” (only controls 1 output), place a check in the “Single Bus” box.

Placing a check in the “Single Bus” box will cause the panel to only access and switch the single selected output.

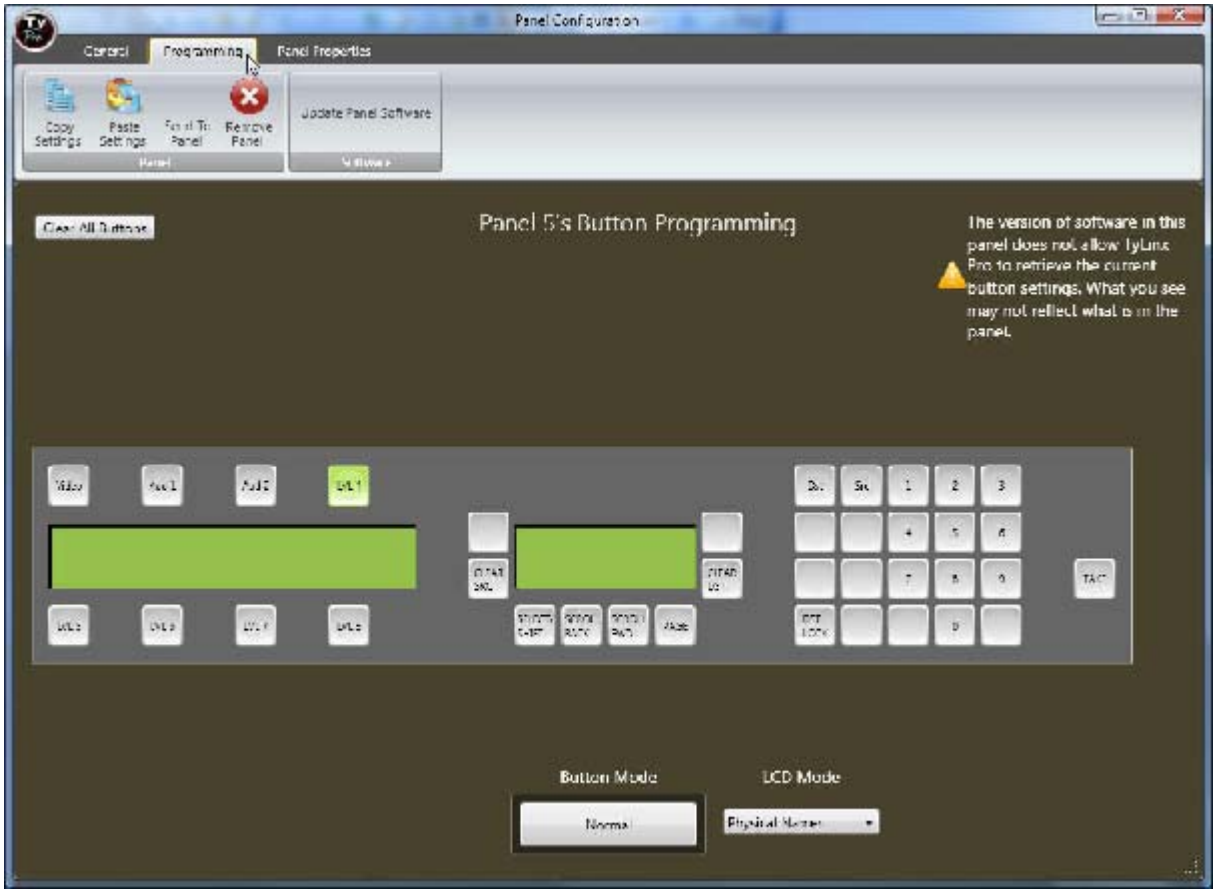
If there is no check in the box and only one output is selected for the panel to control, the panel can status the blocked outputs but only switch the selected output.

When selection of allowed outputs and levels is complete, click on “Send to Router”.

Programming Panel Buttons

Click on the “Programming” tab at the top of the window.

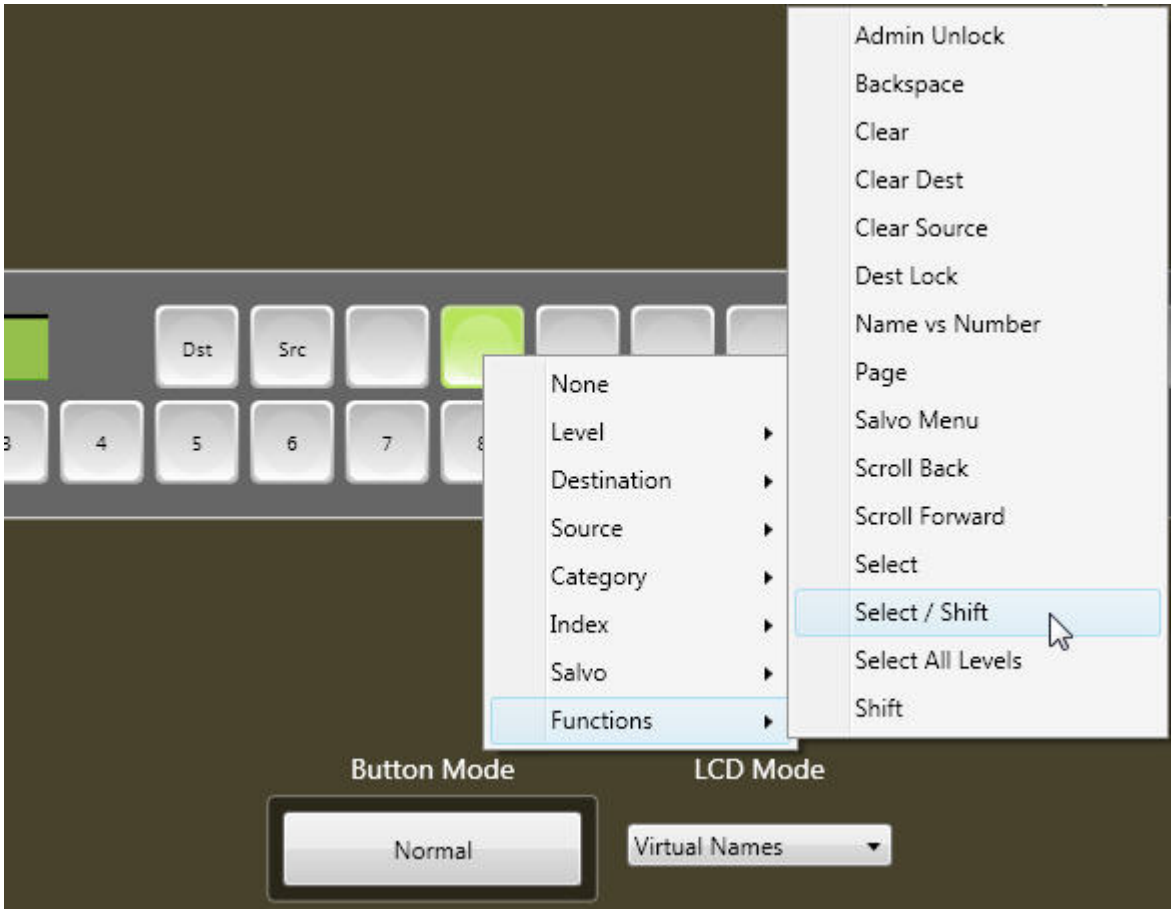
This will take you to the button programming window.



Note:

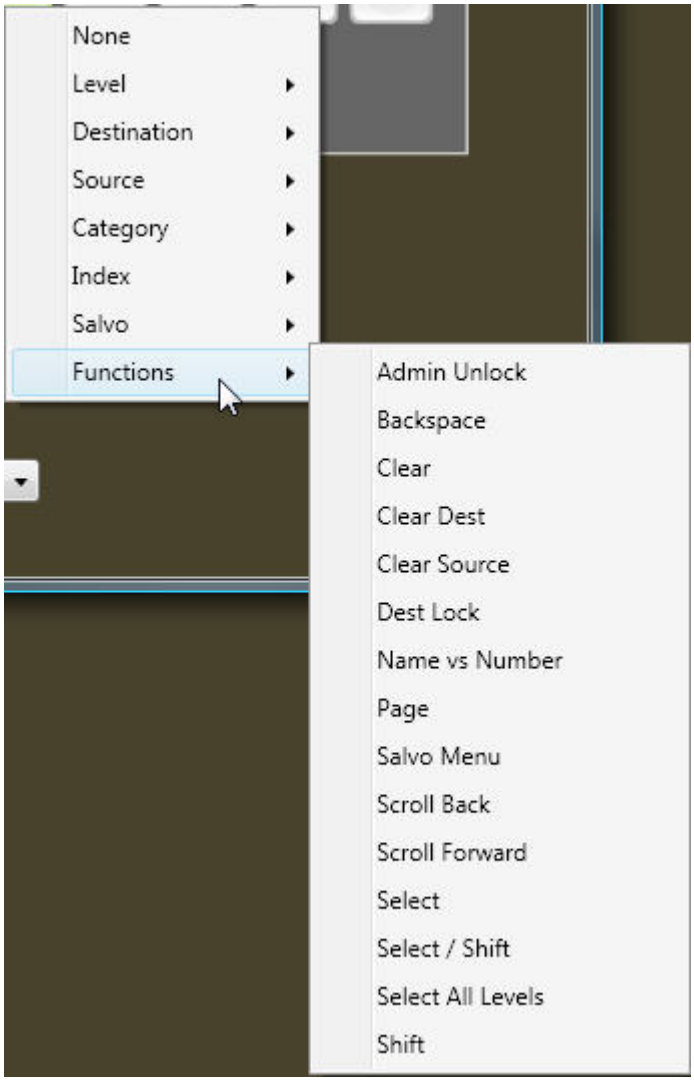
If your panel does not have software that does not allow TyLinx Pro to read the current programming of the buttons, this screen will reflect the factory default programming.

To program a button hover over the button with the mouse pointer, right click, and select from the dropdown list, the program you would like to place into the button.



Continue this process for each button you want to program.

Functions; This is a list of functions that can be applied to the panel buttons.



Admin Unlock- Unlocks selected destination. Overrides lock made by any user.

Backspace- Causes cursor to move back one character space.

Clear- Clears current entry.

Clear Dest- Clears destination entry and places the cursor in the destination field.

Clear Source- Clears source entry and places the cursor in the source field.

Dest Lock- Locks current destination from changing to another source.

Name vs Number- Toggles between Alpha and Numeric sort.

Page- Changes display to next page. If there are more levels than show in LCD display, Page will display next set of levels.

Salvo Menu- The “Salvo Menu” function will display the list of Salvos in the LCD of the panel for selection.

Scroll Back- Causes lists to display from higher number to lower.

Scroll Forward- Causes lists to display from lower number to higher.

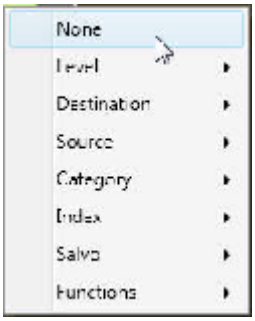
Select- Moves cursor.

Select/Shift- “Select/Shift” is a dual mode function. Pressing once is the “Select” function (moves cursor). Holding down the button is the “Shift” function similar to a standard computer keyboard.

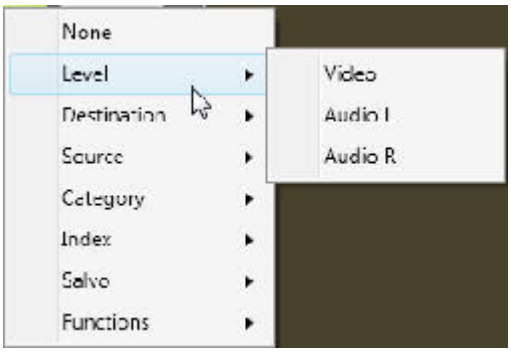
Select All Levels- Enables all levels Note; all levels are enabled as a default. This function restores all levels to enable if the previous switch was other than all levels.

Take- Initiates command

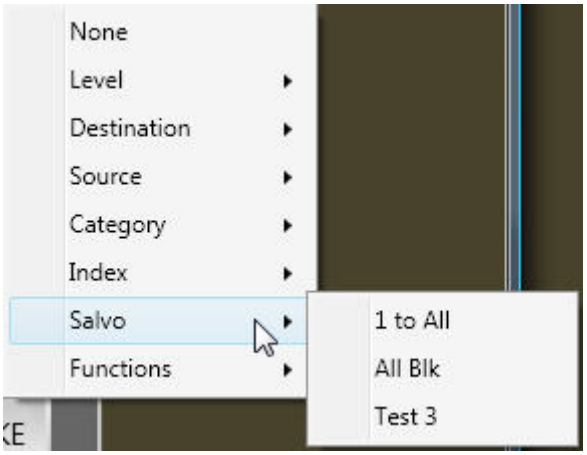
None- This removes any programming from the button.



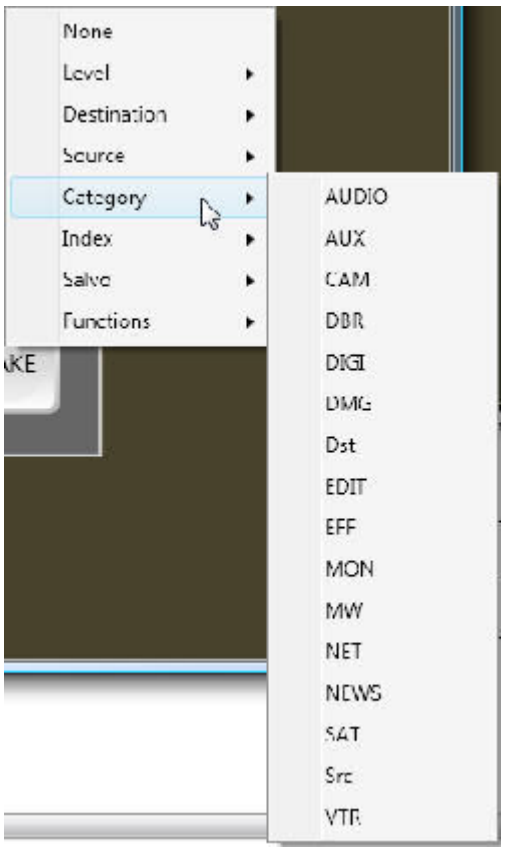
Level; This list contains the levels of control active on the router. When this function is applied to a panel button the LED for that button will light allowing individual level selection. After a destination is selected all level buttons will light. Pressing a level button will unselect the level indicated by extinguishing the light. Holding down the button will cause the panel to cycle from enabling only the level selected to all levels enabled.



Salvo; This window is the list of Salvos. Selecting a Salvo from this list and applying it to a button gives you a direct link to the Salvo selected.
*A “Salvo Menu” function can be found in the **Functions** window. This will display the list of Salvos in the LCD of the panel for selection.

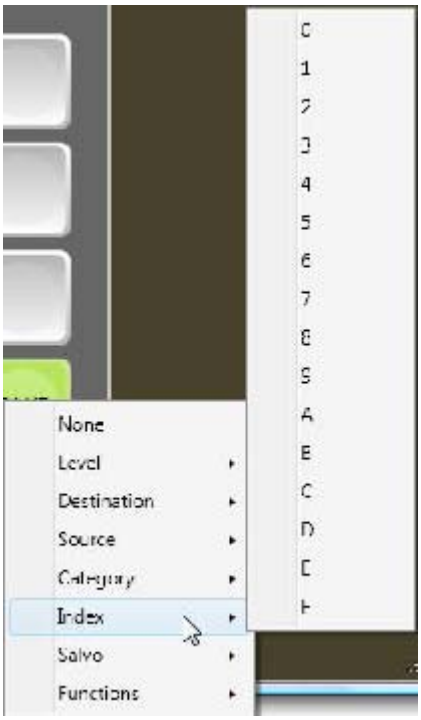


Category; This list contains the categories as entered in the names screen in TyLinx Pro. This programs the button to enter the category name awaiting an index number to complete the entry.

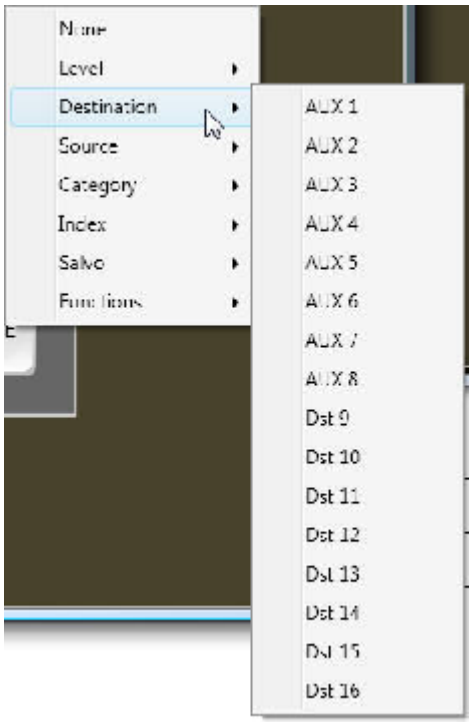


Index: This list contains the Indices as entered in the names screen in TyLinx Pro. This

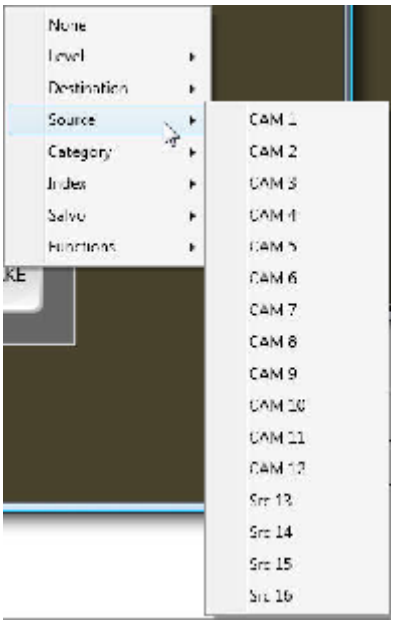
programs the button to enter the index reference of a category to complete the entry.



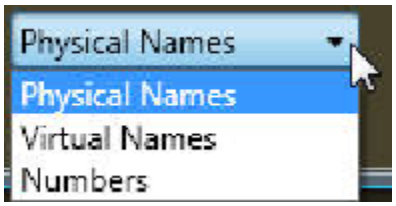
Destination; This is a list of outputs, by name, providing a direct routing path to a selected output.



Source; This is a list providing a direct routing path to a selected input.

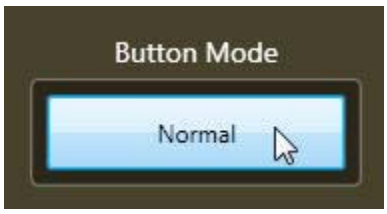


LCD Mode; Selecting the different setups will adjust the display of the in the “Source Status” window on the panel. Some models, depending on LCD size, do not support all setups.



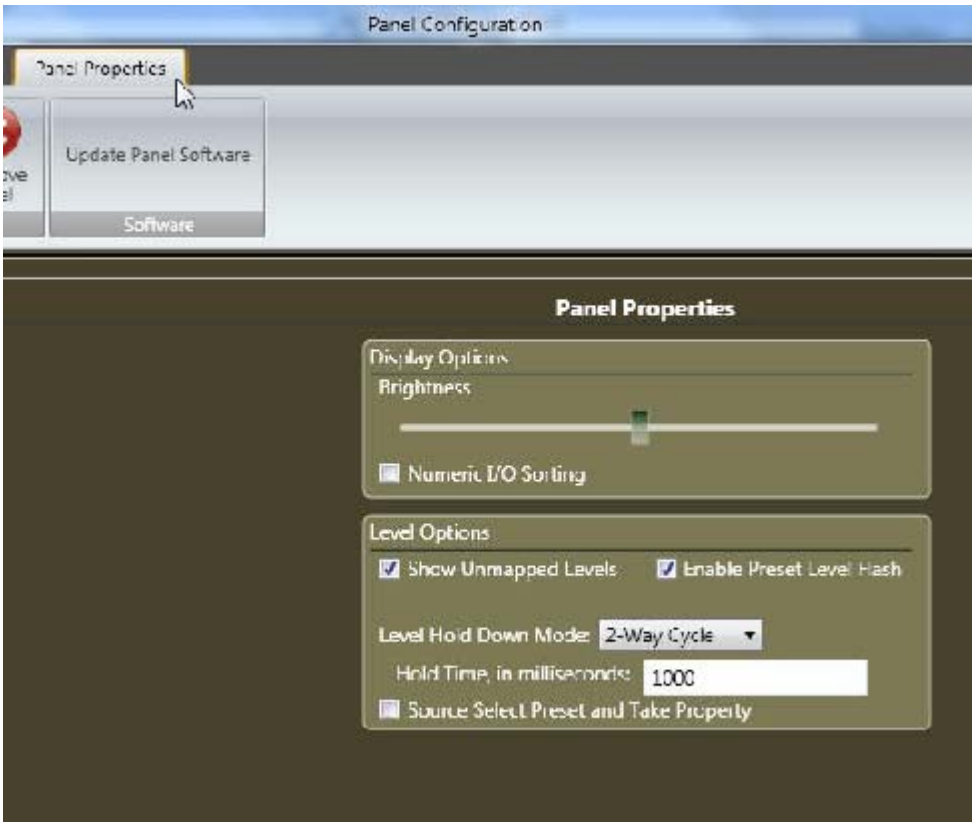
Physical Names displays the actual source names by level.
Virtual Names displays the virtual source name in all levels.
Numbers displays the physical I/O numbers (numeric only).

Button Mode; Clicking on the “Button Mode” button mode button toggles between “normal” and “shift”. Selecting “shift” allows you to program buttons on a “shift” row. The “shift” row acts similar to a PC keyboard. If a button is programmed is programmed as “Select/Shift”, holding down that button accesses anything programmed in the “shift” row.



Panel Properties

Select the panel properties tab.



Numeric I/O sorting- Panel lists will display sorted by input or output number. Un-checked panel will display lists by alpha sort.

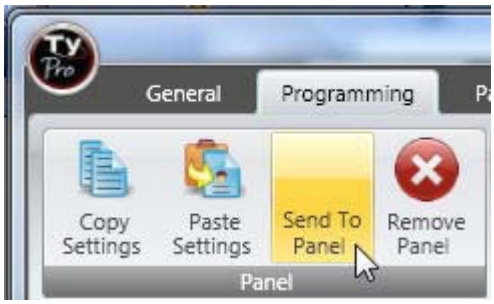
Show UnMapped Levels- Levels that are unmapped will be displayed in status. Unchecked will hide unmapped levels.

Enable Preset Level Flash- When checked this will cause level display to flash when preset to switch. ** If level button is programmed as a shift function, checking this box has no effect on level button function.*

Source Select Preset and Take Property- If this box is checked, router will “Take” when source is selected. Un-checked will require a “Take” button to be pressed to initiate switch.

Level Hold Down Mode- When level buttons are held down for 3 seconds they will cycle through a series of enabled and disabled. In the 2-Way Cycle mode, holding down the level button toggles between all on to only the selected on. 3-Way Cycle Mode, holding down the level button toggles between selected on, all on, and selected off others on.

When programming is complete, click on “Send To Panel” to apply programming to the panel.

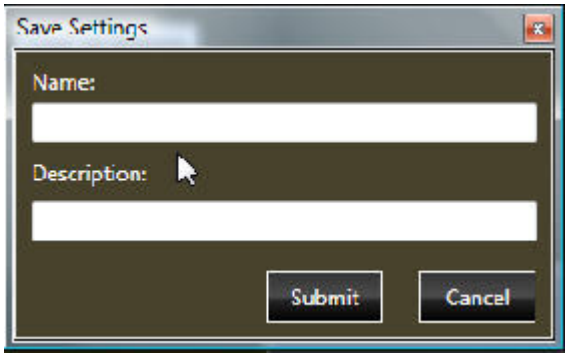


The LCD screen on the panel will indicate that the buttons are being programmed and the panel will reset when complete.

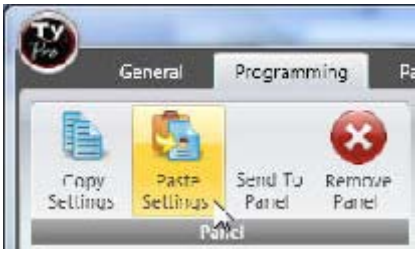
Once you have programmed a setup you may save the setup to paste to other panels. Settings are saved in the TyLinx Pro data base and can be selected to paste to another SCP-240 in the future.

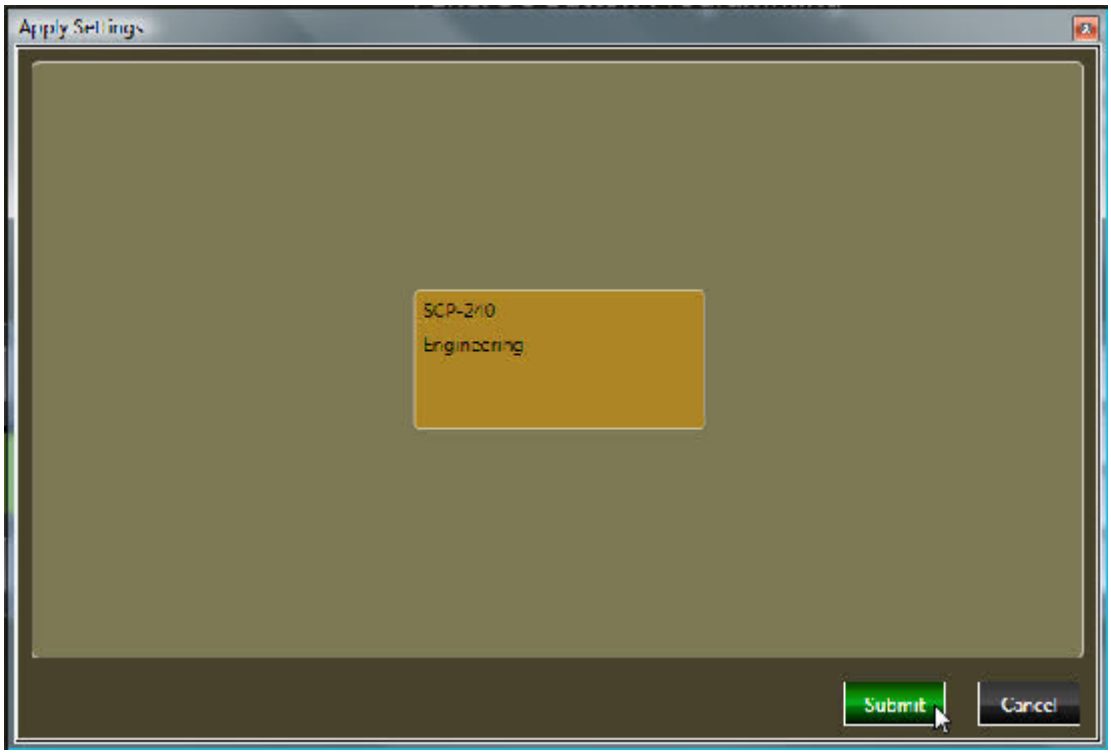
Click on “Copy Settings”.

A “Save Settings” dialog window will appear allowing entry of a name and description of the saved settings.



To recall saved settings, click on “Paste Settings” and select the settings you want to apply and click on “Submit”.





Operational Notes

Enter the destination first. After the destination is entered, the button programmed “Select” or “Select/Shift” will light indicating a valid entry. You can press either “Select” or “Take” to move the cursor to the “Source” field, and enter the Source. After the “Source” is entered, pressing “Take” will complete the route.

Names are stored in the router’s CPU. Enter names in the router before programming the panel.
See the “names” section of the TyLinx Pro help file for details.

When a panel displays a question mark it is an indication that the name entered is not recognized as a name in the router’s CPU.

The control panel downloads names from the router on power up. If the names in the router are changed, remove power from the control panel for 10 seconds. Re-applying power will

cause the panel to download the new names.

4.7 Control Panel Software Upgrade

Software Upgrades

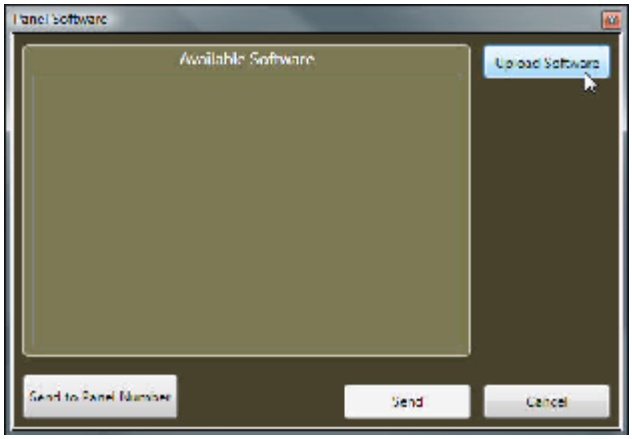
Introduction

From time to time software upgrades will be available from Sierra Video. Check our web site (sierravideo.com) for available downloads, or contact the factory.

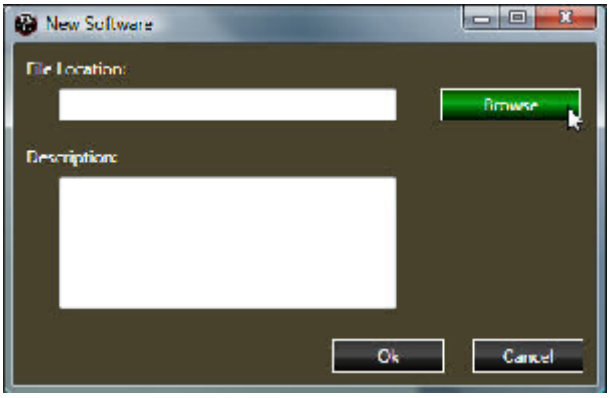
Operation

Download the software upgrade to a folder on your PC. From the Panel Configuration window, select “Update Panel Software”.

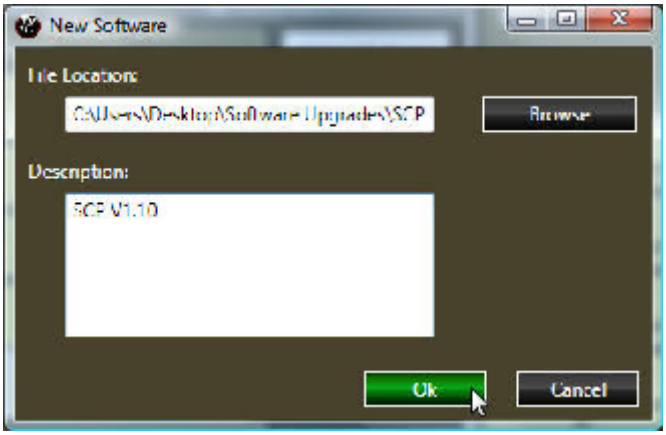
The following window will be displayed;



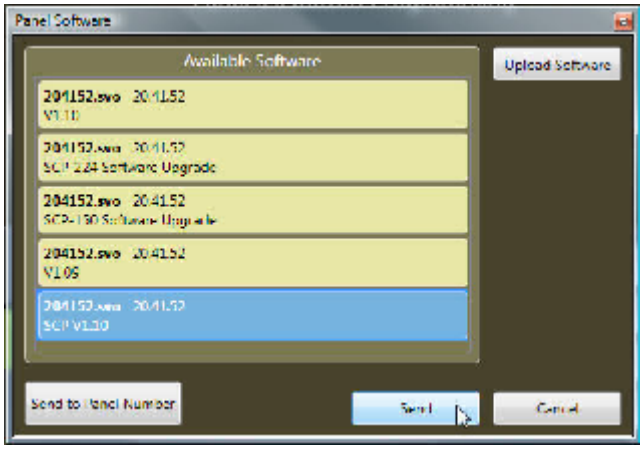
Select “Upload Software” and click on “Browse” to locate the software file you placed on your PC.



Enter a description and press Ok.



The file will appear in the “Available Software” window. Select the file and click on “Send”.



The panel’s software upgrade process will be indicated on the LCD screen of the panel by “Receiving Text #####”. The panel will reset when transfer is complete.

When the software update is complete, close the “Panel Configuration window.

From the “Device Map” screen, right click on the control panel(s) icon and select “ReSync Panels” before programming panel.

Console Designer

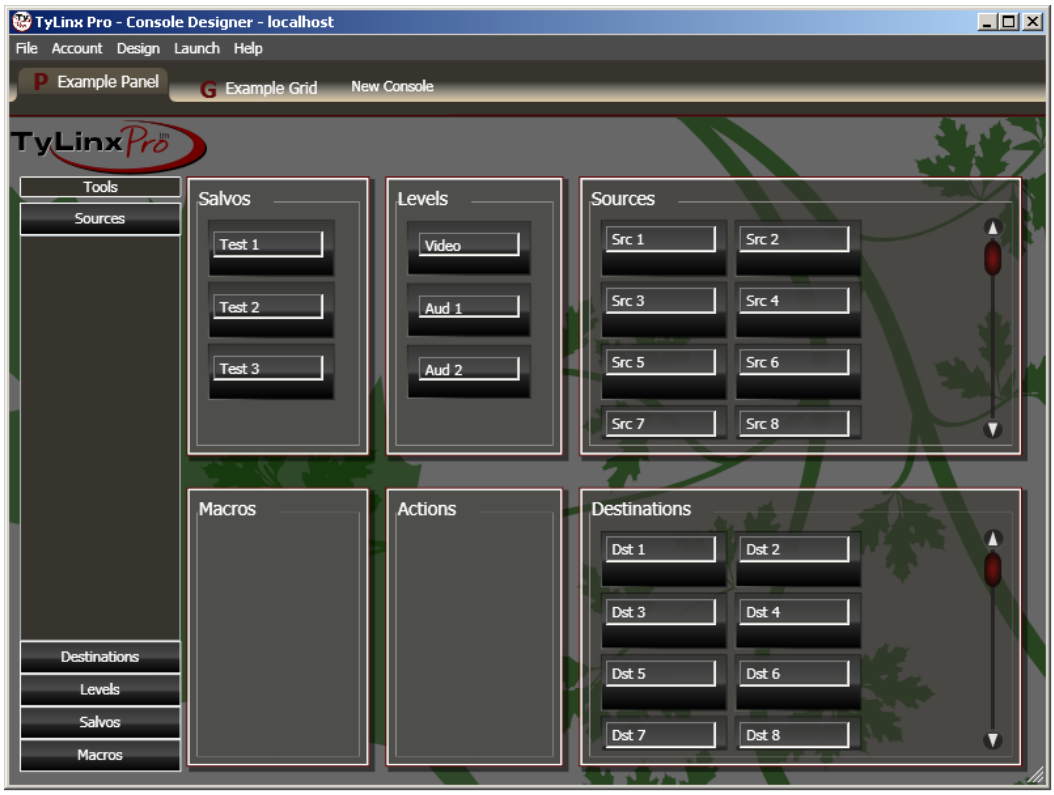
Part V

5 Console Designer

This section provides a detailed explanation of the Console Designer client and how a Designer can use this tool to create virtual control consoles for operators.

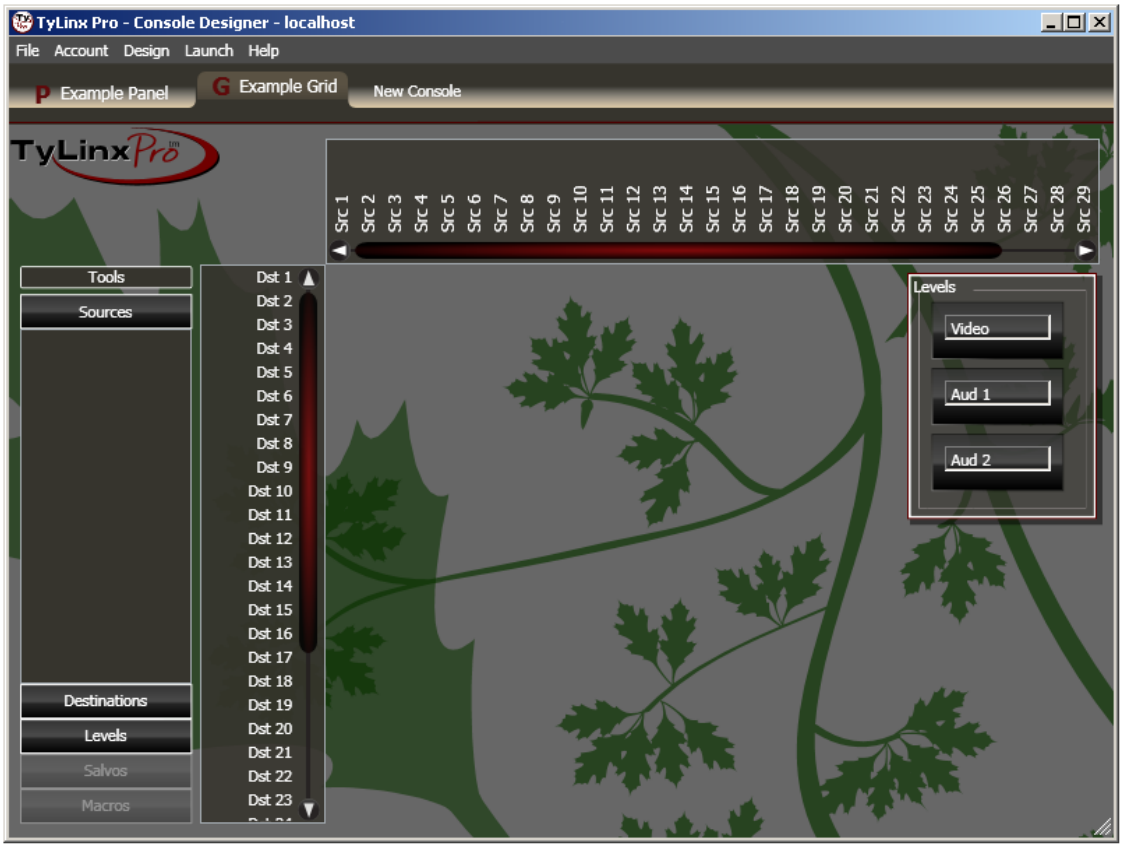
5.1 Overview

The Console Designer is a client application used by operations supervisors to create virtual control consoles for operators. A virtual control console represents all or a subset of the switching resources available in one or more routers. The Designer has the ability to provide very granular cross views of switching resources so that an operator only sees the view they need to do their job. Virtual console also serve to isolate operator actions from one another to prevent them from interfering with each others work as virtual consoles are assigned to users by the Designer.



Console Designer Window Showing Panel Console

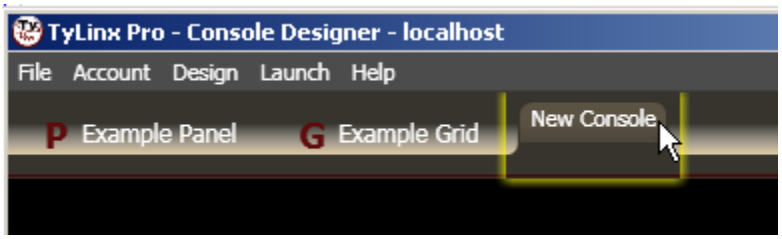
The Console Designer window presents all virtual consoles defined in the system through a tabbed interface. The tabs show the assigned console name. Click on a tab to select a particular console to edit. Each tab is prefixed with either the letter P or G to indicate the console type. The allowed types are panel (P) and grid (G). The image above shows a Panel type console selected. The image below shows a grid console selected. The console illustrated were create during the router retrieval process described here.

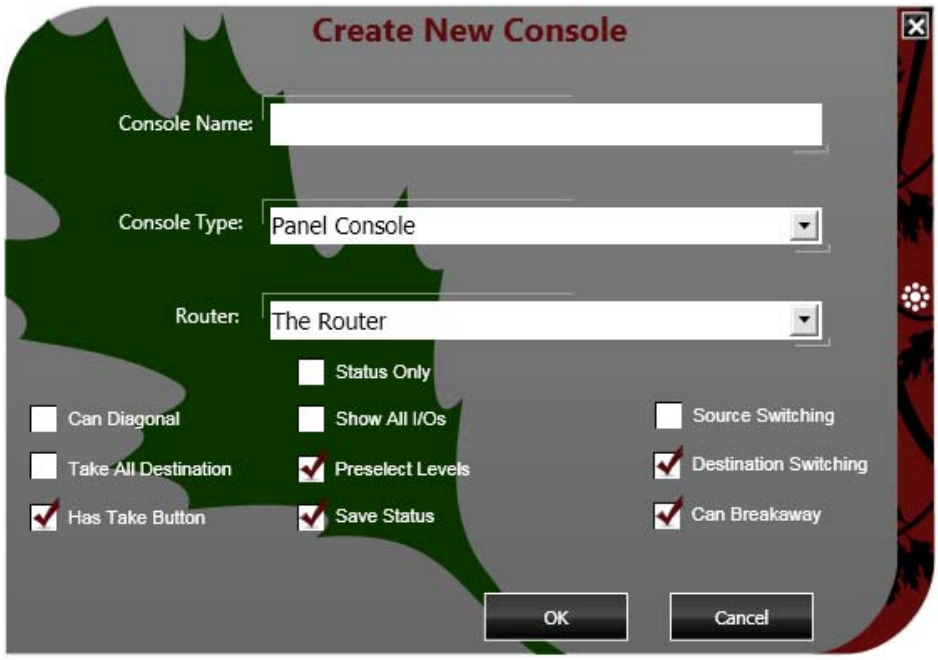


Console Designer Window Showing Grid Console

5.2 Add a Console

To add a console click the New Console tab. A Create New Console dialog appears to prompt the user for the console properties.





Create New Console Dialog

To create a new console, fill in the Console Name, select the Console Type, the router upon which to create the console, and set the properties for the console. Once completed click the OK button and a new console shall be created.

Console Name

This is a 1 to 60 character name that is displayed on the Player tab view to identify the console to the operator.

Console Type

Select either Panel Console or Grid Console type.

Router

Select the router upon which the console shall be created.

Status Only

Check this box if this console will be for indicating status only. If checked, no operations may be performed on the router from this screen. The screen will display status only.

Can Diagonal

Check this box if the operator wants to be able to set a diagonal connect pattern in the router. Please be aware that this features is typically used by service personnel and not some normally used by operators.

Take All Destinations

Check this box if the operator wants to be able to perform an all destinations take from this console. This will enable you to select all destinations, select a single source, and switch that source to all destinations.

Has Take Button

Check this box if the operator must confirm a take with a Take button, otherwise, take is effected when the operator selects a source and then a destination or vise-versa depending on other property settings.

Show All I/Os

Setting this property cause the new console to be pre-populated with all sources, destinations, and levels. Not checking will result in a new console that is empty.

Preselect Levels

Preselect Levels requires that an operator first select levels when performing a take operation.

Source Switching

Indicates that a **source must be selected first** to perform a take. Source Based and Destination Based may not be both selected.

Destination Switching

Indicates that a **destination must be selected first** to perform a take.

Can Breakaway

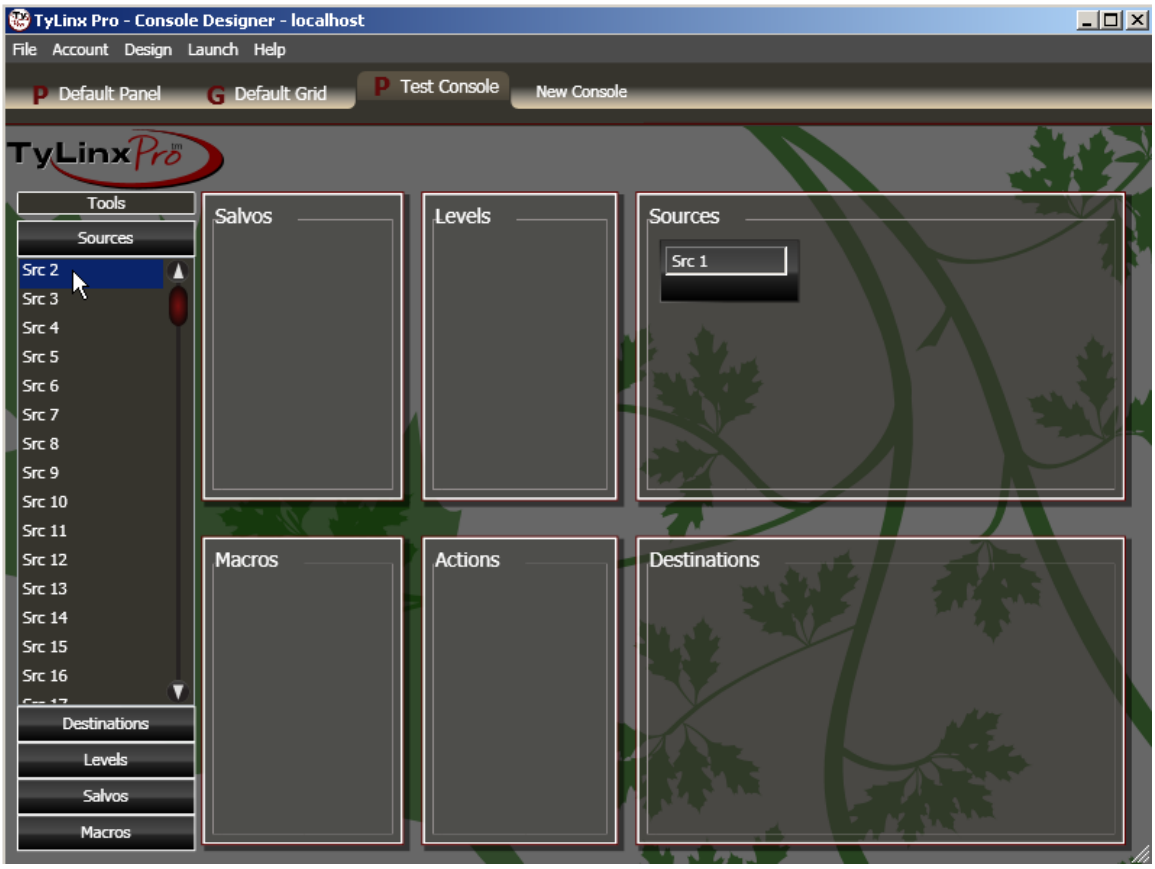
Indicates whether Breakaway switching shall be enabled on this console.

Save Status

When checked, user console display a Save Status and Restore Status buttons to allow the user to save a snapshot of the current console status and then restore the status at a later time. After "Restore Status" is applied the the memory is cleared.

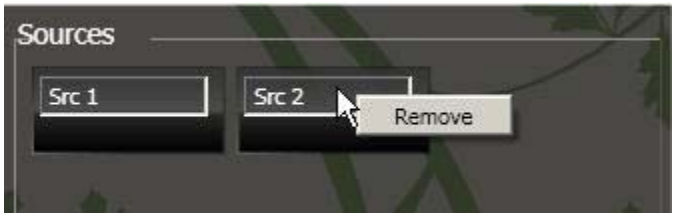
Note:

Save Status is volatile meaning that any saved status is lost if the user terminates the Player.



To add buttons such as sources, destinations, levels, salvos, and macros, drag and drop from the "Tools" window on the left.

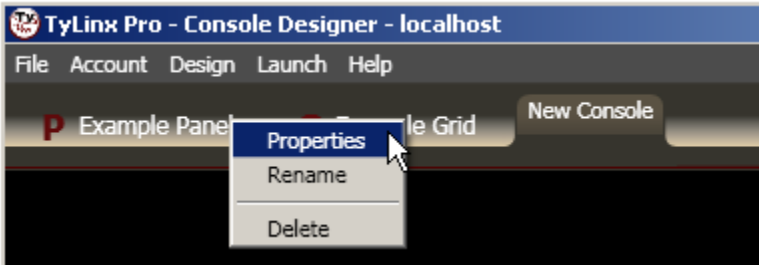
Buttons can be removed by right clicking on the button and selecting "Remove".



5.3 Change Console Design

After a console is created, it may be altered by selecting its tab in the Console Designer main window and making changes using the tools available on the design screen. Sources, destinations, levels, macros and salvos may be added or deleted from an existing console. Also, the properties that are setup during console creation may be altered.

To change the properties, name, or delete a console, right click on the console tab and select the function desired.



Referring back to the Overview section, there are two console designer windows, one for panel consoles and one for grid consoles. On the left side of each designer is a Tools control which holds all of the available switching resources not yet assigned to the console. Drag any of the available resources into the appropriate container on the right side of the Tools control to add the resource. For example, dragging an available source into the Sources group will add that source to the console. Select a resource and press delete to remove it from the console. Remove may also be done by right clicking a resource to reveal the context menu and selecting "Remove".

5.4 Add a User

The most important security concept in TyLinx Pro is console assignment to users.

Select from the Console Designer menu the Design/ Manager Users menu item.

Manage Users Dialog

To add a new user click the Add User button.

Create New User Dialog

Provide the new user with a login name and a default password. The password must be entered twice for validation. After pressing OK, the new user will appear in the list of users on the Manage Users dialog. The user may then be assigned a first and last name and various privileges may be assigned to the user. Select one or more available consoles and click the right arrow button to assign the console(s) to the user. If consoles in the User Consoles list are selected and the left arrow click, then the user will lose access to those consoles.

User Privilege Descriptions

Designer

A Designer is someone who is responsible for supervising operators and/or has oversight of content switching operations. The Designer will have authority to manage users as well as make and assign consoles to users.

Can Simple Lock

A simple lock is a mechanism that prevents a destination from being switched inadvertently. Note that **any** user can override a simple lock.

Prompt for Unlock

Prompt for unlock will cause a confirmation dialog to appear whenever a user attempts to unlock a locked destination. Otherwise, users will be allowed to unlock a destination without confirmation if authorized.

Can Protect

A protect is a locking mechanism that locks a destination by user assigned pass-code. Only the user who protected the destination or an administrator can unlock it.

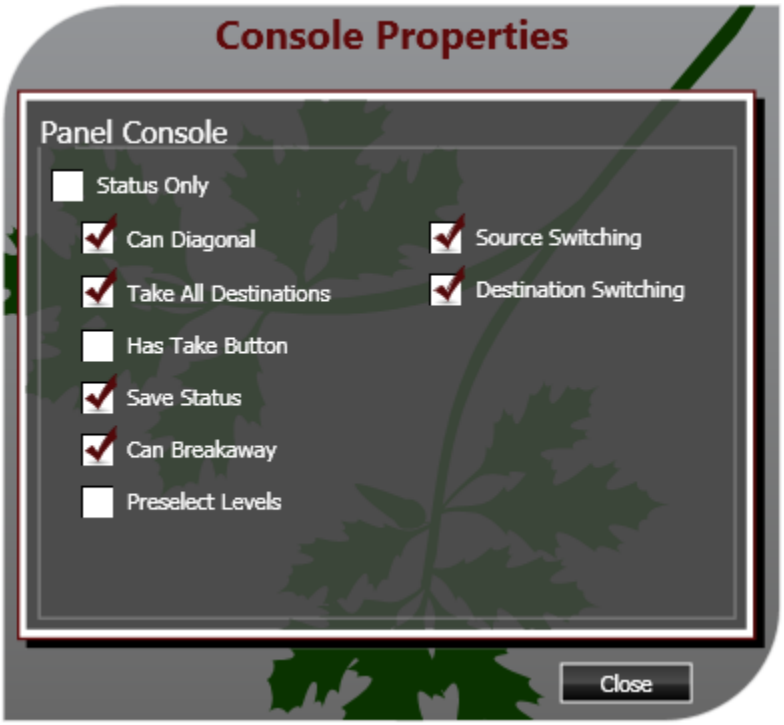
Can Change Volume-

This will enable a user to control the router's volume from a "Player" window.

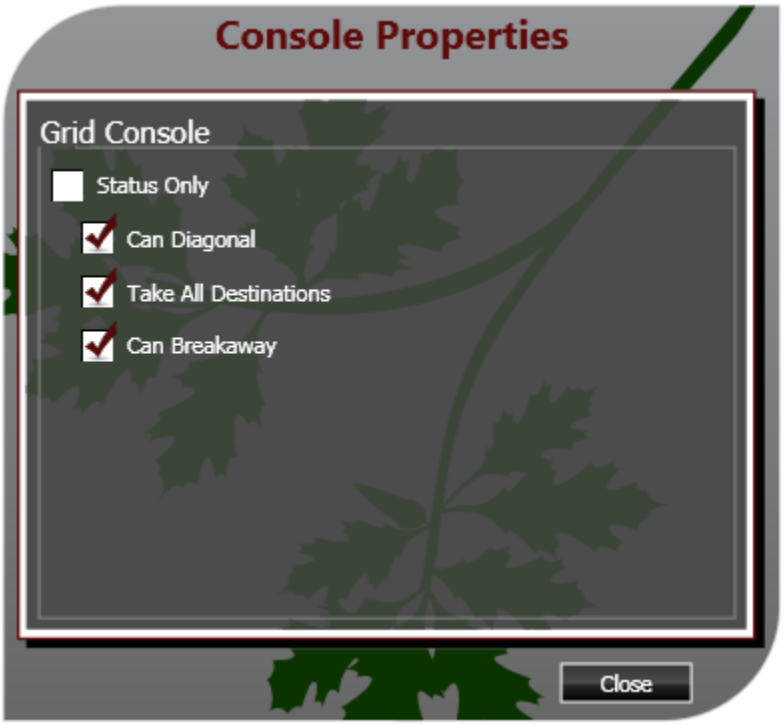
5.5 Console Properties

Panel Console and Grid Console properties may be changed by the Designer as needed by right clicking a console tab and selecting Properties. There are two different Console Properties dialogs

that may appear depending on whether the consoles is a panel or grid type. Some features available on a panel console are not available on a grid console. The two images below show the Panel and Grid console property dialogs. For an explanation of the properties see here.



Panel Console Properties Dialog

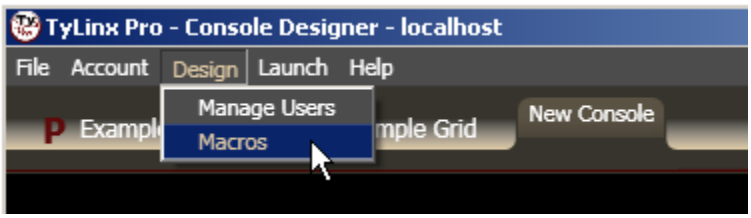


Grid Console Properties Dialog

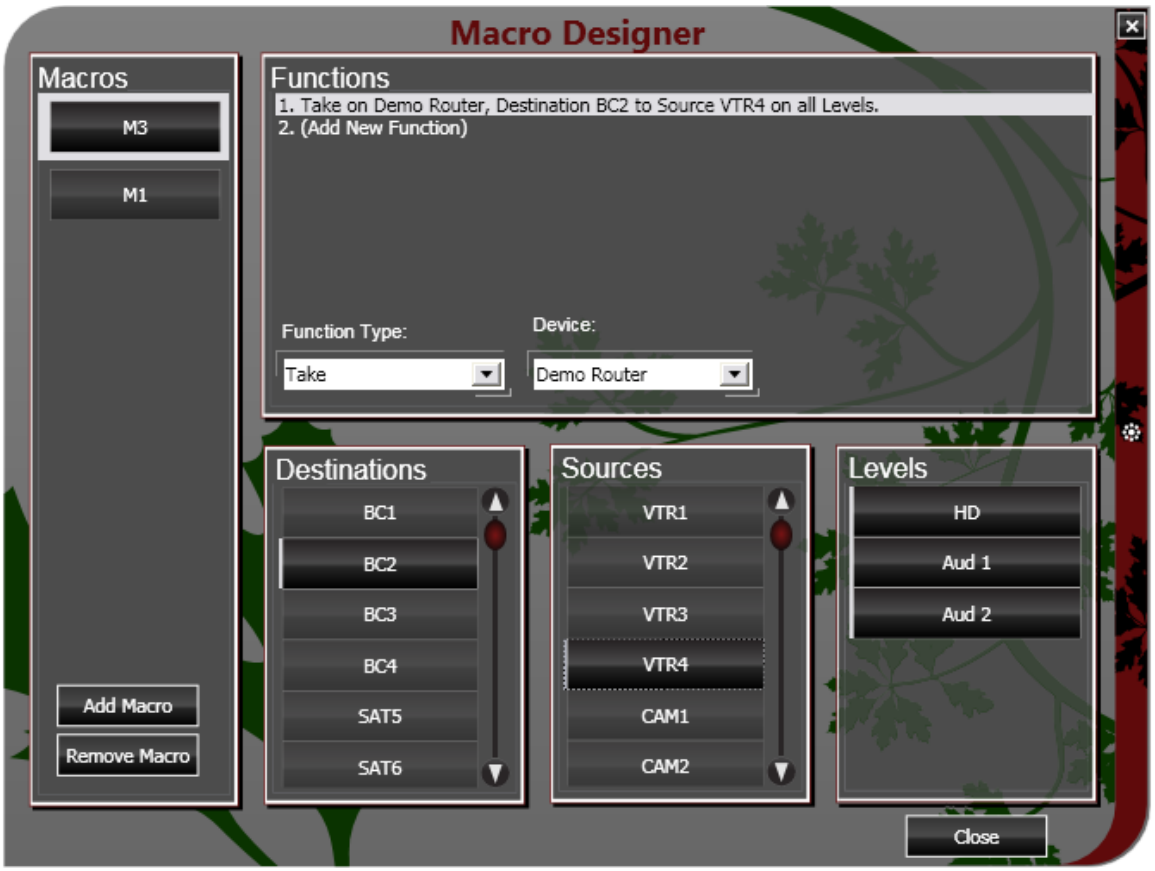
5.6 Designing Macros

Macros are collections of take and other commands that are executed in TyLinx Pro from consoles. The Console Designer provides a facility for managing macro configuration called the Macro Designer. Designers may add, edit and delete macros as needed using this dialog. Macros are stored in the TyLinx Pro database only and are not available to "hardware" control panel users.

From the Console Designer menu, select "Design/ Macros".



The image below illustrates the Macro Designer dialog:



Macro Designer Dialog

Click the Add Macro button to add a new macro. This will show the Add New Macro dialog as shown below:

Add New Macro Dialog

Provide the new macro with a name and click OK. After creating the macro, select it in the Macros list and its list of functions shall be display in the Functions list. Obviously, when a macro is first created, it has no functions. To add a function click the (Add New Function) line in the Functions list. You can then edit the new function by selecting its its Function Type and Device. When you select the Function Type the details near the bottom will change to prompt for the parameters suitable for the function type.

Note:

The device selection for a macro is made on a per-function basis, thus, macros can be created that affect any number of devices.

Console Player

Part VI

6 Console Player

The TyLinx Pro™ Console Player client application is used to access and operate operator control consoles. Through control consoles the operator may effect audio/video content switching and control. As explained in the TyLinx Pro™ Console Designer topic, Control consoles are created and assigned to operators based on their operational requirements. In other words, consoles are *designed* to provide each operator with the control view they need to perform their particular job function.

6.1 Overview

The Console Player client application presents to the operator one or more control consoles. There are two types of control consoles that may be visible to the operator; 1) the panel console, and 2) the grid console. The panel console presents switching resources as a collection of inputs and outputs with various other control buttons as enabled in the Designer. The grid console presents switching resources as a matrix of controls that represent the actual switch matrix.

Both console types are accessed from the player's main window using a tab view. The illustration below shows the top of the player's main window and as shown, there are two tabs labeled "Example Panel Console" and "Example Grid Console". To access one of these consoles just click on the tab for the particular console.

Top of Console Player Main Window

Notice that the console type, panel or grid, is identified on the tab by a colored letter P or G, respectively. This letter also serves as a communications status indicator. If green, it represents that the communications with the router controlled from the console is connected and working properly. If red, it means that TyLinx Pro has lost communications with the router.

6.2 Panel Console Operation

The illustration below provides an example panel control console:

Example Panel Console

There are six groups of controls on the panel console; these are Salvos, Levels, Sources, Macros, Actions and Destinations. The discussion below provides an introduction to each of these control groups.

Salvos

Salvos are take macros that reside in switching routers. Salvos consist of one or more take operations that are performed as a single operation. The advantage of salvos is that once activated, all takes that comprise the salvo happen at the highest possible performance inside a router.

Levels

The Levels group shows the level controls enabled for the console. The levels controls available on a given console may be either all or a subset of levels physically configured on a router. These controls are used to effect break-away switching as well as provide a reference for matrix status display.

Sources

The Sources group shows a collection of content source controls that are available on the console. These controls are used for showing status as well as content source selection for takes.

Macros

The Macros group shows a list of macro activator (fire) buttons available on a panel console. Macros reside in the TyLinx Pro application and provide a higher level of operational control when compared to salvos but lack salvo performance. Where salvos operate within the context of an individual router, macros can cross router boundaries and, in effect, perform complex switching actions that involve more than one router. Individual macro functions consist of takes, delays, and salvo fire operations.

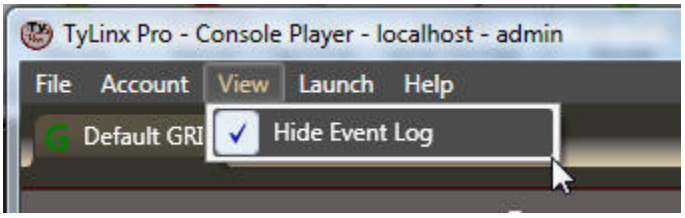
Actions

The Actions group contains several control buttons used by the operator for various control activities. The functions of these buttons are explained in detail in the various subsections of this topic.

Destinations

The Destinations group shows a collection of content destinations (outputs) to where source content may be routed. These controls are used for showing status as well as content destination selection for takes. Destination controls may also be used to perform destination lock operations.

Event Log



At the bottom of the Console Player window an event log can be displayed. The default setting is "Hide Event Log". To view the event log, click on "View Hide Event Log" to remove the check. The log is used to provide user confirmation of actions and to indicate when user actions fail. Successful actions are shown in green, warnings are shown in yellow, and unsuccessful actions are shown in red. This log is volatile meaning that it is not saved anywhere and its contents are lost when the user closes the Player. The user may clear the log by clicking the Clear Log button in the upper right-hand corner of the log. Also, the log may be turned off and on by alternately clicking the menu item View, Hide Event Log.

6.2.1 Status

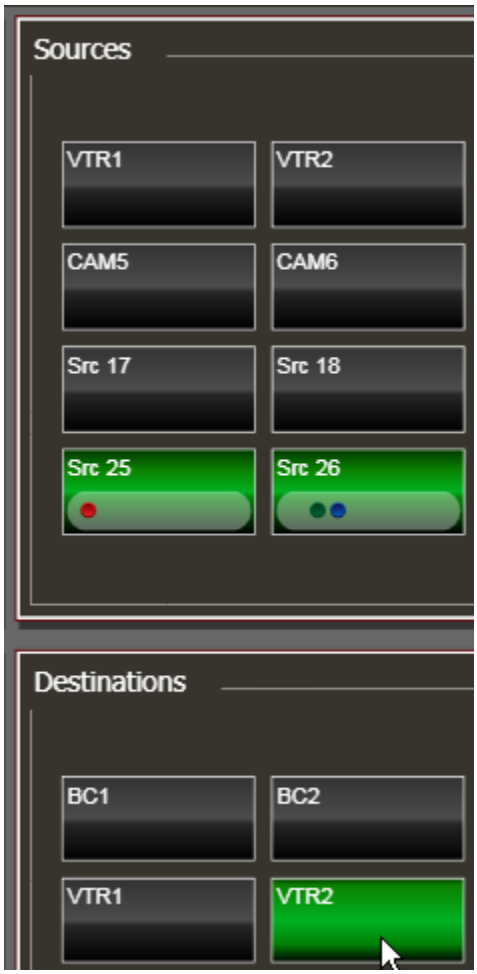
The status of the switching router may be viewed at any time by the operation simply by hovering your mouse pointer over a source or destination control in the Sources or Destinations control groups. To show the connection status of a particular source just move the mouse pointer over the source control as illustrated below:

Input Status Example

Notice the pointer over an source causes indicators on the destination to show. The colors of the status indicators on the destination control correspond to the colored indicators on the level controls. This status shows that all three levels of Src 1 on this console view are currently connected to output Dst 6,8,9,10,11,12,13,14,15,and Dst 16. Likewise, when hovering the mouse pointer over an destination control, the connected source is shown as indicated on the illustration below:

Output Status Example

In the event of a break-away connection, the status may be shown as:



Output Break-away Status Example

The break-away status indication shows that VTR2 is connected to Src's 'HD' level and also connected to Src 26's 'Aud 1' and 'Aud 2' levels.

6.2.2 Takes

Takes are effected from a panel console in different ways depending on a particular console's configuration as determined by the console's designer. This section discusses the various ways takes are made using various console configuration settings.

Take - Source to Destination

In this scenario a take is made by first clicking on the source control that contains the source content

to be routed and then clicking on a destination control. When selected the source control's color will change to indicate that it is in a selected state.

Take - Destination to Source

In this scenario a take is made by first clicking on the destination control to where the content is to be routed and then clicking on a source control that contains the content source. When selected the destination control's color will change to indicate that it is in a selected state.

Take - With Take Button

Some panel console configurations will include a Take button. When the Take button is present the operator must select both a source and destination and then follow with clicking the Take button. No switching occurs until the Take button is clicked.

Take - All Destinations

When enabled for all destinations takes, the operator should see two buttons in the Actions group label "Select All" and "Un-Select All". When Select All is clicked all destinations become active indicating they shall participate in the next take. If the Take button is present, the user should select the source and then click Take. If the Take button is not present simply clicking on a source will effect the take.

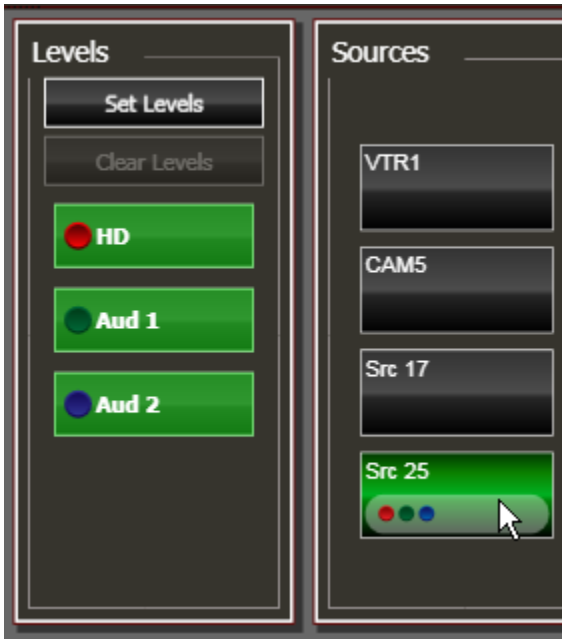
6.2.3 Breakaways

Breakaway is an operation where a subset of levels of a source are routed to a destination and a subset of levels from another source. This may be done in circumstances where several camera views with different audio sources are used. For example, during a news broadcast several cameras views from different angles are used on the news anchor but audio may be sourced from a single lapel microphone. Ideally, the designer would create separate consoles that allow independent control of video and audio sources. But in some cases, breakaway actions from a single console needs to be performed.

Performing a breakaway operation requires the operator to "build" the take using several steps. These steps vary depending on the console configuration settings but by default panel console properties may be performed as follows:

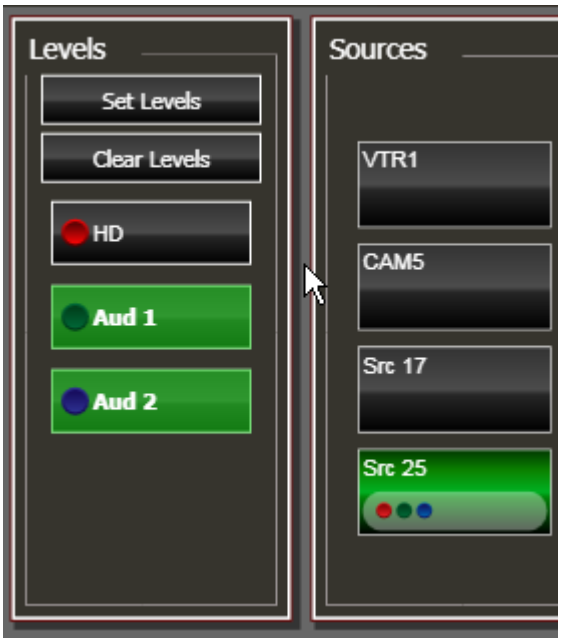
1) Select the Destination for the breakaway route:

2) Select the first source:



Notice that when the first source is selected, all level controls are activated to indicate they will participate in the take for this source.

3) Deselect the levels that <u>will not</u> be routed from the first source. For example, clicking the HD level control shown on the image above will result in its de-selection as shown below:

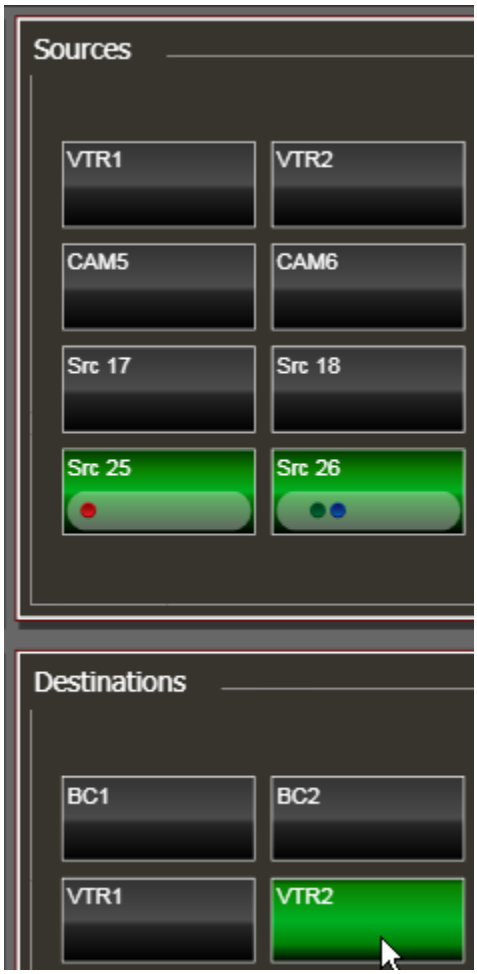


4) Select the second source:

Notice that when a pending take is completed and valid, the Take button is enabled.

5) Press the Take button which should now be enabled:

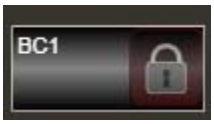
Hovering over the destination control after the take is complete will show the breakaway state as shown below:



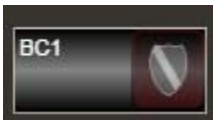
6.2.4 Locks

Locking is a mechanism that prevents someone else from inadvertently changing the status of a destination. Destinations may be locked either using what is called the "simple" method or the "protect" method. A simple lock can be unlocked by any user provided they have the "Can Simple Lock" or "Can Protect" privilege enabled in their user profile. A protect lock can only be unlocked by the person who locked it or by an Administrator.

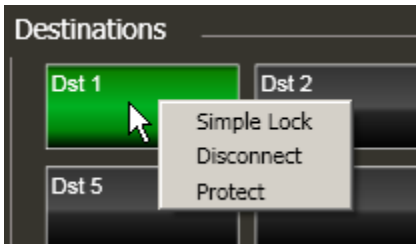
Lock status is indicated on a destination by one of two symbols. A padlock is shown for the simple lock indication:



A protect lock is indicated by a shield symbol:



To lock a destination, right click the intended destination control and the lock options assigned to the user shall be presented as a context menu. Click the lock option desired and the destination shall be locked.



To unlock an destination, right click a locked destination control and select "Unlock". The unlock attempt requires the user confirm they really intended to unlock the destination. If the user attempting the unlock has authority to unlock the locked state of the destination then the destination shall be unlocked, otherwise, a red error event log entry will display the failure.

6.2.5 Diagonal

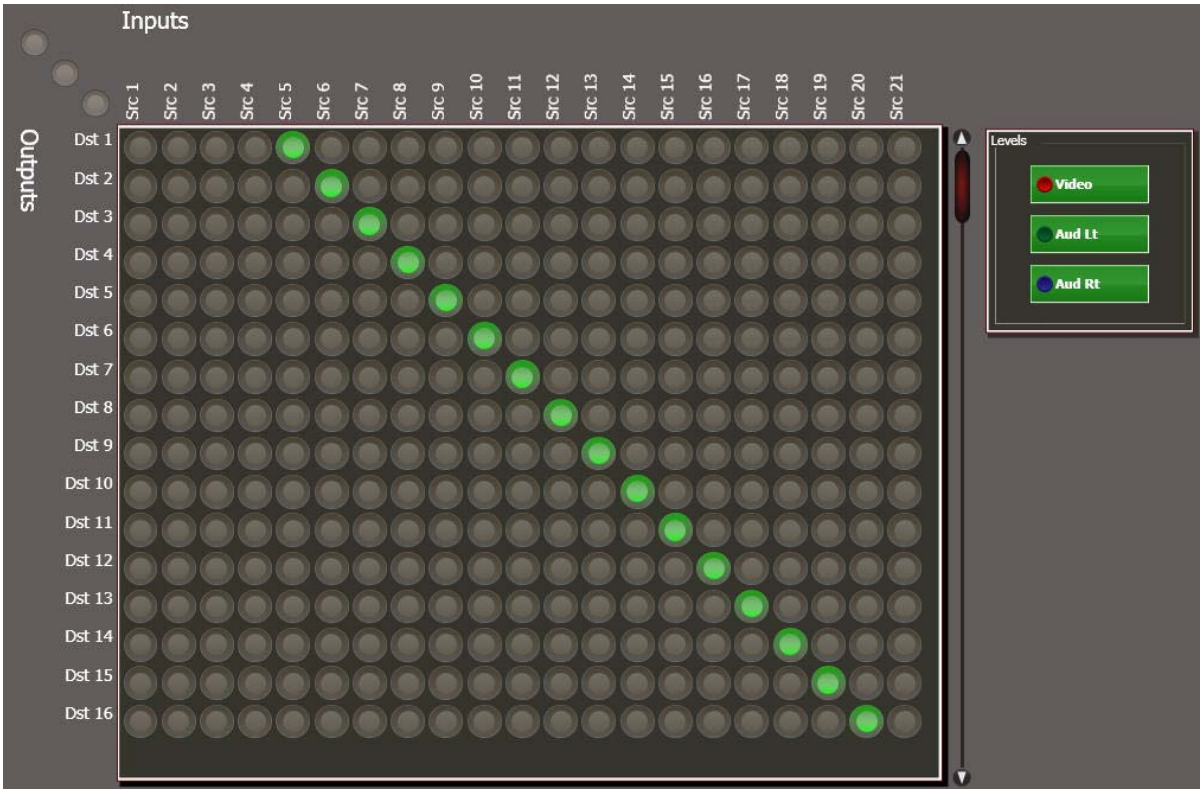
A button labeled Diagonal in the Actions section may be visible on some console configurations when enabled on the panel properties menu (Can Diagonal). This button is used to create a diagonal switch pattern on the switching router matrix. Typically this capability is used by Engineers for testing and will likely not be enabled on most operator consoles.

To use, click the Diagonal button in the "Action" window.

The Diagonal Control will then be presented as shown below:

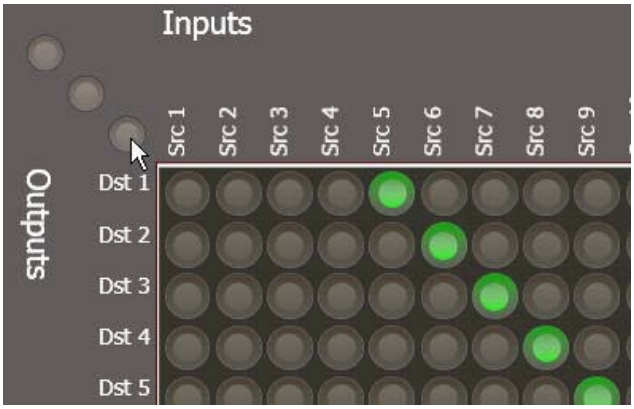
Diagonal Control

This control allows the user to create either forward or reverse diagonal patterns with an optional offset. For example, creating a forward diagonal with an offset of 4 would make a pattern on a grid console that looks like:



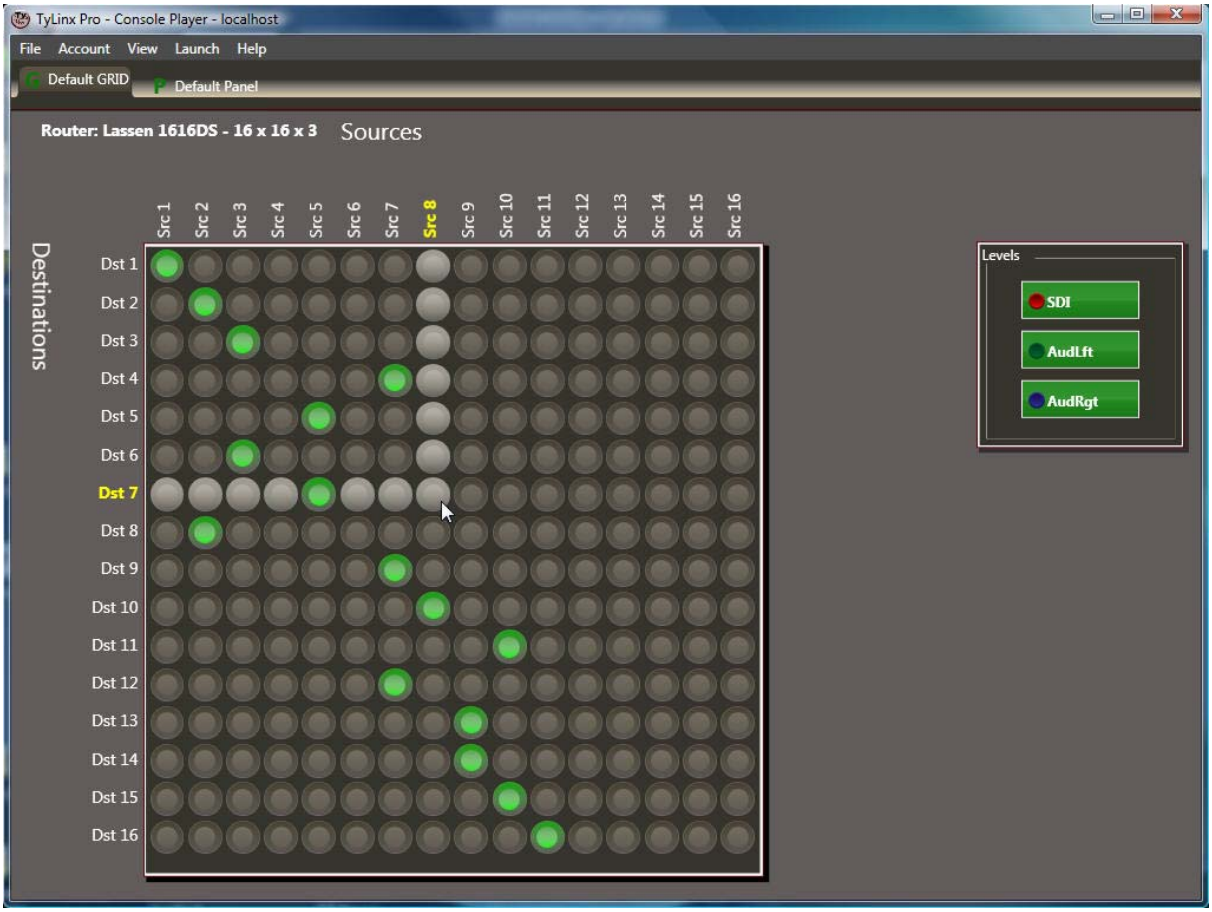
Plus 4 Forward Diagonal Pattern

To fire a diagonal from a GRID screen, click on one of the "nodes" on the upper left of the screen.



6.3 Grid Console Operation

The illustration below provides an example grid control console:

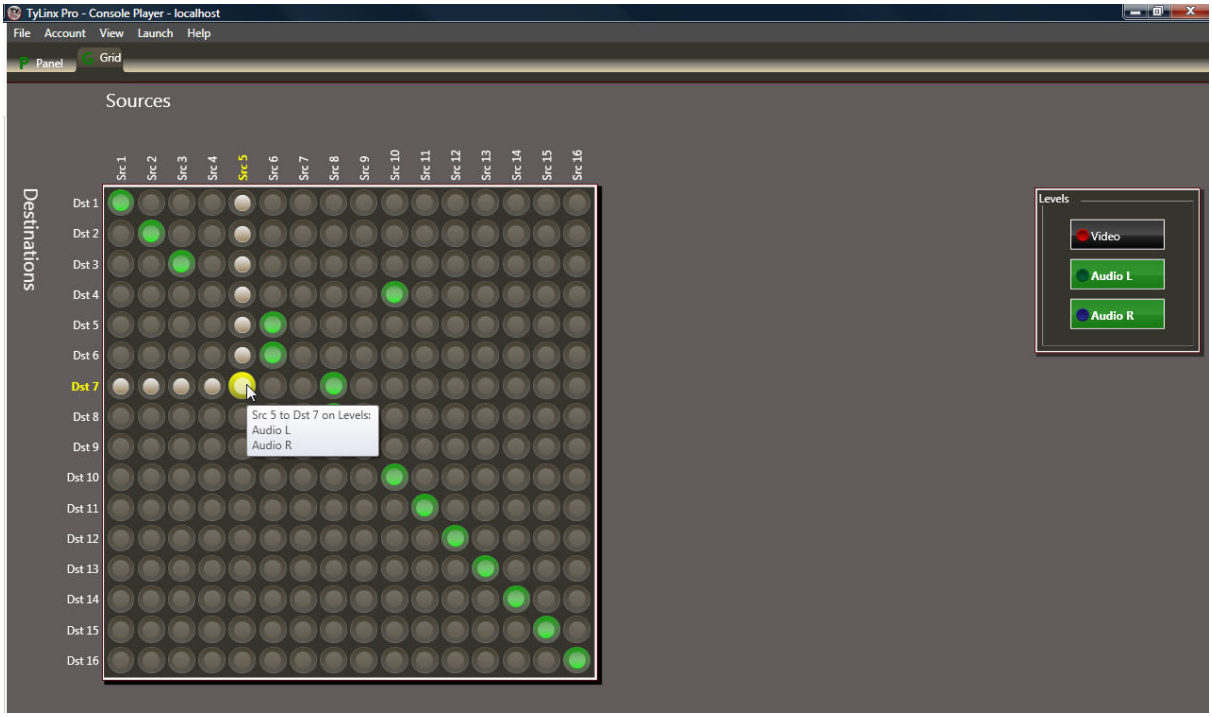


Example Grid Console

This console has one control group that is always visible and one Levels control group that is shown when needed during breakaway takes. The outputs are shown vertically along the left side of the grid and the inputs across the top. Contained within the grid area are a number of indicators representative of the matrix switch nodes.

6.3.1 Status

The grid console always shows current matrix status by the coloration of the grid nodes. As illustrated below, the grid can show both all-levels as well as break-way connection status. An all-levels connection is indicated by a solid green indicator and a break-away is indicated by a two-tone color scheme. The break-away node with the green on the outside indicates that the connection at this node includes the first level of the router. All other nodes participating in the break-away are shown with a green inner indicator surrounded by a light gold circle. To see the detailed view of individual nodes, hover the mouse pointer over the node and a tool-tip shall appear showing the level names of the levels actually connected at that node position.



Grid Console Status Indications

6.3.1.1 Diagonal

A button labeled Diagonal in the Actions section may be visible on some console configurations when enabled on the panel properties menu (Can Diagonal). This button is used to create a diagonal switch pattern on the switching router matrix. Typically this capability is used by Engineers for testing and will likely not be enabled on most operator consoles.

To use, click the Diagonal button in the "Action" window.

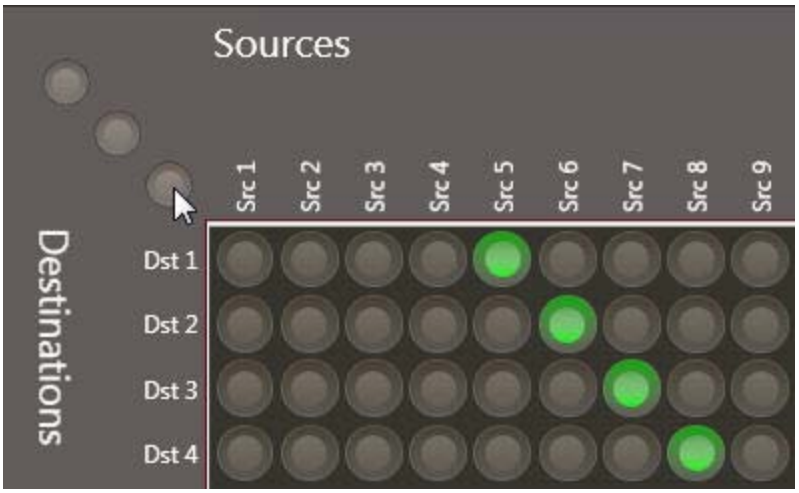
The Diagonal Control will then be presented as shown below:

Diagonal Control

This control allows the user to create either forward or reverse diagonal patterns with an optional offset. For example, creating a forward diagonal with an offset of 4 would make a pattern on a grid console that looks like:

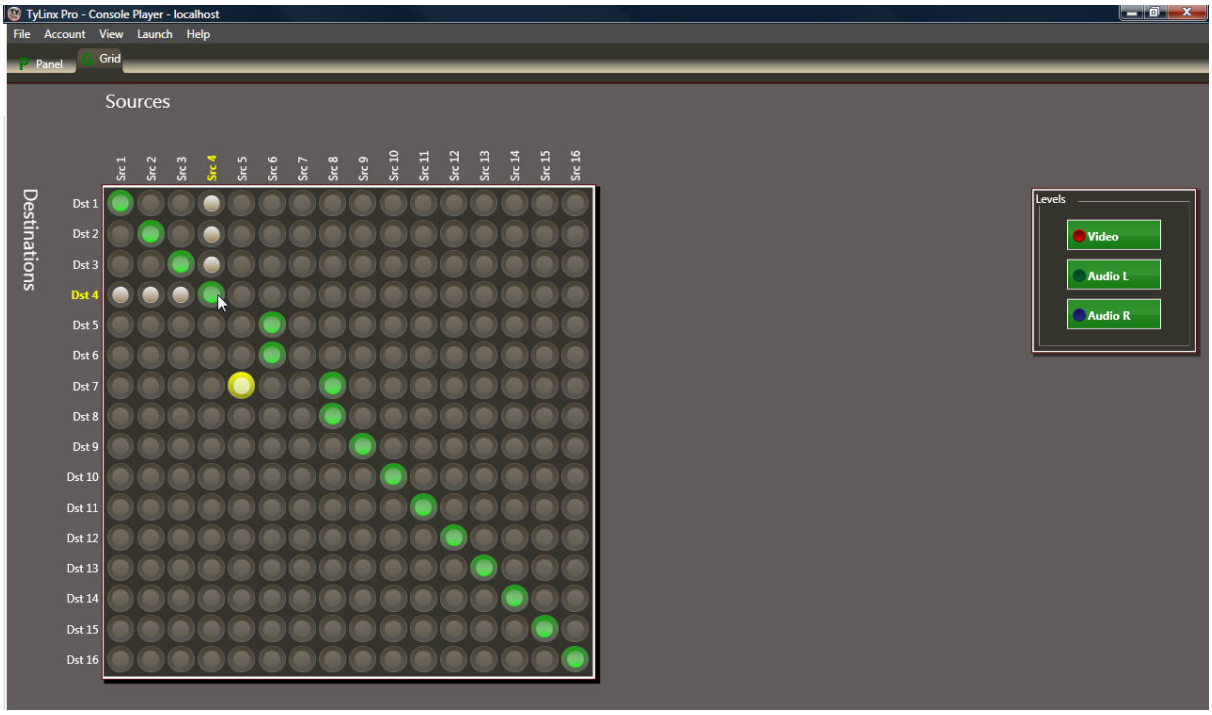
Plus 4 Forward Diagonal Pattern

To fire a diagonal from a GRID screen, click on one of the "nodes" on the upper left of the screen.



6.3.2 Takes

To perform an all-levels take on the grid console, first select all levels (green indicates enabled) then click the node symbol that intersects the input and output. The illustration below demonstrates how to connect Dst 4 to Src4:

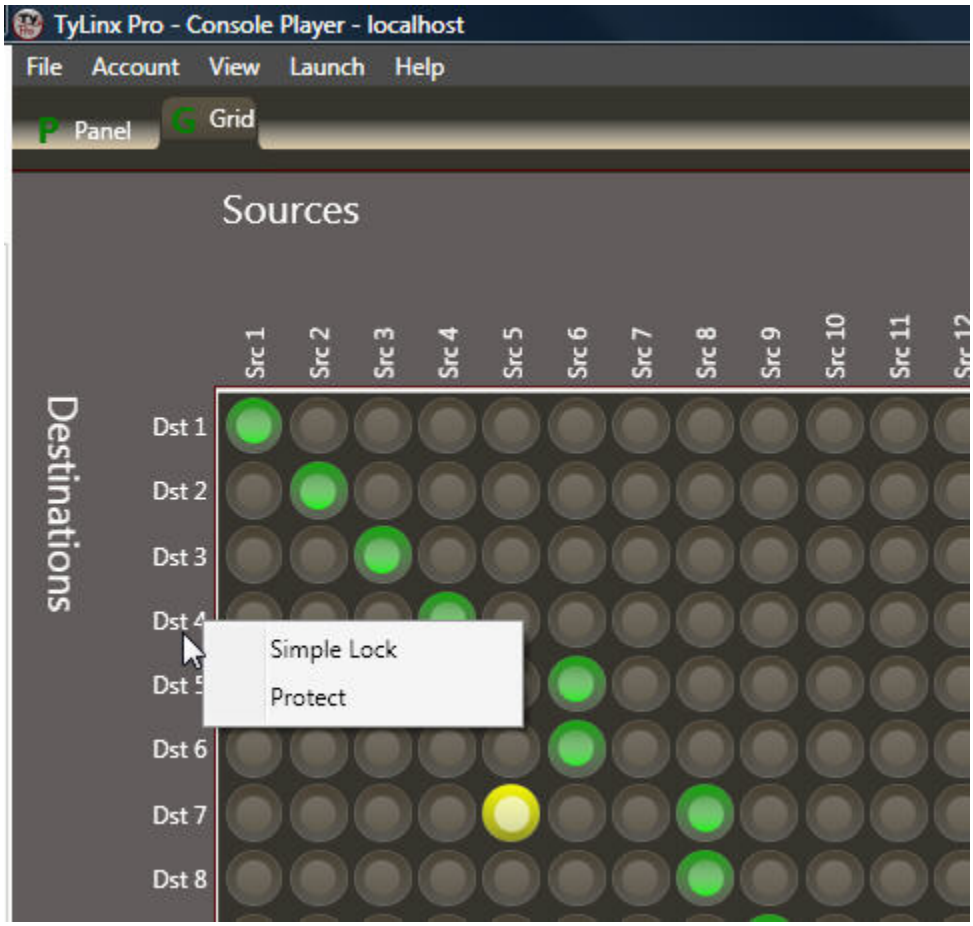


6.3.3 Breakaways

To perform a breakaway on a grid console, first select the level(s) desired (green = enabled, black = disabled). Then left click on the node.

6.3.4 Locks

Right click a destination name label to perform a simple or protect lock. Right clicking will bring up a context menu if locking is enabled for the user. Simple locks are shown as a red background to the name label and protect locks are shown as a blue background. Right click and select Unlock from the context menu on a locked destination to unlock it.


TyLinx Pro - Console Player - localhost
File
Account
View
Launch
Help
Panel
Grid
Sources
Destinations
Src 1
Src 2
Src 3
Src 4
Src 5
Src 6
Src 7
Src 8
Src 9
Src 10
Src 11
Dst 1
Dst 2
Dst 3
Dst 4
Dst 5
Dst 6
Dst 7
Dst 8
Simple Lock
Protect

Firing Salvos & Macros

Part VII

7 Firing Salvos & Macros

To fire either a salvo or macro click one of the salvo or macro controls inside the Salvos or Macros group boxes. Confirmation of successful firing will be shown in the event log on the bottom of the Console Player. If a Take button is present on the console, then clicking a salvo or macro button must be followed by clicking the Take button.

Configuration Storage

Part VIII

8 Configuration Storage

TyLinx Pro™ uses the Microsoft® SQL Server 2005 Express Edition for its configuration storage. This is a free database engine from Microsoft and must have been previously installed or installed during the installation of TyLinx Pro™. There are a couple of database administration tools available from Microsoft that the system administrator (Engineer) should become familiar with to maintain the data vital to TyLinx Pro™ operations; these are SQL Server Configuration Manager and SQL Server Management Studio Express Edition (herein after referred to as SSMSE). SQL Server Configuration Manager is installed during the installation of SQL Server 2005 Express Edition and is used by system administrators to start and stop the service as well as enable/disable the various protocols supported by SQL Server Express. SSMSE is a free download from here and is used to perform such tasks as changing security settings as well as performing database backup and restore.

8.1 Backing Up Your Data

The Importance of Backups

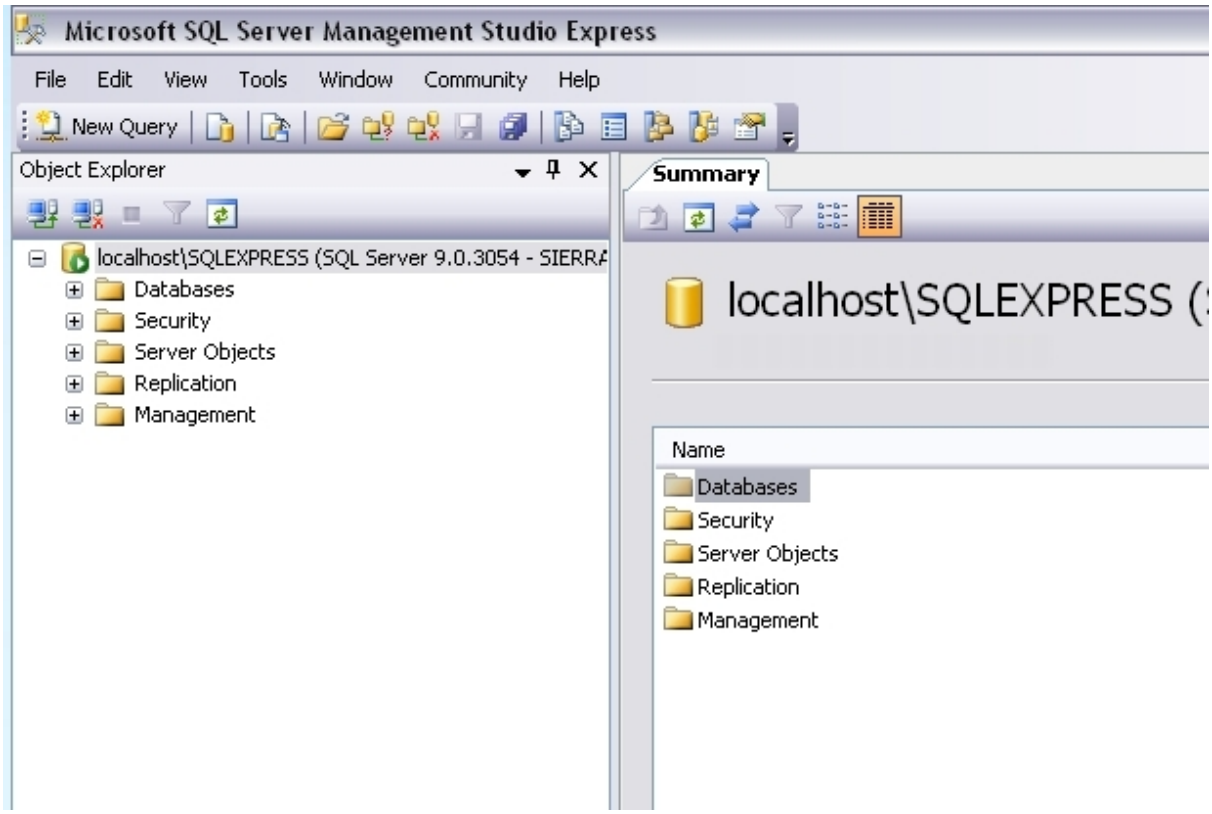
The TyLinx Pro™ database is a very important component of the system and, when populated with user data, will become an important part of an audio/video environment's control nerve center. It represents not only the devices you have installed, but also the various views used by operators to control content resources. The loss of this information would necessitate recreating it from scratch not to mention constitute a significant waste of time and money. Thus it is vital that the system administrator make periodic backups of the database.

How-to Backup the Database

1. To backup the database start the SSMSE tool. You will be immediately prompted with the 'Connect to Server' dialog as shown below:

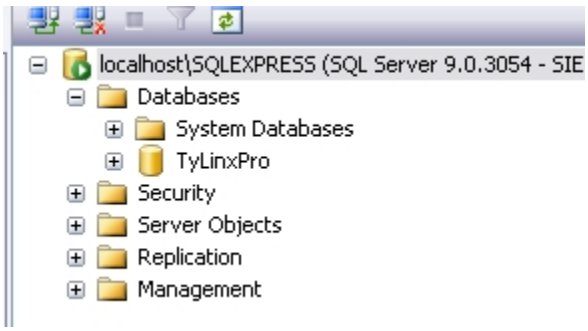
2. Enter "localhost\SQLEXPRESS" as the 'Server name' and then click the Connect button.

This will open a connection to the local SQL Server Express database instance. SSMSE will now show an application window that looks something like:



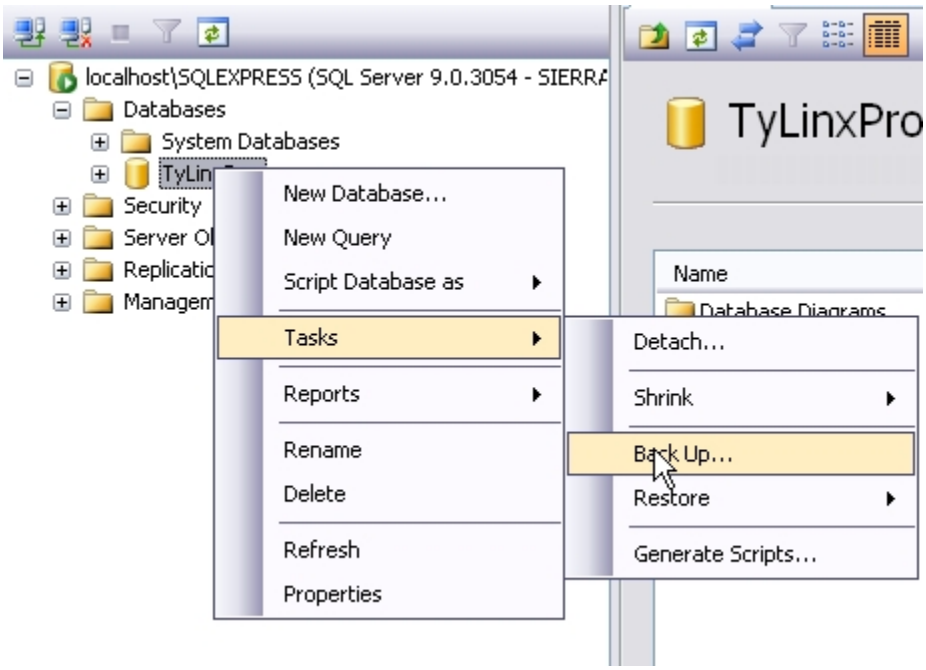
3. Click the ⊞ symbol adjacent to the Databases node.

This will show the databases installed on the SQL Server instance. Among them the TyLinxPro database should be present as illustrated below:



TyLinxPro is the name of the database that you should backup periodically to secure TyLinx Pro™ configuration data.

4. Access the backup command by right clicking the TyLinxPro database node expanding the context menu and selecting Back Up as shown below:



You will now be presented with a Back Up Database dialog. The important step here is to identify where you would like your backup to reside when the backup operation has completed. It is highly recommended that you choose a Disk that is not physically located on the same computer as your database. A network file server or external flash drive is a more appropriate choice. For those with established IT administrative procedures, consult your IT department regarding how you can take advantage of their procedures.

5. When you have entered the backup destination, click Ok and SSMSE will make a backup of your TyLinxPro database.

Note:To ensure the reusability of your backup device in case you need to use it to restore a database, it is recommended that it be kept in a fire resistant safe or vault.

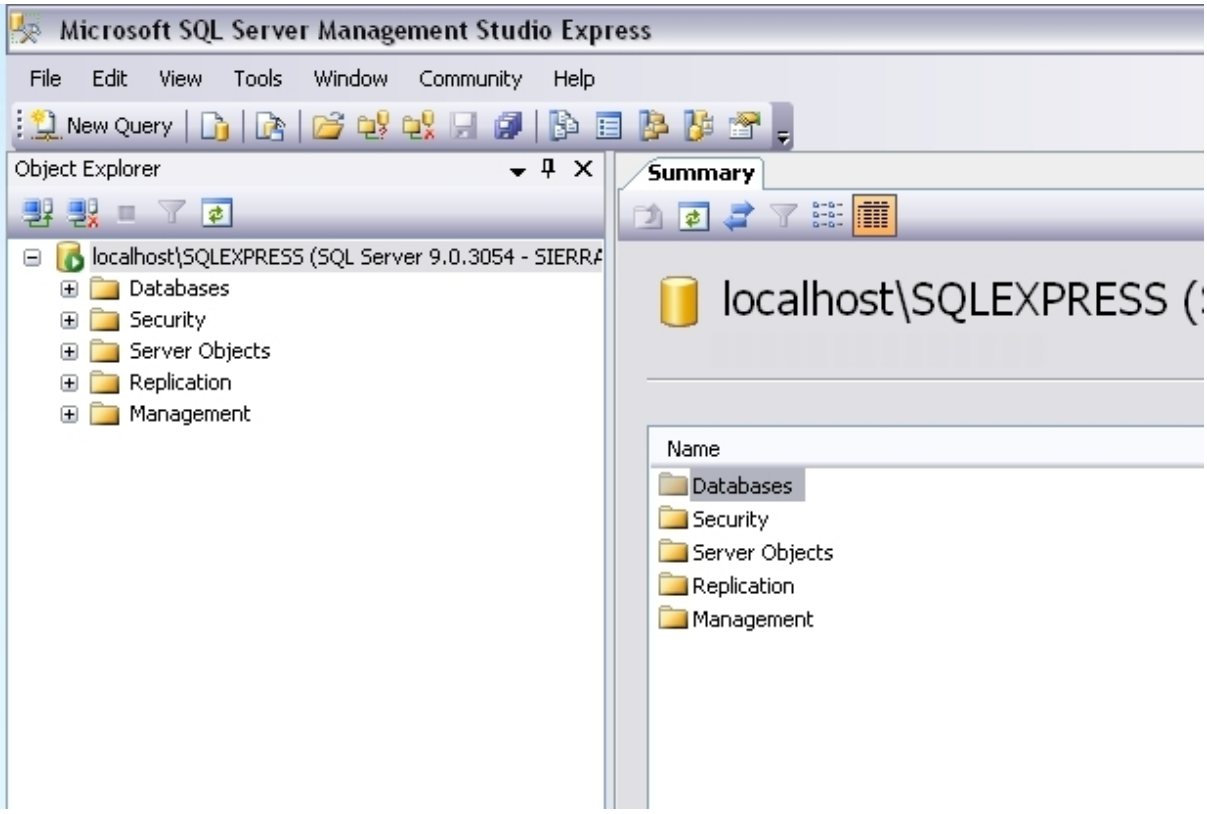
8.2 Restoring Backed Up Data

To restore Backed Up Data:

1. To restore the database start the SSMSE tool. You will be immediately prompted with the 'Connect to Server' dialog as shown below:

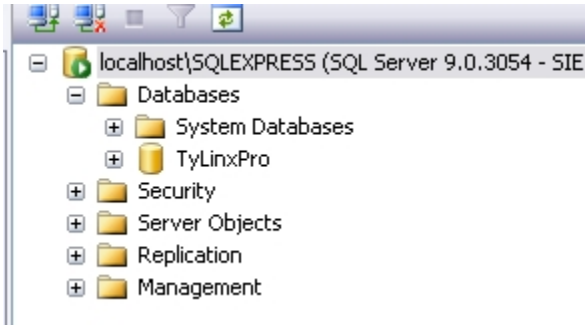
2. Enter "localhost\SQLEXPRESS" as the 'Server name' and then click the Connect button.

This will open a connection to the local SQL Server Express database instance. SSMSE will now show an application window that looks something like:

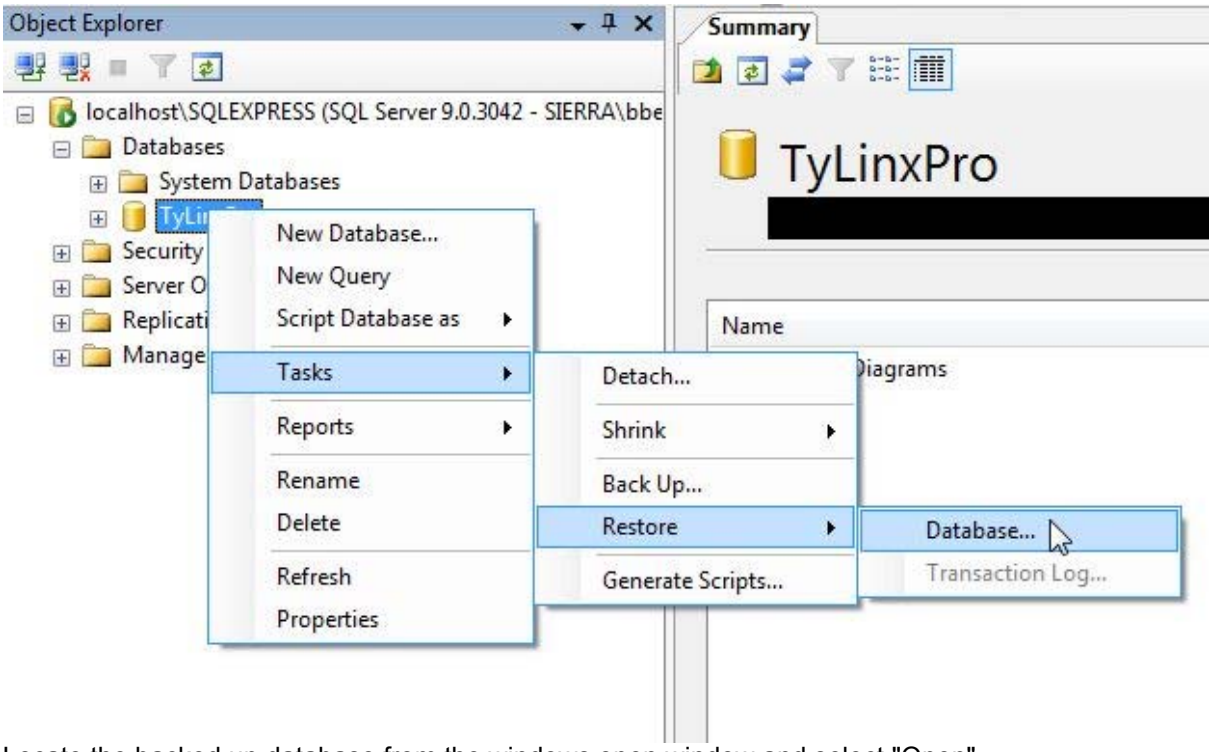


3. Click the ⊞ symbol adjacent to the Databases node.

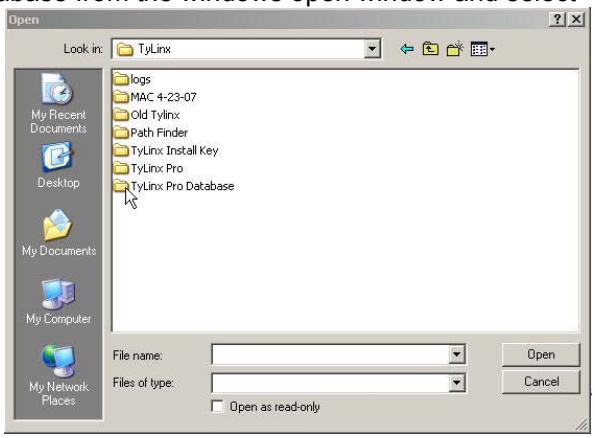
This will show the databases installed on the SQL Server instance. Among them the TyLinxPro database should be present as illustrated below:



Right click on the TyLinx Pro folder and select Tasks/Restore/Database.



Locate the backed up database from the windows open window and select "Open".



Endnotes 2... (after index)

Back Cover