TS-22

TALENT STATION

TECHNICAL MANUAL

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MANUAL

Wheatstone Corporation
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TS-22 Talent Station Technical Manual

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Attention!

Federal Communications Commission (FCC) Compliance Notice:
Radio Frequency Notice

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

> ⚠ **This is a Class A product. In a domestic environment, this product may cause radio interference, in which case, the user may be required to take appropriate measures.**

This equipment must be installed and wired properly in order to assure compliance with FCC regulations.

Caution! *Any modifications not expressly approved in writing by Wheatstone could void the user's authority to operate this equipment.*

$C\epsilon$

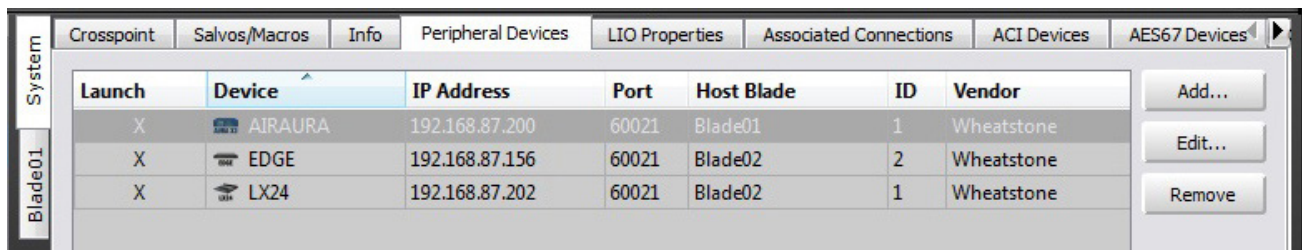# Adding The TS-22 To The Peripheral Devices* Tab

In order to utilize all the features of the TS-22 Talent Station the device must be added to the System *Peripheral Devices* tab in the Wheatstone WheatNet-IP Navigator program (aka the Navigator GUI). This sheet shows you the basics of that procedure. Refer to the *WheatNet-IP Audio Over IP Network Technical Manual* for additional details.

You will need to know the IP address of the device being added, so you will want to find that out before you start.

Launch the Navigator GUI and make sure that **System 0** is selected in the *System* pane. You will see something like this:
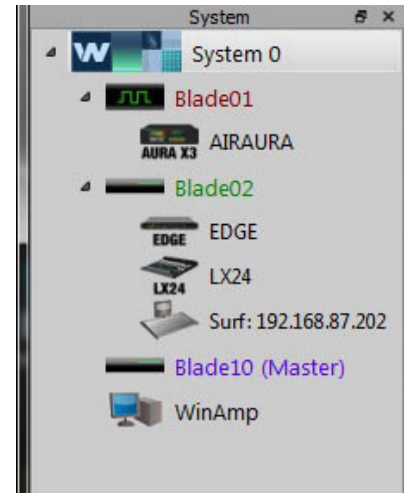
Now select the *Peripheral Devices* tab.

Launch	Device	IP Address	Port	Host Blade	ID	Vendor	
X	AIRAURA	192.168.87.200	60021	Blade01	1	Wheatstone	Add...
X	EDGE	192.168.87.156	60021	Blade02	2	Wheatstone	Edit...
X	LX24	192.168.87.202	60021	Blade02	1	Wheatstone	Remove

Click the *Add* button to bring up the *Add Peripheral Device* dialog:

Type in a convenient *Name* and insert the *IP Address* of the device being added. Leave the *TCP Port* at the default setting of **60021**. From the *Host BLADE* drop down select the BLADE that you want to associate the Peripheral device with. Click *Ok*.

This completes the process of adding the device to the *Peripheral Devices* tab. The added device should show up in the *System* pane under the BLADE you added it to. If it does not show up, or if it shows up but has a yellow question mark on it, then there is either a network issue that needs attention, or the device is not connected to the network at all, or one or more steps have been omitted or done incorrectly in the configuration process.

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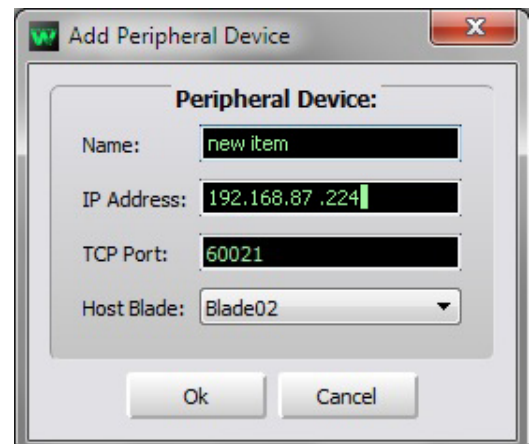
* In previous Navigator GUI versions this was the **System 3rd Party Devices** tab.

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General Information

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General Information

Introduction

All new from Wheatstone, the TS-22 Talent Station is a first for radio broadcast studios. This single panel controller plugs into the WheatNet-IP Intelligent Network to provide controls for mic, headphone, amplifier and speaker levels all in one turret. No outboard equipment required and no wiring it all together. It's all right here in one IP-accessed turret, including power-over-Ethernet.

The Talent Station TS-22 is available in two designs:

- desk turret for countertop placement
- desk panel for mounting in the countertop

TS-22 Placement

The TS-22 Talent Station desk turret has predrilled holes (3/16" D) on the bottom part of the frame that are used for countertop mounting. Drill holes in the contertop by using the supplied chassis full size template. Then place the TS-22 on the counter and secure it with #8 screws.
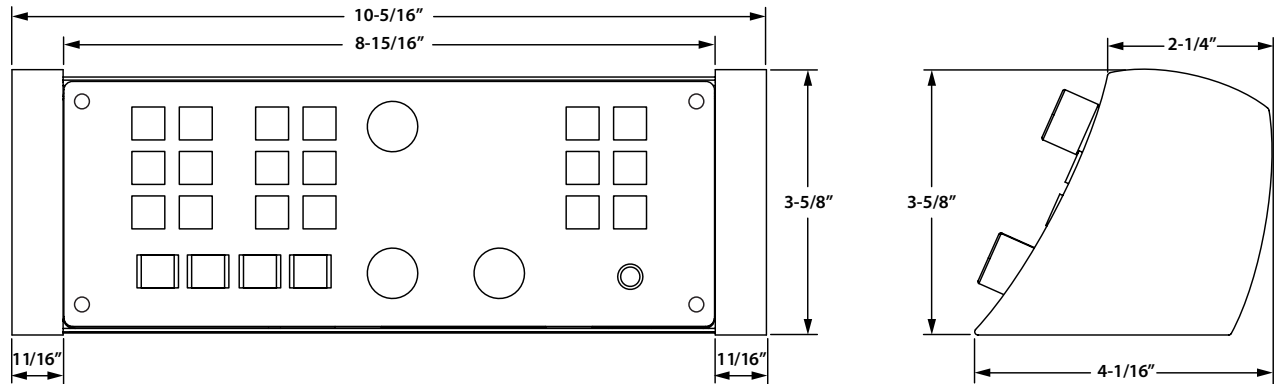
To mount the TS-22 Talent Station desk panel in the countertop refer to the ππdrawing below for the unit and cutout dimensions. The TS-22 Talent Station desk panel has predrilled holes (1/16" D) on the front panel that are used to mount to the counter. Make the cutout and drill holes in the contertop by using the supplied full size template. Then place the TS-22 panel into the counter and secure it with #4 screws.

4 Drill Center Marks
for #8 Screws 3/16" bit

REAR

1-3/8"

Wire Passage
0.65"x0.90"

1-5/8"

1-3/8"

1/2"

1-1/16"

1-3/4"

FRONT

1-11/16"

6-15/16"

1-11/16"
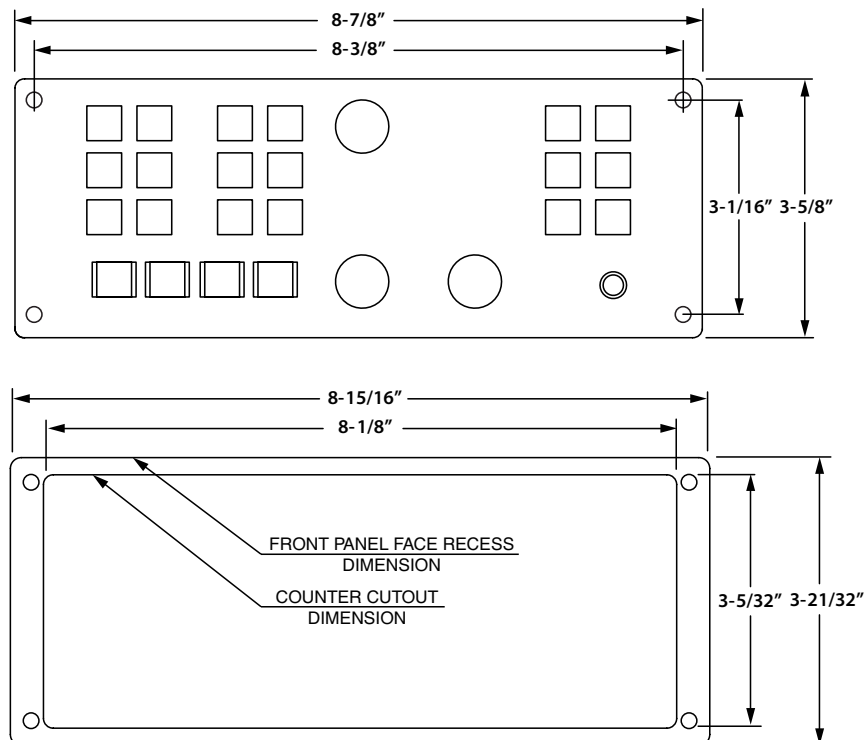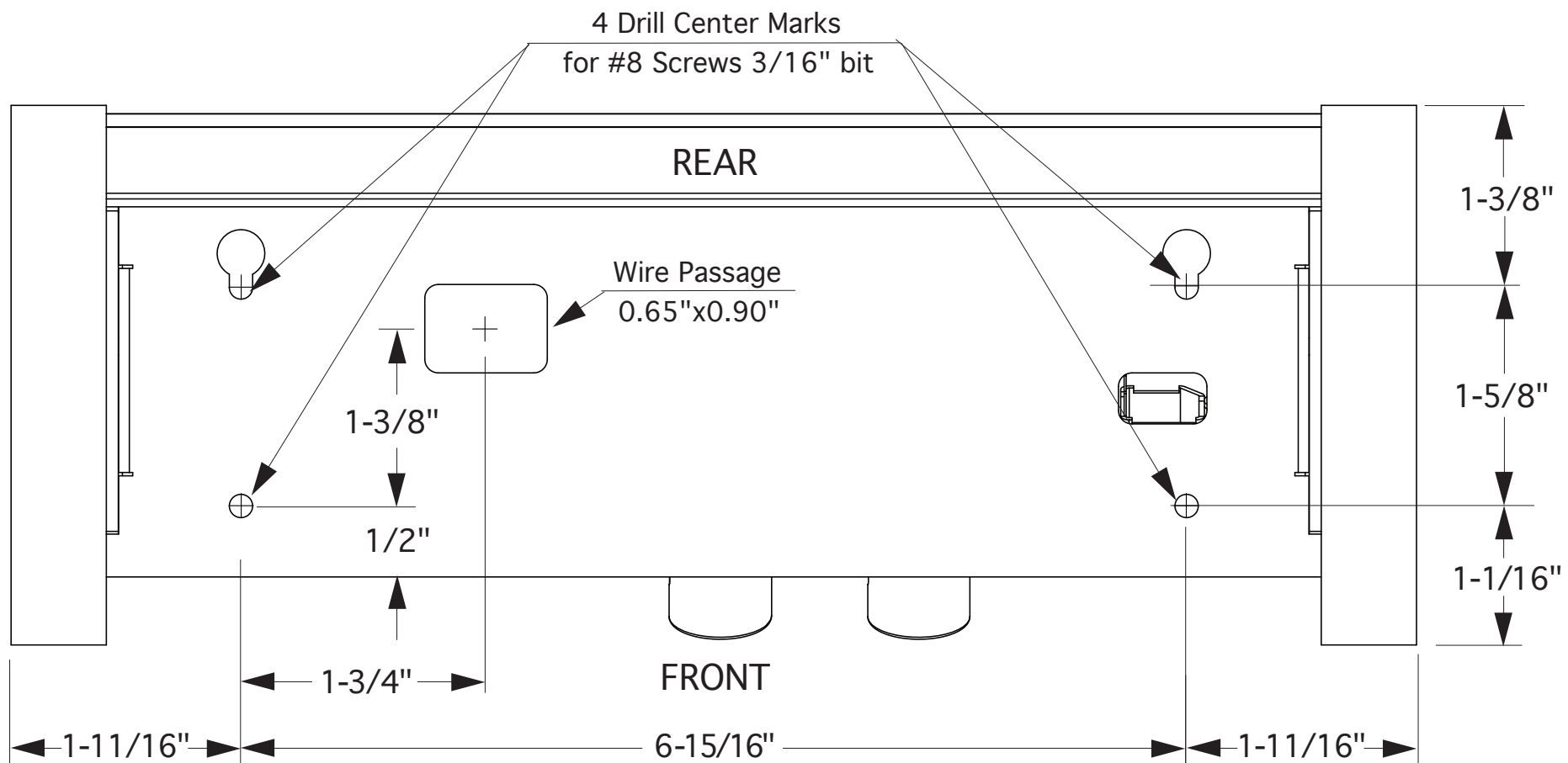
TS-22 Desk Turret Chassis Full Size Template

8-15/16"

8-3/8"

8-1/8"

3-1/16"

4 Drill Center Marks
for #4 Screws 1/16" bit

3-5/32"   3-21/32"

FRONT

COUNTER CUTOUT DIMENSIONS – 8-1/8" x 3-5/32"

FRONT PANEL FACE RECESS DIMENSIONS - 8-15/16" x 3-21/32" x 3/32"
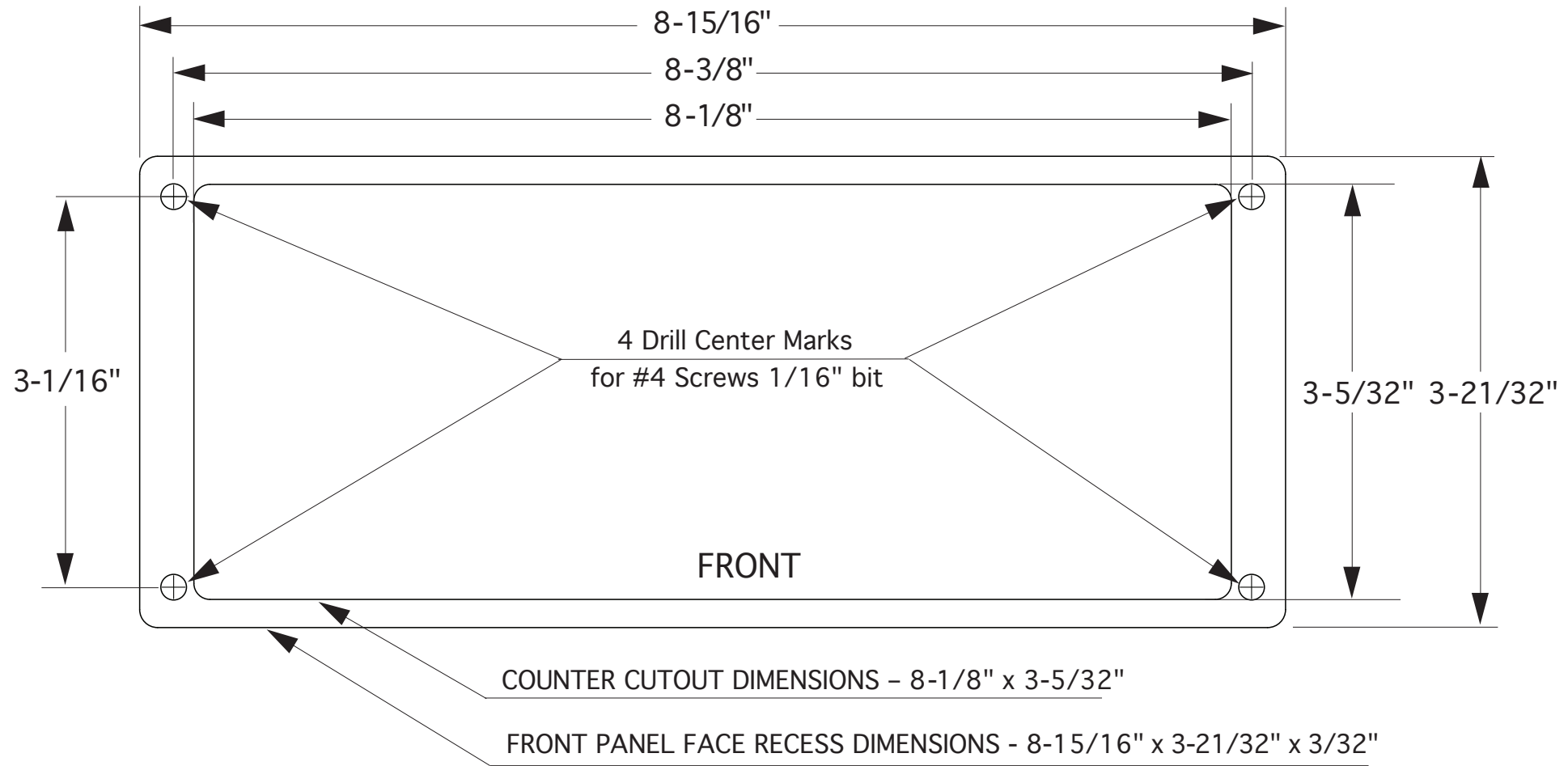
TS-22 Desk Panel Full Size Template

Power Supply and Ethernet Connection

The Talent Station is powered by a factory supplied 12V/1.25 A power adapter with 100-240V/50-60Hz input.

To make power and Ethernet connections for Talent Station desk turret unscrew the turret's front panel. Pass the power adapter cord and the CAT5 cable through the opening on the bottom of the turret and plug into the power connector and the RJ-45 connector located on the RZR-TSL board.
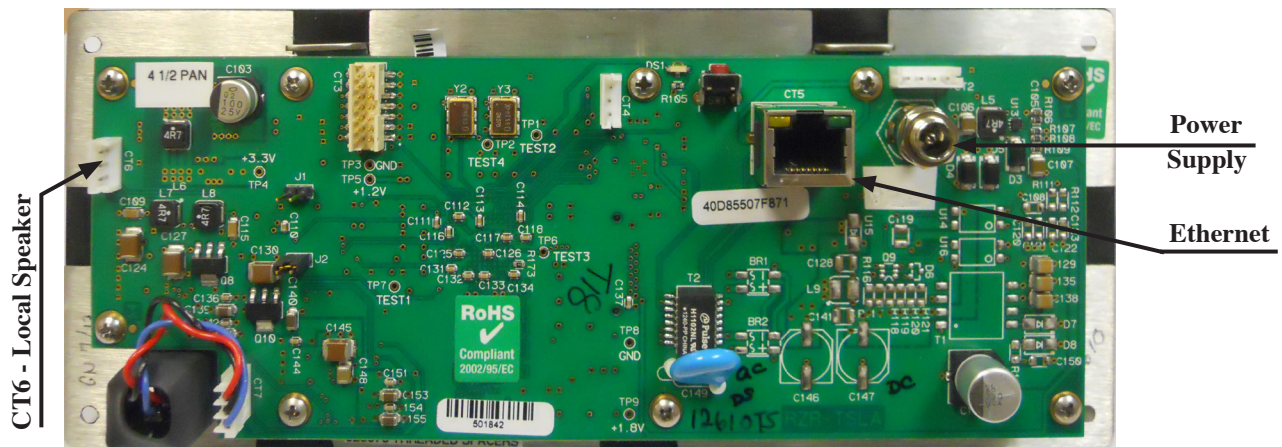
To make power and Ethernet connections for the Talent Station desk panel plug the power adapter and Ethernet cable into the power connector and the RJ-45 located on the rear of the unit.

Assuming the TS-22 is properly placed, and its power adapter connected to the unit, you may now energize the unit by plugging it into the AC mains. The TS-22's switches will assume factory default settings.

Power conditioning, surge suppression, and even power backup devices are wise investments when using sensitive modern electronic devices that use an internal computer.

Note: To de-energize the Talent Station, unplug the power supply adapter's AC cord from the AC mains. Never de-energize the Talent Station by disconnecting the cable that connects the Talent Station and power supply adapter together.

Connect To Network

The Talent Station must be connected on a network with at least one Wheatstone BLADE in order to function. The unit has been programmed at the factory with a device Name and an IP Address. This information is displayed on a label on the device. Please make sure you know what name and IP address are programmed for the device as you follow these steps.

The WheatNet-IP system typically resides on a network having addresses on the 192.168.87.xxx subnet. If it becomes necessary to change your Talent Station's IP address follow the instructions in the Front Panel Menus section of Chapter 2.

A managed network switch is required to connect the various devices in the system. Please read the appropriate chapter in the *WheatNet-IP Audio Over IP Network Technical Manual* for details on switch setup. The Talent Station port uses the same setup as described for a surface, GP panel, or XY controller.

Connect the Talent Station to an appropriately configured port on the network.

TS-22 Operation

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TS-22 Operation

Soft Buttons

The Talent Station TS-22 has six *SOFT* buttons labeled A through F that can be programmed with a user-written script. The script is written in the GUI and compiled on a PC and then stored and executed in the Talent Station. The script determines what happens when buttons are pressed and which button LEDs are lit. See Chapter 4 for more about scripting.
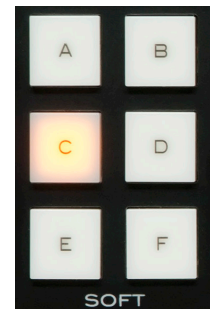
Source Buttons

The Talent Station TS-22 has six *SOURCE* buttons that can be programmed to specific Source Signals. When a source button is pressed, the source signal saved to the button is connected to the headphone and speaker on the Talent Station.
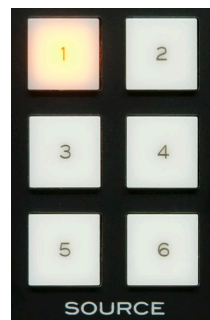
Programming a Source Button

To program a particular button, follow these steps:

- Press and hold down a button until it starts to flash. This causes a list of source signals to be displayed on the display.
- The source signal highlighted with a white background is the currently selected signal. Turn the *SELECT* knob to move the current selection up and down through the source signal list.
- When you have the desired signal highlighted with a white background, push the *SELECT* knob. This causes the programming to complete. The source button stops flashing and the display returns to the normal display.
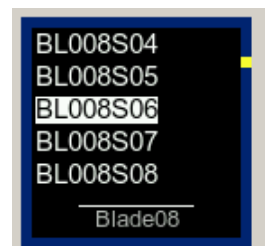
NOTE: The programming operation will timeout if you do not press any buttons or turn the Select knob.

NOTE: To end the programming operation without waiting for the timeout, simply press the flashing source button.

Using a Source Button

To use a Source Button, simple press and release a pre-programmed Source button.

This causes the Source signal to be connected to the headphone and speaker signals of the Talent Station. When the connection is complete, the programmed source button lights up. In addition, the display changes to show the connected Source signal name. As the connection is made, the Location for the signal is shown on the Display for a short time.

If more than one Source button is programmed to the same signal, then multiple buttons light when that source is connected to the headphone.

Timer Buttons

The Talent Station TS-22 has timer capabilities that enable:

- Count-up timer
- Count-down timer
- Timer group with one master device and many slave devices
- Timer automatically started in a timer group based on specific surface activity. when a slave device is a surface and an Input Fader on that surface is turned on and that Input Fader has the "Timer Restart" option set.

The buttons are on the right side of the panel.

Buttons Description

UP ARROW – Button is lit when the timer is in count-up mode.

If the timer is in count-down mode and stopped, a simple press and release of the Up arrow button changes the mode from count-down to count-up.

If the timer is in count-down mode and stopped, an overpress of the Up arrow button changes the starting time of the count-down timer. As the button is held down longer, the increment by which the starting time increases changes from 1 to 5 to 10 seconds.

DOWN ARROW – Button is lit when the timer is in count-down mode.

If the timer is in count-up mode and stopped, a simple press and release of the Down arrow button changes the mode from count-up to count-down.

If the timer is in count-down mode and stopped, a simple press and release of the Down arrow decrements the start time by one second.

If the timer is in count-down mode, holding down the Down arrow and turning the Select knob changes the start time of the timer.

AUTO – Button is lit when the auto-start capability is enabled.

Pressing the *AUTO* button toggles between enabling and disabling the auto-start capability.

START/STOP – The *S/S* button is lit when the timer is running.

Pressing the *S/S* button starts the timer if the timer is not already running.

Pressing the *S/S* button stops the timer if the timer is already running.

MASTER – The *MSTR* button is lit when the device is the master of a Timer Group.

Holding the *MST* button down for several seconds makes the device become the master of a Timer Group. See the discussion on Timer Groups below for more details.

RESET – The *RST* button is used to make a timer start over.

Pressing the *RST* button while a timer is running makes the timer start over at 0 or the start time depending on the mode of the timer.

Pressing the *RST* button while a timer is not running makes the timer reset to 0 for a count-up timer and to the start time for a count-down timer.

Count-Up Timer

A count-up timer starts at 00:00 and counts up. The timer rolls over after 1 hour. (i.e. 59:59) When a count-up timer is stopped, the time shown is the latest time reached by the timer. Pressing *S/S* again to start the timer causes the timer to reset to 0 and start counting over. Pressing the *RST* button while the timer is running causes the timer to start over at 00:00.

The mode of the timer is indicated by whether the Up arrow button is lit (count-up) or whether the Down arrow button is lit (count-down). To change the mode from count-down to count-up, if the timer is stopped, just press and release the Up arrow.

Count-Down Timer

A count-down timer starts at a specified start time and then counts down to 00:00. When 00:00 is reached, the timer is turned off. Pressing the *RST* button while the timer is running causes the timer to start over at the specified start time. Pressing the *S/S* button while the timer is running causes the timer to stop and show the last time shown when the timer was running. Pressing the *RST* button while the timer is off causes the display to reset to the start time.

The mode of the timer is indicated by whether the Up arrow button is lit (count-up) or whether the Down arrow button is lit (count-down). To change the mode from count-up to count-down, if the timer is stopped, just press and release the Down arrow.

Timer Groups

Timer Groups are a way to have many devices show the same timer. Many devices can be members of the same group. The group is identified by an ID, which is just a number. The ID for a particular device can be set in the GUI. Many groups can exist at the same time on the same WheatNet-IP network. All devices with the same ID are in the same group. A group ID of 0 means the device is not a member of any group.

Within each group, there is one Master and many slaves. The Master can start and stop the timer as well as change the timer mode. The slaves can just display what is being done on the Master. The slaves display the timer mode by lighting the Up arrow

or Down arrow but the slaves cannot change the mode. The slaves display the running time of a timer but they cannot start, stop, or reset a timer.

Any device can become the master by holding down the *MSTR* button until the *MSTR* button is lit. On slaves, the *MSTR* button is not lit. When the current master sees another device becoming Master, it backs off and becomes a slave.

Within a group, a timer can be started by either the Master device or by an Auto-start indication from one of the slaves. The conditions for an automatic start are as follows:

- Press the *AUTO* button on the Master so the button is lit. This enables the Auto-start capability.
- On a surface which is a slave in the same group, make sure the "Timer Restart" option on an Input Fader is checked.
- Press the *ON* button for the Input Fader.

When the *ON* button is pressed on an Input Fader with the "Timer Restart" option set, then the slave sends a message to the Master and this causes the timer to start if the timer is not already running and to restart if the timer is already running.

Microphone Buttons

The Talent Station TS-22 has four Microphone buttons.

These buttons are designed to be used to support the usual microphone functions. When the TS-22 is added as a 3rd Party device to a WheatNet-IP network, the TS-22 creates six LIOs that are directly associated with the Microphone buttons. The LIOs that are created can be added to any signal. When connected to a signal that supports the microphone LIOs, then all the microphone LIOs will work.

Note that by changing a setting in the TS-22 Setup GUI, the meaning of the ON and OFF buttons can be reversed so that the OFF button is on top and the ON button is on the bottom. If this is the desired operation, make the change in the GUI (see the Device Setup section) and remove the button caps from the TS-22, replacing them in the opposite positions.

Microphone LIOs

The LIOs defined by the TS-22 include the following:

- Remote ON. This LIO is set when the Mic ON button is pressed and unset when the ON button is released.
- Remote OFF. This LIO is set when the Mic OFF button is pressed and unset when the OFF button is released.
- Cough. This LIO is set when the Cough button is pressed and unset when the Cough button is released.

- Talk Back. This LIO is set when the TB button is pressed and unset when the TB button is released.

- On Tally. When this LIO is set, the Mic ON button is lit.
- Off Tally. When this LIO is set, the Mic OFF button is lit.

Within Navigator, the LIOs appear in the LIO Info tab of the BLADE that the TS-22 was added to as a 3rd Party device, as well as when adding LIOs to signals.

The LIOs are defined so they can be included in a Source signal, which could be connected to a Destination signal on a surface, which in turn supports the microphone LIOs.

Studio Tally LIOs

The Talent Station shows a Microphone icon on the Talent Station display. The icon can be gray to indicate there is no live microphone in the studio or the icon can be red to indicate that there is a live microphone in the studio. The state of the icon is triggered by Studio-in-use Tally LIOs from something like a surface. The configuration and usage steps are described below.

- Tell the Talent Station which Studio Tally LIOs to look at. This is done by using the Mic In Use Tallies. There are 4 checkboxes corresponding to the four different Mic In Use Tallies. Simply check one or all of the check boxes.

- Create a Destination signal that just consists of LIOs. The LIOs to include are one or all of the Studio Tally LIOs from the Talent Station as shown above. Note that the Studio Tally LIOs correspond to the Mic In Use Tallies.

- Connect the Destination signal to a Source signal that drives the desired Studio Tally LIOs. One example of such a Source signal is the E6TALLY Source signal on an E-6 surface. Other signals could be used. A signal with an SLIO with the correct function will also work and would allow the icon to be driven by a button panel.

If using an E-6 surface, when a fader is turned on, one or more of the Studio Tally LIOs are turned on as specified by the configuration for that fader. The default mode is to turn on all four Studio Tally LIOs but this can be changed.

When the signals have been created and connected, when any of the Studio Tally LIOs of interest are set, the microphone icon is red. When all are clear, the icon is grey.

Volume Controls

The TS-22 has two knobs that can be used to control volume. The *HEADPHONE* knob controls the volume of the headphone plugged into the Talent Station. The *SPEAKER* knob either controls a Studio speaker or a local speaker, or no speaker at all. For instructions on connecting a local speaker see page 4-18.

The current volume levels are shown in the blue lines at the bottom of the display. The headphone level is shown on the top blue line next to the headphone icon. The speaker level is shown on the bottom blue line next to the speaker icon.

As the knob is turned clockwise, the volume levels are increased and the light blue part of the blue line becomes longer. As the knob is turned counter-clockwise, the volume levels are decreased and the light blue part of the blue line becomes shorter.

When the Talent Station is configured to control a Studio Speaker on a Surface, turning the *SPEAKER* knob causes the volume level on a Surface Studio Speaker to change. In this mode, when the volume level is changed, there may be a red bar in the blue line for the speaker volume.
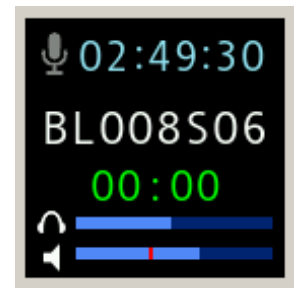
The red bar indicates the last level that the surface knew while the blue line indicates what the Talent Station thinks the volume should be. The blue line directly tracks the volume changes as the speaker knob is turned. The red line will usually just be shown momentarily. When the surface updates to the correct level, the blue line and the red bar will be at the same level and then the red bar will not be shown.

When the Talent Station is configured to use a local speaker, it is possible to mute the speaker. When this is done, the speaker icon in the display, changes to a different icon.

The Mute condition is indicated by an LIO provided by the Talent Station with the Mute LIO function. To use the LIO, follow these configuration steps:

- Add the Talent Station as a 3rd Party device.

- Create a Destination signal that includes the Speaker Mute LIO from the Talent Station.
- Create a Source signal that includes an LIO with the Mute function. The actual LIO might be an SLIO or a physical LIO on a Blade.
- Connect the Source and Destination signals just defined.

Display

The TS-22 contains an OLED display which displays several pieces of information.

Microphone Icon

In the upper left corner, a microphone icon can be seen. The purpose of this icon is to indicate whether there are any live microphones in the studio. When there is a live microphone, the icon will be red instead of gray if so programmed. The red icon is triggered by the Mic In Use Tallies.

Time of Day

On the topmost line, the time of day is shown in either 12-hour or 24-hour format. The time is obtained from the host blade. If no host blade is configured, the time starts at midnight when the talent station is powered on.

Signal Name

In the center of the display is the name of the source signal currently connected to headphones on the talent station. If you just see ">", it is likely that there is either no host blade configured or there is no connection to the host blade.

Signal Location

When a new source signal is connected to the headphone, in addition to the signal name, the signal location is shown below the signal name. The signal location is shown for about 3 seconds.

Timer

The normal display below the signal name is either the accumulated time in a count-up timer or the remaining time of a count-down timer.

Headphone Volume

At the bottom of the display, there are two horizontal lines. The top line indicates the volume level for the headphones. The horizontal line is light blue on the left and dark blue on the right. As the volume increases, the length of the light blue portion increases. As the volume decreases, the length of the light blue portion decreases.

Speaker Volume

At the bottom of the display, there are two horizontal lines. The bottom line indicates the volume level for the speaker. The horizontal line is light blue on the left and dark blue on the right. As the volume increases, the length of the light blue portion increases. As the volume decreases, the length of the light blue portion decreases. When the speaker volume is controlling a studio speaker on a surface, there may be a red vertical bar in addition to the blue portions. Similar to how the volume is shown on the surface when being remotely controlled, the red bar indicates what the actual volume level is on the surface. The red bar is usually just shown for brief periods of time.

To the left of the speaker volume indicator is a speaker icon. When the volume control is for a local speaker, it is possible to Mute the speaker. When this is done, the speaker icon changes to a speaker with a red circle and red slash to indicate that the speaker is muted. For instructions on connecting a local speaker see page 4-18.

Front Panel Menus

There are several operations that can be performed from the TS-22 front panel. To perform these operations you first must enter the front panel menu system. To do this, press and hold both the SPEAKER and HEADPHONE encoders for about five seconds until the display shows the menu.

The SELECT knob is used to scroll through menu selections and parameter choices, by rotating the knob, and in some instances it is used to advance through parameter fields, by pressing and releasing the knob, a process we will refer to by the term "dobby" in this manual. Thus, if we say at some point to dobby the SELECT knob, we mean press it, then release it.

The following sections describe the menu functions in greater detail.

Network...

Turning the SELECT knob until *Network...* is highlighted and dobbying the SELECT knob enters the *Network...* sub-menu, which provides the following choices:

- *IP Addr* – this item allows you to view the TS-22 IP address – dobby the SE-LECT knob and you can edit the IP address
- *Netmask* – this item allows you to view the subnet mask for the TS-22 – dobby the SELECT knob to edit the subnet mask
- *Gateway* – this item allows you to view the gateway setting for the TS-22 – dobby the SELECT knob to edit the gateway
- *MAC Address* – this item allows you to view the MAC address for the TS-22 – note that you cannot edit the MAC address
- *<<Top of Menu* – this item returns you to the main menu.

Blades...

Turning the SELECT knob until ***Blades...*** is highlighted and dobbying the SELECT knob enters the ***Blades...*** sub-menu, which provides the following choices:

- ***Host Blade 1 IP*** – this item allows you to view the IP address of the TS-22's host BLADE – dobby the SELECT knob and you can edit this address
- ***Blade 2 IP*** – this item allows you to view the IP address of the second BLADE the TS-22 can communicate with – dobby the SELECT knob and you can edit this address
- ***Blade 3 IP*** – this item allows you to view the IP address of the third BLADE the TS-22 can communicate with – dobby the SELECT knob and you can edit this address
- ***Blade 4 IP*** – this item allows you to view the IP address of the fourth BLADE the TS-22 can communicate with – dobby the SELECT knob and you can edit this address
- ***Blade 5 IP*** – this item allows you to view the IP address of the fifth BLADE the TS-22 can communicate with – dobby the SELECT knob and you can edit this address
- ***Blade 6 IP*** – this item allows you to view the IP address of the sixth BLADE the TS-22 can communicate with – dobby the SELECT knob and you can edit this address
- ***Blade 7 IP*** – this item allows you to view the IP address of the seventh BLADE the TS-22 can communicate with – dobby the SELECT knob and you can edit this address
- ***Blade 8 IP*** – this item allows you to view the IP address of the eighth BLADE the TS-22 can communicate with – dobby the SELECT knob and you can edit this address
- ***<<Top of Menu*** – this item returns you to the main menu.

Surfaces...

Turning the SELECT knob until ***Surfaces...*** is highlighted and dobbying the SELECT knob enters the ***Surfaces...*** sub-menu, which provides the following choices:

Surface 1 IP – this item allows you to view the IP address of the first control surface the TS-22 can communicate with – dobby the SELECT knob and you can edit this address

Surface 2 IP – this item allows you to view the IP address of the second control surface the TS-22 can communicate with – dobby the SELECT knob and you can edit this address

Surface 3 IP – this item allows you to view the IP address of the third control surface the TS-22 can communicate with – dobby the SELECT knob and you can edit this address

Surface 4 IP – this item allows you to view the IP address of the fourth control surface the TS-22 can communicate with – dobby the SELECT knob and you can edit this address

<<Top of Menu – this item returns you to the main menu.

Audio Procs...

Turning the SELECT knob until *Audio Procs...* is highlighted and dobbying the SELECT knob enters the *Audio Procs...* sub-menu, which provides the following choices:

- *AudioProc 1 IP* – this item allows you to view the IP address of the first audio processor the TS-22 can communicate with – dobby the SELECT knob and you can edit this address
- *AudioProc 2 IP* – this item allows you to view the IP address of the second audio processor the TS-22 can communicate with – dobby the SELECT knob and you can edit this address
- *AudioProc 3 IP* – this item allows you to view the IP address of the third audio processor the TS-22 can communicate with – dobby the SELECT knob and you can edit this address
- *AudioProc 4 IP* – this item allows you to view the IP address of the fourth audio processor the TS-22 can communicate with – dobby the SELECT knob and you can edit this address
- *<<Top of Menu* – this item returns you to the main menu.

Device...

Turning the SELECT knob until *Device...* is highlighted and dobbying the SELECT knob enters the *Device...* sub-menu, which provides the following choices:

- *Device Name* – this item allows you to view the TS-22s four character device name – dobby the SELECT knob and you can edit the name
- *Temperature* – this item allows you to view the temperature of the TS-22s processor – this value cannot be edited
- *Normal Level* – this item allows you to view the normal brightness setting of the TS-22 display – dobby the SELECT knob and you can edit this setting
- *Dim Level* – this item allows you to view the brightness setting of the TS-22 display when it is in dim mode – dobby the SELECT knob and you can edit this setting
- *Dim Timeout* – this item allows you to view the time delay before the TS-22 display goes into dim mode – dobby the SELECT knob and you can edit this setting

- *Group Timer ID* – this item allows you to see which timer group, if any, the TS-22 is a member of – dobby the SELECT knob and you can edit this setting
- *24 Hour Time* – this item allows you to see if the TS-22 clock is in 12- or 24-hour mode – dobby the SELECT knob and you can edit this setting
- *<<Top of Menu* – this item returns you to the main menu.

Versions...

Turning the SELECT knob until *Versions...* is highlighted and dobbying the SELECT knob enters the *Versions...* sub-menu, which provides the following choices:

- *Station Type* – this item will display Talent Station-22
- *FPGA Version* – this item shows the FPGA version information
- *SW Version* – this item shows the software version information
- *Build Date* – this item shows the software build date
- *Build Time* – this item shows the software build time
- *<<Top of Menu* – this item returns you to the main menu.

Exit Menu

Turning the SELECT knob until *Exit Menu* is highlighted and dobbying the SELECT knob exits from the front panel menu. If you have the menu displayed and are idle, not turning or pressing anything, for about 20 seconds, the TS-22 will automatically exit from the menu.

Setup GUI Operation

Contents

Setup GUI Operation

Installing The Talent Station Setup Tool

You begin Talent Station setup by running the WheatNet-IP Talent Station-22 Setup Tool program that shipped either with the system or with the TS-22. If you haven't already done so, install the program by running the provided Talent Station GUI installer file – wheatnetip_ts22_GuiSetup_x_x_x.exe (the x_x_x is replaced with the program's version number).

Please note that the IP address of the computer that you will be running the TS-22 GUI on should be on the same subnet as the hardware devices in the system.

The rest of this chapter gives an overview of the GUI menus, while Chapter 4 covers the GUI in detail.

File Menu

The file menu allows you to create, open, save, print, etc. your script files as well as modify the WheatNet-IP Programmable Panel Setup GUI password.

- *New...* – this menu item clears out any current script functionality.
- *Open...* – this menu item opens an existing script file. You will be prompted for a script file to open. The GUI will remember the script which you have open when you exit the GUI and au-tomtically open the same script file the next time that you start the GUI.
- *Save* – this menu item saves your script file changes.
- *Save As...* – this menu item saves your script to a new file. You will be prompted for a script file to create.
- *Load From Device...* – this menu item will upload the current script from the selected button panel.
- *Print...* – this menu allows you to print the script that is currently open in the editor. Both the wizard and custom script sections will be printed.
- *Set Password...* – this menu opens the password dialog box which allows set-ting up password restricted access to the WheatNet-IP Programmable Panel Setup GUI.
- *Exit* – this menu item closes the WheatNet-IP Talent Station-22 Setup GUI program.
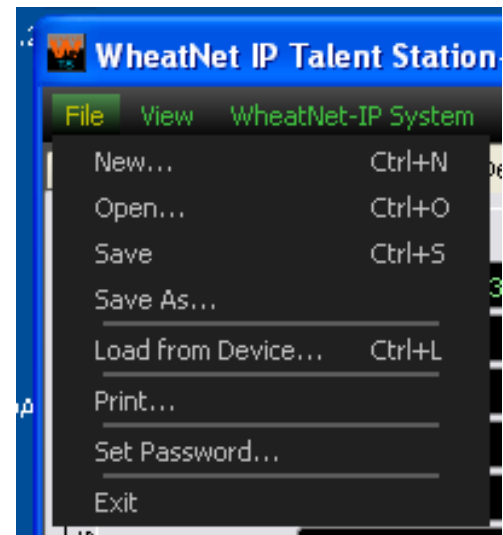
View Menu

The view menu allows you to select what dockable windows are currently shown in the GUI.

- *Devices* – this menu item displays the Devices panel.
- *Output* – this menu item displays the Output panel.
- *System Info* – this menu item displays the System Info panel.
- *Stylized* – this menu item toggles the GUI appearance between a plain look and a nicely styled look.

WheatNet-IP System Menu

The WheatNet-IP system menu allows you to build and maintain a system database of signals, salvos, and BLADEs in your WheatNet-IP system.

The system database is used in the setup GUI to help you select signals or salvos while using the script wizard. It also provides BLADE choices on the device properties setup tab. Your PC must be attached to your WheatNet-IP system network in order to scan the network for the purpose of building the database. After that initial scan the system database is stored in a file on your PC so that you have the information whether you are attached to your WheatNet-IP system network or not.
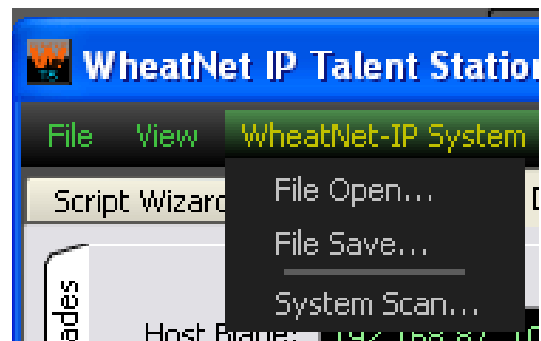
- *File Open...* – This menu item allows you to open a system database file stored on your PC hard drive.
- *File Save...* – This menu item allows you to save your system database to a file on your PC hard drive.
- *System Scan...* – This menu item opens the system scan wizard. You use this menu item to attach your PC to one of the blades in your WheatNet-IP system in order to collect information to build a system database. It is important to follow the system scan wizard instructions **exactly**, in particular when you are prompted to click Finish.

Hardware Menu

This menu allows you to define and maintain the list of TS-22 devices which the GUI can setup. Once defined, a device shows up in the device list window. Once you have defined your devices, you will select one device at a time to work with in the GUI. The selected device will be the target
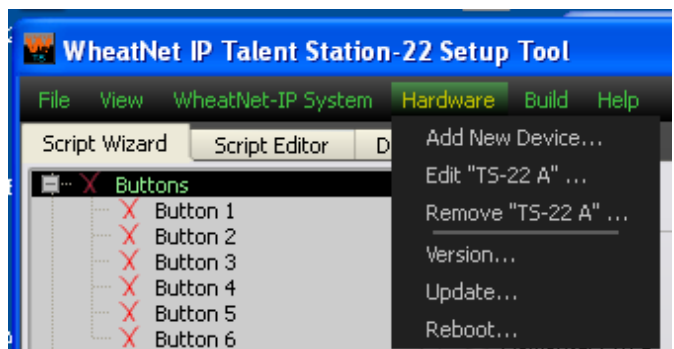
for commands from the GUI (i.e. proper-
ties, script compile and download).

- *Add New Device...* – this menu item opens the Add Device dialog box. You may add devices to your GUI using this dialog box.

- *Edit "Selected Device"...* – this menu item opens the Edit Device dialog box. It is here that the currently selected device's name and IP address can be modified.

- *Remove "Selected Device"...* – this menu item opens the Remove Device dialog box. It is here that the currently selected device can be removed from the device list.

- *Version...* – this menu item will cause the GUI to query the software version number of the selected device. A window will be displayed with the results of this query including device type, version number and date etc. **NOTE:** This menu item is only available if you are connected to the currently selected device.

- *Update...* – this menu item allows you to update the software in your device. You will need a new version of the device software in an RBN file to upgrade the device. Usually these files will be named with the device type and software version number as a part of the file name (i.e. wheatnetip_ts22_1_2_0.rbn for version 1.2.0 of the TS-22 software).
  NOTE: This menu item is only available if you are connected to the currently selected device.
  To update the software on a device, you select this menu option. You will then be prompted to select an RBN file from your PC hard drive. Some details of the selected file will be shown before you begin the download of the new software. You may cancel the upgrade at this point. Once you press *Yes* a progress bar will be displayed while the file downloads. While the file is downloading you may still cancel the operation. Once the file is downloaded the update of the device's flash memory will begin, and again the progress bar shows during the flash update. You may not cancel this operation and **YOU MUST <u>NOT</u> REMOVE POWER** from your device until the flash update cycle is complete. On the TS-22 there will be three cycles of flash updates. The first pass will be to download the software, the second pass will be to flash the software, and the third pass will be for the field programmable gate array chip if that has changed. When all of the flash programming cycles are complete the GUI will tell you it is done. At that point you must power cycle your programmable panel device.

- *Reboot...* – if the *Reboot...* menu item is present, it can be used to force the device to reboot. When the menu item is selected, a confirmation dialog is shown to give the user a chance to cancel the reboot. This option should be rarely used.
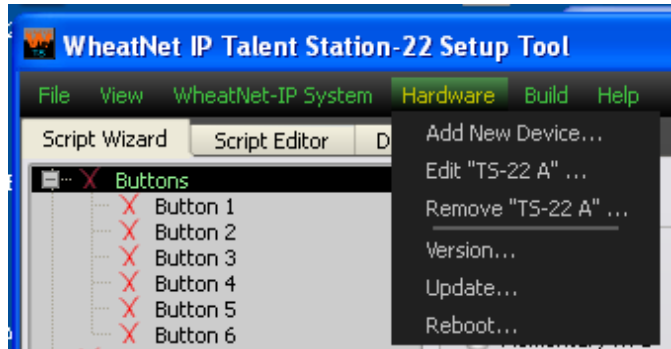
Build Menu

The build menu allows you to compile your script into virtual machine byte code, download the compiled byte code to the TS-22, and restart the script in the device.

- *Compile Script* – this menu item runs the script compiler on the current script without downloading the compiler output to the TS-22. This can be helpful when trying to resolve a syntax error in your custom script code. The keyboard shortcut for this command is **<F7>**.

- *Compile & Download* – this menu item runs the script compiler on the current script. Then, if the compilation is successful, it downloads the compiler output to the TS-22. The old script will stop executing and the new one will be executed after the download completes. The keyboard shortcut for this command is **<F5>**.

- *Restart Script* – this menu item will start or re-start the currently loaded script in the TS-22. The keyboard shortcut for this command is **<Ctrl.+F5>**.
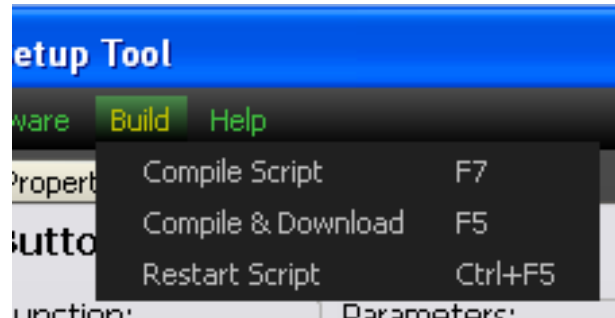
Help Menu

Contents – this menu item opens the help table of contents, **<Ctrl+F1>**.

Search... – this menu item opens the help search window.

Index... – this menu item opens the help index window.

About... – this menu item opens the WheatNet-IP Talent Station-22 Setup GUI About box.

<F1> Context Sensitive Help – pressing the **<F1>** key will bring up the help menu related to the function you are currently performing.
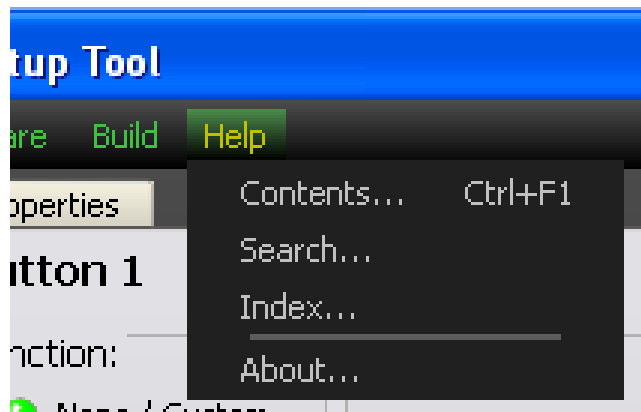
Device Setup

Contents

Device Setup

Device Definition

You will need to setup your GUI with a list of each TS-22 device in your system. The setup steps only need to be performed once since the setup information will be stored on your PC. Once each device is setup you will select the device which you wish to configure prior to downloading a new script to the device.

Device List Window

You can view the device list, if not already shown, by selecting *View* from the main menu and clicking the box for *Devices*. The following docking pane will appear in the GUI. The first time you open this dialog box after installing the GUI, you will not have any devices in the list. After you have defined some TS-22 devices they will appear in the list.
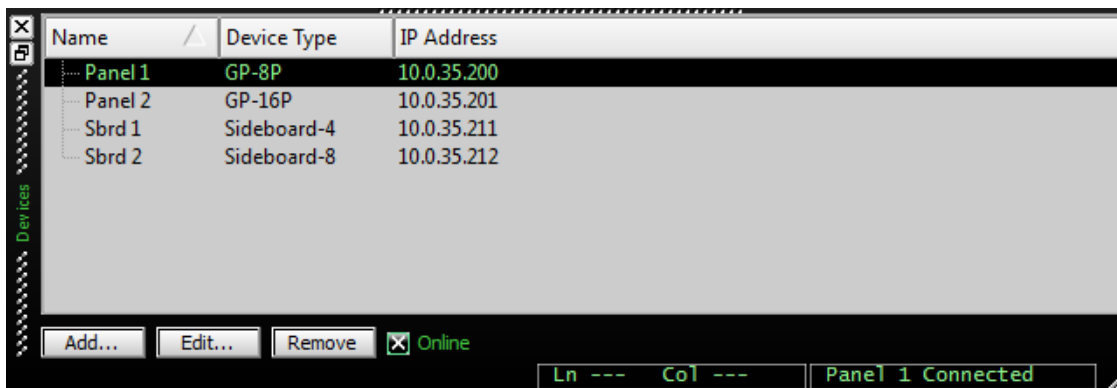
Add, Edit, or Remove Devices in List

In order to add, edit, or remove a device from your device list you need to use the menus available under the main Hardware menu or the three buttons adjacent to the device list.

Add New Device

This selection opens a dialog box that allows you to add a new device to the device list. It requires that a name and valid IP address be specified for the new device and you must select which type of device you are adding.

Edit "Selected Device"

The edit selection opens a dialog box in which you can edit the name and IP address of the device which is highlighted in the list. The device type can not be changed after the initial device definition. If you accidently specified the wrong device type for some IP address, you must remove the old definition and add a new definition.

Remove "Selected Device"

The remove selection deletes the device highlighted in the list.

Online Check Box

The online check box allows you to set your GUI offline when you are not connected to a device. If the online check box is checked, the GUI will be trying to establish a TCP connection to the device which is selected in the device list. If you are not on the same network as the device or the device is powered off, the GUI may appear to pause occasionally while it's trying to reconnect. Unchecking the online box will prevent the GUI from attempting to make any connections.

Note that the far right portion of the main window status line displays the selected device name and the current connection status. In the example shown on the previous page the connection status is "Connected".

Add / Edit Device Dialog

When the device *Add...* is selected, the dialog box on the right will appear. If *Edit...* is selected a similar box will appear, labeled *Edit Device*.

You must define the name, type and IP address for your device in this dialog box. The *Name* field specifies the device name which will appear in the device list. The *IP Address* is the IP address of the device which the GUI will connect to when the device is selected. The *Device Type* must be configured so that the script wizard can generate the proper number of buttons for the device you are programming.
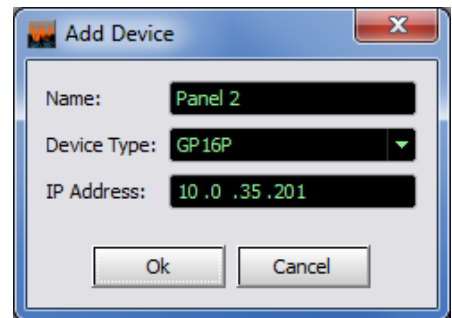
Mapped BLADE Configuration

You will need to setup your TS-22 with the IP address of a host blade. The Host BLADE is the BLADE which your TS-22 uses as a portal into the WheatNet-IP system for most control aspects (i.e. cross point routing, salvos, etc).

The setup steps only need to be performed once since the setup information will be stored in the programmable panel's Flash memory and on your PC. Select the device which you wish to setup, then use the *Device Properties* and *Blades* tabs to specify the IP address of the BLADE which the panel will communicate with.

NOTE: If you are not connected to the TS-22, you are looking at the device properties which are stored on your PC's hard drive. These properties may not truly reflect the properties of your device, if the device has been more recently configured from another PC.

The *Blade n:* fields allow you to specify the desired IP address for each BLADE (up to eight) that a device can access.

You must specify one BLADE IP addresses as the panel's *Host Blade*. As labeled the top IP address corresponds to the *Host Blade*. The *Host Blade* is also referenced as ID "1" in the BLADE and utility mixer interface functions.

You may specify up to seven additional IP addresses. As labeled the second from the top IP address corresponds to the BLADE "2" in the BLADE and utility mixer interface functions. This address will be used when you specify a "bladeid" of "2" in any of the blade_xxx or umix_xxx functions within your scripts or when you select the BLADE or utility mixer options in the Script Wizard. Unused *Blade n:* entries should be left blank.

The buttons labeled "..." to the right of the IP address edit boxes will open a BLADE picker dialog box when pressed. The *Blade Picker* (shown below) will display all of the BLADEs that are known to your system info database. If you double click on one of the BLADEs shown in the *Blade Picker* dialog, then its IP address will be entered into the *Blade n:* IP address edit box.

Blade ID	Mapped ID	Name	IP
1	---	Blade01	192.168.87.101
2	---	Blade02	192.168.87.102
3	Host Blade (1)	Blade03	192.168.87.103
16	---	Blade16	192.168.87.116
25	---	BLD025	192.168.87.35
35	Blade 2	Blade35	192.168.87.135
38	---	Blade38	192.168.87.138
39	Blade 3	Blade39	192.168.87.139
40	---	Blade40	192.168.87.140
41	---	Blade41	192.168.87.141
64	---	BLD064	192.168.87.221

Make sure you click *Apply* when done with this screen.

Mapped Surface Setup

If you are using your TS-22 to interface with a Wheatstone mixer console (control surface), you will need to setup your device with a list of each surface to which it will communicate.

The setup steps only need to be performed once since the setup information will be stored in the button panel's Flash memory and on your PC. Select the *Device Properties* and *Surfaces* tabs to specify the surface IP addresses that you would like your button panel to communicate with.

NOTE: If you are not connected to the TS-22 device, you are looking at the device properties which are stored on your PC's hard drive. These properties may not truly reflect the properties of your device, if the device has been more recently configured from another PC.

The *Surface n:* fields allow you to specify the desired IP address for each surface that a TS-22 can access.

You may specify up to four surface IP addresses. As labeled the top IP address corresponds to surface "1" in the surface interface functions. This address will be used when you specify a "surfid" of "1" in any of the surf_xxx functions within your scripts or when you select the "Surface Event" and "Surface Ch On" options in the Script Wizard. Unused surfaces should be left blank.

Don't forget to check *Apply* when done.

Mapped Audio Processor Setup

If you are using your panel to interface with a Wheatstone audio processor, you will need to setup the panel with a list of each processor it will communicate with.

The setup steps only need to be performed once since the setup information will be stored in the button panel's Flash memory and on your PC. Select the device which you wish to setup, then use the *Device Properties* and *Audio Procs* tabs to specify up to four audio processor IP addresses.

NOTE: If you are not connected to the TS-22 device you are looking at the device properties which are stored on your PC's hard drive. These properties may not truly
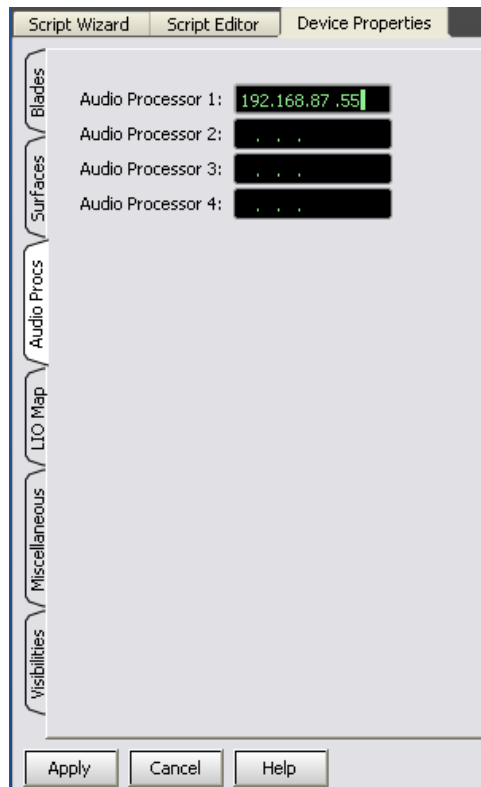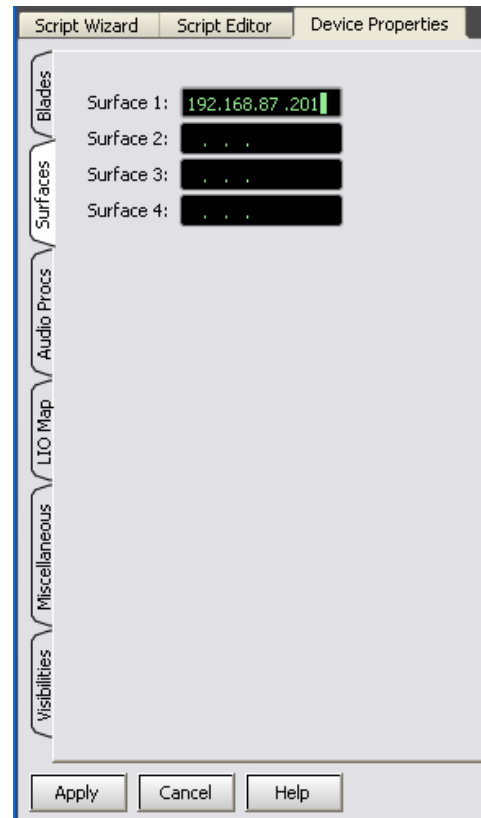
reflect the properties of your device, if the device has been more recently configured from another PC.

The *AP n:* field allows you to specify the desired IP for each audio processor that a panel can access.

You may specify up to four audio processor IP addresses. As labeled the top IP address corresponds to audio processor "1" in the audio processor interface functions. This address will be used when you specify an "apid" of "1" in any of the ap_xxx functions within your scripts or when you select the "AP Preset" option in the Script Wizard. Unused audio processor entries should be left blank.

Once again, check *Apply* when done.

Mapped LIO Setup

If you are using the TS-22 to interface with logic I/O on your WheatNet-IP system, you will need to configure the TS-22 with a list of each WheatNet-IP Soft LIO with which it will interact.

Each TS-22 may interact with up to 16 input and 16 output soft LIO pins in the Wheat-Net-IP system. These soft LIO pins may be on the panel's Host Blade or on any of the other BLADEs mapped to the panel.

The setup steps only need to be performed once since the set-up information will be stored in the panel's Flash memory and on your PC. Select the device which you wish to setup, then use the *Device Properties* and *LIO Map* tabs to access the LIO Map configuration screen.

You may specify up to 16 input soft LIOs and 16 output

soft LIOs. When we use the term "Input LIO" we are referring to logic going into the WheatNet-IP matrix, therefore Input LIOs are the LIOs that a TS-22 can drive. When we use the term "Output LIO" we are referring to logic coming out of the WheatNet-IP matrix, therefore Output LIOs are the the LIOs that a TS-22 can monitor.
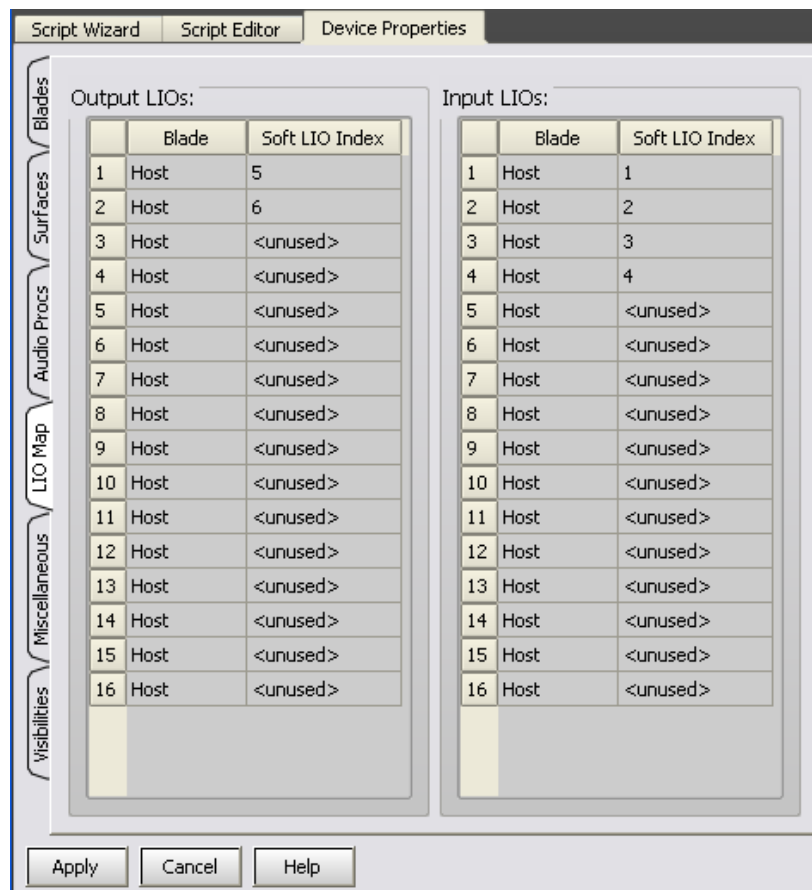
Input LIOs

Input LIOs correspond to Logic I/O values which are fed IN to the WheatNet-IP crosspoint grid. Typical types of input LIOs would be cough, talkback, remote on, and remote off logic signals associated with a microphone source. In a discrete hardwired system these signals would typically come from a button on the announcers desk, then be fed into a BLADEs logic port on its back panel. In a WheatNet-IP system they can come from a programmable panel such as a GP-8P or TS-22, for example.

In the TS-22 you can drive input LIOs using the lio_set() function. The first input LIO corresponds to LIO id "1" in the lio_set() function, the second to LIO id "2", etc.

NOTE: When you specify input soft LIOs for the TS-22, you will typically select a logic line which is also configured as an input LIO in the WheatNet-IP Navigator program. You can point one of the input LIOs at a logic line which is configured as an output soft LIO in the WheatNet-IP Navigator, and the panel will happily drive it. The negative side of doing this is, there might also be another panel or a physical logic input driving the same output LIO.

Output LIOs

Output LIOs correspond to Logic I/O values which are sent OUT of the WheatNet-IP crosspoint matrix. Typical types of output LIOs would be machine start, machine stop, and tally logic signals associated with a microphone source. In a discrete hardwired system these signals would typically come from the logic port on the back of a BLADE and then feed to a logic line on your automation system or to an LED in your tally light.

In the TS-22 you can read output LIOs using the lio_get() function. The first output LIO corresponds to LIO id "1" in the lio_get() function, the second to LIO id "2", etc.

The *Soft LIO Index* field allows you to specify the desired soft LIO that will correspond to the LIO that the panel accesses with its get and set functions. The soft LIO selected here corresponds to the soft LIO on the mapped blade which the panel is setup to communicate with.

NOTE: When you specify output LIOs for the TS-22, you will typically select a logic line which is also configured as an output LIO in the WheatNet-IP Navigator program. You can point one of the device's output LIOs at a logic line which is configured as an input LIO in the WheatNet-IP Navigator, and the panel will happily read it.

LIO Configuration Example

This example is here to show how you could configure the TS-22 to work with a microphone source signal and provide some common microphone type controls.

For the sake of this example, let's assume that we have a microphone source named "JOES MIC" in our system. We will be placing a TS-22 next to the announcer, Joe. We would like to use some of the TS-22 buttons to provide Joe with remote ON/OFF, cough, and talkback capability. We would also like a tally light from the console to indicate when Joe is on air.
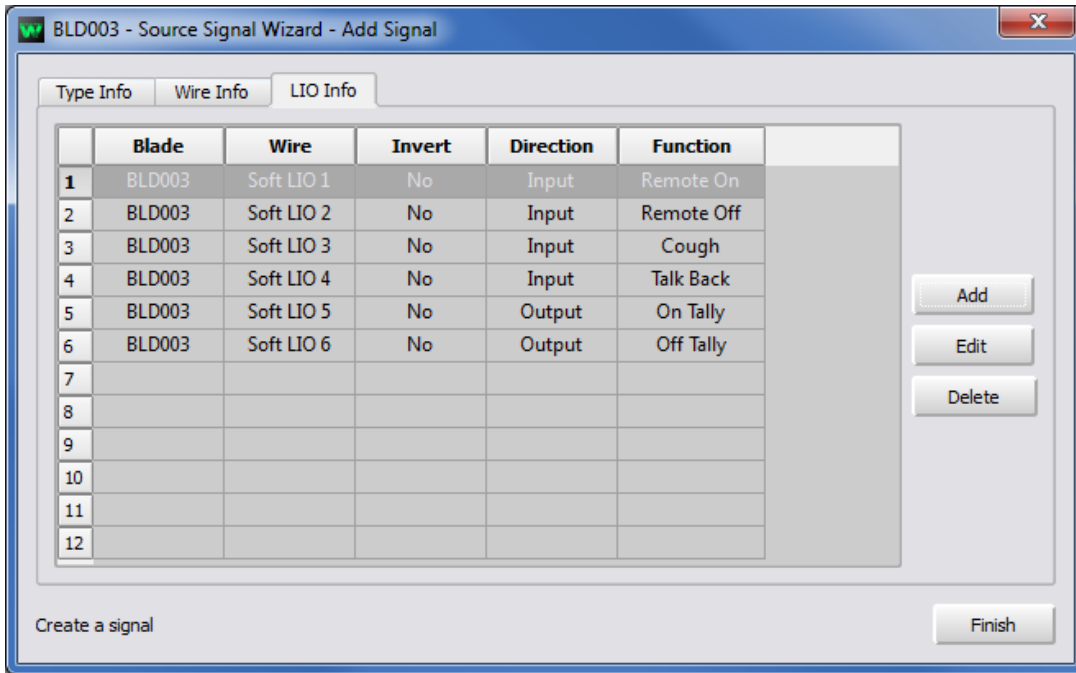
Configure The Signal

The first thing we need to do is configure the "JOES MIC" source signal with some virtual LIO signals to perform these functions. The following figures show how the LIOs will be defined for "JOES MIC" in the WheatNet-IP Navigator GUI.

To begin you need to setup a source signal that connects to Joe's Microphone, "JOES MIC", as shown below. Configure the signal name, location, and type under the *Type Info* tab of the WheatNet-IP Navigator GUI's Signal Wizard.
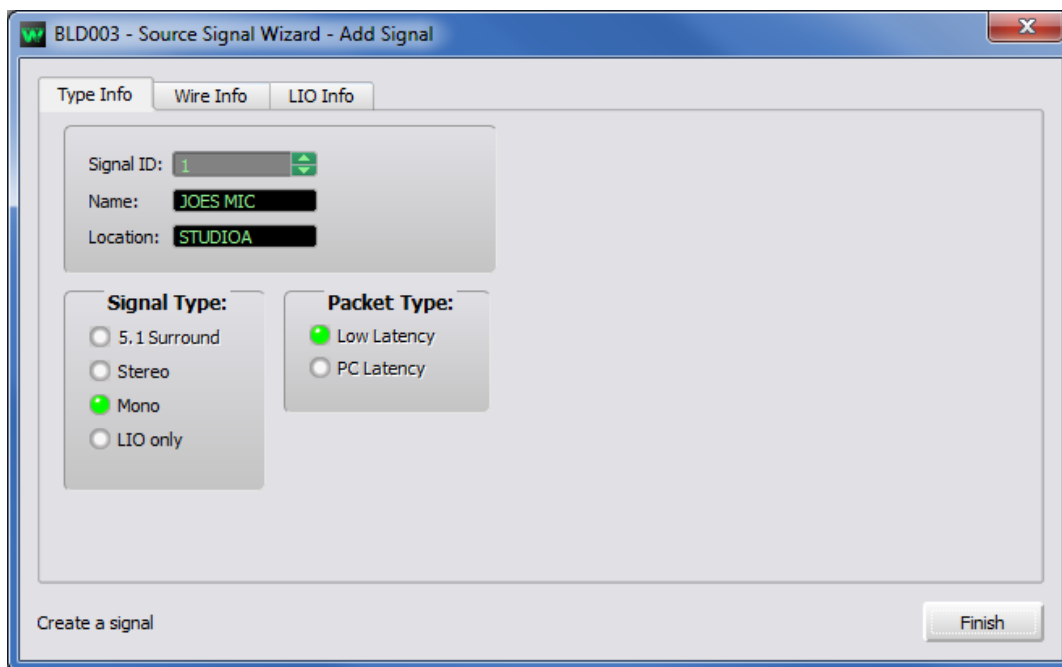
Select the *LIO Info* tab next to configure the six soft LIOs that will be used. The table below shows how each LIO should be configured. The term "Soft LIOs" refers to an LIO pin which resides in the BLADE's memory while the BLADE is running. It is a virtual LIO pin much like the physical pins on the back panel of the BLADE, except that it is accessed via the network link rather than via a hard wire connection. The TS-22 does not require you to solder any wires to a connector on the rear panel

of your BLADE. Instead it drives and monitors any of these virtual soft LIO pins. Most BLADEs have 64 soft LIO pins available inside them. A soft LIO pin can then be assigned to a WheatNet-IP signal just as you would assign a physical pin from the rear panel of a BLADE.

Things to take note of in this diagram are the soft LIO number and the logic function associated with each LIO wire. The soft LIO number will come into play when we configure the logic I/O for the TS-22.

| LIO Function	Direction	Soft LIO Pin
Remote On	Input	Soft LIO 1
Remote Off	Input	Soft LIO 2
Cough	Input	Soft LIO 3
Talk Back	Input	Soft LIO 4
On Tally	Output	Soft LIO 5
Off Tally	Output	Soft LIO 6

Configure The TS-22 LIOs

Let's assume that we want to use the first four soft buttons on our TS-22 to perform these functions.

Button	Function	Details
1	ON	The Remote ON LIO will be triggered when the button is pressed, the button LED will light to indicate that the channel is on air.
2	OFF	The Remote OFF LIO will be triggered when the button is pressed, the button LED will light to indicate that the channel is off air.
3	Cough	The Cough LIO will be triggered when the button is pressed and released, the button LED will light to indicate that button is down.
4	Talkback	Press the button once, the LED will light and the talkback LIO will be asserted. Press the button again, the LED will go out and the talkback LIO will be de-asserted.

Specify The TS-22's LIO Map

The Script Wizard assumes a one to one correlation between the LIO number in the *Device Properties* tab LIO map and the auto generated action which the Script Wizard will generate. Therefore, we need to define the LIOs in the device properties LIO map in the proper locations for the button functions. The following figures show how we will define our LIO map for this example using the *Device Properties-LIO Map* tab in the WheatNet-IP TS-22 GUI.

Define the first four input LIOs to match the Remote On, Remote Off, Cough, and Talk Back LIOs for the "JOES MIC" signal. Take note that these are configured as "Input" LIOs in the TS-22 since we are sending this logic into the crosspoint matrix.
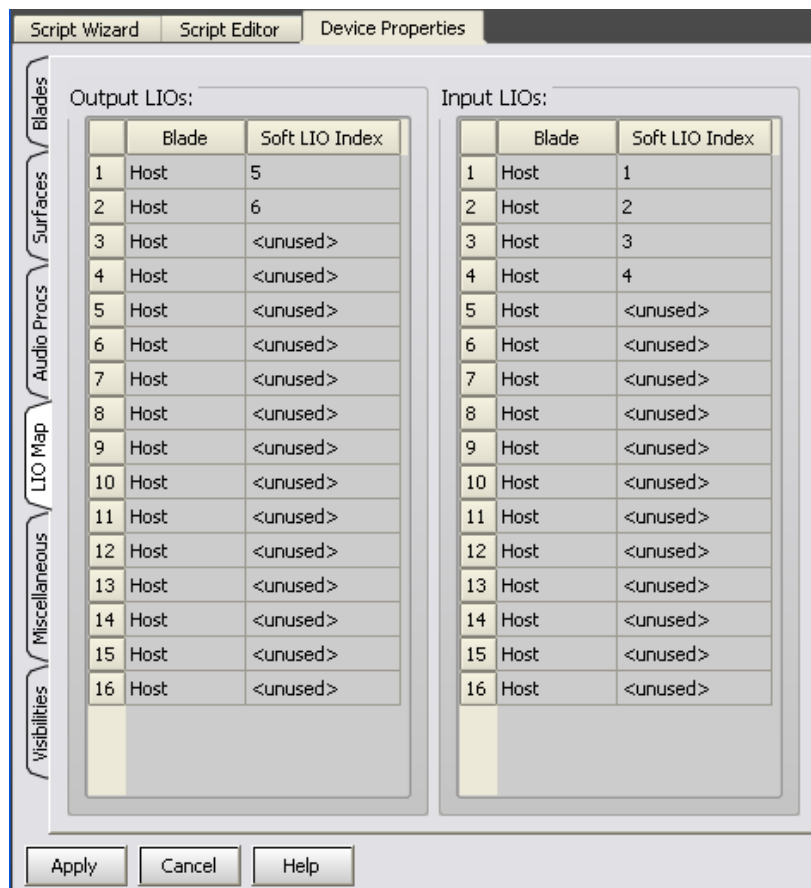
Define the first two output LIOs to match the On Tally and Off Tally LIOs for the "JOES MIC" signal. Take note that these are configured as "Output" LIOs in the TS-22 since we are reading this logic out of the crosspoint matrix.

Note that you must click *Apply* for this configuration to be sent to the TS-22.

Create a Script Using The Script Wizard

Now we want to use the script Wizard to generate a script for the TS-22.

Button 1 & 2

Configure the first and second buttons to be Momentary LIO functions with External LED drive. You must click *Apply* after each button is configured.

The *Momentary LIO* function choice gives us the functionality we desire in that the input soft LIO mapped to this button will be asserted when the button is pressed and de-asserted when the button is released. The External *LED Drive* choice gives us the LED functionality we desire in that the LED will be lit when the output soft LIO mapped to this button is asserted (i.e. when either the channel ON (button 1) or channel OFF (button 2) tally LIOs are asserted).
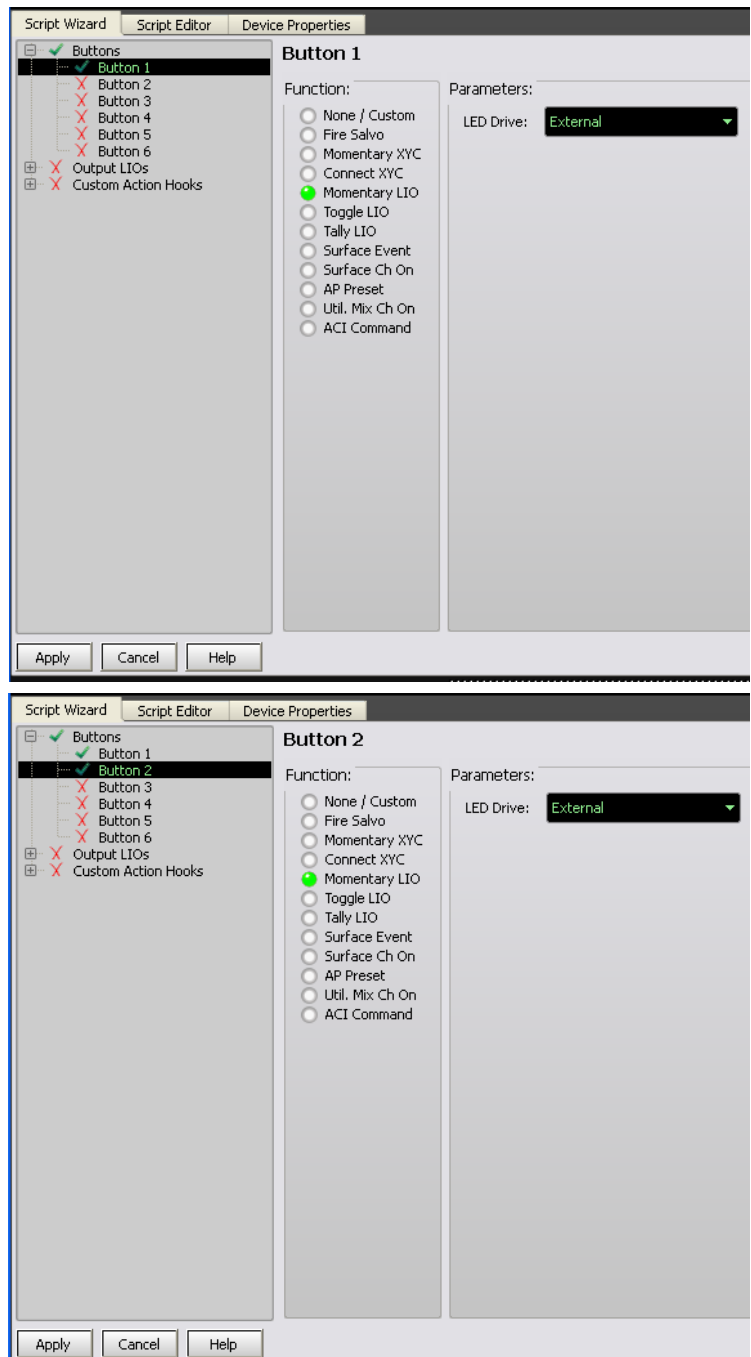
Button 3

Configure the third button to be Momentary LIO with Internal LED drive.
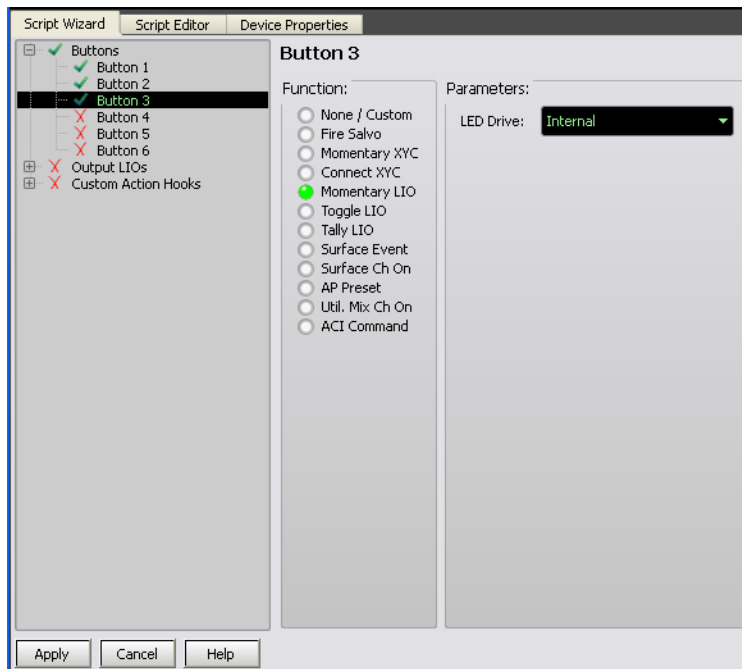
The *Momentary LIO* function choice gives us the functionality we desire in that the input soft LIO mapped to this button will be asserted when the button is pressed and de-asserted when the button is released. The Internal *LED Drive* choice gives us the LED functionality we desire in that the LED will be lit when the button is being held down.

Button 4

Then configure the fourth button to be Toggle LIO with Internal LED drive.

The *Toggle LIO* function choice gives us the functionality we desire in that the input soft LIO mapped to this button will be toggled between being asserted or de-asserted each time the button is pressed. The Internal *LED Drive* choice gives us the LED functionality we desire in that the LED will be lit to indicate whether the TS-22 is asserting or de-asserting the input LIO.
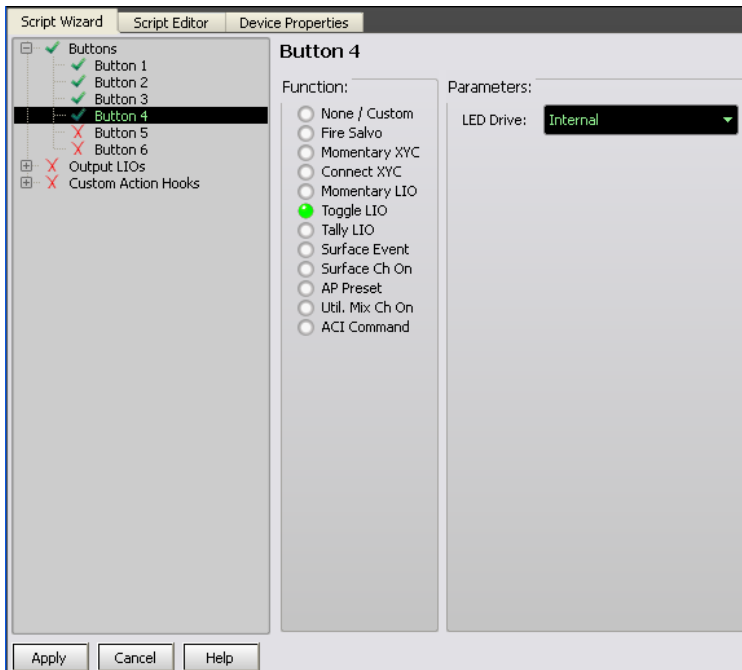
Generated Script

The auto-generated script code for the first two buttons will assert the input LIO while the button is pressed and de-assert the input LIO when the button is released. The button LED will light to indicate that the corresponding output LIO is active.

The auto-generated script code for the third button will assert the input LIO while the button is pressed and de-assert the input LIO when the button is released. The button LED will light to indicate that the button is down.

The auto-generated script code for the fourth button will assert the input LIO with one button press and de-assert the input LIO with the next button press. The button LED will light when the input LIO is asserted.

The following script will be generated. The button 1 & 2 actions simply drive the corresonding input LIOs. A periodic timer drives the button 1 & 2 LEDs with the value read from the corresponding output LIOs. The button 3 actions simply drive the corresponding LIO and LED. The button 4 action toggles the state of the script variable **AGB_toggle_4** between 0 and 1 and then drives the corresponding input LIO and LED with the value of that variable.

```
//AG_START
//All code between the AG_START and AG_END tags is auto generated and
should not be modified.
//WheatNet IP Script Wizard – GUI v1.0.4
//AG_DEVICE TYPE="Talent Station-22"
//AG_BTN1 TYPE="LIO_MOMENTARY" LED="1"
//AG_BTN2 TYPE="LIO_MOMENTARY" LED="1"
//AG_BTN3 TYPE="LIO_MOMENTARY" LED="0"
//AG_BTN4 TYPE="LIO_TOGGLE" LED="0"

variable: AGB_toggle_4 = 0  // Storage for button 4 toggle state.

action: STARTUP
{
  tmr_create_periodic (3, "AG_TIMER_FUNC")
}

action: AG_TIMER_FUNC
{
  btn_led (1, lio_get (1))
  btn_led (2, lio_get (2))
}

action: BTN_1_PRESS
{
  lio_set (1,1)
}
action: BTN_1_RELEASE
{
  lio_set (1,0)
}
```

```
action: BTN_2_PRESS
{
  lio_set (2,1)
}
action: BTN_2_RELEASE
{
  lio_set (2,0)
}

action: BTN_3_PRESS
{
  btn_led (3,1)
  lio_set (3,1)
}
action: BTN_3_RELEASE
{
  btn_led (3,0)
  lio_set (3,0)
}

action: BTN_4_PRESS
{
  // Make sure variable is a 1 or zero then toggle it.
  AGB_toggle_4 = (AGB_toggle_4 & 1) ^ 1
  lio_set (4,AGB_toggle_4)
  btn_led (4,AGB_toggle_4)
}

//AG_END
```

NOTE: In this example we have seen how the Script Wizard associates a button with the corresponding LIO from the LIO map on the device properties dialog box. This one to one correspondence is only a limitation of the Script Wizard. If you are writing a custom script you may access any mapped LIO from any action or sub-routine in your script.

Please note that the script must be compiled and downloaded to the TS-22 before the TS-22 can use the programmed functionality of the script. See the section on the Build Menu in Chapter 3.

Miscellaneous Setup

The Miscellaneous Tab is used to specify a number of parameters for the TS-22 Talent Station.

The setup steps only need to be performed once since the setup information will be stored in the TS-22 Flash memory and on your PC. Select the device which you wish to setup, then use the *Device Properties* and *Miscellaneous* tabs to configure the various parameters.

Misc

The controls in the *Misc:* group include the device name, the group timer ID, and the desired time display format.

3rd Party Signal Name Prefix

Each Talent Station has a four-character device name. The default name for the Talent Station-22 is TS22. The Talent Stations use the WheatNet-IP 3rd Party interface to define signals for receiving the audio for the headphone and speaker. The names of these signals use the four-character device name as the first four characters and then HDPN or SPKR as the last characters. With the default name of TS22, the default signal names are TS22HDPN and TS22SPKR. Changing the device name allows customization of the signal names that can make it easier to identify the signals in Navigator.

NOTE: When you change the device name, it is necessary to do the following. First, remove the 3rd Party device definition for the particular Talent Station from Navigator. Second, reboot the Talent Station. And third, add the 3rd Party device definition back into Navigator.

NOTE: In most places, the 3rd Party device name is displayed next to the signal name and can also be used to help distinguish signals when multiple Talent Stations are in use.

Mic Buttons Order

The order of the On and Off buttons can be changed by checking the box labeled "Reverse meaning of On/Off Buttons." Check the box and Apply to the TS-22, then switch the two physical button caps on the TS-22 to swap the functions.
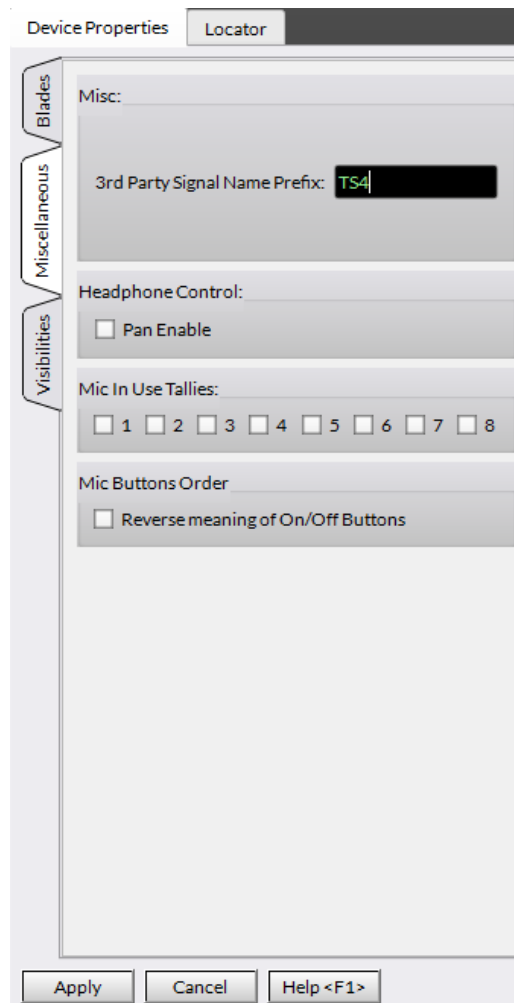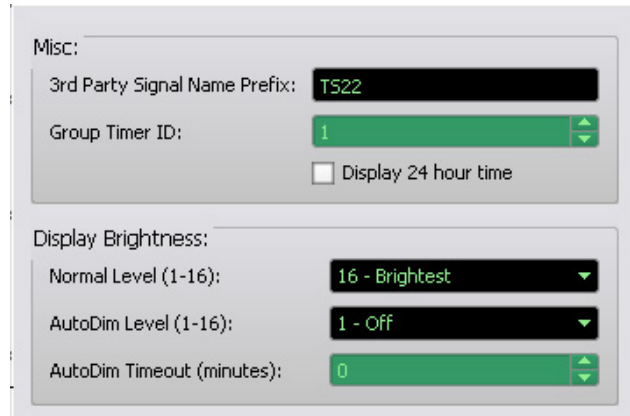
Group Timer ID

The TS-22 uses the concept of a Group Timer. The group consists of one or more Talent Stations surfaces. The Group has a Master which controls the timer (direction, start/stop, reset, etc.). The Slaves of the group simply display the timer information as obtained from the master.

Each group is identified by a numeric ID. There can be multiple groups within the same WheatNet-IP network.

The Group Timer ID field is used to specify the group timer ID for the Talent Station. The group timer feature can be turned off by using a Group Timer ID of 0.

Display 24 Hour Time

The time of day is shown on the TS-22 and can be shown in 12-hour format or 24-hour format. The default format is 12-hour. To change to 24-hour format, check the *Display 24 hour time* check box.

Display Brightness

The brightness of the display can be controlled by the settings in this region. The display brightness varies from a setting of 1 (which is off) to a maximum of 16. The display also has a screen-saver mode. After a specified time, the display brightness will be automatically dimmed to an alternate brightness setting. When a button is pressed or an encoder is turned, the brightness returns to the normal level.

Normal Level

This control specifies the normal brightness level of the Talent Station display. The possible values vary from a low of 1 (off) to a high of 16.

AutoDim Level

This control specifies the brightness level to be used when the display is in screen-saver mode. The possible values vary from a low of 1 (off) to a high of 16.

AutoDim Timeout

This control specifies how long (in minutes) to wait before entering screen-saver mode. The Talent Station must be idle before entering screen-saver mode. This means the timer must be off, the microphone icon must be disabled, and no buttons can be pressed for the specified time.

The allowed values range from 1 to 59 minutes. A value of 0 is also allowed and is used to turn off the screen saver mode.

Speaker Control

The TS-22 has a Speaker encoder that can be used to either control a speaker attached to the Talent Station or a speaker on a Surface. There are three speaker modes that can be selected.

None

Check this radio button when using the None mode.

Local

Check this radio button when using a local speaker. A local speaker can be connected between pins 1 and 3 of CT6 on the RZR-TSL circuit board (see photo on page 1-6). Please note that this connection is to a single speaker and will contain the left-side only of the audio feeding the HEADPHONE output of the TS-22. Pin 1 is the positive phase of the local speaker audio and pin 3 is the negative phase.

CAUTION: Do not ground either speaker wire.

Remote Surface

Check this radio button when controlling a Studio Channel speaker on a remote surface.

Surface

When the Remote Surface mode is chosen, this control will become active and is used to specify which surface (as identified on the Surfaces tab) is to be used.

Studio Channel

When the Remote Surface mode is chosen, this control will become active and is used to specify which Studio Channel (1 or 2) is to be controlled on the remove surface.

Mic In Use Tallies

The Microphone icon in the Talent Station display can turn red to indicate that there is a live microphone in the studio. The alternative is that the microphone is gray. The state of the

icon is driven by one or more Mic In Use Tallies. These correspond to LIOs that are made available by the Talent Station to the WheatNet-IP network. These Tallies work exactly like LIOs on a BLADE. The LIO's can be used in a signal that is connected to an E6TALLY signal (or the appropriate TALLY signal if the surface is other than an E-6) from a surface. When any of the corresponding tallies are set from the surface, the microphone icon becomes red on the Talent Station. When all of the corresponding tallies are not set, then the microphone icon becomes gray.

The check boxes correspond to Studio-In-Use Tallies from the surface. Simply check all that should be used to determine if a microphone is live in the studio.
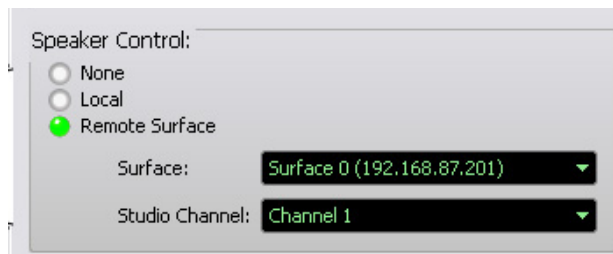
Visibilities

The *Visibilities* tab is used to configure the set of Source signals that is shown when programming a Source button or when doing a Source selection for the Talent Station headphone. (If a local speaker is attached, then the speaker is connected to the same source as selected for the headphone.)

Channel

This area is used to select which destination the visibilities is being configured for. On the Talent Station, the Headphone is the only destination for which visibilities are available.

Global Alpha Sort

When this check box is checked, all of the sources are sorted by name and then shown in the selection list. If the check box is not checked, the sources are sorted by signal numbers which is essentially grouping them by BLADEs.

Allow No Source

When this check box is checked, a special signal with the name NoSrc is added to the signal list. When NoSrc is selected, the destination will be made unconnected.

Signal Tree

The signal tree shows a hierarchical list of source signals that are grouped by BLADEs and other sub-categories. You can expand one or more blades to see the categories and signals within those categories. Checking the check box by a BLADE or category selects all signals under that BLADE or category. Checking the check box by a particular signal selects that particular signal. It is also possible to select all the high level check boxes and then uncheck particular signals in order to remove specific signals from the list of signals that will be visible when selecting a source signal.
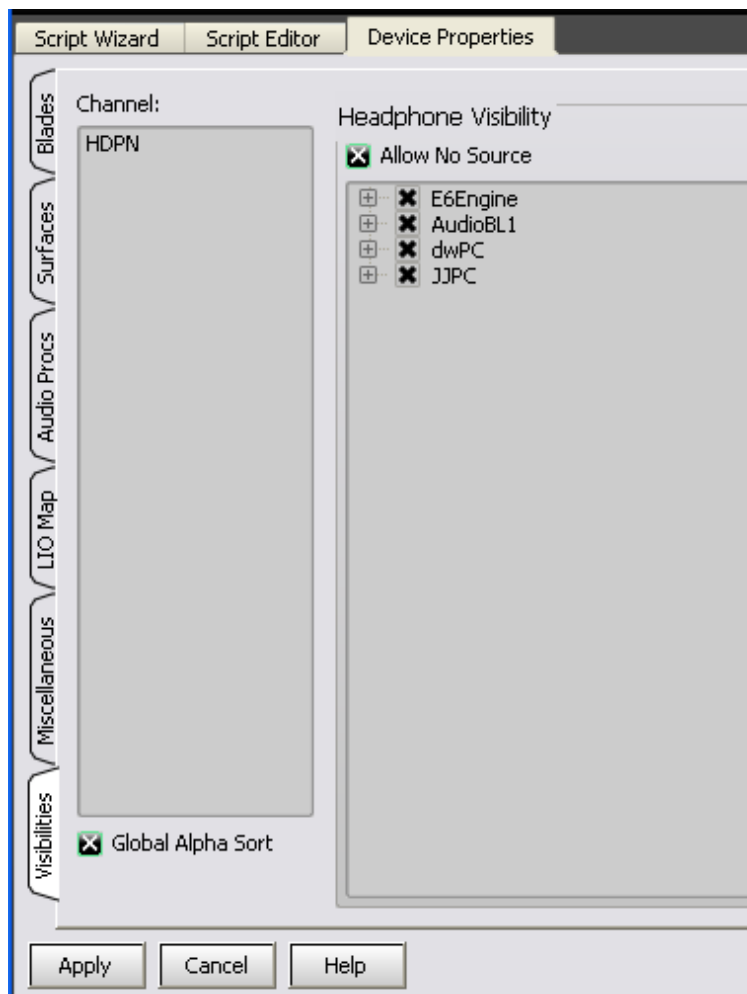
Script Compile & Download

Script Compiling

Once you have created a script using the script wizard or the script editor you must compile and download the script to the TS-22. You can compile the script without actually downloading it to the programmable panel device by clicking on *Compile* under the *Build* menu, or by pressing the **<F7>** key. If the script compiles successfully you will see some status messages followed by the text *Okay...* in the *Output* window.

If there are syntax errors in the script you will see an error message in the output window. If you double click on the error message, the script editor tab will open with the line at which the error was detected highlighted. Beware that the actual error may be on a preceding line though. The reported error line is just the line at which the compiler noticed that an error had occured.

Script Download

Once the script successfully compiles you are ready to download the script to the programmable panel to which you are connected. Download the script to the programmable panel device by clicking on *Compile & Download* under the *Build* menu, or by pressing the **<F5>** key. The script will be compiled again and this time the script will be sent to the TS-22 and stored in the panel's Flash memory, then the script will begin execution.

The script that was previously running in the TS-22 will be stopped, when a new script is downloaded. The new script will be automatically executed. You can select *Restart Script* under the build menu to cause the currently loaded script on the selected panel to be (re)started.