User Manual

Build 680

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Horizon Overview

Concept of Horizon

Two basic styles of lighting consoles have evolved since computerized consoles were introduced in the early 1970s. These two styles can best be described as tracking and preset, sometimes referred to as Light Palette or Performer style respectively. For various reasons these styles of consoles were and are today used by two distinct groups of users.

Almost all large-scale professional productions, opera houses and major repertory companies use the tracking console. University theatres, smaller professional productions and the non-profit theatre community use the preset console.

What has caused the divergence?

- Tracking consoles are capable of much more sophisticated and complicated effects. The primary reason for this is their ability to have more than one fade executing at the same time, usually called overlapping fades. This ability has become the stock in trade of the Broadway lighting designer.
- Because of the sophistication and intricacies of tracking consoles dedicated operators almost always operate them. Theatres that do not have, or cannot afford, dedicated operators very wisely stay away from tracking consoles and choose instead the much easier to operate preset consoles.
- Because tracking consoles are aimed primarily at this high-end market they tend to be much more expensive.

Where does Horizon fit in?

- HORIZON is a tracking console with all the sophistication of the best now available.
- Because HORIZON uses a Graphical User Interface and replaces the hidden and magic command structure of the DOS-based tracking consoles with standard computer operations like menus and dialog boxes, it can easily be operated and understood by any computer literate operator.
- Horizon is less expensive then either tracking or preset consoles.
- With the introduction of the Wing Panel and the IntelliMouse? to the HORIZON line it now has all the control surfaces available on dedicated consoles: 101 buttons, 24 sliders, 24 bump buttons and a wheel.
- HORIZON allows lower budget theatres with operators who are not full time employees to have the sophistication that has previously been reserved for only the biggest of professional theatres.
- HORIZON is the perfect teaching tool. It offers the techniques of tracking consoles in an easy-to-learn environment.

System Capacities

The Horizon system capacities outlined below represent the upper range of capacities the program can support.

DMX512 Dimmers	3,072 (512 or 1028 per DMX Interface)
Control Channels	3,072
Cues	No Reasonable Limit
Groups	No Reasonable Limit
Submasters per page	up to 128
Submasters Pages	No Reasonable Limit
Simultaneous Fades	No Reasonable Limit
Function Keys per page	up to 128
Function Key Pages	No Reasonable Limit
Dimmer Profiles	No Reasonable Limit
Cue Profiles	No Reasonable Limit
IPS Talkback	Yes
IPS Remote Commands	Yes
Portable Remote	Optional
GUI Automated Lighting	Gold
Active Magic Sheet	Silver/Gold
SMPTE/MIDI Interface	Optional
External Trigger Events	Optional
Astronomical Clock	Silver/Gold
Ethernet Network Node	Optional

System Requirements

The Horizon program is designed to operate on the following minimum requirements.

Microsoft ® Windows ® 95/98/NT/2000
Pentium ™ Processor
32 MB Ram
VGA Video (SVGA recommended)

Note:

Windows NT and Windows 2000 restrict the use of the printer port. Only the Ethernet Node, the Playback Controller or Demo Mode can be used with Windows NT/2000.

Windows 2000 is the latest version of Windows NT not the next version of Windows 98.

Installing The Horizon Program

A CD-ROM drive is the quickest and easiest way to install the Horizon program.

1 Place the Horizon Compact Disc (CD) in your computer's CD-ROM drive
2 Double Click on MY COMPUTER
3 Double click on the CD-ROM drive icon
4 Double click on the Horizon.exe file
5 Follow the steps that appear on your monitor

If you don't have a CD ROM drive, use the following steps to install the program.

1 On any PC with a CD Rom drive, insert the Horizon CD in the CD Rom Drive.
2 Copy the entire contents of Directory Disk-1 to a floppy disk. Label this floppy as Disk-1.
3 Follow the same procedure for all other Directory Disks on the Horizon CD-ROM.
4 Insert Disk-1 in the floppy drive of your Windows Computer.
5 Double click on MY COMPUTER.
6 Double click on the floppy drive A: icon.
7 Double click on Horizon.exe file.
8 Follow the steps that appear on your monitor.

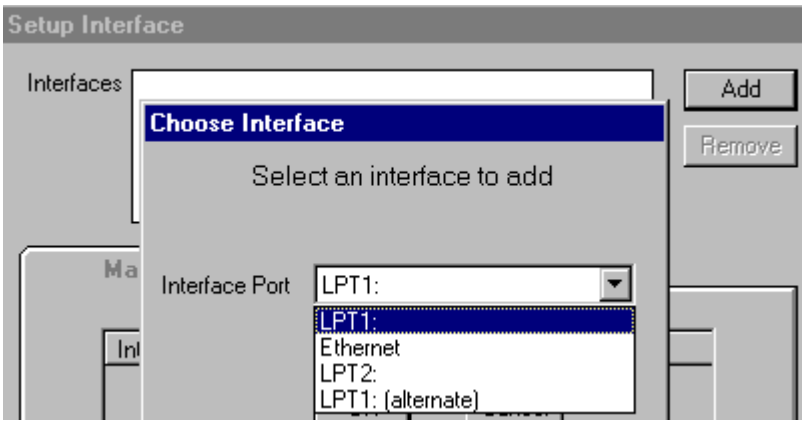
Note:

You must have Administrator Privileges to install Horizon on Windows NT or Windows 2000.

Connecting Hardware to Horizon

Connecting the DMX-512 Interface

1. Connect an IEEE 1284 Bi-directional Printer Cable to a printer port on the PC.
2. Connect the printer cable to the DMX Interface.
3. Connect the Power Supply to appropriate power and to the DMX Interface.
4. Select **Set-up/Interface** on the Menu Bar.
5. Select **Add** and pick the port from the pull down menu.



Note:

- *If this is the first time the Interface has been used, enter the Authorization Code you received by contacting ROSCO / Entertainment Technology in the by clicking on the DMX icon in the lower right hand corner. In the dialog box click on **UPGRADE** and follow the instructions.*
- *The Cable for the DMX Interface must be marked **IEEE-1284***
- *The DMX-512 Interface can **not** be used with Windows NT or Windows 2000.*

Connecting the Submaster Wing Panel

1. Connect a Modem Cable (DB9 Female / DB25 Male) to a serial port on the PC.
2. Connect the Modem Cable to the Submaster Wing Panel.
3. Connect the Power Supply to appropriate power and the Submaster Wing Panel.
4. Select the **Set-up/Options** pull down menu on the Menu Bar. Select the **Serial** tab to configure the ports.

Note:

- *When the interface is connected properly, the Interface Icon*  *is displayed without an X on the Status Bar*

Connecting the Ethernet Node or Playback Controller

1 Install a 10BaseT Ethernet Network Card in PC

2 Configure Network for TCP/IP operation. (see Win95/98/NT manual for details)

3 Set the PC IP address to **192.168.1.51**

4 Set the Mask to **255.255.255.0**

5 Connect DMX devices to DMX ports on the 1024 Ethernet Node

6 Connect the Horizon PC and the Ethernet Nodes using standard 10BasesT practice

7 Units are configured and addressed in the factory. If maintenance or trouble shooting is required. Connect a VGA Monitor and an IBM PC AT type keyboard to the 1024 Ethernet node and follow the onscreen instructions.

8 Insure that Horizon 98 (Version 630) or higher is loaded on your PC

9 From Horizon Menu, Select **Setup | Interface**

10 Select **Add** and select **ETHERNET** from the pull down list.

11 Set the IP address to the IP address of the 1024 Interface (from label on rear)

12 Click on **OK** to close the dialog box

13 Repeat 10 through 12 for each Ethernet Node to be connected.

14 You can use the **Mapping** tab to change the map from the default. Remember you can have the same dimmer on more the one node and a node does not have to have all 1024 channels mapped.

15 Use the **I/O Setup** tab to configure any installed I/O boards for input or output.

16 Use the **Interface Ports** tab to assign connected peripheral to the serial port on the Node or Playback.

If connected properly, the DMX icon in the lower right hand corner of the display will be bright without an "X".

Connecting External Inputs and Outputs

The Horizon Ethernet Node and the Horizon Playback Unit have two external inputs and two external outputs. The electrical characteristics are detailed below:

INPUT: 3 – 12 VDC on the + input terminal with respect to the - input terminal. Voltages greater than 12 VDC will damage the input circuitry. Reverse connection of up to 12 VDC will not harm the unit. Any voltage greater than 3 VDC will be seen as an active input. An inactive input should have no voltage applied. The input current is a function of the applied voltage and is given by the formula Iin = (Vsupply – 2) / 470.

OUTPUT: The outputs are normally-open relay contacts. The isolation voltage between the output terminals and the Horizon Playback Unit is 1000 VAC. The ratings for the relay are given below:

Contact resistance 50 mΩ max. G5V-2
Load Resistive load (p.f. = 1)
Rated load 0.50 A at 125 VAC
2 A at 30 VDC
Carry current 2 A
Max. operating voltage 125 VAC, 125 VDC
Max. operating current 2 A
Max. switching capacity 62.50 VA, 60W
Min. permissible load 10 μA, 10 mVDC

PINOUT:

Pin	Signal Name
1	INPUT 1 +
2	INPUT 1 -
3	INPUT 2 +
4	INPUT 2 -
5	OUTPUT 1A
6	OUTPUT 1B
7	OUTPUT 2A
8	OUTPUT 2B

The Horizon Ethernet Node and the Horizon Playback Unit can optional support 96 additional I/O connection. These connections are designed to work in conjunction with OPTO 22 style I/O Mounting Racks.

- Industry Standard 50-pin headers
- Isolation provided by OPTO 22 style I/O modules
- External Isolation, such as the OPTO 22 modules, must be provided. Using the I/O pins without isolation can result in severe damage to the Playback or Ethernet Node.

PINOUT:

	CONNECTOR			
	# 1	# 2	# 3	# 4
Pin	(Function Bar 1)		(Function Bar 2)	
1	F-24	F-48	F-24	F-48
3	F-23	F-47	F-23	F-47
5	F-22	F-46	F-22	F-46
7	F-21	F-45	F-21	F-45
9	F-20	F-44	F-20	F-44
11	F-19	F-43	F-19	F-43
13	F-18	F-42	F-18	F-42
15	F-17	F-41	F-17	F-41
17	F-16	F-40	F-16	F-40
19	F-15	F-39	F-15	F-39
21	F-14	F-38	F-14	F-38
23	F-13	F-37	F-13	F-37
25	F-12	F-36	F-12	F-36
27	F-11	F-35	F-11	F-35
29	F-10	F-34	F-10	F-34
31	F-9	F-33	F-9	F-33
33	F-8	F-32	F-8	F-32
35	F-7	F-31	F-7	F-31
37	F-6	F-30	F-6	F-30
39	F-5	F-29	F-5	F-29
41	F-4	F-28	F-4	F-28
43	F-3	F-27	F-3	F-27
45	F-2	F-26	F-2	F-26
47	F-1	F-25	F-1	F-25
49	NC	NC	NC	NC

[all even numbered pins are Ground]

See Also:

Connecting the Ethernet Node or Playback Controller

External Events

Connecting MIDI and SMPTE

MIDI and SMPTE time code can be connected to the Playback Controller or the Ethernet Node through the optional MIDI / SMPTE dongle. The dongle provides for a single SMPTE time code stream and two MIDI ports with both in and out (note: some dongles provide only one MIDI port).

- MIDI connects using the industry standard MIDI connector.

- SMPTE connects using an unbalance line level signal through a phono (RCA) jack.
- A potentiometer is provided on the dongle to attenuate the incoming SMPTE level.

Setup Options – Default Settings

The Options category under **S**etup consists of a series of user preferences. They are divided in to six groups.

To access the Default Settings

1 Click on the **Set-up** pull down menu on the Menu Bar.
2 Click on **Options** to display the Options dialog box.
3 Select the appropriate Tab.

Display Tab

Channel Increment Value

- Use the 1% and by 1 DMX option button to select which method will be used.

Label Position

- Use the Label position option buttons to change the position of the information displayed next to each cue on the cue list.

Abbreviate Cue List Information

Use the Abbreviate Cue List Information check box to change the look of the information displayed next to each cue on the cue list.

Labels On Keyboard

Use the Label On Keyboard check box if you have machine cut labels on your keyboard. If not selected the shortcut keys from previous versions will be active.

Recently Used File List

- Use the check box next to the Recently Used File List to activate the number of file names which will be displayed in the File pull down menu on the Menu Bar.

  The standard default number of files to be displayed is (4).

Defaults Tab

Goto / Back Time

Use the Goto/Back text box to set the default time for completing the GoTo and Back function.

The standard default Go/To Back time is 1.0 seconds.

Default Follow Time

Use the Follow Time text box to set the default time for the Follow Cue function.

The standard default Follow Time is 5.0 seconds.

Default Fade Time

Use the Fade Time text box to set the default time for Cue Fade Time.

The standard default Fade Time is 5.0 seconds.

Predefined Level Value

- Use the Predefined Level Value text box to set the default level of a selected channel.

  The standard default Predefined Level Value is 100%.

Record Mode

- Use the Tracking and Cue Only option buttons to select which mode of operation that cues will default to when they are being recorded.
- The standard default mode is Tracking.

Cue List Channel Precedence

- **Last Value Take Precedence (LPT)** Channels will take the value of the last change regardless of what Cue List caused the change.
  Example: If channel one is set 50% by Cue 1 on Cue List Main and then set to 25% by Cue 1 on Cue List 2 it will go to 25%.
- **Highest Value Take Precedence (HTP)** Channels will take highest level of the last change from each Cue List.
  Example: If channel one is set 50% by Cue 1 on Cue List Main and then set to 25% by Cue 1 on Cue List 2 it will stay at 50%. See Building_a_Multi_Cue_List_Console .

Default Show Directory

- Set the Default directory where Horizon will look for your stored shows.

HTML Tab

HTML File

- Use this section to access HTML files. Clicking on the Change button displays a standard Windows Open file dialog box.

View HTML File at Startup

If this box is checked the selected HTML file will come full screen when Horizon is started.

Location Tab

Click on **MODIFY** to pick the city nearest to your current location. This value is used to establish Sunrise, Sunset and Twilight.

Serial Ports Tab

- Use the Serial Port drop down lists to select the device connected to each serial port.

SMPTE Tab

- **None**
  No SMPTE source is selected
- **Internal**
  Time Code is generated internally and not available to other devices. No dongle is required.
- **External Generation**
  SMPTE Time Code is generated by the SMPTE dongle on the Ethernet Node or Playback Controller. Time code is available for other devices.
- **External Source**
  SMPTE Time Code is generated by an external device and is received by the dongle on the Ethernet Node or Playback Controller.

Contacting ROSCO/Entertainment Technology

Via US Mail:

Rosco/Entertainment Technology
2181 NW Front Ave.
Portland, Oregon 97209
U.S.A.

By phone:

U.S.A.:	(800) 223-9477
	(503) 222-9944
Fax:	(503) 227-1562
U.K.:	(181) 659-2300
Fax:	(181) 659-3153
Spain:	(341) 846-3602
Fax:	(341) 846-3634
Brazil:	(11) 218-2865
Fax:	(11) 218-2865
Australia:	(02) 9906-6262
Fax:	(02) 9906-3430

On the Internet:

E-mail: horizon@rosco-et.com

WWW: www.rosco-et.com

Tutorial

Step by Step Set-up

1 From the start menu on your desktop, click on **Programs**.
2 From the Program List, click on the **Horizon** Folder.
3 From the Horizon Folder, click on **Horizon**.
This will start the Horizon Program.
4 Make sure the DMX interface is installed correctly. See Connecting Hardware.

Note: It is not necessary to have an interface connected to run this tutorial.

 This icon appears on the Status Bar if the interface is not correctly installed.

5 From the Horizon Menu Bar, select **File**.
6 From the File pull down menu, select **Open**.
7 Select **Tutorial.hzn** from the list of files
8 Click the **OK** button.
9 Make sure **Num Lock** is selected on your numeric keypad.
10 If you are not using Keyboard Labels select SETUP | OPTIONS from the menu. Then select the DISPLAY tab and unclick **Labels on Keyboard**.

Setting Levels and Recording Cues

Setting Levels and Recording a Cue with the Mouse

1. With the mouse, click on channels **1, 5, 7 and 12** in the channel grid
2. Right click the mouse and the **At Level** drop down display appears.
3. From the At Level sub-list, select **80%.**
4. With the mouse, left click **Record**  on the tool bar.
   The Record dialog box appears.
5. Enter the number **1** in the Cue text box.
6. Select **OK** to close the dialog box and complete the record action.
   Cue 1 is now shown on the Cue List; it has been recorded with the default fade time set in **Set-up | Options**.

Setting Levels and Recording a Cue with the Numeric Keypad

1. Using the numeric keypad, press **1 / 5 * 5 0 Enter** (1 through 5 at 50%)**.**
2. Press **1 2 + 1 5 * Home** (channels 12 and 15 at Full).

   Note: *[Home] is a shortcut key for level setting*.

3. Press the **Recrd Key** (R if you do not have labels) to access the Record dialog box.
4. Press the up arrow next to the text box to make the cue number **2**.
5. Press **Enter** on the keypad to complete the record action.

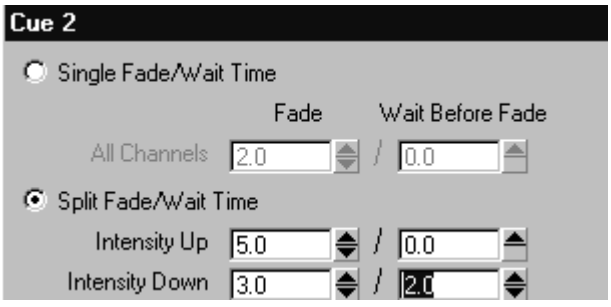
Recording a Split Fade Time with a Wait Time

1. Click on **Cue 2** in the cue list
2. Click on the **Fade Time**  button on the tool bar.

   The Fade Time dialog box appears.

3. Click on the **Split Fade Time** option button**.**
4. Enter **5** in the **Intensity Up** - **Fade Time** text box.
   Make sure that the **Intensity Up** - **Wait Time** displays **0.0**.
5. Enter **3** in the **Intensity Down** – **Fade Time** text box.
6. Enter 2 in the **Intensity Down** – **Wait Time** text box.

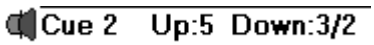
   The display should now look like this:



This will make the channels going up start at the beginning of the cue and the channels going down wait 2 seconds and then start. Because the down time is 2 seconds shorter then the up time, the channels will finish together.

7 Click on **Okay** to complete the action.

Cue 2 in the Cue List now looks like this:



8 Click the **Save** button to save your work. 

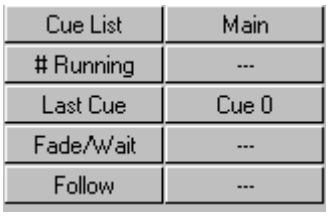
Note: As with any computer file, you should get in the habit of doing this often.

Playing Cues Back

1 Select **Cue 0** (blackout) by double clicking on the cue in the Cue List.

2 Click on **View Fader**  on the tool bar.

The Playback Fader display appears at the bottom of the monitor.



3 Click on the **GO** Button  on the tool bar. Cue 1 fades up.

Note: *The blue arrow beside each channel level indicates that the level has gone up in this cue.*

4 Click the **GO** Button again, or use **G** on the keyboard for Go. Cue 2 fades in.

Note: *The Up Fade begins on the Faders at the bottom of the screen and two seconds later the Down Fade begins. Looking at the channel display you can see that channels went up (blue arrow), down (green arrow) and did not change (tracked- magenta) in this cue.*

Record and Use an Additive Submaster

Record the Submaster

1 Select **Cue 0** (blackout) by double clicking on the cue in the Cue List.

2 Click View **Submaster**  on the tool bar to display the Submaster Button.

3 Place the mouse pointer over channel 5 and drag the mouse to channel 25.

This will select channels 5 through 25.

4 Set the channels to a level – the same or varied.

5 Click on **Record**  on the Tool Bar

6 Select the **Submaster Tab** in the Record dialog box**.**

7 Enter **1** in the Submaster Number text box.

8 In the Submaster Label text box, type **Cyc**.

9 Be sure the Additive check box is selected.

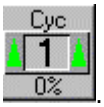
10 Click **OK** to close the Record dialog box.

11 Push the **backspace ** shortcut key two times to release all channels from the keypad.

Use The Submaster To Set Levels

1 Click on **View Submaster**  to

2 Place the Mouse pointer on Submaster Button One



3 Click and hold down the left mouse button and now run the submaster handle up.

Note: *If you have a wing panel, run up Submaster one on the Wing Panel.*

The channels controlled by the submaster will have a yellow line with a green submaster handle beside their level to indicate that they are controlled by an additive submaster..

Multiple Cue Lists

1 From the **Setup** pull down menu, select **Cue Lists**.

2 Press the **New** button.

3 Type ***Chase*** in the dialog box.

4 Press the **OK** button.

5 With Chase highlighted Press the **Properties** button.

6 Press the **Change Color** button.

7 Click on the pale green box.

8 Press the **OK** button.

9 Press the **OK** button in the Chase Properties Box.

10 Press the **OK** button in the Setup Cue Lists Box.

You now have two separate Cue Lists that can run completely independently of each other. Try selecting the tabs to see the different Cue Lists.

Setup a Chase

1 Press the Chase Tab.
2 Select dimmers 20 and 21 and put them at Full.
3 Record this as Cue 1.
4 Select dimmers 22 and 23 and put them at Full
5 Press the right mouse button and select **Rem Dim.**
6 Record this as Cue 2.
7 Holding down the mouse button select both **Cue 1** and **Cue 2** from the Chase Cue List.
8 Press the **Time Fade Button** 
9 Click **Single Wait/Fade Time.**
10 Set the **Fade Time** to 5.0 and leave the **Wait Time** as 0.0

11 Click **Follow** and set the follow time to 5.0

12 Click the **OK** button.
13 Select only **Cue 2** from the Cue List.
14 Press the **Time Fade Button** 
15 In the **Link To** pull down box select **Cue 1** and leave **Forever** checked.

16 Click the **OK** button.
17 Click the **GO** button to see the chase run. 
18 Double Click on **Cue 0 (goto Cue 0)** to stop the chase.

Use the Chase

1 Press the Main Tab.
2 Click on **Cue 10** to select Cue 10.
3 Click on the **Time Fade** button. 
4 Click on the **Change** button.
5 Click the plus sign next to **Cue Sheet** to expand the list.
6 Click **Goto & Run** from the list.
7 Select the **Chase** from the Cue Sheet pull down.
8 Select **Cue 1** from the Cue Name list.

9 Click **OK**, **OK** to close both dialog boxes.
10 Double Click on **Cue 9** to goto Cue 9.
11 Click the **GO** button to run cue 10. 
Notice: The Chase is now running on the Chase Cue List.
12 Click the **GO** button to run cue 11. 
Notice: The Chase is now fading to off.

Setup Moving Lights

1 If you have a DMX Interface connected to your computer and have not as yet been authorized to run the GOLD functions: In the **Setup | Options…** menu, temporarily set the **Interface Port** to **(none).**

2 Click on the **Function Bar** button to display the Function Bar.

3 Select **Setup | Moving Light Patch** from the menu.

4 Press the **Add** button

5 Select **Intellabeam** from the **Fixture** pull down list.

6 Fill in the remainder of the items as shown below:

7 Click **OK** to close the Add box.

8 Click **DONE** to close the Moving Light Patch box.
Notice: A small red arrow in the corner of Channel 50 – 53, this indicates that these channels have addition attributes (pan, tilt, color etc.).

Focus Moving Lights

1 Select Channel 50 on the Channel Grid Display.

2 Press **Focus Key** (F4 if you do not have labels), this will display focus target for the first Intellabeam.

3 Press the right mouse button and select **All to default values** from the list. This handy shortcut set all the attributes to standard values.

4 Press and hold the mouse button over the target to focus the Pan and Tilt.

5 Try the other tabs to adjust the **Intensity, Color** and **Beam.**

6 Try **Prev Fixture** and **Next Fixture** to work with the other fixtures.
Note: You can select multiple fixtures from the channel grid to change the attributes on more than one fixture at a time.

7 Press the **Close** button to close the Moving Light Box.

8 Record this as Cue 20

9 Press the Time Fade Button. 

You can now set separate Wait and Fade Times for Intensity Up, Intensity Down, Color, Beam and Focus. This allows a single cue to change color at one time, move the beam at other and change the Gobo at still a third time.

Monitor Display

Tool Bar

The Tool Bar is located directly below the Menu Bar at the top of the Horizon display. The Tool Bar contains icons representing buttons that allow you to quickly perform the most commonly needed tasks. Tool Bar Buttons can be accessed either with the Mouse or Shortcut Keys.

If you are not sure about a tool's function, position the mouse pointer on a toolbar button (without clicking). The name of the tool appears just under the button, along any with the shortcut keys.

The functions of the Tool Bar are detailed below. Shortcut key combinations are indicated in brackets [ ] after the description.

 The **Save** button records the current (active) show.

 The **Step Back** button replays the cue before the active cue in the recorded fade time. [Ctrl + Left Arrow]

 The **Step Forward** button goes to the cue after the active cue on the Cue List in the recorded fade time. [Ctrl + Right Arrow]

 The **GO** button activates the next cue in the Cue List and places it on the playback faders. [G]

 The **Stop** button halts all playback, that is, any fades in action. [S]

 The **GoTo Cue** button activates the highlighted cue on the Cue List in the default time. [O]

 The **GoTo and Run** button fades to the highlighted cue in the recorded time [F].

 The **Record** button accesses Cue, Submaster and Group record features. [R]

 The **Time** button accesses Cue Time record features. [T]

 The **Cut Cue** button deletes the highlighted cue from the Cue List. [Ctrl+X]

 The **Copy Cue** button copies the highlighted cue on the Cue List [Ctrl+C].

 The **Paste Cue** button pastes the copied cue immediately after the highlighted cue on the Cue List . [Ctrl+V].

 The **Delete Cue** button removes the highlighted cue from the Cue List. [Delete]

 The first click of the **Release** button deselects the channel which is currently selected on the keypad, the 2nd click releases all other selected channels [Backslash\]

 The **Display HTML** button accesses the Magic Sheet display.

The **Display** drop down list box accesses the different Channel Grid display modes.

 The **View Submasters** button toggles the virtual Submaster display on or off.

 The **View Fader** button toggles the virtual Playback Fader display on or off.

 The **View Function Bar** button toggles the virtual Function Bar display on or off.

The **What's This?** button toggles the channel info function on or off.

The DMX Window button shrinks the DMX display to a small window so it can be viewed while you are setting level and playing cues back.

Channel Grid

- The Channel Grid is the field of numbers located on the right side of the Horizon display.
- Each channel in the system is represented on the channel grid in two lines.

  The top line represents channel numbers.

  Level information is shown on the second line.

- Channel levels are color-coded to indicate the status of the channel.

Adjusting the size of the Channel Grid Display

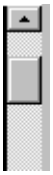
- Clicking on and dragging the horizontal line separating the Channel Grid from the Cue List will adjust the width of the Channel Grid display.

Changing what is displayed on the Channel Grid Display

- The following shortcut keys can be used to adjust what number channels are shown on the channel grid.

Alt + Up Arrow	Scroll channel grid display up a line
Alt + Down Arrow	Scroll channel grid display down a line
Alt + Page Up	Scroll channel grid display up a page
Alt + Page Down	Scroll channel grid display down a page
Alt + Home	Scroll channel grid display to top
Alt + End	Scroll channel grid display to bottom

- **The Scroll Bar** is located along the right edge of the cue list display as well as the channel display and it identifies whether the display is near the top, middle or bottom.



Inside the Scroll Bar is the Scroll Box, which indicates the section displayed. (If it is near the top of the scroll bar, you are near the top of the display. As you press the **Alt + Page Up** or **Alt + Page Down** keys, the scroll box moves accordingly.

Instead of using the **Alt + Page Up** (or **Alt + Page Down**) key, click above (or below) the scroll box. The box will move up (or down) and the display will move up (or down) a page.

To move up (or down) line by line, click on the boxed-in arrow (scroll arrow) at the top or bottom of the scroll bar. Each click will move the display one line. If you hold down the mouse button while the mouse pointer is over the arrow, the screen will continue moving line by line

To move big steps, put the mouse pointer on the scroll box, hold down the mouse button and the drag the scroll box up or down in the scroll bar.

See Also

Channels Colors and Symbols

Channel Colors and Symbols

The Horizon program incorporates both color and graphics to help identify the status of channel levels.

A red outline, a yellow channel number and a white level on a red background indicate the channel is currently selected on the numeric keypad.

A red level only indicates that the channel level is controlled by the numeric keypad but that the channel is not currently selected.

Blue levels represent channel levels that moved up in the last cue.

Green levels represent channel levels that moved down in the last cue.

Magenta levels represent channel levels that did not change (Tracked) in the last cue.

{{bmc other-cue-list-levels.bmp} Channel levels shown on a dark blue background indicate active, on stage, levels contributed by another Cue List.

Yellow levels with a submaster symbol with a green handle represent channels controlled by an Additive Submaster.

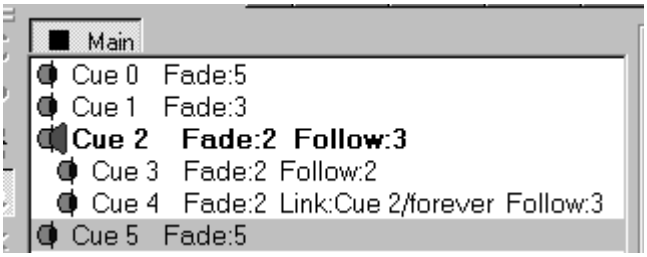
Yellow levels with a submaster symbol with a red handle represent channels controlled by a Subtractive Submaster.

White levels with a green parked symbol represent parked channels or dimmers.

A red triangle next to a channel numbers indicates a moving light base channel.

The letter M in a yellow circle symbol indicates a moving light attribute channel.

Cue List



- The Cue List is located on the left side of the display.
- The Cue List presents all recorded cues in numerical ascending order with their attributes.
- The Cue O position is reserved as a blackout and is at the top of the list.
- Cues that are indented on the Cue List run automatically (the previous cue has a follow time)
- The symbols on the left of the field indicate the status of the cues.
- The  symbol represents the last active cue on the Faders.
- Multiple Cue Lists are indicated at the top of the display.
- Cues that execute automatically are indented on the Cue List.
- The Cue List will scroll automatically as Cues are executed. Right clicking the mouse in the Cue List area can disable this function.

In this example, there are three Cue Lists in the system: Main, News, and Weather. Main is the Active Cue List displayed.

Status Bar

The Horizon Status Bar is located in the lower right of the monitor and provides information on various functions and Hardware options that can be used with the Horizon.

Displays the next cue to run on the active Cue list, and the number of active fades in use on the virtual faders.

 Global Run activated.

 Global pause activated.

Note: *The above two buttons are alternate actions for the same icon*

 Mouse Mode is not in use.

 Mouse Mode is active.

 BOTH Parked dimmers and channels are in use.

 Parked dimmer(s) in use.

 Parked channel(s) in use.

 Neither Parked dimmers nor Parked Channels in use.

 Interface online.

 Interface Error.

 Submaster Wing Panel on online.

 Remote Focus Unit on online.

Menu Bar

File Menu

The **F**ile pull down menu on the Menu Bar provides access to the following functions.

- **N**ew - Use to record a new show.
- **O**pen – Use to access an existing show for playback.
- **C**lose – Use to exit the show that is currently in use.
- **Show I**nformation – Identifies the name of the current show, and the dates on which it was created and last edited. Notes may be added.
- **Import Patch** – Use to bring in patch assignments from offline paperwork programs.
- **S**ave – Use to record the contents of the current show.
- **S**ave As – Use to record the current show under another name.
- **Backup** – Use to save the current show to another location on the disk or to a floppy.
- **P**rint – Use to print cue and patch info for the show currently in use.
- **L**ist - Use to select the most recently used shows.
  Note: The number of shows displayed is selected in Set-up Options.
- **E**xit – Use to close down the Horizon Program.

Edit Menu

The **E**dit pull down menu on the Menu Bar provides access to the following functions. Shortcut keys are indicated in brackets [ ] after the description.

- **Cut** - Deletes the highlighted (selected) cue(s) from the Cue List. [CTRL + X]
- **Copy** – Copies the highlighted cue(s) from the Cue List. [Ctrl +C]
- **Paste** – Pastes copied cue(s) immediately after the highlighted cue on the Cue List. [Ctrl +V]
- **Delete** - Removes the highlighted cue from the Cue List. [Delete]
- **Select All** - Selects every channel in the Channel Grid display.
- **Deselect All** - Releases all previously selected channels.
- **Invert Selection** – Reverses the current channel selection.
- **Renumber Cues** – The means to quickly renumber either selected cues or the whole cue list.

View Menu

The **V**iew pull down menu on the Menu Bar provides access to the following display functions.

- **Live** – Displays the current level of all active channels on stage. In Live, if you want to add, remove or modify cue levels, you must play the cue back, make the changes and then re-record the cue.
- **Blind** – Preview, create, and modify cues without affecting the look on stage (Live). Any changes made to a cue in Blind are automatically recorded.
- **Submaster** – View, create, and modify submaster assignments separately from the look on stage.
- **Group** –View, create, and modify group assignments separately from the look on stage.
- **Parked Channels** – Assign and view parked channels.
- **Parked Dimmers** – Assign and view parked dimmers.
- **Talkback** – Activates the Talkback display.
- **DMX** – Activates the DMX display
- **Submasters 1-12** – Display Submasters 1 through 12 for easy adjustment with the mouse.
- **Submasters 13 - 24** – Display Submasters 13 through 24 for easy adjustment with the mouse.
- **Submaster Bar**– reveals or hides the virtual Submaster Buttons and Handles.
- **Function Bar** – reveals or hides the virtual Function buttons.
- **Faders** – reveals or hides the Fade Indication display.

Setup Menu

The Setup pull down menu on the Menu Bar provides access to the following functions

- **Cue Lists** – Use to Program different, asynchronous cue lists for each show.
- **Submasters** – Use to program separate submaster pages
- **Function Bar** – Use to program functions for the virtual function buttons.
- **Dimmer Patch** – Use for assigning dimmers to the channels in the system.
- **Dimmer Profile** – Use to assign and create dimmer profiles.
- **Moving Light Patch** – Use to set up and patch your moving lights.
- **Channel Check** – Use to perform a channel by channel light check.
- **Options** – Use to establish system defaults and attributes.

Actions/Events Menu

The Action/Events pull down menu on the Menu Bar provides access to the following display functions.

- Time Events – Schedule Events related to the time of day, sunset, sunrise or twilight.
- SMPTE Events – Schedule Events synchronized with SMPTE Time Code.
- MIDI Events – Setup Events to correspond with MIDI Actions.
- SMPTE Learn Mode – Enable SMPTE Learn Mode

- Actions can be executed by:
  - Time Events
  - SMPTE Events
  - MIDI Events
  - External Events
  - Cues
  - Function Buttons

Help Menu

The **H**elp pull down menu on the Menu Bar provides access to the following functions.

- **Horizon Help** - Opens the on-line Horizon help files.
- **About Horizon** – Identifies general information about the Horizon program, including the current version number.
- **Tip of the Day** – Use to access the Tip of The Day display which provides tips and notes on Horizon operation.

Channel Grid Display Modes

Changing the Channel Grid

The display drop down list box on the Tool Bar is used to change the mode of the channel grid display.

1 Clickclick the down arrow on the right of the drop down list box.
2 Click on one of the display modes shown.
3 The drop down restores and the mode selected is shown.

The information on the channel grid display alters according to the mode selected.

Live or Stage Display

The Live display shows the current level of all active channels on stage. In the Live Display, if you want to add, remove or modify cue levels, you must play the cue back, make the changes and then re-record the cue.

1 Clickclick the down arrow on the right of the display drop down list boxDrop_Down_List_Box on the Tool BarTool_Bar .
2 Click on Live in the list.

The drop down restores and the selected display mode is current.

Blind Display

The Blind display lets you create, preview or modify cues without affecting the look on stage (the Live display). Any changes made to a cue in Blind are automatically recorded.

To Access the Blind Display

1. Clickclick the down arrow on the right of the display drop down list boxDrop_Down_List_Box on the Tool BarTool_Bar.
2. Click on **Blind** in the list.
3. The drop down restores and the selected display mode is current.

To Display the Contents of A Cue in Blind

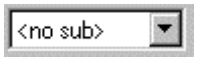
1. To display a cue in Blind, select the Blind mode
2. Click on the cue you wish to preview in the Cue List. Its name will be highlighted and the contents of the cue are shown on the channel grid.

Note

- *Any level changes made in the Blind Display do not affect the level on stage.*
- *To record the changes as a different cue number, use the Record button on the Tool Bar, or use the R shortcut key.*

Submaster Display

The submaster display mode enables you to create and modify submaster assignments separately from the look on stage.

1. Clickclick the down arrow on the right of the display drop down list boxDrop_Down_List_Box on the Tool BarTool_Bar .
2. Click Submaster in the list.
3. The drop down will restore and the selected display mode is current.
4. Select the Submaster number you wish to view from the pull-down list box at the end of the Tool Bar 

The channel levels recorded in the selected submaster are shown in yellow with the Submaster handle symbol next to the level. 

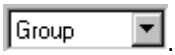
Group Display

The Group display enables you to view the contents of a group as well as create and modify group assignments separately from the look on stage.

1 Click the **down arrow** on the right of the display drop down list box on the Tool Bar .

2 Click on **Group** in the list.

The drop down restore and the selected display mode is current.

3 Select the Group you wish to view from the drop down list box at the end of the Tool Bar. 

.

The drop down restores and the selected display mode is current.

See also

Recording Groups
Modifying Groups

Park Displays

Parked levels are identified by the symbol 

.

The Park Channel Display

The Park Channel display allows you to assign and view parked channels and dimmers.

The Park Dimmer Display

The Park Dimmer display allows you to assign and view parked channels and dimmers.

See Also

Park Channels
Park Dimmers
Channel Resolution

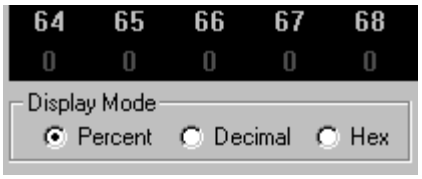
DMX Display

The DMX Display indicates the real time output levels that are being transmitted to the system dimmers or DMX device. This is the level being transmitted to the DMX interface.

1 Click the down arrow on the right of the display drop down list box on the Tool Bar.

2 Click on **DMX** in the list.

3 The drop down restores and the selected display mode is current.



4 Use the option buttons at the bottom of the display to select the format the DMX information is shown in: Percent, Decimal or Hexadecimal.

Note

The DMX Display can be reduced and displayed on top of the channel field through the DMX Window  *icon.*

Mouse / Trackball

Using the Mouse to Select Channels and Levels

The mouse can be used to select channels and set levels.

- Left click the Mouse to select or de-select a channel.
- Hold the left button down and drag to select groups of channels.
- Right click the mouse on the Channel Grid to access the Level drop down menu

  Select from the level setting choices listed.

- The wheel on the Intellimouse mouse can be used to raise or lower channel levels.

  - Select a channel.

  - Turn the wheel in the middle of the mouse.

    The level changes in the same direction you move the wheel.

- Using the mouse as a channel fader

  - Select a channel.

  - Position the pointer on the narrow vertical bar on the far right side of the channel grid. - Click and hold the left mouse button down.

    Moving the mouse forward will increase the level of the selected channel. Moving the mouse down will decrease the level.

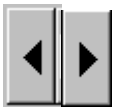
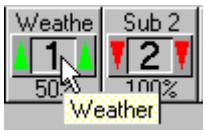
  - Let go of the mouse button to stop this action.

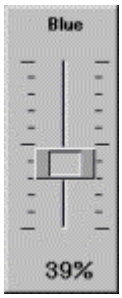
See Also

Channel Grid
Channel Colors and Symbols
Setting Levels
Selecting Channels

Using the Mouse on the Submaster Buttons

The mouse can be used to alter the submaster display and to access the virtual submaster handles.

- Click the mouse on the  symbols at either end of the submaster display to scroll the Submaster Buttons horizontally so the rest of the buttons can be accessed.
- Positioning the Mouse pointer on a Submaster Button displays the entire Submaster name.
- 

- A **virtual Submaster Handle** appears when you click and hold down the left Mouse button on a Submaster Button. Keep holding the mouse button down and move the mouse up and down to move the submaster handle and change channel levels.
- 

- Right clicking the Mouse on a Submaster button locks the virtual Submaster Handle display on. Move the mouse up and down to raise and lower the Submaster.

Keyboard

Introduction to the Keyboard

The Keyboard controls used in Horizon conform to Microsoft ® Windows ® 95 conventions.

- Use the Numeric Keypad to the right of the keyboard to select channel and cue numbers as well as to set channel levels.
- Use the **Tab** key to access positions inside dialog boxes.
- Use **Enter** to complete an action in a dialog box.
- Use the **Up** and **Down arrows** to position the highlight bar in the cue list or in a drop down list box.
- Use keyboard letters for quick access to various functions, using shortcuts.
- Use the **Space Bar** to turn on or off check boxes.
- The **Function buttons** (F1, F2, etc.) at the top of the keyboard are used to access operations in the some of the dialog boxes.

  Note: *The keyboard function buttons are totally separate from Horizon's twenty-four virtual function buttons.*

Tool Tips

The Horizon program incorporates Tool Tip displays to help the operator who wants to use the keyboard, rather than the mouse, to access functions.

- Position the mouse pointer on any icon on the Tool Bar. The Tool Tip display indicates the function and the shortcut key that accesses the function.

- If there are shortcut keys for a function in a pull down menu or any menu displayed after right clicking the mouse, they will be displayed in the menu.

See also

Shortcut Keys
Numeric Keypad
Keyboard Labels

Using_the_Numeric_KeypadUsing the Numeric Keypad

The numeric keypad is the rectangular calculator-like group of ten keys on the right of most keyboards. The numeric keypad can be used to enter cue numbers when recording, to select channels, and to set levels.

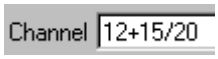
Please note that in the above illustration, keys are labeled as the Horizon function rather than the actual keypad labels.

Tip

*The **Num Lock** (Numeric Lock) key must be on whenever the numeric keyboard is used. A light will be illuminated above the Num Lock key when it is on.*

Channel Selection

As you select channels on the numeric keypad, the numbers appear in the Channel Display at the bottom left of the Channel Grid display.



The above example indicates that channels 12 and 15 through 20 are selected.

Selected channels are identified on the Channel Grid by a red square and a yellow channel number.

The following keys can be used individually or together to select multiple channels so they can be set to the same level.

/ Through
For example, to select channels 16 through 20, enter **1 6 / 2 0** on the numeric keypad.

+ And
For example, to select channels 1 and 3 and 5, enter **1 + 3 + 5** on the numeric keypad.

- Less (Minus)
For example, to select channels 6 through 10 less 7, enter **6 - 1 0 - 7** on the numeric keypad.

Level Setting

*** At Level**
For example, to set channel 2 at a level of 85, enter **2 * 8 5**. Use **Enter** to complete the action.

As you enter the level, it is displayed in the level display on the lower right of the Channel Grid.

The level does not appear under the channel number until you press Enter.

Tip

*You only need to enter one digit for whole number levels when entering levels on the keypad,. For example: 1 * 2 Enter sets channel 1 to a level of 20%*

. (dot) Instant List

The Instant List give the operator instant access to many useful functions that would otherwise require the mouse.

See Also:

Shortcut Keys
Channel Grid
Channel Colors and Symbols
Instant List
Using the Mouse to select channels and set levels

Shortcut Keys and the ALT key

Shortcut Keys allow you to use the keyboard to access functions that you can also select with the mouse.

Keyboard Labels

- If you are using the Machine Cut Labels for your keyboard see Keyboard Labels. If you are not using Keyboard Labels you may use the keys described below:

G .....Go
0.....Goto Cue at default fade time
F .....Goto at recorded fade time
S .....Stop (Halt)
R.....Record
T .....Modify Fade Times

- Many of the keys are common to both keyboard layouts:

Shortcut Keys

If there are shortcut keys for a function in a pull down menu, they are displayed next to the function name, such as the Ctrl + X key combination for the **Cut** action in the **Edit** menu. Instead of using the pull down menu, just hold down the **Ctrl** key and press the letter **X** to cut (delete) the highlighted cue.

Below is a listing of the Shortcut Keys available in Horizon.

Cue Playback

Ctrl + **X**.....Cut cue
Ctrl + **C**.....Copy cue
Ctrl + **V**.....Paste cue
Delete.....Delete cue

. (**Numeric keypad**).....1st push accesses a list of Record and Fade time choices
2nd push reveals the list of channel grid display choices

Cue List

Ctrl + Left Arrow .....Display previous cue list
Ctrl + Right Arrow .....Display next cue list
Ctrl + Up Arrow .....Scroll cue list up a line
Ctrl + Down Arrow .....Scroll cue list down a line
Ctrl + Page Up .....Scroll cue list up a page
Ctrl + Page Down .....Scroll cue list down a page
Ctrl + Home .....Scroll cue list to top
Ctrl + End .....Scroll cue list to bottom
Ctrl + Space .....Goto Cue at default fade time
Alt + Space .....Goto and Run Cue at recorded fade time

Channel Selection and Level Setting

Alt + Right Arrow .....Selects next channel
Alt + Left Arrow.....Selects previous channel
\ (Backslash) .....Releases independent channels
1st push releases the last channel selected
2nd push releases all independent channels)
Page Up .....Increases channel level up 10
Page Down .....Decreases channel level by 10
Home.....Sets channel level to full (100%)
End.....Sets channel level to out (0%)
Ins .....Sets channel level to default level selected in **Set-up/Options**
Up Arrow .....Increases channel level by 1% or DMX value as set in **Set-up/Options**
Down Arrow .....Decreases channel level by 1% or DMX value as set in **Set-up/Options**
Pause/Break Remainder Dim: Sets all remaining channels to zero output

Scroll Lock Wheel: Selects the mouse channel wheel mode which uses the mouse pointer in the vertical scale on the right of the screen to proportionally adjust the levels of all selected channels

Channel Grid

. (Numeric keypad).....1st push accesses a list of Record and Fade time choices
2nd push reveals a list of display choices
Alt + Up Arrow .....Scrolls channel display up a line
Alt + Down Arrow .....Scrolls channel display down a line
Alt + Page Up .....Scrolls channel display up a page
Alt + Page Down .....Scrolls channel display down a page
Alt + Home .....Scrolls channel display to top
Alt + End .....Scrolls channel display to bottom

The ALT Key

Anytime you see a word with an underlined letter on the menu bar or in a pull down menu, this means you can access it from the keyboard using the ALT key and the underlined letter in the name of the Menu Bar Item or function.

For example, hold down the ALT key on the keyboard. Then press the underlined letter to access the pull down menu item. For example, **ALT, F, O** will access the **File** drop down menu from the Menu Bar, and then the dialog box for the **Open** file function.

If you accidentally press ALT and find yourself trapped in Menu Land, press ALT to return to normal. If that doesn't work, try pressing **ESC**.

Keyboard Labels

If you are using the Machine Cut Keyboard Labels:

1. Select **Setup/Options…** from the Menu Bar.
2. Make sure **Labels on Keyboard** is checked

An Adobe Acrobat file of the keyboard overlay labels (Keyboard labels.pdf) is in the directroy C:\Program Files\Horizon98, it is also on the Web Site (www.rosco-et.com).

Machine cut label sets are available from your ROSCO / Entertainment Technology dealer.

Instant List

The Instant List is a quick and easy way to access many functions without using the mouse.

- Select Groups
- Record Cues
- Change Fade Times
- Change Display Mode
- Fade Submasters

1 Press the . (dot) key on the Numeric Key Pad

2 Select the number of the function from the Instant List
or
Press the . (dot) key again to see more functions.

Patch

System Configuration

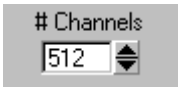
The number of dimmers controlled by Horizon and the number of channels displayed on the Channel Grid can be user selected.

The system default configuration is 512 channels and 512 dimmers

1 Select **Set-up/Dimmer Patch** from the Menu Bar.

The Setup Dimmer Patch dialog box appears.

2 Click on the **Number of Channels** text box.



3 Enter the number of channels to be displayed.

4 Click on the **Number of Dimmers** text box.

5 Enter the number of dimmers to be controlled.

6 Click on **Ok** (or push the **Enter** key) to exit the Setup Dimmer dialog box.

See Also

Channel Grid

One to One Patch

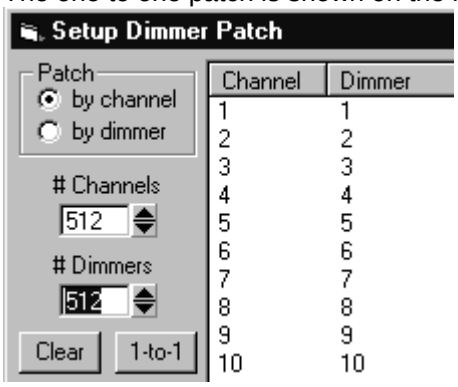
The default One to One Patch assigns dimmer 1 to channel 1, dimmer 2 to channel 2, and so on. If there are more dimmers than channel numbers in your system, the extra dimmers will not be assigned.

1 Select **Set-up/Dimmer** Patch from the Menu Bar.
The setup Dimmer Patch dialog boxDialog_Box appears.

2 Click on the **One to One** patch button.

3 An Are You Sure display is shown to advise tou that assigning a 1-to-1 patch re-assigns the whole patch.

4 Click **Yes** to confirm the action (Or NO if you choose not to continue).
The one to one patch is shown on the left side of the Setup Dimmer Patch display.



5 Click on **Okay** (or use the **Enter** key) to exit the Setup Dimmer Dialog box.

Custom Patching

You can create any dimmer to channel patch you wish. Please note, that while more than one dimmer can be assigned to a channel, only one channel may be patched to a dimmer.

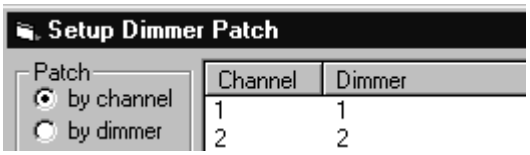
You can set up patch assignments in one of two modes – By Dimmer or By Channel.

Patching by Channel

1 Select **Set-up/Dimmer** Patch from the Menu Bar.

The setup Dimmer Patch dialog box appears.

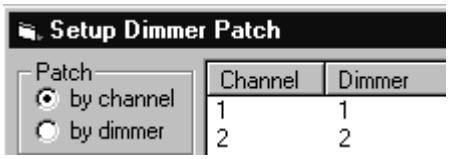
2 Click the **By Channel** option button to change the patch mode.



Note: *Use the Scrollbar to change the channel numbers displayed.*

3 Highlight the channel number to which you want to patch dimmers.

For example, Channel 1.



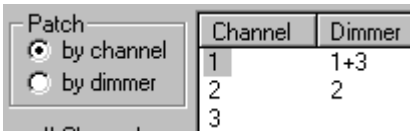
4 Click the Dimmers in Channel text box, and enter the number of the dimmer(s) that are to be patched to the selected channel.

For example, dimmers 1 and 3.

Note*: Use the + (and), / (through) and - (minus) keys on the numeric keypad to select groups of dimmers.*

5 Push the **Enter** key to finish patching the selected channel.

The display shows the new patch assignment



Note: *Do Not Click on the OKAY button in the display until you are done with all the dimmer assignments you want to make. The Okay button closes the Setup Dimmer Patch display and returns you to the regular Horizon.*

6 Continue making patch assignments.

Note: *Any dimmer numbers that are not patched are shown in the Unused Dimmer Display.*

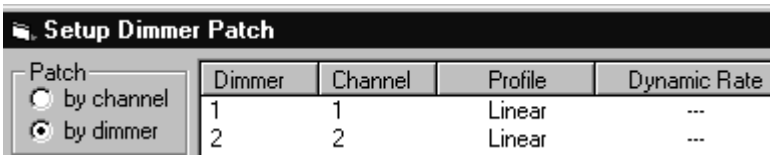
7 Click on the **Okay** button to close the Setup Dimmer Patch Display.

Patching by Dimmer

1 Select **Set-up/Dimmer** Patch from the Menu Bar.

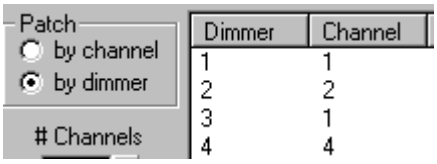
The Setup Dimmer Patch dialog box appears.

2 Click the **By Dimmer** option button to change the patch display mode.



3 Highlight the dimmer number you want to patch.

For example, dimmer 2.

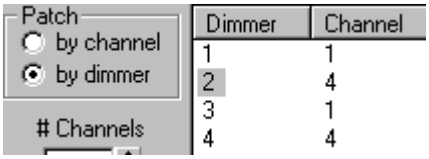


4 Click the Dimmer in Channel text box, and enter the number of the channel(to which the selected dimmer(s) is to be patched.

For example, channel 4.

5 Push the **Enter** key to finish patching the selected channel.

The display shows the new patch assignment



Note: *Do Not Click on the OKAY button in the display until you are done with all the dimmer assignments you want to make. The Okay button closes the Setup Dimmer Patch display and returns you to the regular Horizon.*

6 Continue making patch assignments.

Note: *Any dimmer numbers that are not patched are shown in the Unused Dimmer Display.*

7 Click on the **Okay** button to close the Setup Dimmer Patch Display.

Tip

To select multiple dimmers, highlight the first dimmer, then hold down the SHIFT key while pushing the Up or Down arrow.

Unpatching a Dimmer or a Channel

The operator can unpatch a dimmer from a channel as well as clear a channel of all dimmers assigned to it.

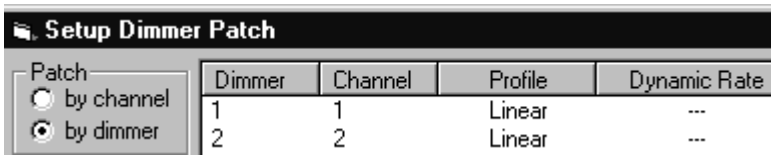
Note: Unpatching clears a dimmer of any profile or dynamic rate that may have been assigned.

To Unpatch a Dimmer

1 Select **Set-up/Dimmer** Patch from the Menu Bar.

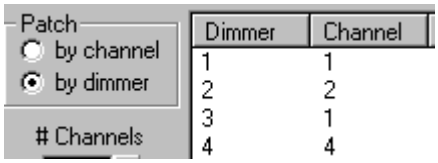
The Setup Dimmer Patch dialog box appears.

2 Click the **By Dimmer** option button to change the patch display mode.



3 Highlight the dimmer number you want to unpatch.

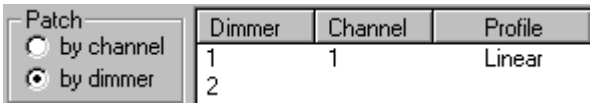
For example, dimmer 2.



4 Click the **Dimmer in Channel** text box and enter zero (no channel).

5 Push the **Enter** key to finish unpatching the selected channel.

The display shows the dimmer as unpatched,



Note: *Do Not Click on the OKAY button in the display until you are finished with all patch assignments you wish to make. The Okay button closes the Setup Dimmer Patch display and returns you to the regular Horizon display.*

Note: *Any dimmer numbers that are not patched are shown in the Unused Dimmer Display.*

6 Click on the **Okay** display button to close the Setup Dimmer Patch Display.

Tip

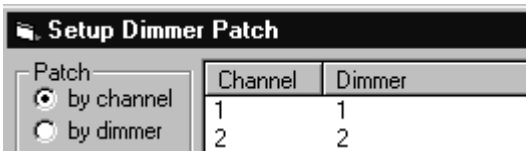
To select multiple dimmers, highlight the first dimmer, then hold down the SHIFT key while pushing the Up or Down arrow.

To Clear a Channel of Its Patch

1 Select **Set-up/Dimmer** Patch from the Menu Bar.

The setup Dimmer Patch dialog box appears.

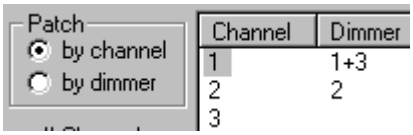
2 Click the **By Channel** option button to change the patch mode.



Note: *Use the Scroll Bar to change the channel numbers displayed.*

3 Highlight the channel number you want to unpatch.

For example, Channel 1.



4 Push Delete on the keypad to erase the contents of the Channel text box (the dimmer numbers patched to the selected channel would've been highlighted).

5 Push the **Enter** key to finish patching the selected channel.

The display shows the new patch assignment.

Note: *Do Not Click on the OKAY button in the display until you are done with all the dimmer assignments you want to make. The Okay button closes the Setup Dimmer Patch display and returns you to the regular Horizon.*

6 Click on the **Okay** button to close the Setup Dimmer Patch Display.

Clearing the Patch

At times, it may be easiest to simply erase all patch assignments and start over.

1 Select **Set-up/Dimmer** Patch from the Menu Bar.

The Setup Dimmer Patch dialog box appears.

2 Click on the Clear button. 

An Are You Sure display is shown to advise you that clearing the patch discards the ENTIRE patch assignment.

3 Click **Yes** to confirm the action (Or NO if you choose not to continue).

All patch assignments are cleared.

4 Click on **Okay** to exit the Setup Dimmer Dialog box.

Dimmer and Channel Notes

The operator can assign notes to both dimmers and channels, in addition to the information Horizon provides automatically (DMX, where the level is coming from, etc.). These user defined notes provide a quick and easy way to find out about a channel or dimmer, providing a reminder about the uses, color, circuit, hanging position, and so on of a particular group of lights.

Channel Notes

Channel Notes are viewed in the Live, Blind, Submaster, Group and Park Channel displays by clicking the What's This? button on the Tool Bar and then placing the mouse pointer on the channel you want to know about.

1 Select **Set-up/Dimmer** Patch from the Menu Bar.

The setup Dimmer Patch dialog box appears.

2 Click the **By Channel** option button to change the patch mode.

Note: *Use the Scroll Bar to change the channel numbers displayed.*

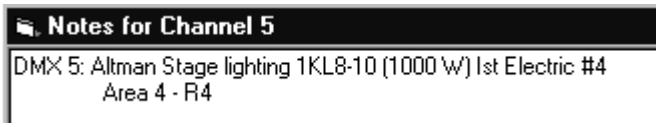
3 Highlight the channel number for which you want to create a note.

4 Click the **Channel Notes** button 

The Channel Notes text display appears.

5 Enter the information you want to include in your notes about this channel.

For example:



6 Click **Okay** to close the Notes display.

Dimmer Notes

Dimmer Notes are viewed in the Park Dimmer, Talkback and DMX displays by clicking the What's This? button on the Tool Bar and then placing the mouse pointer on the channel you want to know about.

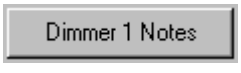
1 Select **Set-up/Dimmer** Patch from the Menu Bar.

The Setup Dimmer Patch dialog box appears.

2 Click the **By Dimmer** option button to change the patch display mode.

Note: *Use the Scroll Bar to change the dimmer numbers displayed.*

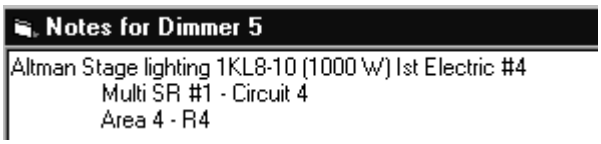
3 Highlight the dimmer number for which you want to create a note.

4 Click on **Dimmer Notes** button 

The Channel Notes text display appears.

5 Enter the information you want to include in your notes about this channel.

For example:



6 Click **Okay** to close the Notes display.

See also

What's This?

Flash a Dimmer or a Channel

To flash a dimmer

1 Select **Set-up/Dimmer** Patch from the Menu Bar.
The Setup Dimmer Patch dialog box appears.

2 Click the **By Dimmer** option button to change the patch display mode.
Note: *Use the Scroll Bar to change the dimmer numbers displayed*.

3 Highlight the dimmer number you want to flash.

4 Click the **Flash Dimmer b**utton 

.
Each click of this button flashes the selected dimmer on and off.

To flash a channel

1 Select **Set-up/Dimmer** Patch from the Menu Bar.
The setup Dimmer Patch dialog box appears.

2 Click the **By Channel** option button to change the patch mode.
Note: *Use the Scroll Bar to change the channel numbers displayed*.

3 Highlight the channel number you want to flash.

4 Click the **Flash Channel** button 

.
Each click of this button flashes the selected channel (and all of its dimmers) on and off.

Dimmer Profiles

A Dimmer Profile is a means to configure or shape the output of the dimmer to a special or custom ramp. The profile describes the relationship between the length of a fade and the level of a dimmer at each point throughout the fade.

Standard Profiles that are in the Horizon Library can be to any dimmer, as well as Custom Profiles that the operator creates.

Horizon automatically assigns a standard Linear Output as the default profile when a dimmer is patched.

To Assign a Standard Profile:

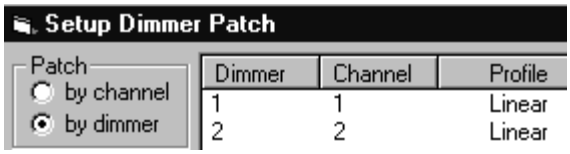
1 Select **Set-up/Dimmer** Patch from the Menu Bar.

The Setup Dimmer Patch dialog box appears.

2 Click the **By Dimmer** option button to change the patch display mode.

3 Highlight the dimmer number you want to unpatch.

For example, dimmer 1.



4 Click the **Profile** button 

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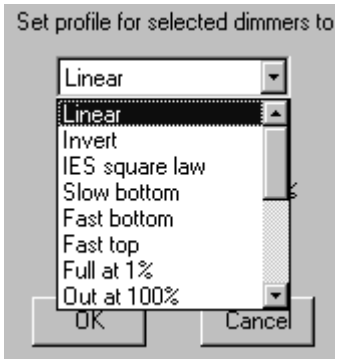
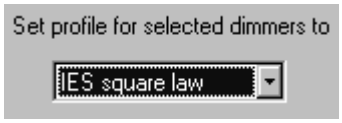
The Profile dialog box opens

5 Click on the **Profile** drop down list box to display the choice of standard profiles.



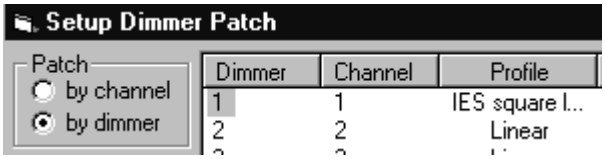
Note: Use the Scroll Bar to adjust the display to see additional profiles.

6 Click on the profile you want to use for the selected dimmer(s).



The profile name is at the top of the list; the list box closes.

7 Click **Okay** (or push the Enter key) to accept the displayed profile.



The selected profile is displayed for the dimmer(s).

8 Click Cancel to close the Setup Patch Display.

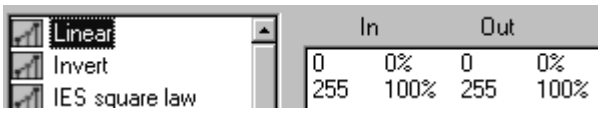
Tip

*To select multiple dimmers, highlight the first dimmer, then hold down the **Shift** key while pushing the Up or Down arrow.*

To Create a Custom Profile

1 Select **Set-up/Dimmer Profile** from the Menu Bar.

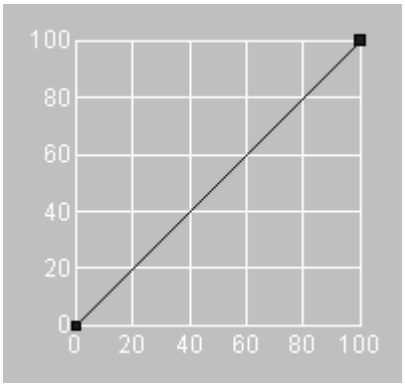
The Setup Dimmer Profile dialog box appears.



- The display on the left shows the available profiles. Linear, which is highlighted, is the currently selected profile. Use the Scroll Bar to display additional profiles.

- The display on the right shows incremental levels for the selected profile.

- The output display below graphically illustrates the shape of the selected profile.



2 Click the **New Profile** button .

New Profile is shown in the profile display.

3 Click on **New Profile** and type in the name for profile you are creating.

4 Click **Insert Profile Point** to create a step in the profile.

5 Insert the input percentage point.

6 Insert the output percentage point.

7 Click **Okay** to complete the action for this point on the profile.

The Output graph changes to show the profile point you just entered.

8 Repeat steps 4 to 7 for each point in the profile that you are creating.

Note: *Use the **Delete***  *button to remove a profile point.*

9 Click **Okay** (or push the Enter key) to accept the Profile and close the Setup Profile Display

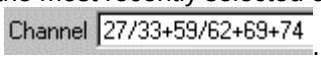
To Copy or Delete a Profile

- Click **Copy Profile**  to make a copy of the selected Profile to serve as the basis for a new profile.
- Click **Delete Profile**  to erase the selected (highlighted) Profile.

Setting levels

Selecting Channels

- Channel information is shown on the channel grid with the channel number on the top row of numbers and the level on the bottom row. Selecting a channel is the first step towards setting or modifying levels. Channels may be selected with either the mouse or with the numeric keypad.
-
- Selected channels are identified in the channel grid by a red highlight around the channel number and level. Additionally, the channel number changes to yellow while selected.
- 

.
- The numbers of the most recently selected channels are shown the Channel display below the channel grid. 

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Using the Numeric Keypad to Select Channels

Tip

Make sure that the Num Lock key is on before using the numeric keypad.

-
- Enter the number of the channel(s) you wish to select on the keypad. Complete the action by pushing **Enter** or setting a level.
- Use the + (And), / (Through) and – (Minus) keys to select groups of channels. Complete the action by pushing **Enter** or setting a level.

Using the Mouse to Select Channels

- Position the mouse pointer on the channel number and left click. The red highlight appears.
- Groups of channels can be selected with the mouse by left clicking on the first channel, holding the left button down and dragging the mouse to the last channel number in the group.

Using shortcut keys to select channels

Alt + Right Arrow .....Selects next channel
Alt + Left Arrow.....Selects previous channel

-

To Release Selected Channels

- Left clicking the mouse on a selected channel releases (de-selects) that channel.
- The **Release** button  on the Tool Bar can be used to release the last channel selected as well as all previously selected channels.

  - 1st click on the button releases LAST channel selected.

  - 2nd click on the button releases ALL selected channels.

- The **** (backslash) shortcut key can be used to release the last channel selected as well as all previously selected channels.

  - 1st push on the key releases the last channel selected.

  - 2nd push releases ALL selected channels.

- Select a channel and right click on the mouse to access the Level setting display. Click on the **Release/Sneak** option and choose either **Release Selection** or **Release All.**

Setting Levels

Levels can be assigned to selected channels with either the numeric keypad or the mouse. Levels are shown in percentage points from 0 to 100%.

Note: It is important to decide in which mode y[Live] modifying levels - that is, live, blind, submasters, etc. Use the display pull down list [Live] on the Menu Bar to select the mode.

Using the Numeric Keypad to Set Levels

Reminder

The NumLock key must be on if you want to use the numeric keypad.

1. Select the channel(s) you want to work on, so that it is highlighted in red.
2. Press the ***** (at) key on the numeric keypad.
3. Type a **single or two-digit level** on the keypad. This value appears in the level display located below the channel grid on the right-hand side. There is no change to the level shown under the selected channel.

   Note: *If you want to set a channel to a level of 50, just enter 5 – you do not need to enter the zero; if you want to set a level of 55, you must enter both numbers.*

4. Press the **Enter** key to complete the action. The level under the selected channel number in the channel grid shows the value you just entered.

Using the Mouse to Set Levels

1. Select the channel(s) you want to work on, so that it is highlighted in red.
2. Right click the mouse to access the Set Level drop down display.
3. Select one of the level setting choices by clicking on it with the mouse.
   - **At Level** - Choose from a list of levels in increments of 10%
   - **Release/Sneak -** Choose from Release All, Release Selection, Sneak and Sneak At
   - **+10** - Increases the channel level 10 points
   - **-10 -** Decreases the channel level 10 points
   - **Full/100 -** Sets the channel level at 100
   - **Out /0% -** Sets the channel level at zero
   - **Default Level -** Sets the channel level to the default established in **Set-up/Options**
   - **RemDim** - Remainder Dim: Sets all remaining channels to zero output
   - **Wheel** - Selects the mouse channel wheel mode which uses the mouse pointer in the vertical scale on the right of the screen to proportionally adjust the levels of all selected channels

Using the Mouse to Proportionally Adjust Levels

1 Select the channel(s) you want to work on, so that it is highlighted in red.

4 Use the wheel on your mouse (Windows 98 only).
OR
Right click the mouse to access the set level drop down display.

5 Click **Wheel**.

The vertical scale at the far right of the channel display changes to gray with a line in the middle.

6 Move the mouse in a direction (up or down) to proportionally change the levels of all channels selected (you do not have to hold the mouse button down).

Yellow bars indicate the direction of the level change.

7 Click either mouse button to release the Mouse wheel mode.

Level Setting Shortcut Keys

- **Page Up** - Increases channel level by 10
- .... **Page Down -** Decreases channel level by 10
- **Home** - Sets channel level to full (100%)
- **End -** Sets channel level to out (0%)
- **Ins -** Sets the channel level at default level set in **Set-up/Options**
- .... **Up Arrow** - Increases level by 1% or DMX value set in **Set-up/Options**
- .... **Down Arrow -** Decreases level by 1% or DMX value set in **Set-up/Options**
- **Pause/Break -** Remainder Dim: Sets all remaining channels to zero output
- **Scroll Lock -** Wheel: Selects the mouse channel wheel mode which uses the mouse pointer in the vertical scale on the right of the screen to proportionally adjust the levels of all selected channels

Independent Channels

Any channel whose level has been adjusted with the keypad or the mouse is considered to be independent. The levels of the channel are now controlled solely by the keypad (or mouse) and not by any cues, submasters and groups.

A red level identifies independent channels.

To remove a channel from independent control, select the channel and release it by any of the following methods.

- **Release** button  on the Tool Bar.
  - 1st click deselects the channel that is currently selected on the keypad.
  - 2nd click releases all other selected channels.

- **\ (Backslash**) shortcut key.
  - 1st push releases the last channel selected
  - 2nd push releases all independent channels)

- **Right click the mouse** on the Channel Grid to access the Level drop down menu

  Select **Release/Sneak** from the Level drop down display and choose either Release or Release All.

Note: *Simply selecting a channel does not place it on independent. You must change the level.*

Recording cues

Recording a Cue

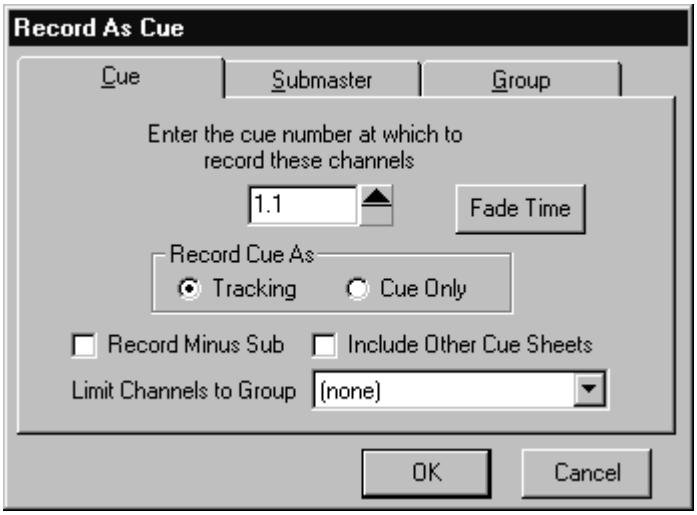
Set the levels you want to record as a cue in the display mode of your choice. If you are using the Live Display, you are recording all levels that are active on stage – channels on independent (controlled by the keypad), channels from this cue list, channels set from other cue lists (optionally) and channels set from submasters (optionally).

Note: *Make sure that the Cue List that is active is the one for which you want to record a cue.*

Recording A Cue with Default Fade Times

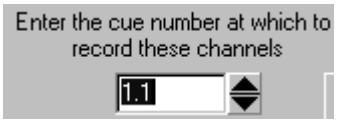
1 ClickClick the Record button  on the Tool BarTool_Bar (or press the shortcut keyshortcutkeys R).

2 The Record dialog box appears.



Note: *Make sure the Record As Cue mode is selected. If it is not, click on the Cue tab in the top of the display.*

3 Click on the Cue text box.



4 Enter a **cue number**.

5 Select:

Tracking: The recorded levels will stay at the recorded levels until another cue changes the level.

Cue Only: The recorded levels will only effect this cue.

6 The channels recorded in this Cue can be adjusted using the check boxes.

7 Channels recorded on this Cue can be limited to only the channels in a named group. Select the Group from the drop down list box.

8 Select **Okay (**or press **Enter**) to close the record dialog box and complete the action.

9 The cue has been recorded with the default time selected in **SetUp/Options.**

10 The recorded cue appears on the cue list.

Tips

- *You can use the wheel on the mouse, click on the arrows next to the text box or use the keyboard up and down arrows to change the number in any of the text boxes in the Record and Time displays.*
- *If you enter the number of a cue that has already been recorded in step 3, a warning display appears, asking that you confirm that you want to write over the cue. Click Yes to proceed, or No to Cancel the action and close the record dialog box.*

See Also

Cue Lists
Changing the Channel Grid Display Modes
Setting Levels
Recording Moving Light Attributes

Recording a Single Fade Time

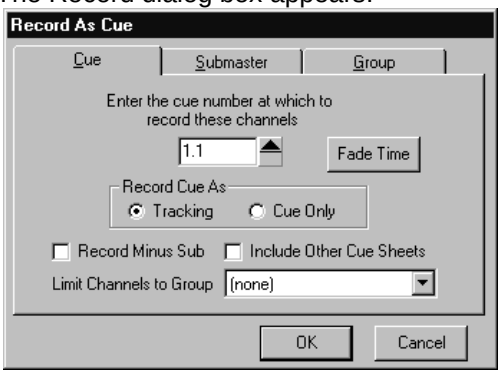
A fade time other than the default one can be recorded for either a new or an existing cue.

Fade times are expressed in hours, minutes, seconds, and tenths of seconds. For example, a time of 1:40:10.2 would be a time of 1 hour, forty minutes, and ten and two tenths seconds.

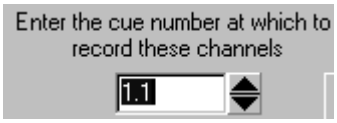
Recording A Single Fade Time for A New Cue

1 Click the **Record** button  on the Tool Bar.

2 The Record dialog box appears.



Note: Make sure the Record As Cue mode is selected. If it is not, click on the word Cue in the top of the display.

3 Click on the **Cue** 

text box.

4 Enter a cue number.

5 Click the **Fade Time** button to display the Fade Time dialog box.

6 Click the **Single Wait/Fade Time** option button.

7 Enter the wait and fade times for all channels.

8 Select **Ok** (or press **Enter**) to close the record dialog box and complete the action.

The recorded cue appears on the cue list with a single fade time.

Tip:

You can use the wheel on the mouse, click on the arrows next to the text boxes in the or use the keyboard up and down arrows to change the fade time in any of the text boxes in the Record and Time Displays.

Recording a Single Fade Time for an Existing Cue

1 Highlight the cue number you wish to work on the Cue List.

2 Click the **Time**  button on the Tool Bar to display the Fade Time dialog box.

3 Follow steps 6 through 8 above to complete the action.

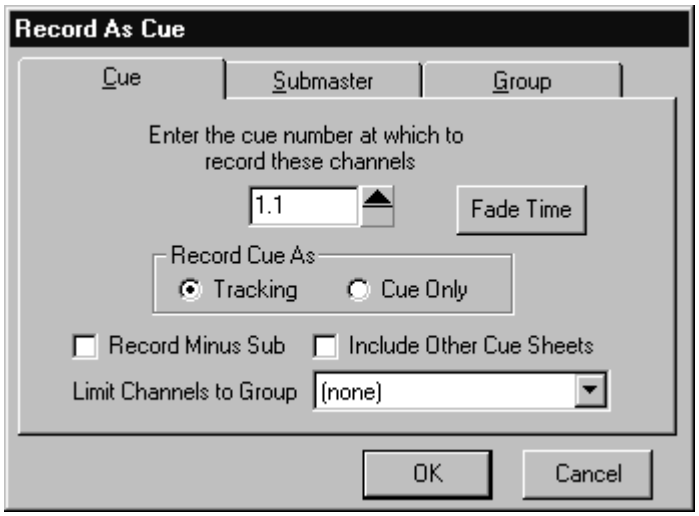
Recording Split Fade Times

You can assign separate Wait and Fade Times to: Intensity Up, Intensity Down, Color, Beam and Focus. This means that the channel levels being raised can move at a different rate than the channel levels being lowered in a cue or the color can change at the beginning of a cue and the gobo at the end of the cue.

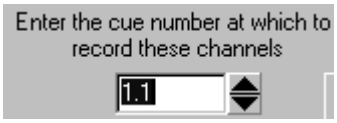
Recording A Split Fade Time for A New Cue

1 Click the **Record** button  on the Tool Bar.

The Record dialog box appears.



Note: *Make sure the Record As Cue mode is selected. If it is not, click the Cue Tab at the top of the display.*

2 Click on the **Cue** 

text box.

3 Enter a cue number.

4 Click on the **Fade Time** button to display the Fade Time dialog box.

5 Click the **Split Wait/Fade Time** option button.

6 Enter Wait and Fade Times for all. If you do not have any Moving Lights you can ignore the Color, Beam and Focus.

7 Select **Ok** (or press **Enter**) to close the record dialog box and complete the action.

The recorded cue appears on the cue list with the different times displayed.

Tip:

You can use the wheel on the mouse, click on the arrows next to the text boxes in the or use the keyboard up and down arrows to change the fade time on any of the text boxes in the Record and Time Displays.

Recording Wait/Fade Times for an Existing Cue

1 Highlight the number on the Cue List of the cue you wish to work on.

2 Click the **Time**  button on the Tool Bar to display the Fade Time dialog box.

3 Follow steps 5 through 7 above to complete the action.

See Also

Recording Single Fade Times
Instant List
Keyboard Labels

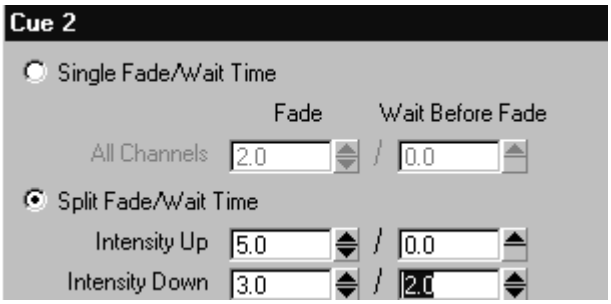
Recording Wait Times

A Wait Time is the time between starting a cue (Go) and when the fade actually begins. Separate Wait times can be set for the up and down portions of a cue.

1 Access the **Fade Time** dialog box.

- For a new cue, click the **Record** button on the Tool Bar (**or** press the shortcut key **R**), enter a **cue number**, and click the **Fade Time** button.

- For an exisiting cue, highlight it on the Cue List, and click the **Time**  button on the Tool Bar (or press the shortcut key **T**).

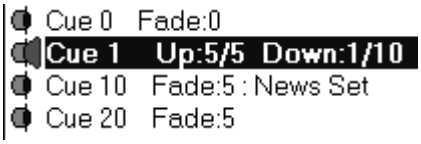


2 Select either the **Single Wait/Fade Time** or the **Split Wait/Fade Time** option button.

3 Enter fade time(s) in the **Intensity Up and Intensity Down Wait Time** text boxes (1st column).

4 Select **Okay** (or press **Enter**) to close the dialog box and complete the action.

The recorded cue appears on the cue list with both the Wait and the Fade times shown; the Wait time is the number before the /, and the Fade time is the second number.



In this example, the Up portion of Cue 5's fade will wait 5 seconds before starting a 5-second fade, while the Down portion will wait 1 second before beginning a 10-second fade.

Tip:

You can use the wheel on the mouse, click on the arrows next to the text boxes in the or use the keyboard up and down arrows to change the fade time on any of the text boxes in the Record and Time Displays.

See Also

Recording Split Fade Times

Follow Cues

Follow enables you to program cues to run automatically. A follow time on a cue is the length of time the system pauses after the cue's completion, before automatically starting the next cue.

A Follow uses the next cue on the Cue List, unless the cue with the follow time is linked to a different cue number.

1 Access the **Fade Time** dialog box.

- For a new cue, Click the **Record** button on the Tool Bar (**or** press the shortcut key **R**), enter a **cue number**, and click the **Fade Time** button.

- For an existing cue, highlight it on the Cue List, and click the **Time**  button on the Tool Bar (or press the shortcut key **T**).

2 Click the **Follow** check box

3 Enter a time in the **Follow** text box.

4 Select **Okay** (or press **Enter**) to close the dialog box and complete the action.

Tip:

You can use the wheel on the mouse, click on the arrows next to the text boxes in the or use the keyboard up and down arrows to change the fade time on any of the text boxes in the Record and Time Displays.

See Also

Linking Cues

Linking Cues

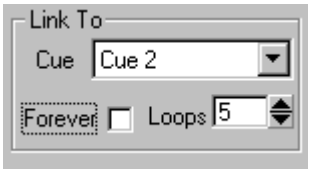
Linking cues allows you to run cues out of sequence. This means, once a cue is completed, the system immediately selects the cue to which the first cue was linked as the next cue to run.

1 Access the **Fade Time** dialog box.

- For a new cue, Click the **Record** button on the Tool Bar (**or** press the shortcut key **R**), enter a **cue number**, and click the **Fade Time** button.

- For an existing cue, highlight it on the Cue List, and click the **Time {**bmc TIM-BT.BMP} button on the Tool Bar (or press the shortcut key **T**).

2 Click the **Link To Cue** drop down list box to display the list of all recorded cues.



3 Click on the cue to be linked, or enter a number.

4 Select **Okay** (or press **Enter**) to close the dialog box and complete the action.

Tip:

You can use the wheel on the mouse, click on the arrows next to the text boxes in the or use the keyboard up and down arrows to change the fade time on any of the text boxes in the Record and Time Displays.

See Also

Creating Playback Loops

Playback Loops

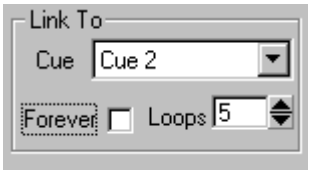
Link and Follow can be combined to create playback loops, in which cues fade automatically and repeat.

1 Access the **Fade Time** dialog box.

- For a new cue, click the **Record** button on the Tool Bar (**or** press the shortcut key **R**), enter a **cue number**, and click the **Fade Time** button.

- For an existing cue, highlight it on the Cue List, and click the **Time {**bmc TIM-BT.BMP} button on the Tool Bar (or press the shortcut key **T**).

2 Click the **Link To Cue** drop down list box to display the list of all recorded cues.



3 Click on the cue to be linked, or enter a cue number.

4 Enter the number of loops to be completed in the **Loops** text box.

Note: *Click the **Forever** check box for infinite number of loops.*

5 Click the **Follow** check box to activate it.

6 Set a time in the Follow Time text box.

7 Select **Okay** (or press **Enter**) to close the dialog box and complete the action.

For example:

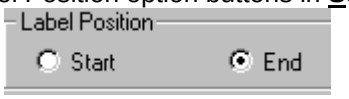
The following illustrates a playback loop in which five cues repeat endlessy, with five tenths of a second pause between sections.

Labeling a Cue

A Cue Label or name can be assigned to every cue and is displayed on the cue list.

The cue label can be displayed either at the start of the cue info line next to the cue number, or at the end of the line after all the fade time information.

Use the Label Position option buttons in **Set-up\ Options** to select the position of all Cue Labels.



1 Select (highlight) the cue for which you wish to record a cue label.

2 Click the **Time**  button on the Tool Bar.

The **Fade Time** dialog box appears.

3 Click the mouse pointer in the **Cue Label** text box.

4 Enter a cue label up to 20 characters long.

5 Click **Okay** (or push the **Enter** Key) { to complete the action.

The Cue Label appears on the Cue List, on the Cue line.

See Also

Setup/options

Cue Actions

Any cue can have an Action assigned to the cue.
Actions can perform many functions like:

- Macros
- Start Cues on Other Cue Sheets
- Fade Submasters
- and much more

See Assigning Actions for details.

Modifying Cues

Cues can be modified in the Live or Blind display modes. When you modify a cue in the Live display, you are recording all channel levels that are visible – both on the screen and the stage. Working in the Blind display lets you modify cues without affecting (or including) any active stage levels.

Modifying Cues in the Live Display

1 Select **Live** 

from the display mode drop down list box on the Tool Bar .

2 Highlight the Cue to be modified on the Cue List.

3 Click the **GoTo Cue**  button on the Tool Bar to bring up the cue.

4 Make the level changes required.

5 Click the **Record**  button on the Tool Bar.

6 Record the Cue as the same number by clicking **Okay** (or push **Enter** on the keypad).

Modifying Cues in the Blind Display

1 Select **Blind** 

from the display mode drop down list box on the Tool Bar.

2 Highlight the Cue in the Cue List to be modified.

3 Make the level changes required.

Use the record button to keep the changes as the same cue number or as a new cue number.

See Also

Selecting Channels
Selecting Levels

Copying, Moving and Deleting Cues

Cues can be easily duplicated and/or repositioned with the Copy  , Cut  and Paste  Buttons on the Tool Bar.

- The actions of the **Cut** and **Copy** buttons affect the highlighted cue(s) on the Cue List.
- The **Paste Cue** button inserts the cut or copied cues immediately after the highlighted cue on the Cue List.
-
- Use the **Delete Cue**  button to remove the highlighted cue(s) from the Cue List **and** delete the cue from the system memory.
-

Tip

- *These functions can also be accessed through the **Edit** pull down menu on the Menu Bar.*
- *Each of these functions also has shortcut keys that can be used to access each action.*

See Also

Shortcut keys
Menu Bar/Edit Menu

Tracking and Cue Only

Tracking

In tracking mode, when a cue brings a channel to a level, the channel stays at that level until it receives a specific instruction to change levels. This level tracks through all subsequent cues until the level is increased or decreased in another cue.

Tracking is the default setting for Horizon; accessing **Set-up/Options** can change this. You can also choose tracking mode on a cue by cue basis when recording cues, by clicking the Tracking option button in the Record dialog box .

Tracking levels are displayed on the channel grid in magenta with a  symbol beside the level.

The best way to understand tracking is to think of how you use lights everyday.

- When you enter a room, you turn on a room light.
- Then you may turn on your desk light. You do not turn on the room light again.
- With Horizon, you say take channel 1 to 80% and take 300 sec. If nothing else sends a command to that channel it will continue to 80% over 300 seconds, no matter what other changes may take place. Channel 1 will continue at 80% through all subsequent cues until it is told to change its level by a later cue.

See also

- Set-up/Options
- Using a Block Cue
- Recording a Cue
- Cue Only

Cue Only

In Cue Only mode, when a cue sets a channel to a level, the channel remains at that level only until the next cue starts. At that time, it will fade out if there is not a level recorded for this channel in the next cue.

In Cue Only Mode, if you modify a channel level, the new level only affects the current cue. The channel's level in all following cues is unchanged.

-
- You can select Cue Only mode when are recording each cue by using the Cue Only option button in the Record dialog box. Or, you can use Set-up/Options to change the system default mode from Tracking to Cue Only.

See Also

- Setup/Options
- Tracking

Using a Block Cue

In Tracking mode, channel levels track from one cue to another continuously. A Block Cue is an effective way to stop levels from tracking and to record only the levels you set. The Block Cue sets channels that are tracking to a specific level, and sets all unused channels to zero.

1. Set levels as required.
2. Access the **Fade Time** dialog box.

   - For a new cue, click the Record button on the Tool Bar (or press the shortcut key R), enter a cue number, and click on Fade Time button.

   - For an exisiting cue, highlight it on the Cue List, and click the Time  button on the Tool Bar (or press the shortcut key **T**).

3. Click the **Block Cue** 

check box to select the feature.
4. Select **Okay** (or press **Enter**) to close the dialog box and complete the action.

   When the cue is played back, all channels with and without levels display the Block Cue 

symbol.

See Also

Tracking

Playing Cues Back

Fade Indicator Display

- The Fade Indicator Display can be added or removed from the display by clicking the **View Fader Button**  on the Tool Bar or, by selecting **View/ Faders** on the Menu Bar.
- When activated, the Fade Indicator display is located at the bottom of the monitor, under the Cue list.

Cue List	Main
# Running	---
Last Cue	Cue 0
Fade/Wait	---
Follow	---

- **Cue List** identifies which Cue List the cue is from.
- **Running** tells you how many fades are running from the Cue List.
- **Last Cue** shows the number of the last cue in the sequence that is running
- **Wait/Fade** provides a dynamic indication of the fade times in use.
- When the cue is completed, the fader display clears.

See Also

Playing Cues Back

Playing Cues Back

Virtual Faders

Horizon uses virtual faders to playback cues.

Cue List	Main
# Running	---
Last Cue	Cue 0
Fade/Wait	---
Follow	---

- To access the Fade Indication display at the bottom of the monitor, click the **View Fader** Button  on the Tool Bar or, select **View\ Faders** on the Menu Bar.

Cue List

The Cue List, on the left of the monitor, is used to select cues for playback.

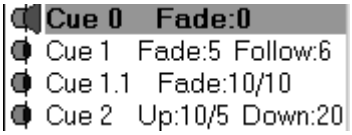
- The Cue List presents all recorded cues in numerical ascending order with their attributes.
- The Cue O position is reserved as a blackout and is at the top of the list.

- A  symbol represents the last active cue on the Faders.

Go

The **Go** button  on the Tool Bar is used to start fades or, use the **G** shortcut key. The Go button activates the next cue after the active Cue on the Cue List.

Using the Go Button



In the above example, Cue 0 (blackout) is active.
Clicking the **Go** button starts Cue 1 and then Cue 1.1 as Cue 1 has a follow time.

Using the Mouse as a Go Button.

- Click the Mouse icon  on the Status Bar in the lower right corner of the display.
  The icon changes to indicate the change of mode.

- Click the left mouse button to start the next cue.
  The pointer, when positioned on the Cue List, changes to the  icon.

- To turn off the Mouse mode, click on the Mouse icon  .
  The icon restores to the inactive mode,  .

Stop

Stopping Cues

- Click the **Stop** button on the Tool Bar or use the **S** shortcut key to halt fades in action.
- To restart the fade, click the **Go** button or use the **G** shortcut key.

Using the Mouse to Stop Cues

- Click the Mouse icon on the Status Bar in the lower right corner of the display.
  The icon changes to indicate the change of mode.

- Right click the mouse to stop any fades in progress.

  The pointer, when positioned on the Cue List, changes to the icon.

  Note: *Left click the mouse to restart the fade.*

- To turn off the Mouse mode, click on the Mouse icon .
  The icon restores to the inactive mode, .

Step Forward and Back

Step Back a Cue

- Click the **Step Back** button on the Tool Bar to fade back to the cue prior to the active cue, or use the shortcut keys **Ctrl + Left Arrow**.
- Step Back uses the recorded fade time.

Step Forward a Cue

- Use the **Step Forward** button to fade to the next cue after the active cue on the Cue List, or use the shortcut keys **Ctrl + Right Arrow**.
- Step Forward uses the recorded fade time.

GoTo Functions

GoTo a Cue in the Default Time

Click the **GoTo Cue** button  on the Tool Bar to fade to the highlighted cue on the Cue List using the default time, or use the **O** shortcut key.

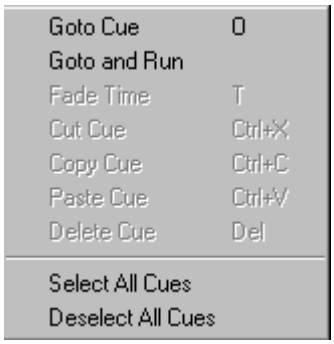
GoTo a Cue in Its Fade Time

Click the **GoTo and Run** button  to fade to the highlighted cue in using the cue's recorded time or use the **F** shortcut key.

Tip

The above functions can also be accessed from the Cue List drop down menu

- *Position the mouse pointer on the Cue List.*
- *Right Click the mouse to access the menu.*



- *Click on the function you wish to use.*

See Also

Setup/Options for default settings

Running Multiple Fades

Any number of cues can be played back at the same time, fusing any or all of the Cue Lists. Cue timing is controlled by the Fade, Follow and Wait times recorded for each cue.

- The current cue on a Cue List is indicated by the red light  .next to the cue number.
-
- The next cue number and the number of active fades in progress 

.are indicated on the Status Bar in the lower right of the screen.
-

See Also

- Recording Single Fade Times
- Recording Split Fade Times
- Recording Wait Times
- Follow Cues
- Linking Cues
- Creating Playback Loops
- Cue Lists

Changing the Rate of a Cue or List

The rate that Cues playback can be modified for:

- A single Cue
- A group of Cues
- All Cues on a Cue List
- All Cues in the Show

The rate is set in percentage:

- A rate of 100% will playback at the recorded times
- A rate of 50% will playback at half the recorded times
- A rate of 200% will playback at twice the recorded times

Changing the Rate for a Single Cue or Group of Cues

1. Highlight the Cue or Cues
2. Select the Time Button  .
3. Enter the rate in the **Rate (%)** number box.

Changing the Rate for a Cue List

4. From the Menu Select **Setup, Cue Lists**
5. Highlight the desired Cue List.
6. Click on **Properties**
7. Enter the rate in the **Cue List Rate (%)** number box.

Changing the Rate for the entire show

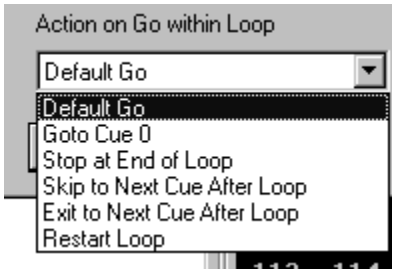
1. Hold down the **Rate Button (~)**
2. Moving the Mouse Up will increase the rate
3. Moving the Mouse Down will decrease the rate
4. Release the **Rate Button (~)**
5. Tapping the **Rate Button (~)** will return the rate 100%

Note:

If a Cue has a rate of 50% and the Cue List has a rate of 50% the cue will play back 25% of the recorded time.

Action on GO within Cue Loop

When the GO button is pressed within a loop of Cues the Cue List can be set to take one of a series of actions. A loop is defined as a series of Cues that all have Follow Times and a Link back from the last Cue in the Loop to the first Cue in the Loop.



1 Select **Setup, Cue List** from the menu.

2 From the **Action on Go within Loop** select the desired action.

- **Default Go**
  Go to the next Cue within the Loop (normal operation).
- **Goto Cue 0**
  Go to a Black out in the default time.
- **Stop at End of Loop**
  Execute all the remaining Cues in the Loop and stop.
- **Skip to Next Cue After Loop**
  Instantly goto the next Cue after the Loop
- **Exit to Next Cue After Loop**
  Execute all the remaining Cues in the Loop and then goto the next Cue.
- **Restart Loop**
  Go back to first Cue in the Loop

See also:

Cue List Properties

Multiple Cue Lists

Multiple Cue List Concept

Unique to Horizon, the Multiple Cue List function allows the console to operate completely separate and asynchronous cue lists simultaneously. For example, if the console was controlling the lighting in a main theater as well as a playing space in the theater lobby, an individual cue sheet for each space could be developed and operated at the same time to activate completely different cues.

Cue lists can be given different names as well as different color backgrounds to help visually differentiate one from another. The cue lists can be locked to prevent unauthorized modifications to cues recorded in the cue list.

Multiple Cue Lists recorded in a show will be indicated at the top of the cue list display.

In the above example, the active cue list is Main; News is the second cue list; Weather is the third.

Setting Up Cue Lists

To Access the Set-up Cue List Dialog Box

1. Select the **Setup** pull down menu on the Menu Bar.
2. Click on **Cue Lists** on the menu.

   The Set-up Cue Lists dialog box appears with its various command buttons. Any existing Cue Lists are displayed.

To Create a New Cue List

1. Click **New** to enter the name of the new cue list; a dialog box appears.
2. Type the new name in the text box.
3. Complete the action with **Okay**.

   The name of the new Cue List is displayed on the left.

To Delete an Existing Cue List

1. Click on the name of the cue list you want to delete.
2. Click **Delete**. A Delete Cue List dialog box appears.
3. Click **Yes** to delete the Cue List shown (**No** will cancel the action; the cue list will not be affected).

To Rename an Existing Cue List

1. Click on the name of the cue list you wish to rename.
2. Click **Rename**. A Rename Cue List dialog box appears.
3. Type the new name for the cue list in the text box.
4. Complete the action with **Okay**.

   The name of the new Cue List is shown on the left of the display.

To Change the Position of a Cue List

1. Click on the name of the cue list whose position you wish to change.
2. Click **Move-Up** to move the highlighted cue list up a step.

   OR

   Click **Move-Down** to move the highlighted cue list down a step.

Cue List Properties

To Modify Cue List Properties

1 Select the **Setup** pull down menu on the Menu Bar.
2 Click on **Cue Lists** on the menu.
3 Select the Cue List to be modified.

OR

1 Right click in the Cue List Area.
2 Select **Properties** from the list.

To Change the Properties of a Cue List

1 Click on the name of the Cue List you wish to work on.
2 Click on **Properties** to display the Properties dialog box.
3 Click on **Change Color** to select a color for the background of the selected Cue List.
A color chart will be displayed.
4 Click on the color you want to use for the background
5 Click **Okay** to complete the action and return to the Properties dialog box.
A sample of the color you selected will be displayed.

Property Check Boxes

1 Lock Cue List (no record)
Cues on this list can not be permanently changed.
2 Global Pause Enabled
Pressing the Pause Button will pause the fades on this cue list.
3 Auto Run At Startup
The lowest numbered cue on this Cue List will start executing when the Horizon Program begins.
4 Cue List Has SMPTE
This Cue List can have SMPTE Time Code associated with it.

Cue List Rate

Enter the rate in the **Cue List Rate (%)** number box.

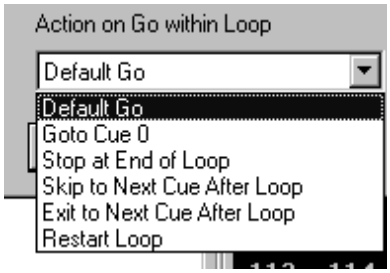
The rate is set in percentage:

- A rate of 100% will playback at the recorded times
- A rate of 50% will playback at half the recorded times
- A rate of 200% will playback at twice the recorded times

Limit this Cue List to a Group of Channels

Selecting a Group from the Pull Down will limit this Cue List to only record channels that are in the specified Group.

Action on GO within a Loop



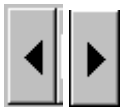
Select the action to be taken when the GO button is hit during a loop of Cues.

Submasters

Submaster Buttons and Handles

The virtual **Submaster display** can be added to or removed from the display by clicking the **Submaster button**  on the Tool Bar or selecting **View\Submasters** on the Menu Bar.

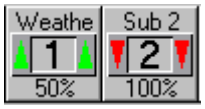
The Submaster Display is located across the top of the monitor under the Tool Bar. Up to 128 submasters are available and are indicated by the row of buttons.



The arrow buttons at either end of the submaster display to scroll the Submaster Buttons horizontally so that the remainder of the buttons can be accessed.

- Click either button once to increment the display one button at a time.

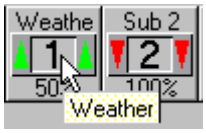
- Click and hold down the mouse button on either button to scroll across the submaster display.



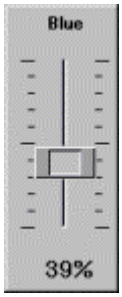
Color is incorporated in the virtual Submaster Buttons to indicate the status of the Submaster.

- Green up arrows on the submaster buttons indicate an additive submaster.

- Submasters recorded as inhibitive show **red down** arrows on their submaster buttons.



Positioning the Mouse pointer on a virtual Submaster button will display the complete user programmable Submaster name.



A virtual **Submaster Handle** appears when you place the Mouse pointer on a Submaster button and left click.

- To change channel levels, hold the left mouse button down while moving the mouse up and down, raising and lowering the submaster handle.

- Move the mouse up and down to raise and lower the Submaster and change levels.

- Left click the mouse to release the submaster handle.

See Also

Types of Submasters (Additive and Inhibitive)
Recording a Submaster

Submaster Types

Horizon's virtual submasters can be used in either an additive or subtractive mode. The operating mode for a submaster is selected during the record process. All Submasters on all pages are active **all the time**.

Additive Submaster

- An additive submaster provides proportional control of its recorded channel levels
- Additive submasters pile-on (add to) the active stage levels on a highest takes precedence level.
- The home position for an additive submaster is zero (0%).
- The levels of channels controlled by additive submasters are displayed in yellow with a submaster symbol with a green handle.

Inhibitive Submaster

- Inhibitive Submasters proportional scale the output of a channel. A channel set at 50% with an inhibitive Submaster at 50% will output 25%.
- The home position for a subtractive submaster is Full (100%).
- The levels of channels controlled by inhibitive Submasters are displayed in yellow with a submaster symbol with a red handle.
- There are several types of Inhibitive Submasters in Horizon.
    - Inhibitive – Scales all selected channels
    - Inhibitive minus Sub – Does not scale levels that are produced by Additive Submasters.
    - Inhibitive Cue List -- Scales only the channels from the selected Cue List.
    - Inhibit Cue List All Channels – Scales all channels from the selected Cue List. A **Master** for the Cue List.
    - Inhibit All Channels – Scales all channels in the systems. A non-selective **Grand Master**.

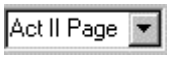
See Also

Recording A Submaster
Channel Colors and Symbols

Submaster Pages

A Submaster Page represents up to 128 separate Submasters with their recorded channel assignments and levels. There is no reasonable limit to the number of Submaster pages that can be recorded in the Horizon. **All Submaster Pages are active all the time**, even if they are not currently displayed.

Submaster pages allow you to quickly change submasters controlled.

The displayed Submaster Page 

is displayed in the drop down list box to the left of the virtual Submaster button display.

To Create a Submaster Page

1. Select the **Setup** pull down menu on the Menu Bar.
2. Click on **Submaster** on the drop down menu.

   The Set-up Submaster Dialog boxDialog_Box appears with its various command buttons. Any existing Submaster pages are displayed on the left.

3. Click **New** to enter the name of the new page.

   A new Submaster appears on the list.

4. Click on the name and type the new name in the text box.
5. Click on the # Subs to change the number of Submasters on the page.
6. Complete the action with **Okay**.

To Change the Submaster Page displayed

1. Click on the arrow on the right of the Submaster Page list box.

   The list of available submaster pages is displayed.

2. Click on the Page you wish to activate.

Renaming a Submaster Page

1. Select the **Setup** pull down menu on the Menu Bar.
2. Click on **Submaster** on the menu.

   The Set-up Submaster Dialog box appears with its various command buttons. Any existing Submaster pages are displayed on the left.

3. Click on the name of the Submaster Page you wish to rename.
4. Type the new name for the Submaster Page in the text box.
5. Complete the action with **Okay**.

   The new Submaster name appears on the left of the Set up Function Key display.

Deleting an Existing Submaster Page

1. Select the **Setup** pull down menu on the Menu Bar.
2. Click on **Submaster** on the menu.

   The Set-up Submaster Dialog box appears with its various command buttons. Any existing Submaster pages are displayed on the left.

3. Click on the name of the Submaster page you want to delete.
4. Click **Delete**.

   A Delete Submaster Page dialog box appears.

Changing the Position of a Submaster Page

1. Select the **Setup** pull down menu on the Menu Bar.
2. Click on **Submaster** on the menu.

   The Set-up Submaster Dialog box appears with its various command buttons. Any existing Submaster pages are displayed on the left.

3. Click on the name of the Subamster Page whose position you wish to change.
4. Click **Move-Up** (or **Move-Down**) to move the highlighted Submaster Page up (or down) a step in the list.

Recording Submasters

Submasters can be set up and recorded in either the Live (Active), Blind or Submaster Display modes.

From the Live Display

1 Select **Live** from the Display Mode drop down list box on the Tool Bar.
2 Select the channels to be assigned to the Submaster.
3 Set the levels for the channels.
4 Click the **Record button**  on the Tool Bar.
5 Click the **Submaster Tab**.

8 Select the **Submaster page** in which you wish to record this sub assignment in form the drop down list box.

9 Enter the number of the Submaster you wish to record.

10 Enter a Submaster name in the Label text box.

11 Set the type of Submaster.

From the drop down list box select the type of Submaster.

Additive:	Levels are Highest Level take precedence.
Inhibitive:	Submaster scales levels.
Inhibitive Minus Subs:	Only the Cue List levels are scaled.
Inhibitive Cue List:	Only the selected channels on the selected Cue List are scaled.
Inhibit Cue List All Chan:	All channels on the selected Cue List are scaled.
Inhibit All Channels:	All channels are scaled.

12 The channels recorded in this Submaster can be adjusted using the check boxes.

13 Channels recorded on this Submaster can be limited to only the channels in a named group. Select the Group from the drop down list box.

14 Select **Okay (**or push **Enter** on the keypad) to record the Submaster.

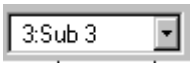
Note:

To release the channels you used to record the Submaster from the keypad, when you are done, use the / backslash shortcut key or right click the mouse on the channel grid and set one of the release functions listed on the pull down menu.

From the Submaster Display

4 Select **Submaster** from the Display Mode drop down list box on the Tool Bar.

5 Select the number of the submaster you want to work on from the Submaster number from the drop down list box at the end of the Tool Bar.



6 Select the channels to be assigned to the Submaster.

7 Set the levels for the channels.

8 Confirm with the **Okay** button (or push **Enter** on the keypad).

Note: *If you adjust levels in the Submaster Display and don't record the information, a warning box appears when you exit the Submaster Display mode, asking if you want to you to save the changes. Select Yes to record the information or No to exit the display without recording.*

See Also

Selecting Channels

Setting Levels

Channel Grid Display Modes

Submaster Pages

Submaster Types (Additive and Inhibitive)

Modifying Submasters

Changing Submaster Levels in the Live Display:

1 Select **Live** from the Display mode drop down list box on the Tool Bar.
2 Select the **Submaster page** in which you wish to record this sub assignment in form the drop down list box.

3 Click the button of the Submaster to be modified and position the fader at full.

The current levels controlled by the submaster are now active.

4 Select channels to new levels.
5 Click the **Record**  Button from the Tool Bar.
6 Click the **Submaster** Tab 

7 Click **Okay** to record the changes to the same Submaster.

Changing levels in the Submaster Display:

1 Select the Submaster Display from the Pull Down Display on the Tool Bar.
2 Select the **Submaster page** in which you wish to record this sub assignment in form the drop down list box.

3 Click the Submaster from the Pull Down Display at the end of the Tool Bar.
4 Select the channels to be changed.
5 Set the new levels on the channels.
6 The revisions are automatically recorded when the Submaster Display is changed.

A warning box will be displayed when you exit this Submaster display, asking you to confirm or discard the changes.

OR

- Click the **Record** button  on the Tool Bar

- Confirm with the **Okay** button (or push **Enter** on the keypad)

Note:

Switching Submaster Pages while a Submaster is in use causes a red or green square around the Submaster name. This indicates that the submaster needs to be returned to its home position (zero for additive subs and full for Inhibitive) before the channel assignments in the new page will take affect on that submaster.

Function Bar

Function Bar and Virtual Function Keys

The Function Bar provides up to 128 virtual key icons which you can program to activate any macro such as Go, Halt, Goto, Run, submaster bump buttons or use to select submaster pages, dimmer profiles and to trigger external outputs.

The Function Bar is displayed below the Tool Bar, when activated.

The functions and characteristics assigned to all virtual function buttons can be stored as an individual Function Bar Page (a recorded set of actions assigned to each function key) for recall at a later time. The Function Bar page in use is displayed in the Function Keys drop down list box to the left of the Function Bar display.

To Activate the Function Bar Display

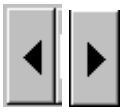
- Click on the Function Bar button  on the tool bar.

OR

- Select the **View** pull down menu on the Menu bar and click on **Function Bar**.
  A check mark will appear next to the words, and the menu will close.

Note: *Repeating either of the above actions **shuts off** the Virtual Function Bar display.*

Adjusting the Function Bar Display

- Use the  buttons at either end of the Function Bar display to scroll the virtual Function buttons horizontally so the rest of the buttons can be accessed.

  - Click either button once to increment the display by one button at a time.

  - Click and hold the mouse button down on one of these buttons to scroll across the function bar display.

To Access the Set-Up Function Bar Dialog Box

- Select the **Setup** pull down menu on the Menu Bar.
- Click on **Function Bar** on the menu.
  The Set-up Function Bar Dialog box appears with its various command buttons. Any existing pages of Function Bar assignments are displayed on the left.

- **OR** -- Right click on the Function Key

Function Bar Pages

The set-up for all virtual function buttons can be stored as an individual Function Bar Page (a recorded set of actions assigned to each function key) for recall at a later time.

The active Function Bar Page 

is displayed in the drop down list box to the left of the virtual Function button display.

There is no reasonable limit to the number of Function Bar Pages that can be recorded in Horizon.

To Create a New Function Key Page

1. Select the **Setup** pull down menu on the Menu Bar.
2. Click on **Function Bar** on the menu.

   The Set-up Function Bar Dialog box appears with its various command buttons. Any existing pages of Function Bar assignments are displayed on the left.

3. Click **New** to enter the name of the new page.

   The Create New Function Key Page dialog box appears.

4. Type the new name in the text box.
5. Enter the number of Function Keys in the **# Buttons** number box.
6. Complete the action with **Okay**.

   The new Function Bar page appears in the drop down list box to the left of the Function Bar display.

Note:

See Special Function Bars for details on setting up other types of Function Bars.

To Change the Function Bar Page In use

1. Click on the arrow on the right of the Function Bar list box.

   The list of available Function Bar pages is displayed.

2. Click on the Page you wish to activate.

To Delete an Existing Function Key Page

1. Select the **Setup** pull down menu on the Menu Bar.
2. Click on **Function Bar** on the menu.

   The Set-up Function Bar Dialog box appears with its various command buttons. Any existing pages of Function Bar assignments are displayed on the left.

3. Click on the name of the Function Bar page you want to delete.
4. Click **Delete**.

   A Delete Function Key Page dialog box appears.

5 Click **Yes** to delete the Function Key Page shown (**No** will cancel the action; the Function Page will not be affected).

To Change the Position of a Function Key Page

1 Select the **Setup** pull down menu on the Menu Bar.

2 Click on **Function Bar** on the menu.

The Set-up Function Bar Dialog box appears with its various command buttons. Any existing pages of Function Bar assignments are displayed on the left.

3 Click on the name of the Function Key Page whose position you wish to change.

4 Click **Move-Up** (or **Move-Down**) to move the highlighted Function Page up (or down) a step in the list.

Programming Function Keys

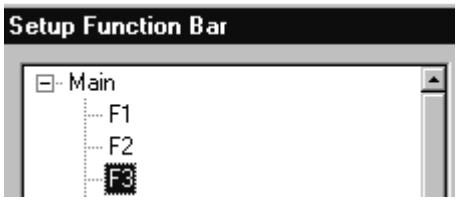
To Program Actions to Function Keys

1 Right click on the Function Key and skip to # 6.
OR
Select the **Setup** pull down menu on the Menu Bar.

2 Click on **Function Bar** on the menu.

3 Click on the + symbol next to the name of the Function Page which contains the function keys you want to program.

A list of the 24 function keys in that page appears.



Note: *Use the Scroll Bar on the right of the display to access higher number function keys.*

4 Click on the number (**F#)** of the Function Key to which you want to assign any of the following actions.

5 Click on **Properties** to access the Properties dialog box. As a short-cut you can Right Click on any Function Key to bring up this dialog box.

6 Make the changes required (see the choice of functions and properties listed below).

7 Click **Okay** to exit the dialog box.

Renaming the Function Key

Use this to enter a name other than F# in the center of the selected function key.

Note: *Up to five characters can be displayed in the center of the Function key*

Selecting a Color for the Function Key Name

Use this to select a color for the characters in the middle of the function key.

- Click on **Change Color** to select a color for the background of the selected Cue List.

A color chart is displayed.

- Click on the color you want to use for the background

- Click **Okay** to complete the action and return to the Properties dialog box.

A sample of the color you selected is displayed.

Assigning a Top Function Key Label

Use this display to enter up to 6 characters to form a label that is displayed in the top of the selected function key.

Assigning a Bottom Function Key Label

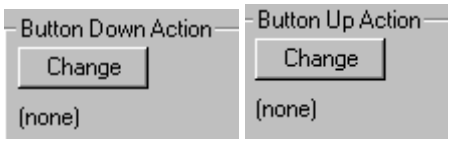
Use this display to enter up to 8 characters to form a label that is displayed in the bottom of the selected function key display.

Assigning a Button Type

Use this check boxes to select the type of button:

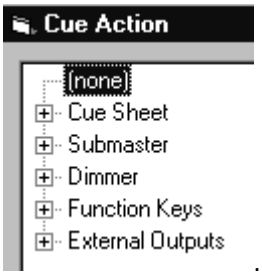
Momentary:	Will stay down only when held
Toggle:	Will stay down until pressed again
Radio:	Will stay down until another Radio Button is pressed.

Assigning an Action to the Function Key



Use these two displays to assign an action to the up or down movement of the selected function key.

1 Click on **Change** to access the list of actions that can be assigned to the selected function key.



2 To select an action, click on it and follow the instructions in the dialog box that is displayed. See Assigning Actions for details.

Clear a Function Key

Click on the **Clear** button to completely clear the assignment of this Function Key.

Special Function Bars

Special Functions Bars are used to program Actions(macros) to external inputs and outputs.

- **Wing Panel**
  This allows the programming of the Bump Buttons on the Wing Panel. Each Bump Button defaults to being a Bump-to-Full for each Submaster but can be programmed to perform any Action or Macro.

- **Horizon Button Station**
  Up 58 Horizon Architectural Stations can be connected to Ethernet Node or Playback. Each station can have 8, 16 or 32 push buttons. The dip-switches on the Horizon Button Station should be set as follows:
  Bit 8 (MSB) should be ON.
  Bits 0 – 7 should be the binary value of the Station ID minus 1.

- **Eternal I/O**
  This allows for programming of the External I/O ports on the Ethernet Node or Playback.
  IP address Int refers to the two inputs and two outputs standard on all Nodes and Playbacks.
  IP address 1 refers to the first optional I/O board added.
  IP address 2 refers to the second optional I/O board added.

See Also:

Connecting the Ethernet Node or Playback Controller

External Events

External Inputs and Outputs

MIDI Events

Groups

Recording Groups

With Groups you can record a frequently used selection of channels and their levels as a single entity for ease of use. Names are assigned to Groups when they are recorded to aid in identifying their use.

There is no reasonable limit to the number of groups that can be recorded in Horizon.

Groups can be set up and recorded in Live, Blind or Group display modes

Recording a Group in the Live Screen

1 Select **Live** from the Display Mode drop down list box on the Tool Bar.
6 Select the channels and levels that are to be recorded as Group.

7 Click the **Record button**  on the Tool Bar.
8 Click the **Group Tab**

9 Enter a number for the Group or take the default.
10 Enter a name for the Group in the text box.

11 The channels recorded in this Group can be adjusted using the check boxes.

12 Channels recorded on this Group can be limited to only the channels in a named group. Select the Group from the drop down list box.

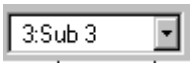
13 Select **Okay (**or push **Enter** on the keypad) to complete the action.

Note:

To release the channels you used to record the group from the keypad, when you are done, use the / backslash shortcut key or right click the mouse on the channel grid and set one of the release functions listed on the pull down menu.

From the GroupDisplay

1 Select **Group** from the Display Mode pull down list box on the Tool Bar.
2 Select the name of the Group you want to work on from the drop down list box at the end of the Tool Bar.



Note: *This step will not be necessary if you have not recorded any groups.*

3 Set the channel levels that are to be recorded in the Group.
4 Click the **Record** button  on the Tool Bar.
5 Enter the Group Name in the dialog box.
6 Confirm with the **Okay** button (or push **Enter** on the keypad).

Note: *If you adjust levels in the Group Display and don't record the information, a warning box appears when you exit the Group Display mode, asking if you want to you to save the changes. Select* ***Yes*** *to record the information or* ***No*** *to exit the display without recording.*

Modifying Groups

Adding or deleting Channels in the Live Screen

1 Click the Pull Down Display below the channel field.
2 Select the Group to be modified.
3 Add or delete the channels to the Group.
4 Click Record  on the Tool Bar.
5 Select the Group Tab. 

6 Record the Group to the same name or number.

Adding or deleting Channels in the Group Screen

1 Select the Group Display from the Pull Down Display on the Tool Bar.
2 Click the Group from the Pull Down Display at the end of the Tool Bar.
3 Add or delete the channels to the Group.
4 The changes will automatically record when the Group Display is changed.

Using Groups to Set Levels

Groups can be easily selected and used for level setting.

Using Groups to Select Channels

1 Click on the arrow at the end of the Channel text box .
15 The Group pull down display appears, listing all available, recorded groups.

2 Click on the Group you want to use and set it to a level.

Using Groups to Select Channels at Level

1 Using the Numeric Key Pad Press the . (dot) key to display the Instant List .
2 Select 0 Groups from the Instant List.
3 Enter the Group Number.
4 Press the at key * (at level) key.
5 Press Enter to use the recorded levels
or
6 Enter a level to scale the recorded levels, then press Enter.

Park

Park Channels

A Parked Channel is always at its parked level, regardless of its recorded levels in cues.

To Access the Parked Channel Display

1 Click the **down arrow** on the right of the display drop down list box on the Tool Bar.
2 Click on **Park Chan.** in the list.
3 The drop down restores and the selected display mode is current.

To Assign a Parked Channel

1 Select the channel number.
2 Set it to its parked level, for example 20.

- The parked symbol  now appears next to the channel level in the Live display.

- The levels are automatically recorded when the display is changed.

To Release a Parked Channel

1 Access the Parked Channel Display.
2 Select the Parked Channel you wish to release.
3 Click **Release**  on the Tool Bar.

1st click deselects the channel that is currently selected on the keypad

2nd click releases all other selected channels.

Or

Use the \ **Backslash** shortcut key for release.

Note:

- Changes in the Parked Channel display are recorded instantly.
- The only way to change the level of a Parked channel is to access the Park Channel display.
- Only Parked Dimmers override Parked Channels.

See Also

Channel Grid Display Modes
Selecting Channels
Channel Resolution
Park dimmers

Park Dimmers

A Parked Dimmer is always at its parked level, regardless of its recorded levels in cues.

To Access the Parked Dimmer Display

1 Click the **down arrow** on the right of the display drop down list box on the Tool Bar.
2 Click on **Park Dim.** in the list.
3 The drop down restores and the selected display mode is current.

To Assign a Parked Dimmer

1 Select the Dimmer number
2 Set it to its parked level, for example 20.

- The parked symbol  appears next to the channel level in the Live display.

- The levels are automatically recorded when the display is changed.

To Release a Parked Dimmer

1 Access the Parked Dimmer display.
2 Select the Parked Dimmer you wish to release.
3 Click **Release**  on the Tool Bar.

1st click deselects the channel that is currently selected on the keypad

2nd click releases all other selected channels.

Or

Use the \ **Backslash** shortcut key for release.

Note:

- Changes in the Parked Dimmer display are recorded instantly.
- The only way to change the level of a Parked Dimmer is to access the Park Channel display.
- Only Parked Dimmers override Parked Dimmer.

See Also

Channel Grid Display Modes
Selecting Channels
Channel Resolution
Park Channels

Active Magic Sheets

Active Magic Sheet

The Active Magic Sheet is an HTML (Web Page) document that can be used to customize Horizon-98 to your special needs. These documents can be created with many different program including any text editors, MS-Publisher, Word, Word Perfect, PageMaker, Front Page or any other HTML editor. One of the easiest programs to use is Microsoft Publisher.

To learn more about Active Magic Sheets and what they do, open the show kgwk.hzn in the show/samples directory. This illustrates two types of Magic Sheets. The initial sheet is a gif file with hotspots and the sheet that appears when you click on MAGIC SHEET is a text based file. Also included is a show called church.hzn. This Active Magic Sheet was created by importing an AutoCad file directly into Publisher. The Hot Spot tool in Publisher made it simple to assign the channel numbers to each of the locations. Other examples are included with the MS-Publisher document used to create them.

Horizon supports several hyperlinks that can be used as commands to the control console. Simply use these hyperlinks as you would any hyperlink (URL) in your HTMP file. The current list of hyperlinks supported by Horizon-98 can be found at HTML Codes for Active Magic Sheets .

Note:

Horizon Support the features of HTML Level 2.

The Active Magic Sheet is only supported if Internet Explorer 4.0 or higher is installed on the computer.

To Select a HTML Page (Magic Sheet)

1. Select the **Setup** pull down menu from the Menu Bar.
2. Click on **Options**.
3. Select the **Change** Button under HTML File.
4. Find and Open your file.

To Display the HTML Page (Magic Sheet)

1. Click on the Magic Sheet Button on the Tool Bar.

   The HTML Page display appears.

HTML Codes for Active Magic Sheets

Standard HTML Format:

http://0/ [character string from MACRO Tables]

Single or multiple macros can appear in one hyperlink:

MACRO or MACRO ; MACRO ; MACRO ; ....

Example:

http://0/chan(1/4+20)
http://0/chan(8+35); level(40)
http://0/functionpage(main); function(3)

See Macro Commands for details and complete list of Horizon Macros.

Macros

Macro Commands

Horizon98 supports a Macro Language that allows the experienced operator to customize the console.

In Horizon, the macro commands, serial commands and HTML codes are all the same.

For macro commands and serial commands, the format is

COMMAND or COMAND ; COMMAND ; COMMAND ; ....

where each COMMAND is

command_name or

command_name() or

command_name(PARAMS)

where PARAMS is a single parameter or a comma separated list of paraemters

Macro and serial command examples

chan(1/4+20)

chan(8+35);level(40)

functionpage(main);function(3)

A Macro Editor is provide to help build macros in Horizon.

For serial commands, the command must be terminated (ended) with a newline before it is processed and the serial port setup is 9600 baud, no parity, 8 data bits, one stop bit.

For HTML codes, the command format is the same but is preceded by http://0/ to make a valid URL.

HTML examples

http://0/chan(1/4+20)

http://0/chan(8+35);level(40)

http://functionpage(main);function(3)

The Macro Commands are grouped as follows:

Channel Selection / Level Setting / Record Macros

Cue Execution Macros

Dimmer / Patch Macros

Function Bar Macros

MIDI Macros

MIDI Show Control Macros

SMPTE Macros

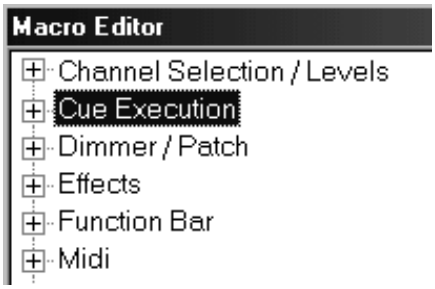
Submaster Macros

Effects Macros

Macro Editor

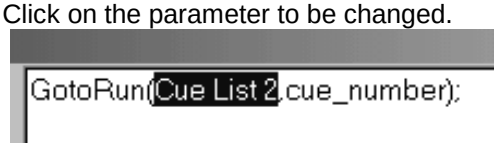
The Macro Editor is available anywhere that a macro can be used (Cues, Function Buttons, Events, etc.)

1 Select the desired macro from the list tree at the top left of the page.

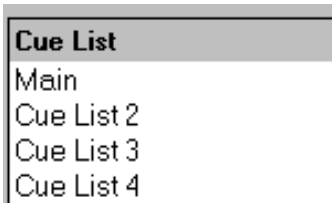


2 Click on **Insert** to move the macro into the edit window on the right.

3 Click on the parameter to be changed.



4 If selections are available they will appear in a list at bottom left. Type in a value or select from the list and click **Insert**.



Channel Selection / Level Setting / Record Macros

Macro	
chan(*channel_range*)	Select a single channel or group of channels
dlevel(*dmx_level*)	set all selected channels to DMX value *dmx_level*
dlevel(+*dmx_level*)	increase the DMX value of all selected channels by *dmx_level*
dlevel(-*dmx_level*)	decrease the DMX value of all selected channels by *dmx_level*
grab(*cue_number, channel_type*)	Grab the level for the selected channels from *cue_number* on cue list Template which match the specified *channel_type*
grab(*cue_list, cue_number, channel_type*)	Grab the level for the selected channels from *cue_number* on the first cue list which matches *cue_list* which match the specified *channel_type*
group(*group_number*)	Select the channels defined in *group_number*
group(*group_number, level*)	Select the channels at level defined in *group_number* and scale their value by *level*
level(*level*)	Set all selected channels to *level*
level(+*level*)	increase the level of all selected channels by *level*
level(-*level*)	decrease the level of all selected channels by *level*
record(*cue_list, cue_number*)	Record the current levels as *cue_number* on the first cue list which matches *cue_list*
release( )	Release selected channels

PARAMS:

channel_range	channels (ex. 1 or 1/3 or 2/5+11/13)
channel_type	*I, c, b, f* or *** (one or all may be specified)
cue_list	partial cue list name
cue_number	valid cue number
dmx_level	0 through 255
group_number	valid group number
level	0 through 100

Notes:

*Cue lists are **always** required, the first cue list that matches is used.*
*All commands work on the **live** channels*
To enter a Carriage Return in the Macro Box hold down the Shift key a press ENTER

Cue Execution Macros

Macro	
go(*cue_list*)	Do a go on the first cue list which matches *cue_list*
goto(*cue_list, cue_number*)	Do a goto *cue_number* in the default time on the first cue list which matches *cue_list*
gotorun(*cue_list, cue_number*)	Do a goto *cue_number* in the recorded time on the first cue list which matches *cue_list* and run
halt(*cue_list*)	Do a halt on the first cue list which matches *cue_list*
hardgoto(*cue_list, cue_number*)	Do a hard goto *cue_number* in the default time on the first cue list which matches *cue_list*
hardgotorun(*cue_list, cue_number*)	Do a hard goto *cue_number* in the recorded time on the first cue list which matches *cue_list* and run
pause( )	Toggle global pause
pause(*pause_value*)	Turn global pause on or off
waitgotorun(*cue_list, cue_number, wait_time*)	Do a goto *cue_number* in the recorded time on the first cue list which matches *cue_list* and run, adding the *wait_time* to all wait times already in the cue

PARAMS:

cue_list	partial cue list name
cue_number	valid cue number
pause_value	on or off
wait_time	time to add

Notes:

*Cue lists are **always** required, the first cue list that matches is used.*

*All commands work on the **live** channels*

To enter a Carriage Return in the Macro Box hold down the Shift key a press ENTER

Dimmer / Patch Macros

Macro	
patchchannel(*channel, dimmer_range*)	Patch the specified *dimmer_range* to *channel*; note: this macro causes the show to be modified
patchclear(*channel_range*)	Clear the patch for the specified *channel_range*; note: this macro causes the show to be modified
patchset(*channel_range, first_dimmer*)	Patch consecutive dimmers, one per channel, to *channel_range*, starting with *first_dimmer*; note: this macro causes the show to be modified
dimmerprofile(*dimmer_range*, *profile_name*)	Set the profile for the specified *dimmer_range* to the first profile matching *profile_name*, making the profile static, note: this macro causes the show to be modified
dimmerprofile(*dimmer_range*, *profile_name, rate, random_start*)	Set the profile for the specified *dimmer_range* to the first profile matching *profile_name*, making the profile dynamic with the specified *rate* and *random_start*, note: this macro causes the show to be modified

PARAMS:

channel	valid channel number
channel_range	channels (ex. 1 or 1/3 or 2/5+11/13)
dimmer_range	dimmers (ex. 1 or 1/3 or 2/5+11/13)
first_dimmer	valid dimmer number
profile_name	partial profile name
random_start	0 or 1 (for no or yes)
rate	0.1 through 100.0

Notes:

*Cue lists are **always** required, the first cue list that matches is used.*

*All commands work on the **live** channels*

To enter a Carriage Return in the Macro Box hold down the Shift key a press ENTER

Function Bar Macros

Macro	
fkeydown( )	Set all function keys on the active function page to down, if not already down
fkeydown(*key_range*)	Set all function keys in *key_range* on active function page to down, if not already down
fkeydown(*page, key_range*)	Set all function keys in *key_range* on first function page matching *page* to down, if not already down
fkeytog( )	Toggle all function keys on the active function page
fkeytog(*key_range*)	Toggle all function keys in *key_range* on active function page
fkeytog(*page, key_range*)	Toggle all function keys in *key_range* on first function page matching *page*
fkeyup( )	Set all function keys on the active function page to up, if not already up
fkeyup(*key_range*)	Set all function keys in *key_range* on active function page to up, if not already up
fkeyup(*page, key_range*)	Set all function keys in *key_range* on first function page matching *page* to up, if not already up
function( )	Press and release all function keys on the active function page
function(*key_range*)	Press and release all function keys in *key_range* on active function page
function(*page, key_range*)	Press and release all function keys in *key_range* on first function page matching *page*
functionpage(*page*)	Make the first function page which matches *page* the active function page
functionpagenext( )	Make the next function page the active function page
functionpageprev( )	Make the previous function page the active function page

PARAMS:

key_range	function keys (ex. 1 or 1/3 or 2/5+11/13)
page	partial function key page name

Notes:

*Cue lists are **always** required, the first cue list that matches is used.*

*All commands work on the **live** channels*

To enter a Carriage Return in the Macro Box hold down the Shift key a press ENTER

Midi Macros

Macro	
midichannelpressure(*midi_port, channel, pressure*)	Send a midi channel pressure command
midicontrolchange(*midi_port, channel, control_num, control_val*)	Send a midi control change command
midinoteoff(*midi_port, channel, key, velocity*)	Send a midi note off command
midinoteon(*midi_port, channel, key, velocity*)	Send a midi note on command
midipitchwheelchange(*midi_port , channel, pitch_lsb, pitch_msb*)	Send a midi pitch wheel change command
midipolykeypressure(*midi_port, channel, key, pressure*)	Send a midi poly key pressure command
midiprogramchange(*midi_port, channel, program_number*)	Send a midi program change command
midirawdata(*midi_port, midi_data_byte, …, midi_data_byte*)	Send the raw data bytes out the midi port; each data byte is either decimal or hex; hex numbers are preceded by 0x, 0X, x or X

PARAMS:

channel	1 through 16
control_num	1 through 128
control_val	1 through 128
key	1 through 128
midi_data_byte	decimal or hex number
midi_port	1 or 2
pitch_lsb	0 through 127
pitch_msb	0 through 127
pressure	1 through 128
program_number	1 through 128
velocity	1 through 128

Midi Show Control Macros

Macro	
midishowfire(*midi_port, device_id, macro_number*)	Output a midi show control fire command
midishowgo(*midi_port, device_id, cue_number, cue_list*)	Output a midi show control go command; a *cue_number* of 0.0 means no specific cue, must be included if cue list present
midishowresume(*midi_port, device_id, cue_number, cue_list*)	Output a midi show control resume command; a *cue_number* of 0.0 means no specific cue, must be included if cue list present
midishowstop(*midi_port, device_id, cue_number, cue_list*)	Output a midi show control stop command; a *cue_number* of 0.0 means no specific cue, must be included if cue list present

PARAMS:

cue_list	*(optional)* number specifying cue list
cue_number	*(optional)* number specifying cue
device_id	0 through 127 (127 = all devices)
macro_number	0.through 127
midi_port	1 or 2

SMPTE Macros

Macro	
smpterun( )	Start the SMPTE running at the current frame
smpterun(*smpte_frame*)	Start the SMPTE running at the specified *smpte_frame*
smptestop( )	Stop the running SMPTE

PARAMS:

smpte_frame	valid SMPTE time

Submaster Macros

Macro	
sub(*sub_range, level*)	Set all submasters in *sub_range* on the active page to *level* immediately
sub(*sub_range, level, time*)	Fade all submasters in *sub_range* on the active page to *level* at *time*
sub(*sub_page, sub_range, level, time*)	Set all submasters in *sub_range* on the first submaster page which matches *sub_page* to *level* at *time*
subbump(*sub_range, level*)	Bump all submasters in *sub_range* on the active page to *level*
subbump(*sub_page, sub_range, level*)	Bump all submasters in *sub_range* on the first submaster page which matches *sub_page*
subpage(*sub_page*)	Make the first submaster page which matches *sub_page* the active submaster page
subpagenext( )	Make the next submaster page the active submaster page
subpageprev( )	Make the previous submaster page the active submaster page
subrestore(*sub_range*)	End bump (restore) submasters in *sub_range* on the active page
subrestore(*sub_page, sub_range*)	End bump (restore) submasters in *sub_range* on the first submaster page which matches *sub_page*

PARAMS:

level	0 through 100
time	time in mm:ss.t or ss.t format
sub_page	partial submaster page name
sub_range	submasters (ex. 1 or 1/3 or 2/5+11/13)

Effects Macros

Macro	
fxcreate(*name, chan, step_time, function(nnn), in_level, in_time*)	Creates the *name* effect, with *chan*, using *function* with *step_time* between steps fading to *in_level* in *in_time.*
fxcreate(*name, chan, step_time, function(nnn), in_level, in_time, wait_time, out_level, out_time*)	Creates the *name* effect, with *chan*, using *function* with *step_time* between steps fading to *in_level* in *in_time* waiting *wait_time* before fading to *out_level* in *out_time.*
fxdelete(*name*)	Delete *name* effect
fxstart(*name*)	Starts *name* effect.
fxstop(*name*)	Stops *name* effect.
fxlevel(*name, level, time*)	Fade *name* effect to *level* in *time.*
fxlevel(*name, level, page, num*)	Assigns *name* effect to submaster *num* on *page* with submaster at *level.*
fxrate(*name, rate*)	Change *rate* on *name* effect.
fxrate(*name, rate, page, num*)	Assigns rate of *name* effect to submaster *num* on *page* with preset *rate.*
fxpreset(*name, chan, value, time*)	Fades *chan* from *name* effect to *value* in *time.*

PARAMS:

name	unique name for the effect
chan	range of channels for the specified effect (1+6/10) or #number specifying a group number (#3)
step_time	Time from *in_time* to next *in_time*
in_level	Channel level at end of *in_time*
in_time	Fade time to *in_level*
wait_time	Wait time from beginning of *in_time* to beginning of *out_time*
out_time	Fade time from *in_level* to *out_level*
out_level	Level at end of *out_time*
function(nnn)	one of the effect functions from the list below where *nnn* is a number or an expression

Effect Function

Function	Description
all()	select all channels in the effect
walk(*num_chan*, *step_size*)	select the next *num_chan* which are *step_size* away from the last channels selected
bounce(*num_chan*)	bounce a window *num_chan* large back and forth
randchan(*num_chan*)	select *num_chan* randomly from the channels in the effect

Note:

1 All levels are in the DMX (0 to 255) or in percentage (0% to 100%)

2 All parameter (items in *italics*) except *name* and *chan* can contain either numbers or math expression (+, -, *, /). The math expression can contain the math function listed below. Math functions can be nested.

Math Function

Function	Description
rand(*limit1*, *limit2*)	return a random number between *limit1* and *limit2*
randlist(*value1*, *value2*, *value3*, ….)	returns a number picked randomly from the list of *values*
newrand(*limit1*, *limit2*)	returns a different random number for each channel between *limit1* and *limit2*
newrandlist(*value1*, *value2*, *value3*, ….)	returns a different number for each channel picked randomly from the list of *values.*
sin(*angle in degrees*)	returns the sine of an expression
cos(*angle in degrees*)	returns the cosine of an expression
chanindex()	return the index for the current channel in the effect
channum()	return the number of the current channel
chancuevalue()	return the current level for the current channel, excluding levels generated by effects
totalchan()	return the total number of channels this effect
mod(*num1, num2*)	return *num1* modulus *num2* (the remainder after dividing *num1* by *num2*)

Intelligent Fixtures (Gold)

Moving Light Concept

Horizon's Intelligent Fixtures Lite is a set of features oriented toward the use of moving light fixtures. The Horizon can control any fixture or device that runs on DMX, such as multi-attribute devices like moving lights and color scrollers, as well as relays and smoke machines.

Moving lights have a set of attributes that are used to control their actions. These attributes are divided into four groups: Intensity, Color, Beam and Focus and are assigned to individual attribute and DMX channel controls. Separate Wait and Fade times are provided for each attribute when a cue is recorded, allowing one cue to change the different attributes of a fixture(s) at the same time at different rates

Setup Moving Light Patch

1 Click on the **Setup** pull down menu on the Menu Bar.
2 Select **Moving Light Patch** to display the Moving Light Patch dialog box.

3 Click on the **Add** button to access the Add Moving Light dialog box.

4 Use the **Fixture** pull down list box to select the moving light (or other device) that you wish to add.
5 Fill in the remainder of the text boxes to suit your application.

For example:

Click the **Fixture** drop down list box **arrow** to display the library of available Moving lights and DMX devices.
2 **Scroll** down the list until **Cyberlight CX** (a type of moving light) is shown.
3 **Click** on Cyberlight CX so the name is highlighted.
4 Click in the **Number of Fixtures** text box and enter **4**.

This tells the system you are using four Cyberlights.

5 Click in the **Starting Number** text box and enter **1**.

This number tells the system where to start numbering this type of moving light.

Note: *When you click the next text box the system automatically adds **through 4** to the display.*

6 Click in the **Base Channel** text box and enter **50**.

This tells the system what channel number to use when you are selecting this fixture. The Base Channel number will display the intensity of the fixture.

Note: *When you click the next text box, the system automatically adds **through 53** to the display, as there are four fixtures.*

7 Click in the **Attribute Channel** text box and enter **100**. These are channels used for each individual attribute of a moving light (pan, tilt, color etc.)

Note: *When you finish in the Attribute Channel text box and click the next text box, the system automatically adds* ***through 159*** *to the display. This is the number of attribute channels required to operate four Cyberlight moving light fixtures. The number of attribute channels required varies with the type of fixture and device but the Horizon calculates all this information for you.*

8 Click in the **DMX Channel** text box and enter 100. This is the actual DMX address of the fixture.

Note: *You must set the dip switches on the moving light fixture to match this address.*

9 Click **Okay** to complete the assignment and close the Add Moving Light display.

The Moving Light Patch display appears, showing the completed assignment.

10 Click **Done** to return to the Channel Grid display.

The moving light base channels are identified by red triangles next to the channel number.

The functions for the attribute channels for each moving light are automatically labeled and numbered on the channel grid display.

Selecting a Moving Light

- Moving Lights and other Multiple Attribute Fixtures appear on the Channel Grid Display with a triangle to the right of the base channel number.
-
-

1 Select the **Base Channel Number** of the moving light you want to select.

2 Right click the mouse button and select Attributes from the display.

OR

Press the Keyboard Function Key F1 through F4

One of the four Attribute boxes assigned to each Moving Light is displayed.

Change the Intensity of a Moving Light

Intensity affects the brightness of the fixture's field.

1 Select the **Live** channel grid display mode.

2 Select the **Base Channel Number** of the moving light whose position you wish to adjust.

3 Right click the mouse button to access the drop down **Level Setting Display**.

4 Click on **Attributes** to display the Moving Light Attribute display

Note: *The above four steps are not necessary if the Moving Light Attribute display is already active.*

5 Click on the **Focus Tab**, if necessary. **Or** use the **F1** keyboard function button.

The Focus attribute display appears.

6 Use the keyboard **F5** and **F6** function buttons to select the previous and next moving light fixture.

OR

Click **Done** to exit the Moving Light Attribute Display.

Change the Color of a Moving Light

Color attributes affect the color of the fixture's field and include attributes like Color, Cyan, Magenta and Yellow.

1 Select the **Live** channel grid display mode.

2 Select the **base channel number** of the moving light whose position you wish to adjust.

3 Right click the mouse button to access the drop down Level Setting Display.

4 Click on **Attributes** to display the Moving Light Attribute display.

> ***Note***: *The above four steps are not necessary if the Moving Light Attribute display is already active.*

5 Click on the **Color Tab.**

Or

Use the **F2** keyboard function button.

> The Color attribute display appears.

6 Choose a color by selecting from the **Color** pull down list box.

Or

Create your own hue by entering varying amounts of **Cyan, Magenta** and **Yellow** displays.

7 Use the keyboard **F5** and **F6** function buttons to select the previous and next moving light fixture.

Or

Click **Done** to exit the Moving Light Attribute Display.

Tips:

*The Keyboard Function buttons are located above the typewriter keys on the keyboard. They **are not** the same as the virtual Function Bar buttons, which will not work on any of the moving light displays.*

Use the Right Mouse Button to select the Defaults for this fixture.

Change the Beam of a Moving Light

Beam attributes shape the fixture's field, and includes attribute like Iris, FX/Prism, Zoom, Focus, Gobo and Control.

1 Select the **Live** channel grid display mode.

2 Select the **Base Channel Number** of the moving light whose position you wish to adjust.

3 Right click the mouse button to access the drop down **Level Setting Display**.

4 Click on **Attributes** to display the Moving Light Attribute display.

> **Note**: *The above four steps are not necessary if the Moving Light Attribute display is already active.*

5 Click on the **Beam Tab**, if necessary. **Or** use the **F3** keyboard function button.

The Beam attribute display appears.

6 Use the keyboard **F5** and **F6** function buttons to select the previous and next moving light fixture.

Or

Click **Done** to exit the Moving Light Attribute Display.

Tips:

- *The Keyboard Function buttons are located above the typewriter keys on the keyboard. They **are not** the same as the virtual Function Bar buttons, which will not work on any of the moving light displays.*
- *Use the Right Mouse Button to select the Defaults for this fixture.*

Focus a Moving Light

Focus controls the position of the fixture with Pan and Tilt, which refer to the fixture's horizontal and vertical movement.

1 Select the **Live** channel grid display mode.
2 Select the **base channel number** of the moving light whose position you wish to adjust.
3 Right click the mouse button to access the drop down **Level Setting Display**.
4 Click on **Attributes** to display the Moving Light Attribute display.

> **Note***: The above four steps are not necessary if the Moving Light Attribute display is already active.*

5 Click on the **Focus** Tab, if necessary.
Or
Use the Focus(V) keyboard button.
The Moving Light Target display appears.

6 Click the mouse on the Moving Light Target.
A small circle appears indicating current position.

7 Continue to hold down the left mouse button and move the mouse.
This moves the indicator circle as well as the pan and tilt level displays and the scroll bars, to identify current position. The moving light is tracking any changes to position on stage.

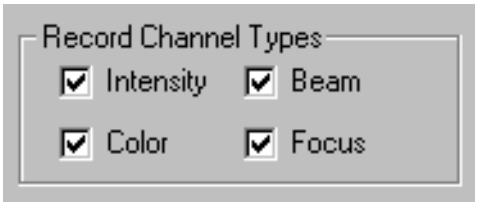
8 Use the keyboard **F1** and **F2** function buttons to select the previous and next moving light fixture.
Or
Click **Done** to exit the Moving Light Attribute Display.

Tips:

- *Use the right Mouse Button to select the Defaults for this fixture.*
- *You can keep the orientation of the Target logical by using the **ADJUST** Button to Reverse or Swap the Pan and Tilt.*
- *Small movements of the Pan and Tilt can be done with the **Arrow** Keys. Holding **Ctrl** or **Alt** will perform medium movements and holding **Ctrl and Alt** will perform larger movements.*

Recording Moving Light Attributes

When recording a Cue that contains Moving Lights it is possible to select which Attributes are to be recorded. Click on the check boxes in the **Record Channel Types** area to select which attributes will be recorded.



Coping Moving Light Attributes

The **Copy** button that appears on all pages of the Moving Light Attribute dialog is used to copy any or all attributes from the selected Moving Light to any similar Moving Light.

1 Select the **Live** channel grid display mode.

2 Select the **base channel number** of the moving light whose position you wish to adjust.

3 Right click the mouse button to access the drop down **Level Setting Display**.

4 Click on **Attributes** to display the Moving Light Attribute display.

5 Click on **COPY** to open the copy dialog.

6 Select the attribute names from the list on the left. The buttons below the list can be used to select predefined groups of attributes.

7 Select the fixtures to get the copied information from the list on the right.

8 Click **Copy** or **Copy & Close** to copy the data from the selected fixture to the fixtures on the right hand list.

Advance Features

Channel Features

Channel Check

With Channel Check, you can easily accomplish your pre-show lighting check. Your Channel Check can be done either manually or automatically.

To Manually Perform A Channel Check

1 Select the **Setup** pull down menu from the Menu Bar.

2 Click on **Channel Check**.

An Are You Sure? warning display appears as Channel Check overrides any active levels on stage.

3 Click **Yes** to continue (Selecting **No** exits Channel Check). The Channel Check dialog box appears.

4 Click on the **Current Channel** text box and enter the starting channel number for the check.

5 Click on the **High Check Value** drop down list box and enter a percentage level to establish the maximum level at which channels play during the check.

6 Click on the **Low Check Value** drop down list box and enter a percentage level to establish the minimum level channels return to after being checked.

Note: *Leaving this display blank causes all lights to return to a level of zero.*

7 Use the **Previous** or **Next** button to manually execute each step of the Channel Check

8 Click **Done** when the dimmer check is completed.

Note: *Click the Release button on the tool bar twice to release all channels controlled by the keypad (red levels are shown under the channel number).*

To Automate Channel Check

1 Follow steps 1 to 8 above.

2 Enter a time in the **Automatic Wait Time** text box.

> **Note**: *The Automatic Wait Time establishes the length of time a channel stays at the High Check Value before automatically fading down to the low check value. At the same time the next channel fades up to the High Check level, and so on.*

3 Click **Next** to start the automatic channel check.

4 Click **Done** when the dimmer check is completed.

> **Note**: *Click the **Release** button on the tool bar twice to release all channels from the keypad (red levels are shown under the channel number).*

Tip:

*The **Tab** button on the keyboard can be used to move between the fields in the Channel Check DisplayChannel Title*

The Channel Title function lets you assign a Primary Title instead of a number for a channel on the channel grid display. In addition, you can assign a Secondary Title next to a channel number. You can also select the secondary title position, the color in which either title is displayed as well as preview what the titles look like while you are creating them.

In the above example, cyc is the primary title and 1 is the secondary title for channel 2.

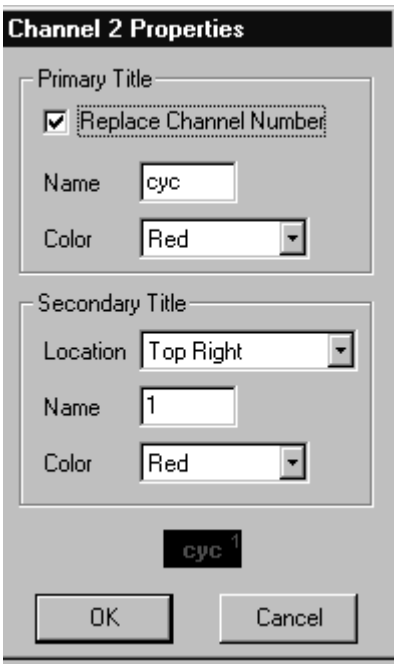
Open the Channel Title Display

1 Select the channel(s) you wish to name.

2 Right click the mouse to display the channel At Level drop down menu display.

3 Click on **Channel Title**

> The Channel Properties dialog box appears



Primary Title

1. Choose **Replace Channel Number** check box to remove the channel number.
2. Click the **Name** text box.
3. Type in a name up to 7 characters long.

   Note*: 2 or 3 characters are recommended for channel titles to maintain clarity on the monitor.*
4. Click on the arrow at the end of the **Color** drop down list boxto display the choices.
5. Highlight the name of the color you wish to use for the title.
6. Click the mouse on this color to complete the selection and close the list box.

Secondary Title

1. Click the arrow at the end of **Location** pull down list box to display the choices for title position.

   Note: *These positions refer to locations around the channel number only.*
2. Click the position required for the channel title you are creating.
3. Click the **Name** text box.
4. Type in a name up to 7 characters long.

   Note: *1 or 2 characters are recommended for channel titles to maintain clarity on the monitor.*
5. Click on the arrow at the end of the **Color** drop down list box to display the choices.
6. Highlight the name of the color you wish to use for the title.
7. Click the mouse on this color to complete the selection and close the list box.

Complete the action

1. Click on **Okay** to complete the action. The channel title you have created will be shown on the channel grid display.

What's This? Button

The **What's This?** button on the Tool Bar provides immediate information about any channel, such as patch information, and the source of its level (keypad, fader, submaster, moving light, etc) as well as any Dimmer and Channel Notes that the operator has entered.

To Turn On the What's This? Button

1 Click the **What's This?**button on the Tool Bar.

The mouse pointer changes to a white arrow with a question mark indicating the activation of the What's This? mode.

2 Move the mouse until the white arrow with the question mark is on the channel number that you want to learn more about.

3 Click the left mouse button.

A drop down display appears providing channel information

To Turn Off the What's This? Button

The **What's This?** mouse pointer mode stays activated until turned off.

Left click the mouse on the **What's This?** button on the Tool Bar.

Tips:

*The notes shown in the **What's This**? display are created in the **Set-up/Dimmer Patch** drop down menu on the Menu Bar, using the **Channel # Notes** and **Dimmer # Notes** buttons.*

See Also

Dimmer and Channel Notes

Actions and Events

External Events

External Events are only available with the Ethernet Node and the Playback Controller

To setup for External Event:

3 External I/O Events are setup as a special type of Function Bar.

4 Select **Setup | Function Bar** from the Horizon Menu.

5 Select **New** to add a Function Bar to represent a group of I/Os.

6 Click on the field in the **Type** column.

7 From the Pull Down associate this Function Bar with the appropriate group of I/Os.

Internal I/O	The 2 Inputs and 2 Outputs on any Node or Playback
I/O Board 1	I/O 1 through 48 on Connector 1 and 2
I/O Board 2	I/O 49 through 96 on Connector 3 and 4

8 Enter the number of **Buttons**.

9 Change the **Name** if desired.

10 Hit OK to close the dialog

11 Repeat steps 3 through 8 to add more Function Bars (groups of I/O)

Programming Input Events

12 Input Events are programmed as if the closure of the input signal is pushing the appropriate Function Key. See Programming Function Keys for details.

13 The event can be tested using the Function Key.

14 The state of the External Input can be monitored on the Function Key Display.

Triggering Outputs

1 Outputs can be triggered by pressing the appropriate Function Key.

2 Outputs can be triggered by the Function Key Macro Commands.

Time Events

Time Events are only available with the Silver or Gold Upgrade Package.

To program a Time Event:

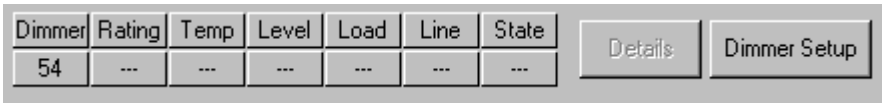
1. From the Horizon Menu Select **ACTION/EVENT | TIME EVENT**
2. Click on the **NEW** button
3. Give the Event a Name or leave the default name
4. Click on **OK** to save
5. Click on the **Properties** Box
6. Select the **Trigger Event** from the pull down box.
   Trigger Events can be at a specific time or relative to Sunrise, Sunset, Morning Twilight or Evening Twilight.
7. Set the time.
8. Select the **Days to Trigger Event**.
9. Click on **CHANGE** under Event Action
10. Select a **Cue Action** for this Event. See Assigning Actions for details.

IPS Dimmers

Talkback Display

The Talkback Display shows the real time status of ROSCO / Entertainment Technology Intelligent Power System (IPS) dimmers.

1. Click the down arrow on the right of the display drop down list box on the Tool Bar.
2. Click on **Talkback** in the list.
3. The drop down restores and the selected display mode is current.
   The Talkback display is shown at the bottom of the channel grid.



4. Select any dimmer to get more information.


Warning State (may need attention)


Error State (dimmer is not operational)


Focus Mode (Local Focus Button)


No Load (Dimmer is On with load less then 100 Watts)


NonDim (Dimmer is set to be a Solid State Relay)


Forward Phase Control (Dimmer is set for Inductive Load)

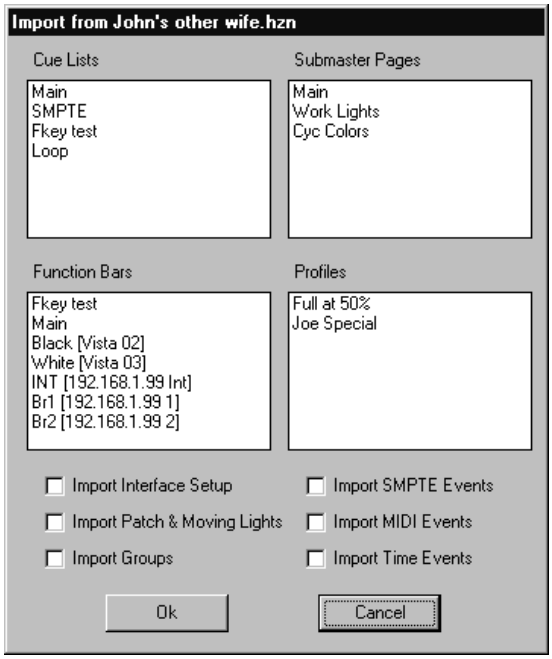
Note:

The Detail Display provides information useful to ROSCO / Entertainment Technology technical support.

Importing Data

Import from other Show Files

This power function allows the loading of any part of another show into the current show.



- **Cue Lists**
  Loads any Cue List of group of Cue Lists with all the cues into the current show.
- **Function Bars**
  Loads any Function Bar or group of Function Bars into the current show.
- **Submaster Pages**
  Loads any Submaster Page or group of Submaster Pages into the current show.
- **Profiles**
  Loads any user defined Profile into the current show.

Note: If the name in any of the above are identical to name in the current show the data in the current will be overwritten. If the items below are checked they will always overwrite the current data.

- **Import Interface Setup**
  Loads all the data related to the type, address, I/O and ports of connected interface units. This data is loaded from the previous show whenever a FILE | NEW is performed.
- **Import Patch & Moving Lights**
  Loads all of the Moving Light and Patch data into the current show.
- **Import Groups**
  Loads all the Groups into the current show.
- **Import (SMPTE, MIDI, Time) Events**
  Loads all the selected events into the current show.

Import Patch

With Import Patch, you can easily bring into the Horizon console any dimmer to channel patch assignments you have created using a separate show paperwork program such as Excel, Lightwright, Softplot, Wysipaper or any other program that can write a Comma-Delimited-File. In addition to re-patching the console the imported data about each channel and dimmer is placed in the Dimmer and Channel Notes and is available with the What's This? Button.

1 Select the **File** pull down menu from the Tool Bar.

2 Highlight **Import** to show the Import Patch display.

3 **Click** on the import patch program you wish to use.

4 Enter the name and location of the file you wish to import into the standard Windows Open File dialog box that appears.

5 Click **Open** to complete the action.

See Also

Preparing files for Import

Preparing files for Import

Lightwright and Comma-Delimited-Files (Excel, MacLux, etc.)

1 Export a comma delimited text file (*.txt)
To make the file easy to find, it is suggested that you save the file in the **Horizon 98 / Shows** directory

2 The file format should be:
Channel, dimmer, purpose, position, inst #, type, wattage, gel, circuit #, circuit name

WYSIPAPER

1 Using WYSIPAPER Ver. 3.0 or later

2 In **Manager** Change to the **DATA** Tab

3 Open **CHANNELS**
The order of the fields must not be alter from the original setting:
Channel, Spot, Patch, Position, Unit, Circuit Name, Circuit Number, Type, Wattage, Purpose, Colour, Gobo

4 From the Menu select **FILE | EXPORT**

5 Set the Save as type: to **Tabbed Text(*.txt)**

6 Give the file a name
*To make the file easy to find, it is suggested that you save the file in the **Horizon 98 / Shows** directory*

7 Hit the **SAVE** button

SoftPlot

1 Using SoftPlot Ver. 5w or later

2 From the Menu Select **FILE | PRINT REPORTS**

3 From the Report Options Dialog Box, Hit the **Lightwright** button

4 Give the File a name
*To make the file easy to find, it is suggested that you save the file in the **Horizon 98 / Shows** directory*

5 Hit the **OK** button

WYSIWYG by Cast Lighting

Setting Up WYSIWYG

Horizon can directly interface with Cast Lighting's WYSIWYG program. Follow the steps below to connect Horizon to WYSIWYG:

1 If you are running WYSIWYG version E or F you will need a new Consoles.cfb file. Two version of the Console.cfb file are located in directories under the Program Files/Horizon 98 directory. Copy the appropriate file into Program Files/Wysiwyg/Lirary directory. Replace the existing copy.

2 Start Horizon.

3 From the menu select **SETUP | OPTIONS | PORTS**.

4 From the Pull Down select **Local Computer** or enter the IP address of the computer where WYSIWYG is running. Be sure Enable Telenet Port is checked.

5 Start **WYSIWYG.**

6 From the WYSIWYG menu select **Setup | Device Manager.**

7 Click **New** and select **Consoles | Rosco | Rosco Horizon**.

8 Click **Insert.**

9 Click **Connect.**

10 Click **Properties** and bind the patch.

Horizon and WYSIWYG should now be connected.

Seeing the output of Horizon

Make the Patch and Moving Light Patch in Horizon are the same as the Patch in WYSIWYG and you will see the output of Horizon in WYSIWYG.

Auto Focus

Horizon Supports the Auto Focus function from WYSIWYG.

1 The Spot Number in WYSIWYG must be same as the Fixture Number in Horizon.

2 Fixtures selected in the Hooked to Console view of WYSIWYG will be selected in Horizon.

3 Right Click in WYSIWYG and select At Full and Focus click in the display where you would like the fixture focused. WYSIWYG and Horizon will handle the geometry and focus all selected fixtures at the desired location.

4 See the WYSIWYG Help Files for details on Auto Focus, Iris, Color and Focus.

Playback Controller

Activating Playback Controller Mode

- Connect the Playback Controller via the Ethernet to Horizon. See Connecting the Ethernet Node or Playback.
- The **Playback** item will appear on the Menu.

Downloading and Running the Playback Controller

Downloading and running of the Playback Controller is managed from the Playback Menu. If Playback does not appear on the Menu see Activating Playback Controller Mode.

- **Download to Playback …**

  Show – This will download a show to the Playback Controller and start Playback Control Mode.

  HTML -- This will download an Active Magic Sheet to the Playback Controller. The Playback Controller will make the Active Magic Sheet available to any browser on the network.

- **Console Control** -- Start Console Control Mode.

  Control of the DMX output will be transferred to the Horizon Console and the Playback Controller will behave as if it were an Ethernet Node.
  The LED on the Playback Controller will flash Amber to indicate Console Mode.

- **Playback Control** -- Start Playback Control Mode.

  Control of the DMX output will handled by the Playback Controller.
  The LED on the Playback Controller will flash Green to indicate Playback Mode.
  The DMX icon will change to indicate Playback Mode.

- **Mute Events** -- Suspend processing any events that come from the Playback Controller .

  When checked all events from the Playback Controller are ignored including:
  - MIDI event
  - MIDI Show Control
  - Front Panel Buttons
  - SMPTE Time Code
  - External Inputs
  - Serial Macro Commands
  - Horizon Button Stations

  This allows the operator to do setup and cueing will ignoring the external events that may be triggered by other equipment and operators.

Front Panel Buttons

The front panel buttons on the Playback Controller correspond to the twelve Function Buttons on the PC Keyboard. See Programming Function Keys for more information.

- Keys 1 though 6 are on the top row.
- Keys 7 though 12 are on the bottom row.
- A Cue, a Function Key or any other Event can change the Function Key Page making an unlimited number of keys available.

Writing to the LCD Display

The LCD Display on the Playback Controller is completely user programmed. Cues, Function Keys and most Events (SMPTE, MIDI etc.) can write to the LCD Display.

- Text to be written to the LCD Display should be entered in the Status String association with the Cue, Function Key or Event.
- Text entered in the Status String will also appear on the status line of Horizon when running in Console Control Mode.
- Text is written to the current location of the cursor.
- The follow Commands are available to format the LCD Display. These Commands can be located anywhere in the Status String and must be proceeded by the less than < and followed by the greater than > symbol.

<nopb>	Don't display this status string on the Playback LCD
<nowin>	Don't display this status string on the Windows status bar
<smpte-hhmmssff>	Displays SMPTE Time Code (hh:mm:ss:ff) at current position
<smpte>	
<smpte-mmssff>	Displays SMPTE Time Code (mm:ss:ff) at current position
<time-hhmm>	Display the time as hh:mm at the current position
<time>	
<time-hhmmss>	Display the time as hh:mm:ss at the current position *Note: refreshes time until the line is cleared or the display is cleared, scrolling the display does NOT move the time!*
<row XX>	Move cursor to row XX, column 1
<row-clear XX>	Move cursor to row XX, column 1 and clear to end of line
<col XX>	Move cursor to column XX of current row
<clear>	Move cursor to row 1, column 1 and clear entire display
<clr-eol>	Clear display to end of line
<up>	Scroll the display up one line and leave the cursor at the bottom
<down>	Scroll the display down one line and leave the cursor at the top line
<@R,C>	Move the cursor to row R and column C

Front Panel LED

The LED on the front of the Playback Controller Indicates the current Mode of Operation:

- **Slow Flash Green** Playback Control Mode – Offline
- **Fast Flash Green** Playback Control Mode – Online
- **Slow Flash Amber** Console Control Mode – Online
- **Fast Flash Red** Console Control Mode – Offline
- **Solid Red** Power Up or Error if not cleared
- **Pattern Flash Red** Error Code (contact R-ET service)

Setup Mode

To enter the Setup Mode, press the **F12 (lower right hand)** front panel button, on the Playback Controller, during the start-up count down.

Turn the Playback Controller off and back on, when display counts down from 3 to 1 press the **F12** Front Panel Button.

- **Press 1 to set:**
  Date
  Time
  Automatic Daylight Savings Time Adjust
  Time Zone (hours past GMT)
- **Press 2 to set:**
  I P Address
  Gateway Address
  DN Server Address
- **Press 3 to:**
  Copy show file to Floppy Disk
  Copy show file from Floppy Disk
  Delete show file
- **Press 7** to enable or disable the Watchdog Timer.
- **Press 8** to save the setting and restart the Playback Controller

SMPTE / MIDI

SMPTE Time Code on Cue Lists

Any Cue List can be marked to accept SMPTE Time Code. This is done using Cue List Properties Box on the SETUP | CUE LISTS menu. In addition the source of the SMPTE Time Code must be selected from the SMPTE Tab on the SETUP | OPTIONS menu .

- Any number of Cue Lists may have SMPTE Time Code.
- The Cue will **GO** when the recorded SMPTE Time Code is received.
- If the SMPTE source is rewound or advanced Horizon will run all the cues up to the current SMPTE Time in order to stay in sync.
- SMPTE Times can be manually added or edited for each cue or the SMPTE Learn Mode can be used to automatically assign or change SMPTE Times in each Cue.

SMPTE Learn Mode

SMPTE Learn Mode is used to synchronize a Cue List with a source of SMPTE Time Code.

1 Build a series of cues that will need to be synchronized with SMPTE Time Code.

2 Click on SMPTE Learn Mode on the Action/Events Menu. The check mark indicates SMPTE Learn Mode is active.

3 Be sure the Cue List is marked for SMPTE in the Cue List Properties and that a SMPTE source has been selected on the SETUP | OPTIONS menu .

4 Start the SMPTE source. Hit the **GO** button to execute the cue at the desired time. This will automatically record the SMPTE time with each Cue.

5 Run the SMPTE Time from the beginning and each Cue will execute at the recorded SMPTE time.

Changing the SMPTE Time

1 Run the SMPTE Time source.

2 To make a Cue happen before the recorded SMPTE Time: Press the **GO** button. The new SMPTE Time will be recorded.

3 To make a Cue happen after the recorded SMPTE Time: Press and hold the **GO** button, release the **GO** button at the desired SMPTE time.

Controlling Internal SMPTE

Two macro commands are available to control internal SMPTE Time Code. See SMPTE Macros for details.

Program Function Keys with these macros to control the internal SMPTE.

SMPTE Events

SMPTE Operation is only available with the Ethernet Node and the Playback Controller

To program a SMPTE Event:

1. From the Horizon Menu Select **ACTION/EVENT | SMPTE EVENT**
2. Click on the **NEW** button
3. Give the Event a Name or leave the default name
4. Click on **OK** to save
5. Click on the **Properties** Box
6. Set the SMPTE time
7. Click on **CHANGE** under Event Action
8. Select a **Cue Action** for this Event. See Assigning Actions for details.

See Also:

Connecting MIDI / SMPTE

MIDI Events

MIDI Operation is only available with the Ethernet Node and the Playback Controller
Horizon can respond to the following:

MIDI note on

MIDI note off

PolyKey Pressure

Control Change

Program Change

To setup for MIDI Event:

1. MIDI Events are setup as a special type of Function Bar.
2. Select **Setup | Function Bar** from the Horizon Menu.
3. Select **New** to add a Function Bar to represent a MIDI type and channel.
4. Click on the field in the **Type** column.
5. From the Pull Down associate this Function Bar select.
   MIDI note on
   MIDI note off
   PolyKey Pressure
   Control Change
   Program Change
6. Enter the number of **Buttons**.
7. Enter the **Channel** number.
8. Change the **Name** if desired.
9. Hit OK to close the dialog
10. Repeat steps 3 through 9 to add more Function Bars.

Programming MIDI Events

1. MIDI Events are programmed as if the MIDI change is pushing the appropriate Function Key. See Programming Function Keys for details.
2. The MIDI event can be tested using the Function Key.

See Also:

Connecting MIDI / SMPTE

MIDI Show Control

Horizon will respond to the following MIDI Show Control Commands.

Command: Go
Arguments: none
Notes: Does a Go command on all cue lists.
Example: `F0 7F 7F 02 01 01 F7`

Command: Go
Arguments: Cue Number
Notes: Does a Goto and Run command to the specified cue on all cue lists where the cue exists.
Example: Goto Cue 0 on all cue lists
`F0 7F 7F 02 01 01 30 F7`

Command: Go
Arguments: Cue Number, Cue List
Notes: Does a Goto and Run command to the specified cue on indicated cue list.
Example: Goto and Run Cue 3.4 on Cue List 12
`F0 7F 7F 02 01 01 33 2E 34 00 31 32 F7`

Command: Go
Arguments: Cue Number = 0.0 or omitted, Cue List
Notes: Does a Go command on indicated cue list.
Example: Go on Cue List 12
`F0 7F 7F 02 01 01 30 2E 30 00 31 32 F7`
`F0 7F 7F 02 01 01 00 31 32 F7`

Command: Stop
Arguments: none
Notes: Does a Global Pause in Horizon.
Example: `F0 7F 7F 02 01 02 F7`

Command: Stop
Arguments: Cue Number = 0.0 or omitted, Cue List
Notes: Stops the indicated cue list.
Example: Stop Cue List 12
`F0 7F 7F 02 01 02 30 2E 30 00 31 32 F7`
`F0 7F 7F 02 01 02 00 31 32 F7`

Command: Resume
Arguments: none
Notes: Does a Global Pause Off in Horizon.
Example: `F0 7F 7F 02 01 03 F7`

Command: Resume

Arguments: Cue Number = 0.0 or omitted, Cue List

Notes: Start specified cue list running.

Example: Start Cue List 12 running

```
F0 7F 7F 02 01 03 30 2E 30 00 31 32 F7
F0 7F 7F 02 01 03 00 31 32 F7
```

Command: Fire

Arguments: Macro Number (1 through 127)

Notes: Push specified function key on function bar Midi.

Example: Push function key 8 on Midi

```
F0 7F 7F 02 01 07 08 F7
```

Notes: The Cue List to use is found by first comparing the argument with cue lists in the current show to find a match. If no match is found, then the phrase Cue List is placed before the argument and a second comparison is made. If still no match is found, then no action is performed.

See Also:

Connecting MIDI / SMPTE

Outputting MIDI

MIDI Output Commands

Horizon98 supports a Macro Language that allows the experienced operator to customize the console. A set of macro is available to output most MIDI Commands, a selected list of MIDI Show Control and Raw MIDI data.

See Also:

- Macro Commands
- MIDI Macros
- MIDI Show Control Macros

Printing

Printing the Program

The **F**ile Command accesses the Print functions for the Program. Elements contained inside the program can be printed for review and archive purposes. Remember to use the Save As Command to label the Show prior to printing.

1. Select **File** on the Menu Bar to access the drop down menu.
2. Click **Print** to access the Print features.
3. Select the type of printer to be used.
4. Select what you want to print:

   Cue Lists and Cues

   Submasters

   Groups

   Patch by Channel

   Patch by Dimmer

   Moving Light Patch

   Parked Channels

   Parked Dimmer

5. Select **Preview** to review the items before printing.
6. Select **Print** to complete the process.
7. Select Range and Details.
8. Select OK to Print.

Tips and Tricks

Sneaking a Level

Sneaking a Level is a means of getting a channel(s) to move to a new level with as little notice as possible. The level to which the channel moves is set in the Level  display.

1 Click on the **Level** text box and enter a sneak level.
2 Select the channel(s) you want to sneak to a level
3 Right click the mouse.

The set Level drop down menu appears.

4 Select **Release/Sneak**.

A drop down menu appears.

5 Select **Sneak** to immediately set the selected channel to the sneak level
OR
Select **Sneak At** to access a pop up display in which you enter the time in which the channel goes to the Sneak level. Click **Okay.**

Channel Resolution

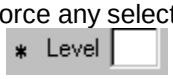
The pecking order for channel resolution, in order of precedence, is as follows.

- Parked Dimmer Levels
- Parked Channel Levels
- Independent Channel Levels (on the keypad, with red levels)
- Inhibitive Submaster Levels
- Additive Submaster Levels
- Cue List Levels (last takes precedence)

See Also

Park Dimmers
Park Channels
Selecting Channels
Submaster Types

Holding Shift while Selecting Channels

Holding the Shift Key while selecting a channel or series of channels will force any selected channels in the display with levels to accept the next level selection in the 

window.

Grand Master and Black Out Button

Creating a Grand master

You can use a Submaster in the Inhibitive Mode to create a virtual Grand Master for the Horizon.

1 Activate the **Submaster Display** 

2 Select the **number** of the Submaster that is to become the Grand Master.

For example, 1.

3 Set all channels to a level of full.

For example: **1 / 512 * Home** to select 1 through 512 at Full.

WARNING*: **We recommend you do this in the Submaster Display (or Blind) so that you don't actually turn every dimmer to 100% on Stage and risk tripping the Main Circuit Breaker.***

4 Click the **Record** button on the Tool Bar.

5 Click the **Inhibitive** submaster option button.

6 Click on the **Label** text box and enter a name.

For example, GM or Grand.

7 Click **Okay** (or use **Enter** on the keypad) to complete the record action.

To Use the Grand Master

Click the **View Submaster** button  on the tool bar at the beginning of every show and set Submaster 1 – the virtual Grand Master – to 100%.

To Create A Black out Button for the Grand Master

Once you have programmed a virtual Grand Master (GM), create a function key with a button down action of Bump Begin for a level of 0% for the GM submaster and a button up action of Bump End. This will act as a Black Out button for the Grand Master.

For example, set the F1 Function Button as the Grand Master Black out button

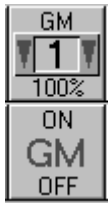
1. Select **Setup/Function Bar**.
2. Click on **Main** and then **F1.**
3. Click **Properties** to display the dialog box.
4. Enter **GM** in the Function Key Legend text box.
5. Click on **Change Color**, click the **red square** and then **Okay**.

   Note: *This step is optional.*

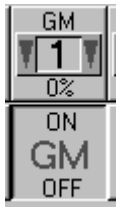
6. Type **On/Off** in the Function Key Name text box.
7. Click the **Toggle** check box on.
8. Click the Bump UP Action **Change** button.
9. Click on **Submaster**, then **Bump Begin**.
10. Enter **1** in the Submaster Text box and **0** in the Percent text box; click **Okay**.
11. Click the Bump DOWN Action **Change** button.
12. Click on **Submaster**, then **Bump End**.
13. Enter **1** in the Submaster Text box and click **Okay**.
14. Click **Okay** to exit the Properties and then **Okay** again to exit the Function dialog box.

To Use the Black Out Button

- Click the **View Submaster**  and **View Function Bar**  buttons at the start of every show.
- Set Submaster 1 – the virtual Grand Master – to 100% and make sure that the GM (F1) blackout button is latched ON.



- Click on the GM (F1) function button to activate a full stage blackout.



Assigning Profiles to Cues

Profiles can be assigned to cues, to affect the look of the fade.

1. Highlight the cue to which you want to assign a profile
2. Click the **Time** button  on the Tool Bar.
   OR
   Place mouse pointer on Cue list and right click.
   Select **Fade Time** from the dialog box.
3. Click the **arrow** next to the Profile drop down list box.
   

4. Select the Profile you want to use from the list.
5. Click **Okay** (or use **Enter** on the keypad) to complete the action.

Note: *All cues are assigned a default linear profile when they are recorded*.

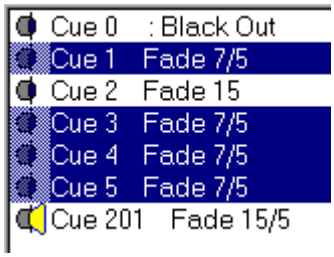
See Also

Dimmer Profiles

Multi-Cue Mode

Multi-Cue Mode offers a means to edit the attributes of more than one cue at a time.

1. Highlight a Cue on the Cue List.
2. Hold down **Ctrl** to select additional Cues and use the up or down arrows
   OR
   Hold down **Shift** to select a series of Cues and use the up or down arrows.
3. A single edit entry on the Tool Bar (such as fade time) affects every each cue selected.



Multi-Part Cues

Multi-Part Cues can be defined as a series of staggered cue actions that start from a single GO command.

Multi-Part Cues can be created by connecting the series of cue actions with the Follow option. By varying the Follow Time between the cues, the nested cues may start at any point after the start of the first cue.

See also

Follow Times

Using the Mouse as the GO Button

You can use the Mouse to operate as a GO Button to start and control the Faders. To convert the Mouse from a pointer, follow the steps below:

- Click the Mouse icon  in the lower right corner of the screen to convert the pointer to a GO Button, **or**, press the Esc key. The pointer will change to  .
- Right click the mouse to start a Fade.
- Right click the mouse again to start another fade.
- Click the left mouse button to stop the Fade.
- Click the left button to Step Back one cue on the Cue List.
- To restore the mouse pointer, click the  icon again **or** press the Esc key.

Effects and Chases

Horizon has several ways to build chases and effects.

- Build chases and effects as Cue Loops on separate Cue Lists. These effects can be called from anywhere in the show using actions or macros.
- Open the show Effect examples.hzn in the Program Files/Horizon98/Samples directory. This show contains several canned effects that can be imported into your show. All of these effects use Groups to define the channels that will be contained in the effect. Change these Groups to build your chase or effect.
- The power user can write Effects Macros to build effects and chases. It is important to study the examples in Effect examples.hzn to understand how to assign Submaster Faders to control the level and rate of the effect.

Building a Multi Cue List Console

Horizon allows the operator to build many types of consoles.

Open the Show File Six Playback Faders in the Horizon98/Shows/Samples directory.

This Show File sets up:

- Six Cue Lists
- A Scene Master for each Cue List
- A Go Button for each Cue List

The following Horizon features are used to set up this console:

- Highest Take Precedence Mode
- Multiple Cue List
- Function Key Macro's
- Special Function Key Macro's (Wing Panel)

Submasters 1 through 6 are Scene Masters for the six Cue Lists.

Function Keys 1 through 6 are GO buttons for the six Cue Lists.

The Wing Panel Bump Buttons 1 through 6 are also GO buttons for the six Cue Lists.

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