

# This is CS4 Help

CS4 Version 1.0

## Getting Started

To access the CS4 system you may use virtually any WiFi enabled device with an Internet Browser.

Use WiFi settings on your device to connect to the same network as the CS4. If you are not on the same network you cannot connect to the CS4 (unless the system administrator has set up that feature).

It is HIGHLY recommended that you use the Chrome browser for the CS4.

To connect to the CS4, open your browser and go to: **system IP address:3000**.

For example the default system address is 192.168.2.10 so you would type **192.168.2.10:3000** in the browser address bar. You should now be connected to the CS4 Home screen.

If an additional T4 Transmitter is setup as a router and connected to Zigbee Port 2, you will be able to monitor the entire system by seeing the same information as the R4 Receivers.

If connected to the internet, the CS4 can send an email every time the system is started.

## HOME Screen

The EVENT LOG shows all system events (input and output signals since you opened the page).

To display the log history, you may use retrieve the last **1000 Entries** or obtain the **Full Log** (25,000 entries)

The Event Log screen can be cleared using the **Clear** button.

If operating in a darkened room the **BkGnd** button will change the page to more subdued colors.

# Scrolling Screen

This is an observational screen only. It shows all system events on a vertical scrolling time line. Input events are on the left side while output events are on the right side. The time line starts when you open the page, therefore no previous time events will appear. This screen is useful for checking on system operation in real time.

# Info Screen

This screen will give you a quick overview of the CS4 status.

1. The time and date of the last 25 system restarts.
2. How long the system has been running since it was last restarted.
3. Total number of restarts.
3. Number of Cues in the cue file.
5. Number of entries in the log file. The maximum is 25,000. After 25,000 the oldest entry will be replaced with new data.

# Timing Screen

This is the screen used to time the show. Since it really will control the show it is password protected. The password is **qwerty**. After entering the correct password you will be shown the screen. If no password is entered or the password entry box is cancelled you will be taken back to the home screen.

If you are starting a timing for a NEW show, select the **Delete Current Cue File** button. You will be prompted to ensure you really want to delete the existing cue file. A backup of the existing cue file will be automatically created.

You may toggle the background if desired by using the **BkGnd** button.

## NOTE:

When timing, up to 3 timings may done at the same time on the same browser. Alternately, timings may be made from more than one client machine at the same time.

Additional timings may be made at any time. Existing timings will not be interrupted while the show is running and the new timing will be sent to users in real time.

To start timing please enter the correct Show Name in the text box of the timing you are performing (1, 2, or 3). This MUST be the same name as used when setting up the R4 receivers for the show. Select the type timing you are performing in the Output radio button selection (R4 Slides or R4 Audio). If the R4 receivers you are using have the Directory feature enable then enter the proper directory for this timing, otherwise it MUST be left blank!

Then just wait for the first incoming cue and press the **GO** button at the desired time to insert the outgoing cue. That's all that's needed for a timing. The CS4 automatically saves each cue as it is entered. When finished with the timing, just leave the timing screen.

# Settings Screen

The main use of the settings screen is to test the CS4 System and the R4 Receivers. Additionally it is used to set up the DMX channels (3) to monitor.

You may toggle the background if desired by using the **BkGnd** button.

## Functions:

### Midi Send

The radio buttons let you select one of four types of midi to send.

1. Light Cue will send the light cue number that is in the adjacent text box. You may enter any valid cue number.
2. Note On will send the note on command listed
3. Note Off will send the note off command listed
4. HEX will send the midi command represented by the hex string in the adjacent text box. You may enter any valid midi hex string. Note: do not use any spaces in the hex string.

Press the **Send Midi 1** or **Send Midi 2** to send it out via the desired channel.

An additional function is provided that will automatically send midi light cues. The Next Cue text box is the beginning cue number to send and the Delay is the time between cues in seconds. The automatic feature is initiated by pressing the **Send Midi 1 Auto** button. The button will turn red to let you know it is in automatic mode. To stop sending, press the button again. Automatic sending will only send via the Midi 1 port.

### Send To R4

This will send a cue to all of the R4 receivers connected. Enter the appropriate Show Name in the text box. Select to send either R4 Slides or R4 Audio with the radio button. If the R4 has the Directory mode enabled enter the appropriate directory, otherwise it must be left blank. Pressing the **Send Cue** button will immediately send the cue listed in the Next Cue text box. The **Send Cue Auto** button will send and increment the cues with a Delay as listed in the text box (in seconds). The **Send Cue Auto** button will turn red when in auto mode. To stop, press the button again.

### Date & Time

To read the date and time of the CS4 system press the **Get CS4 Time** button. Time will be returned to the Event Log at the top of the page. To update the CS4 time to your time press the **Update CS4 Time to My Time** button. Additionally you may change the time zone of the CS4 by using the drop down box.

## Relay Control

The 4 relays on the CS4 may be turned on or off using the appropriate button. They are clearly marked as to their function.

## CS4 Input Status

To read current input values press the desired button. Results will be returned to the Event Log at the top of the page. **ADC 1** and **ADC 2** (Analog to Digital Converters 1 and 2) as well as **Closure 1** and **Closure 2** (Contact Closures 1 and 2) are available with the appropriate button press. Pressing **DMX** will display the values of the 3 previously selected DMX channels.

## Serial Ports

This allows you to send a message (either ASCII or HEX) to any of the three serial ports.

First select either ASCII or HEX for your message. Then use the pull down to select the desired serial port. Select the desired BAUD rate with the pull down as well as the desired parity option. Enter your message in the Message text box, if using HEX enter as one string with no spaces.

To send the message press the **Send** button.

## DAC

Send out the desired voltage via the DAC or DAC 2 (Digital to Analog Converter 1 and 2). Enter the desired voltage in the appropriate text box. Note: the voltages are in Millivolts. (e.g. to output 1.5 Volts, enter 1500).

## SMPTE Output

This will turn the SMPTE output channel on or off. If the SMPTE output is connected to one of the SMPTE inputs, the incoming results will appear in the Event Log at the top of the page.

## DMX Channel Select

The CS4 will monitor up to 3 DMX channels for changes. To select which channels to monitor, just enter the channel number in the appropriate text box. If you need to monitor less than three channels, just leave the channels blank - not 0.

Once the selected channels are entered, just press the **Update DMX Channel Watch** button.

## Data Base Files

All databases on the CS4 are stored as 1 collection of files. When backing up and restoring files, all of the databases are copied or restored.

To use a USB memory stick, insert the USB device in the front panel USB connector, then select either the Copy **Data TO USB** or **Copy Data From USB** whichever function is appropriate. The Event Log will display the status of the operation

Database files may also be copied and stored internally in the CS4. There are 5 different locations so you may keep successive backups. Use the pull down and select the desired location, then either **Backup Data TO Internal** or **Restore Data From Internal** as needed.

## Editing Cue Files

Editing cue files will directly affect system operation. Use caution when editing files. The editor has many critical functions and requires a mouse to use all of the functions. In order to access the editing module open your browser and go to: **system IP address:3000/CS4Edit**.

For example the default system address is 192.168.2.10 so you would type **192.168.2.10:3000/CS4Edit**.

The status bar at the top of the screen will show 'CONNECTED'.

The top graph shows the entire show - all input cues and outputs for the entire length of the show. Only every 5th cue is labeled. Moving the mouse pointer will display the identity of the selected cue in the window that pops up in the upper left corner.

The bottom graph is a zoom window and will only display the data that is within the highlighted area of the top graph. To change the zoomed area location, place the mouse pointer in the highlighted area, press the left mouse button and drag to the desired location. Alternately left clicking on a non highlighted area will select that area or you may drag the **Place** slider to the desired location. One last method is to move the mouse pointer to the bottom graph and use the mouse wheel.

To change the zoom level (amount of zoom) move the mouse pointer to the top graph and use the mouse wheel to change the amount of zoom or drag the **Zoom** slider.

All editing is done from the zoom graph. To change the time of an outgoing cue highlight the cue with the mouse pointer then LEFT click and drag the cue to the desired position. The upper left window will indicate the amount of time the cue is moved. If you need to undo a move just press the **Undo Last Edit** button. If you would like to start over with all editing just press the **Load Cue File** button and the original cue file will be reloaded. Incoming cues (cues in the bottom half of the graph) cannot be moved for obvious reasons.

To REMOVE an incoming or outgoing cue select the cue with the mouse pointer and RIGHT click it, then follow the popup dialog that will appear at the top of the screen.

To add additional cues press the **Add Cues** button and additional selections will pop up at the bottom of the screen. To insert, select the parameters of the new cue then press the Insert button for that cue type. Move the mouse cursor (now crosshairs) to the desired location and press the LEFT mouse button. If the cursor is not showing crosshairs, the cue cannot be inserted - move to a proper location.

Once all of your edits is finished press the **Save Cue File** button and follow the prompts in the popup dialog box.

## System Overview

### Control Inputs

Quantity	Type
4	MIDI
1	RS-232 or RS-485
1	DMX
2	SMPTE
2	Contact Closure
2	Analog Input ( 0 - 5 Volt)

### Misc

4	Midi Thru
4	Midi input indicator LED's
2	SMPTE input indicator LED's
7	LED's for each power regulator
1	Main power switch
1	Main power fuse

## Control Outputs

1	MIDI
3	RS-232 or RS-485
1	Analog (0 - 5 Volt)
4	Relay Closure



# Testing Outputs

Quantity	Type
1	MIDI
1	SMPTE
1	Analog

# System Inputs & Outputs

Quantity	Type
2	Zigbee (probably RS-485)
1	Display module with switches
1	Connection to main controller (some type of high speed serial)

# Main Controller Inputs & Outputs

Quantity	Type
1	Connection to I/O board
2	USB for flash drive
1	SD card interface