# A Guide to using CSC for Click Track Playback controlled by the MD as part of a show

## **Prerequisites**

For this guide, we will be assuming that the click tracks have been prepared as 3 stereo files:

- 1- The 'click' or metronome sound itself
- 2- A stereo mixdown of the vocal recording
- 3- A stereo mixdown of the additional band parts

The click track will contain the same sound on left and right sides of the stereo file, so we can assume this will only need one output channel. The other two files will contain stereo content so will require 2 output channels each.

We will also be assuming the system will be replaying stereo sound effects with an additional feed to sub bass speakers.

Therefore, our outputs will look as follows:

- 1- Sound Effects Left
- 2- Sound Effects Right
- 3- Sub Out
- 4- Metronome
- 5- Vocal Left
- 6- Vocal Right
- 7- Additional Band Left
- 8- Additional Band Right

As outputs are paired in CSC through the use of DirectSound, the output configuration will look a little like the following in the Audio Setup Window:

A	dd Bus (+) F	Remove Bus (-)	Clear Patch (X)		
ID	Bus Name	Out Name L	Out Name R	Output Device	
1	SFX	SFX L	SFX R	Primary Sound Driver	
2	Sub/Clk	SUB	CLK	Primary Sound Driver	
3	VOX	VOX L	VOX R	Primary Sound Driver	
4	BAND	BAND L	BAND R	Primary Sound Driver	

Note firstly how the buses are currently all targeted to the Primary Sound Driver. Change these to the outputs available on the soundcard. Note also the ability to name individual Left and Right outputs of a stereo pair separately.

Once this configuration is in place, many operators and designers tend to find it easier to name the WavPlayers with something specific to the show. This is done also in the audio setup window, under the "Player Setup" tab.

Player	ut Patch Player Setup   / Names Use Default Names	• Use Custom Names —	Clear Custom Names			
1	SFX1	9 WAV9	17 WAV17			
2	SFX2	10 WAV10	18 WAV18			
3	SFX3	11 WAV11	19 WAV19			
4	SFX4	12 WAV12	20 WAV20			
5	SFX5	13 WAV13	21 WAV21			
6	V0X	14 WAV14	22 WAV22			
7	BAND	15 WAV15	23 WAV23			
8	CLK	16 WAV16	24 WAV24			
Player Defaults Default Levet: -12dB  Default Fade Time (secs): 5 FreeSync (Faster Response)						

For this example, we name 5 of the players SFX1, SFX2, etc, giving us 5 players to replay sound effects, and then the following 3 for the click track. We don't have to follow this strict policy, but it makes things a lot easier when looking over the show later on – we can quickly see what each player is doing, and it makes things much quicker to organise files and replace them with new file if necessary. Click OK and all references to players will now use their unique names.

### Programming

Click Tracks can be thought of as any normal cue. The main difference is the way in which they are to be controlled.

For neatness, we probably want the click track cues at the bottom of the main cuelist, away from the operators main list. The causes less distractions for them and also removes the chance of the operator firing a click track by mistake.

In the example below, the show has 5 sound effects and 3 click tracks. Notice how the click track cues have been created at the end of the cuelist, after the "End of Show" cue.

We do not need to apply any special settings (MIDI triggers, etc) to the cues which will contain click track sound files as we will use the External Trigger Lists

🔗 CTR Electronics - CSC Show Control [C:\Program Files\CTR Electronics\CSC Show Control 3.0\newshow.csc3] - Registered to CTR Electronics						
File Cue View Audio MIDI Comms Tools Window Help						
📄 🤌 🚽 😳 🗹 🖌 😆 😌 🏦 🔞 👘 🐁 😐 🧤 🕸 🔛 🖬	🔹 🕨 🔕 💥 <sup>1</sup> 23 🛞					
Image: Contract Conternation Contract Contract Contract Contra	Image: State       Image: State         Image: State       Action:         Player: State       Image: State         Image: State       Action:         Player: State       Out Type: BUS         Image: State       Out Type: BUS					
Cue: 1.00, Page: 0 Trigger: Manual Next Cue: 1.00, Page: 0	6					

In order to load the click tracks to the first click track cue, we need to load the files into the appropriate WavPlayers, in the same way we do with standard sound effects. As we have assigned (and named) players 6, 7 and 8 to be the click track sources, we will start by adding the first click file to player 6.

## **Adding the Files**

Ensure the correct cue is selected – in this case we are adding to Click 1, so ensure cue 8.00 is selected in the main cuelist. Then, in the WavPlayer overview window click on the line for the VOX player. This will select it in the main WavPlayer window (or use the Up/Down Player select box in the WavPlayer window until it selects the VOX player). Then, open the directory containing the click track files and load in the wave file containing the metronome for the first click track.

Once loaded, select the correct output patch. There are 3 different routing types in CSC3 – Bus (which routes to a stereo output pair), Mono (which routes to an individual socket) and Multi (which allows routing to a combination of all outputs).

So for the stereo files, choose "Bus", and for the Mono outputs such as sub and click, choose "Mono" to avoid having to pan to the left or right.

Alter the level of the file if necessary, but it is probably wise to leave it at a default level (such as - 12dB) so all the further click tracks are added at the same level without having to remember what we set this one to.

Continue this method for the remaining 2 players containing the vocal track and the band track, ensuring to select the correct bus type and output patch: Cues can be checked by selecting them in the main cuelist and pressing F4.

Adding files to the remaining 2 Click track cues (9.00 and 10.00) is done in exactly the same way.

## **Remote Control**

Now that we have created a series of cues containing the click track audio which is routed to the right places, we need to create a method for the MD to fire these cues from the pit.

This can be done via MIDI, although the simplest method of achieving this is by using the gameport on the computer and a suitable *MD Split Cable*. CSC is capable of scanning button presses on a standard PC gameport and generating up to 8 different events from it. This utilizes the 4 fire buttons, and then splits the X and Y axis in half to generate a further 2 buttons from each axis.

MIDI Control General Remote Network						
✓ Enable Gameport Control	✓ Enable Extended Button Support					
Buttons 1-4	Extended Buttons 5-8					
Button 1: GO NEXT CUE	Button 5: GO TRIGLIST 1					
Button 2: STOP	Button 6: GO TRIGLIST 1					
Button 3: STANDBY -	Button 7: GO TRIGLIST 2					
Button 4: STANDBY +	Button 8: GO TRIGLIST 2					
Debounce Time (GO, SEND) ms: 200	To set, hold button 5 and press Calibrate:					
IF NO CONTROLLERS ARE CONNECTED TO THE GAMEPORT LEAVE THESE SETTINGS DISABLED TO PREVENT AUDIO STUTTER ON SOME SYSTEMS!!						
	Cancel OK					

A standard MD Split cable will split the 4 fire buttons to a local remote control box for the operator (giving GO, STOP, PREV, NEXT) which will appear in CSC as buttons 1-4, and buttons 6 and 8 are wired to female XLR connectors which can be connected to a GO-STOP button in the pit, via the analogue multicore.

We will use these 2 button inputs to control Trigger lists 1 and 2. The Settings -> Remote page in CSC should therefore be configured as above.

If any buttons appear latched or 'stuck on', it may be necessary to calibrate the threshold by clicking on the calibrate button. Uncheck and then recheck the Extended Button support tickbox and this should clear the latched buttons. See the manual for more info on calibration.

## **Trigger Lists**

As CSC is designed around a single cuelist, we need another method of creating a list of click tracks for the MD to fire. This is solved in CSC by the use of External Trigger Lists. These lists are simply pointers to cues in the main cuelist.

We now have to build up a list of events for the MD to fire, and we do this by entering details of the required cue to fire in the top section of the Trigger List window.

The first event we need to enter is Click 1. In the dropdown box labelled "Cue" find the entry titled "8.00 Click 1: First Song". If you wish to give this a unique name in the trigger list enter this now in the "Title" box, otherwise leave this as is. Leave "Cue Regions" unchecked and finally check the box marked "Data Only". This will ensure that only the data contained within the cue will be fired, without affecting the cuelist position. This means that any activity by the MD will remain transparent to the operator. Click "Insert Trigger" to add this data to the list.

🔶 External Trigger Lists 🛛 🗖 💌 💌				
Cue: 8.00 CLICK 1: First Song 💌 🔽 Data Only				
Title: CLICK 1: First Song				
🔲 Use Cue Regions 🔲 Auto-Advance failed entry				
Enabled: 0.00 💌 Disabled: 11.00 💌				
● ⓒ List 1 ● ◯ List 2 ● ◯ List 3 ● ◯ List 4				
Title Cue				
CLICK 1: First Song 8.00				
CLICK 2: Second Song 9.00				
CLICK 3: Third Song 10.00				
END				

Enter the remaining 2 Click track events in the same way. If you need to alter the data in any of the events, double click the event, make the changes, and then click the Green Tick. The list can now be tested by highlighting the first entry "CLICK 1" and pressing the Green GO button, just above the word List 4. The trigger list will move to the next entry and you should hear the audio for each click track in turn.

### **Stop Button**

Some MDs will also require a STOP button. This requires us to build a cue in the main cuelist which is capable of stopping the 'Click track' players. This is most easily done by creating a new cue (11.00) and selecting each of the Click Players – 6,7, and 8 and changing their action to "STOP":



Firing the cue will stop playback on each of the 3 players, irrespective of the content they are playing.

In order for the MD to take advantage of this new cue and be able to stop the click himself, we need to patch his second button to this cue. For this, we will use a second trigger list.

Select List 2 in the Trigger List window by clicking in the button labelled "List 2" just above the events list. This will now show a blank list. Add Cue 11.00 in the same manner as the previous cues and ensure Data Only is selected. Since we have already mapped remote button 8 to Trigger List 2, the MD should now able to fire cue 11.00, and therefore stop any playing click track.

The only problem with this is that he will only be able to fire it once, and then the list will reach the end. In order to combat this, we can add a "LOOP" command to the bottom of the trigger list. This simply forces the list back to the last Marker, or in this case as we have no markers, top of the list. The loop command can be found at the bottom of the "Cue" dropdown box – See picture below.

As there is only event in the Trigger List 2, it means that every time the MD pushes his button, it will always fire Cue 11.00, and therefore always stop any playing audio.

🜩 External Trigger Lists 🛛 🗖 💌					
Cue: [LOOP]					
Title: [LOOP]					
Use Cue Regions         Auto-Advance failed entry           Enabled:         0.00         Disabled:         11.00         Image: State					
● C List 1 ● C List 2 ● C List 3 ● C List 4					
STOP CLICK PLAYBACK 11.00					
[LOOP] [LOOP] END					

## **Resetting the List**

The MD list position can be altered at any time by simply clicking on the event required to go into Standby. A yellow dot next to the event will indicate it is in standby and next to fire on receipt of a button push.

Note also that if the MD fires a cue by mistake and pushes the Stop button, he won't be able to restart the same cue without operator intervention to reset the current list position. If he pushes the button again it will fire the next click track, and not the one he wants!

If this is a worry then events in the list can be locked to a certain point in the cuelist by using the Cue Regions boxes. This will set the event out of standby until the region is entered, and the event cannot be fired until this point. See the CSC manual for more information on how to do this.