# STRUCTURE & TRIGGERS

It is important to think about how events and media are triggered in each scene, and how we can move between scenes.

JUMP

The JUMP actor allows us to move to another scene on a trigger. We can also add a CROSSFADE to the transition.

- Create 3 scenes with different media.
- Add a JUMP actor to each.
- Set the jump property to +1 in scenes 1 & 2
- Set the jump property to -2 in scene 3
- Add a 5 second X-FADE to each
- click the triggers to move between the scenes

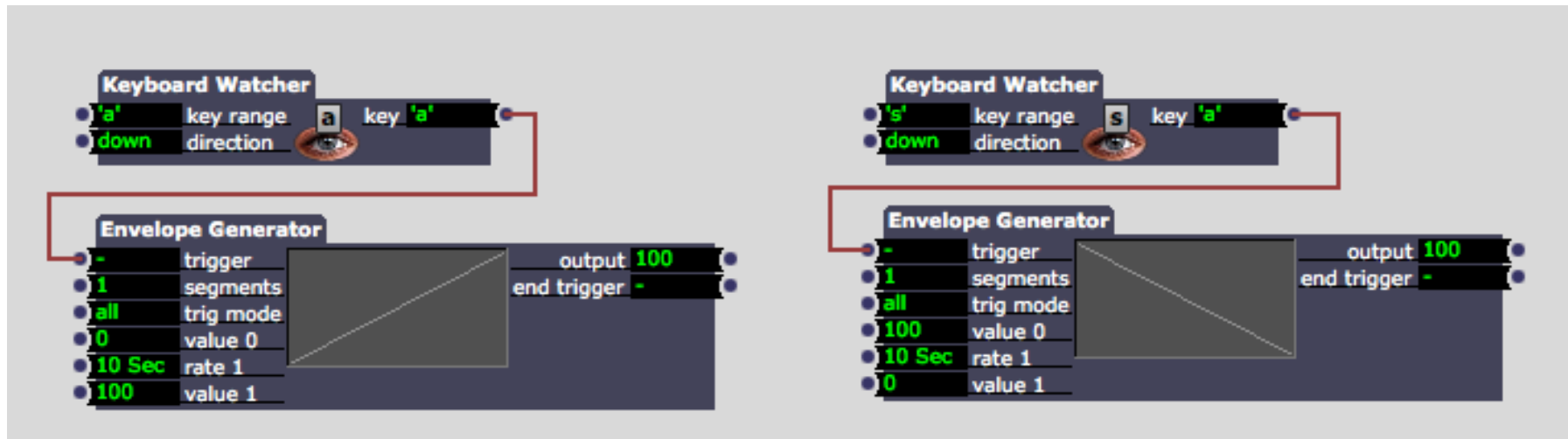Try adding a KEYBOARD WATCHER to each jump actor
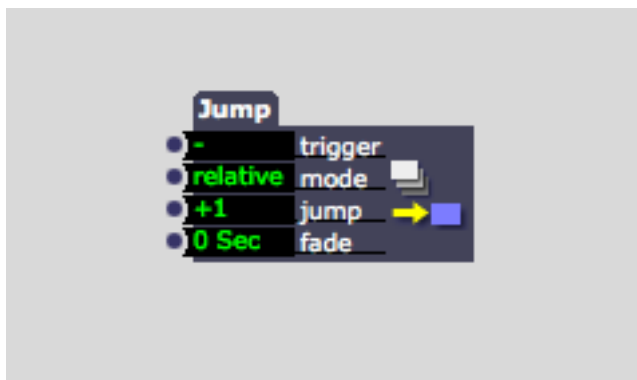
ENTER SCENE TRIGGER & TRIGGER DELAY

This sends a trigger output as soon as a scene is activated. This can be used to cue media or, used with TRIGGER DELAY actor, to automate the transition between scenes

- Add an ENTER SCENE TRIGGER to each scene
- Add a TRIGGER DELAY actor to each
- Set the TRIGGER DELAY to 20 secs
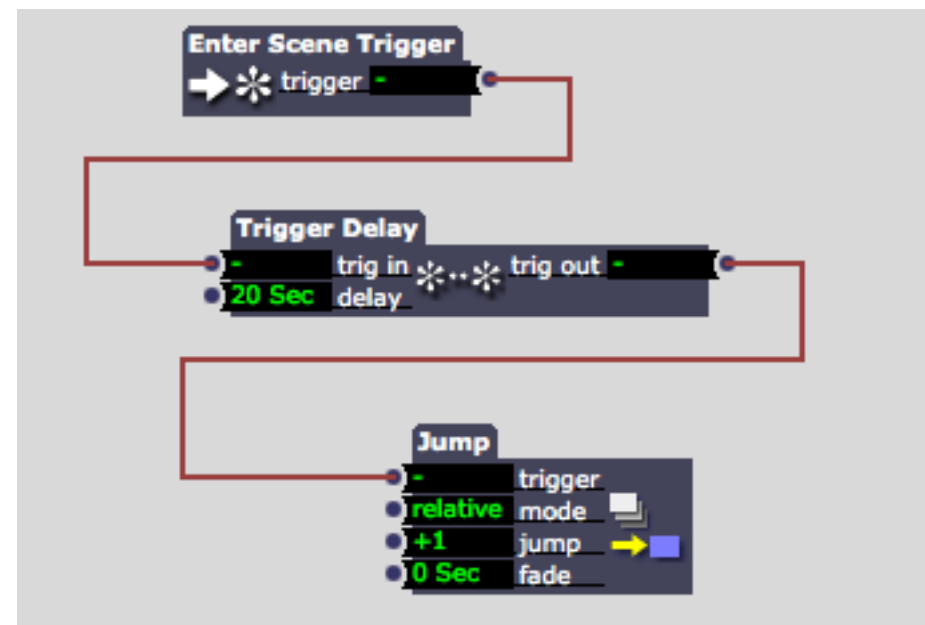
ENVELOPES

BASICS

ENVELOPE GENERATORS allow us to send a change in value over a set time, cued by a trigger. For instance, we can output a value to change from 0 - 100 over 10 seconds. This could be used to fade in a projector, or fade up a volume level.

- Add an ENVELOPE GENERATOR. Click the TRIGGER
- Change the RATE to 10 secs
- Add a Keyboard Watcher trigger
- Copy and paste the pair
- Invert the values on the second ENVELOPE (100 - 0)
- wire each output to the same value of a module (eg volume)

SEGMENTS

An ENVELOPE can contain a series of value changes, triggered sequentially.

- set the SEGMENTS to 3
- set your VALUEs and RATEs
- set the TRIG MODE to ONE/END

COUNTERS & COMPARATORS
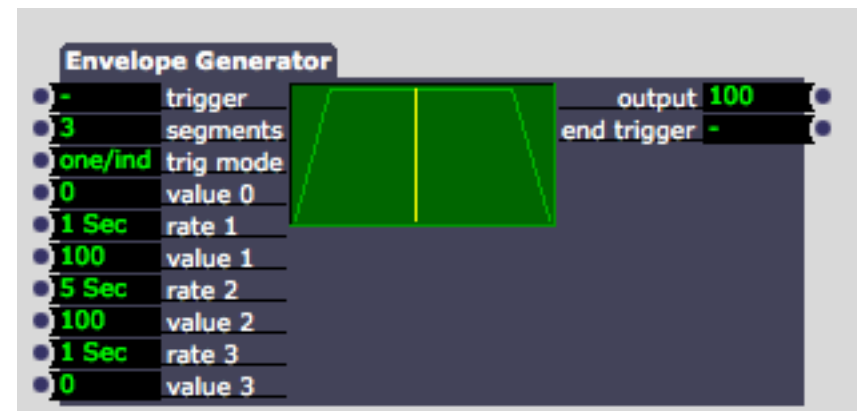
COMPARATOR - "IF...THEN"

A COMPARATOR allows you to track values and compare them to a specified value in order to trigger events

- Add the following: VIDEO IN > DIFFERENCE > CALC BRIGHT-NESS > COMPARATOR (value 1)
- set COMPARE to GE (Greater than or Equal to)
- set NOTIFY to ALWAYS
- Move quickly in order to trigger the TRUE output trigger

Try sending and comparing values from other actors - eg: Sound Level Watcher, EYES (Obj Ctr Hor), Movie Player (Postition)

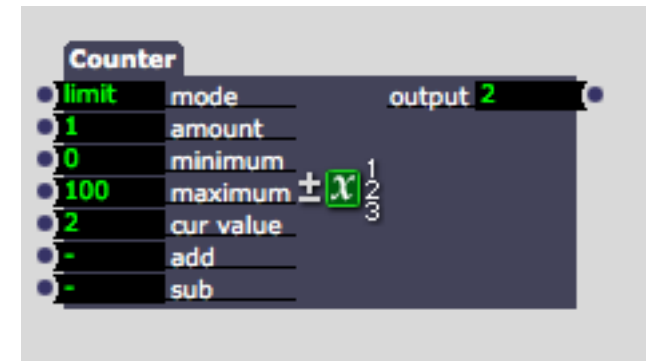Remember to CALIBRATE!
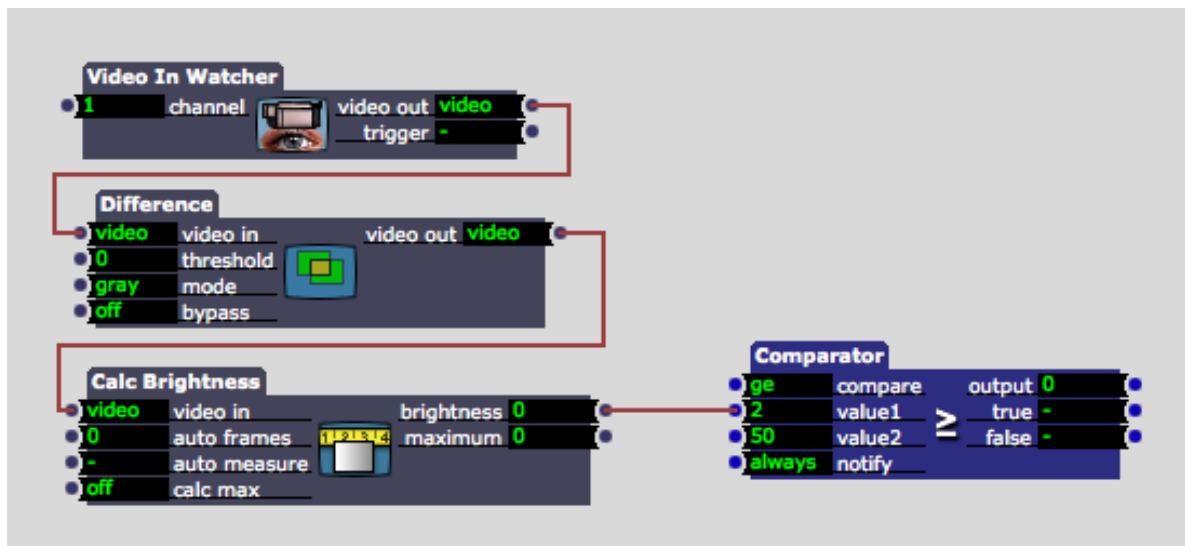
COUNTER

A COUNTER allows you to receive triggers and output numbers in sequence, either adding or subtracting at a set rate.

- wire the following: KEYBOARD WATCHER > COUNTER (add)
- Set Cur Value to 0
- Use the Keyboard to ADD

You could wire the output to a MOVIE PLAYER
or
Try adding COMPARATOR on the end to Look for a specific number

TASK 03 - 3 ACT PLAY

Create a 3-act installation that uses triggers to
jump through each scene in a looped installation.

SCENE 1 - Ready / detecting a user

MoviePlayer > FX > Projector
TRACKING SYSTEM (Position / Freeze) >
Comparator > Jump+1

SCENE 2 - Tracking / Reactive

PicturePlayer > Zoomer > Projector
TRACKING SYSTEM (ObjCtrHor / Ver) > Zoomer
ObjSize > Zoomer (H V Zoom (min 10 max 100))
ObjSize > Comparator > Jump

SCENE 3 - Reward / Effect

Movieplayer (fireworks)
EnterSceneTrig > TriggerDelay > Jump

- You must calibrate each scene carefully
- Remember to set any minimum and mixumum
  values