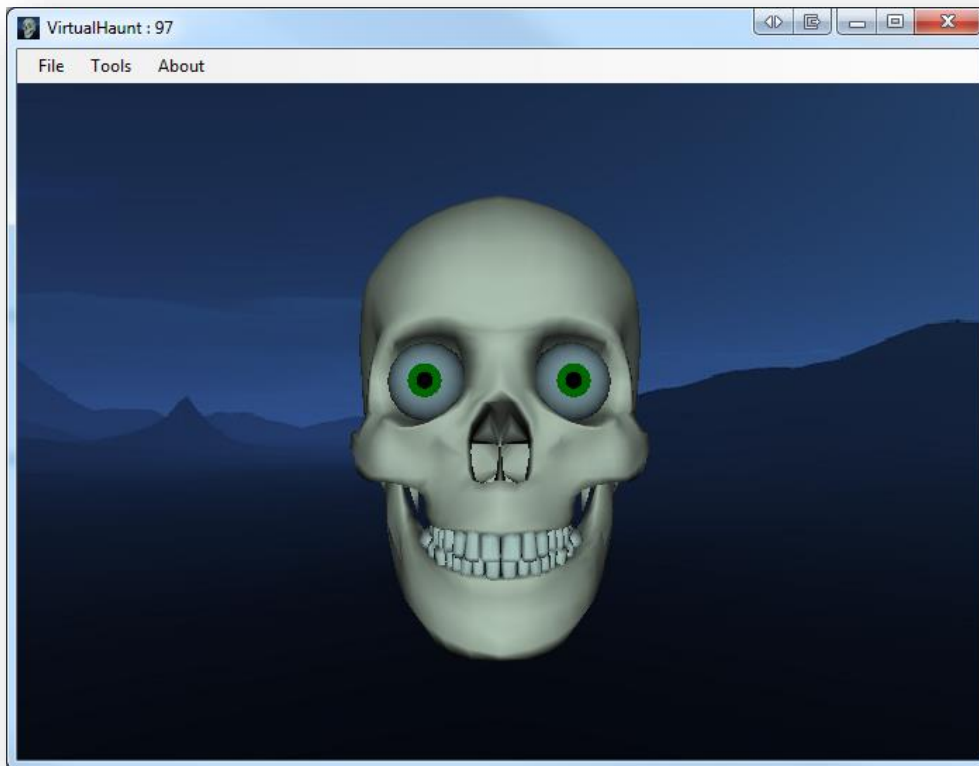


VirtualHaunt User Guide V1.2

By Nelson Bairos (MonkeyBasic)

Introduction

VirtualHaunt was developed to help haunters visualize their 3-axis skulls in virtualized 3D world. Allowing haunters to program their skeleton buddies all year long without having to pull out all of the Halloween supplies. (Which may or may not annoy many spouses, especially when setting up your Halloween buddies in the living room in July.) VirtualHaunt works by monitoring the data being sent to a serial port (or over USB to an Enttec compatible device) and emulating the servo controller that is typically connected, so almost all servo based communication programs will work..



Don't have a 3-Axis skull? You can use VirtualHaunt in its place... Set up a projector in your haunt or a TV/Monitor in a window. There are lots of possibilities.

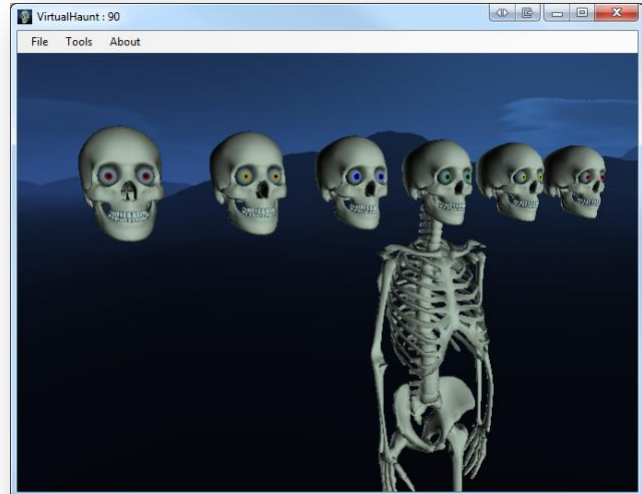
As with all my software, VirtualHaunt will forever be an evolving application. Users are always welcome to submit ideas to nelson@lifeape.com. Enjoy!

Table of Contents

Introduction	1
Features:	3
Requirements:	3
Settings (F3)	4
Port Setup.....	5
No Com ports, no problem	5
Servo Setup	6
Importing VSA defaults	6
Skeleton Setup.....	7
Background Setup	7
Servo Smoothing	7
Positioning (F4)	8
Full Screen Mode (F5).....	8

Features:

- Works along side almost any Serial/DMX based communication program for controlling servos. Such as:
 - Brookshire Software's VSA - http://brookshiresoftware.com/vsa_overview.htm
 - Settings can be imported directly from VSA for easier setup.
 - LifeApe's TrackSkull - <https://lifeape.com/product/monkeybasic-trackskull/>
 - And many more...
- Emulate the following Servo Controller types:
 - miniSSC (and compatible)
 - SSC32
 - SV203
 - Parallax
 - Pololu
 - DMX BoC/SoC (via an Enttec compatible devices)
 - DMX 8bit (via an Enttec compatible devices)
 - DMX 16bit (via an Enttec compatible devices)
 - Looking for something else?
[Contact us](#) and we will working to add it.
- Handles up to 128 servos.
- Up to 6 Skulls or Skeletons on screen at a time.
- Position Skulls (or Skeletons) independently.
- Position the Camera's View as well.
- Different backgrounds to choose from.
- Full-screen mode (great for when using during a Haunt).



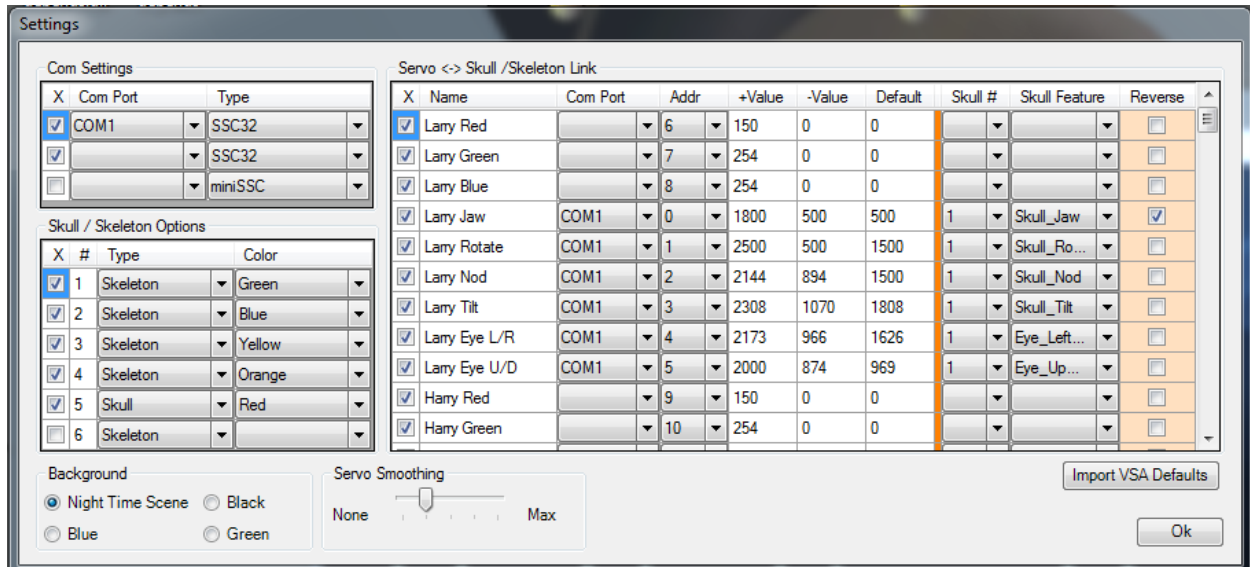
Requirements:

- PC Requirements:
 - Windows 10 (32 or 64-bit versions)
 - .NET Framework 4.6.1 or later
 - At least one serial or Enttec compatible device

Settings (F3)

Settings is where you setup which Com port(s) or Enttec compatible device you wish monitor, what servo channels to use, and how many skulls/skeletons to display.

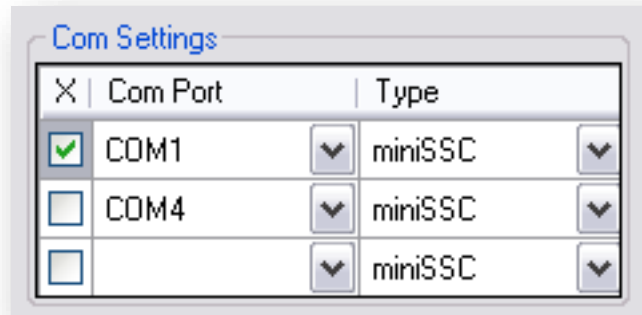
Settings can be accessed from File Menu by selecting Tools -> Settings or hitting [F3].



Port Setup

VirtualHaunt works by monitoring the data being sent to a Com Port or Enttec compatible device and emulating the servo controller that is typically connected. You can select up to 3 ports from within Settings.

Choose the port number (or Enttec_Open or Enttec_Pro) and type of controller you wish to emulate. The checkbox on each row enables it.



Note 1: "Enttec_Open" and "Enttec_Pro" ports must use the Type of "DMX" and Com Ports can NOT use "DMX"

Note 2: Enttec_Open or Enttec_Pro can only be assigned to the first row.

No Com ports, no problem...

You can download "Free Virtual Serial Ports" from HHD Software
LINK: <https://freevirtualserialports.com/>

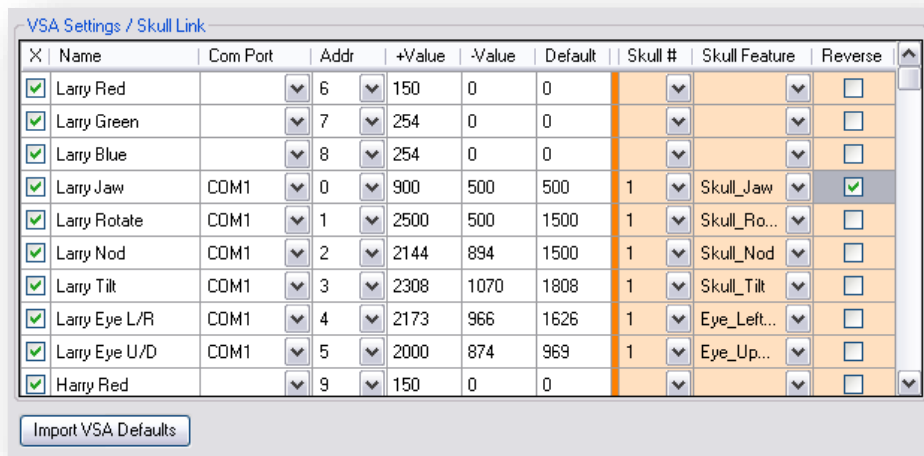
Note: Setup a "Bridge" connection and use one of the Com Ports that have been created.

Servo Setup

This is where you tell VirtualHaunt which Port and Servo Channels should be linked to which feature (Nod, Tilt, Rotate, Eyes, etc...) of each skull/skeleton.

The 1st seven columns are set up the same as VSA. If you know VSA, you should have no trouble here. If not, simply select the Port, Servo Address, and 3 servo positions (Default, Greatest Value, and Smallest Value). Columns 8 thru 10 are explained below:

Skull #	The Skull you will be controlling (1 thru 6)
Skull Feature	The feature you want control (Nod, Tilt, Rotate, Eyes, Jaw, Arms)
Reverse	Reverses the direction of motion



VSA Settings / Skull Link

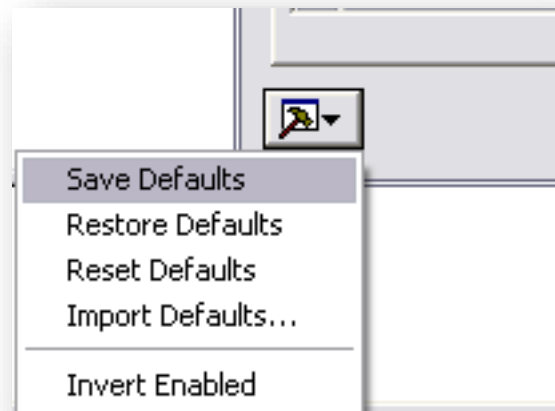
X	Name	Com Port	Addr	+Value	-Value	Default	Skull #	Skull Feature	Reverse
<input checked="" type="checkbox"/>	Larry Red		6	150	0	0			<input type="checkbox"/>
<input checked="" type="checkbox"/>	Larry Green		7	254	0	0			<input type="checkbox"/>
<input checked="" type="checkbox"/>	Larry Blue		8	254	0	0			<input type="checkbox"/>
<input checked="" type="checkbox"/>	Larry Jaw	COM1	0	900	500	500	1	Skull_Jaw	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Larry Rotate	COM1	1	2500	500	1500	1	Skull_Ro...	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Larry Nod	COM1	2	2144	894	1500	1	Skull_Nod	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Larry Tilt	COM1	3	2308	1070	1808	1	Skull_Tilt	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Larry Eye L/R	COM1	4	2173	966	1626	1	Eye_Left...	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Larry Eye U/D	COM1	5	2000	874	969	1	Eye_Up...	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Harry Red		9	150	0	0			<input type="checkbox"/>

Import VSA Defaults

Importing VSA defaults

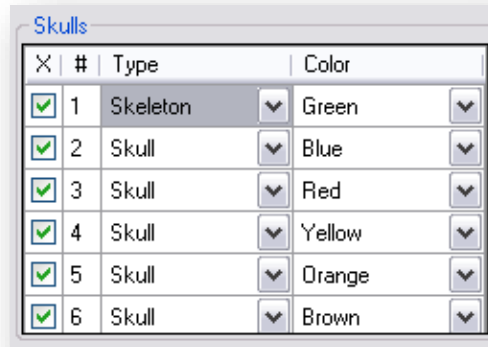
Any easy way to duplicate your VSA settings is to import them directly from VSA. To do this, you will need to make sure that you have your VSA Default settings saved. This is not the same as having them saved to a VSA routine file.

HOW TO: Open your saved VSA routine in VSA and open Settings by hitting F3. In the bottom left-hand corner, is a hammer icon. Select "Save Defaults" and close VSA. In VirtualHaunt's Settings, simply click the "Import VSA Defaults" and after a short delay, you should see your VSA settings loaded.



Skeleton Setup

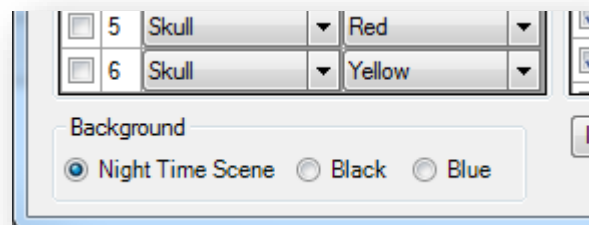
This one is simple. Enable from 1 to 6 skeletons, select whether you want to see just the skull or a full skeleton, and choose an eye color. Eye color helps to differentiate the skulls on the screen.



Background Setup

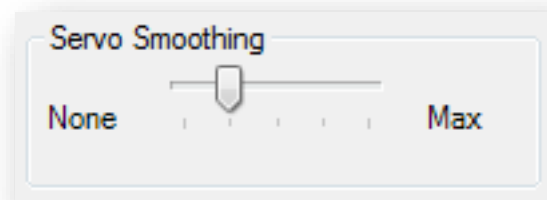
Change the background.

Night Time Scene	Default night time mountain range
Black	Great for use with Full Screen Mode (F5)
Blue	It's blue...
Green	It's green... (not shown below)



Servo Smoothing

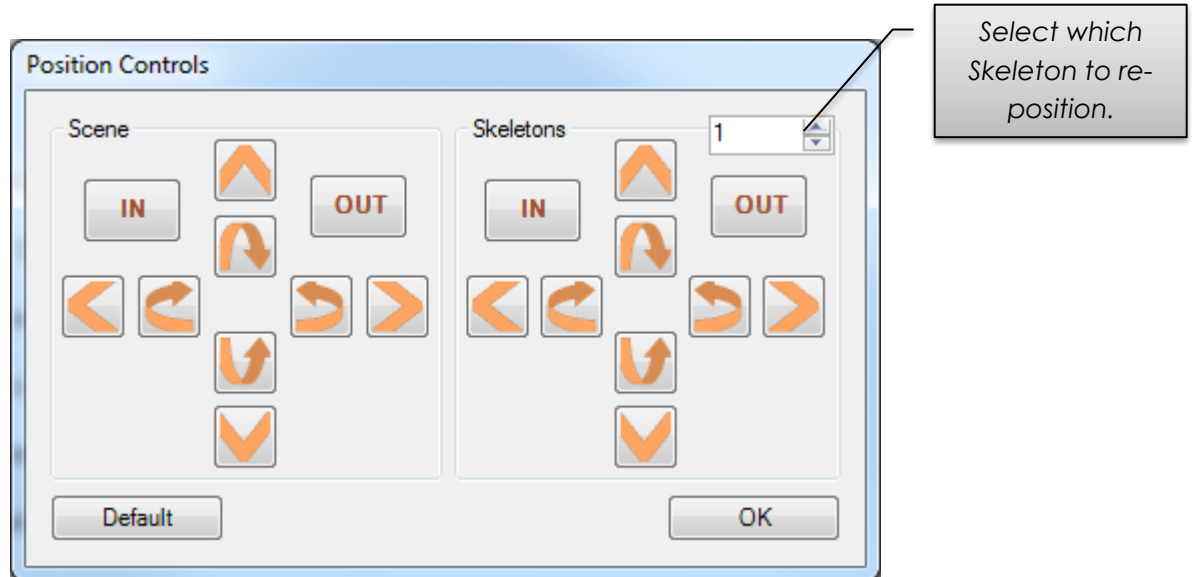
Applies a smoothing algorithm to each virtual servo in attempt to reproduce real servo movements.



Positioning (F4)

These controls allow you to reposition the viewpoint of the scene (what you are looking at) and the position of each skeleton. Play around with the controls; I believe they are pretty much self-explanatory.

Positioning can be accessed from File Menu by selecting Tools -> Adjust Positioning or hitting [F4].



The [Default] button will restore the position of each Skull/Skeleton as well as the viewpoint.

Full Screen Mode (F5)

Use the F5 key to toggle between Windowed and Full Screen mode. VirtualHaunt will expand to encompass whichever monitor it is located on. When in Full Screen mode, you can also hit "ESC" to return to a Windowed mode.