



ADVANCED SETTINGS AND CONFIGURATIONS

Phoenix commands for scripting and Bluetooth control

Underneath it all, the Phoenix Hoop is command line driven, so all functions can be accessed via simple commands that can be issued from scripts, Bluetooth, and customized button mappings. This makes for an extremely flexible platform for scripting and customized configuration.

NOTE We are currently working on an EASY scripting program where the user will drag and drop patterns onto a timeline and it will generate the code for you. Then you can simply save it to your device and be on your way!

cd	Change directory ex. "cd favorites" would move to a folder named favorites
btconfig	Reconfigures bluetooth. ex "btconfig phoenix 1234" would set the name to phoenix and the pin to 1234
bootloader	Sets the hoop to bootloader mode for updates. *Do not use unless you are going to update the hoop. It will stay in bootloader mode until updated*
decrease <param>	Decreases a numeric parameter. Possible parameters BRIGHTNESS CHANGE_DELAY SPEED CHASE
increase <param>	Increases a numeric parameter. Possible parameters BRIGHTNESS CHANGE_DELAY SPEED CHASE
download	Download a file from the hoop. *BUGGY

<filename>	
upload <filename> [DE,AD,BE,EF]	Upload a file to the hoop. *BUGGY
favorite <pattern>	Copies <pattern> to a folder named 'favorites'. If <pattern> is unspecified, it uses the current pattern. *BUGGY
get <param>	Gets value of specified parameters. Valid parameters (PATTERN_LIST, FOLDER_LIST, VARS, HOOP_INFO, ACCELEROMETER)
save_config	Writes current settings to settings.cfg
load_config	Loads settings.cfg
next_folder	Move to next folder
next_pattern	Move to next pattern
prev_folder	Move to previous folder
prev_pattern	Move to previous pattern
save_and_sleep	Saves the current settings and puts the hoop into sleep mode
restart_script	Wakes the hoop and starts the selected script.
play <pattern.bmp> <fps>	Plays specified pattern. If FPS is provided: -When in script mode, this indicates the number of times the pattern should play before the next script command -When in normal hoop mode this specifies the desired Frames Per Second to play the pattern.
streampattern	Sets the hoop to receive a stream of data as a pattern via bluetooth.. not really tested or used. But could be used to feed patterns to the hoop wirelessly
toggle <param>	Toggles a parameter. Valid params: POWER - Puts the hoop to sleep/wakes the hoop up AUTOPLAY - Turns AUTOPLAY on/off
map <BUTTON> "command"	Maps a button to a particular command. command must be <= 40 chars in length Valid Buttons: IR_POWER

	<p>IR_CH_UP IR_CH_DOWN IR_VOL_UP IR_VOL_DOWN IR_MUTE IR_AVTV</p>
<p>set <param> <value></p>	<p>Used to set values of parameters. Valid parameters are as follows:</p> <p>BRIGHTNESS [0-255] - Sets BRIGHTNESS. NUM_LEDS [0-112] - Sets the number of LEDs in device. Best performance when matched to the physical number of LEDs of the device. BAUD [9600,57600,etc] - Sets BAUD rate for communication with Bluetooth/Serial CHASE [0-255] - Sets CHASE value. Pattern will shift x number of pixels with each update. AUTOPLAY [0,1] - Enables/Disables AUTOPLAY (Automatic pattern changes) SCRIPT_NAME "script.txt" - Changes the active script to "script.txt" ENABLE_ACCELEROMETER [0,1] - Enables accelerometer if device is equipped with it STREAM_ACCELEROMETER [0,1] - Streams accelerometer data over bluetooth if device is equipped with it GYRO_POI_COMPENSATION [0,1] - Enables/Disables SpeedSense (Speed compensation) MENU [0,1] - Unfinished feature. Probably will be removed SHUFFLE [0,1] - Replaced by AUTOPLAY ENABLE_JOYSTICK [0,1] - Enables or Disables the joystick if device is equipped with it SPEED [0-???) - Sets FPS MAX_FPS [0-???) - Sets FPS (Same as SPEED) SORT_MODE [ALPHA,FAST,RANDOM] - Sets sorting mode when navigating patterns. ALPHA - Alphabetical FAST - Logical order on disk. (Fastest pattern changes) RANDOM - Chooses next pattern randomly AUTOPLAY_DELAY [0-???) - Sets delay between pattern changes when in AUTOPLAY mode IMG_VERTICAL_ORIENTATION [LEFT_TO_RIGHT, RIGHT_TO_LEFT] - Flips patterns horizontally (Yes, these seem backwards but there is a reason behind it) IMG_HORIZONTAL_ORIENTATION [TOP_TO_BOTTOM, BOTTOM_TO_TOP] - Flips Patterns vertically AUTO_ORIENT [0,1] - Auto orients the pattern if the hoop decides it's right-side up or upside down based on accelerometer</p>

	<p>data</p> <p>QUICK_PATTERN - ?? Don't remember. some unfinished feature.</p> <p>NAME [hoop name] - Set the name of the hoop</p> <p>HW_VER [###] - Set the version of the hoop hardware</p> <p>SW_VER [###] - Set the version of the hoop software</p> <p>DATAMODE [COMMAND, STREAMING, FILE, MIDI] - COMMAND (DEFAULT)</p> <p>STREAMING is for streaming patterns to the hoop</p> <p>FILE is for sending files to the hoop</p> <p>MIDI is for streaming a MIDI signal to the hoop to control it via MIDI over bluetooth</p>

Choreographed Performances

The Phoenix, like all other SpinFX props can be scripted to create complex choreographed performances. All commands known to the operating system can be used in a script. The format is a simple timecode followed by the command to run at that time. Example Format HH:MM:SS.mmm [COMMAND] where HH is Hours, MM is Minutes, SS is seconds, and mmm is milliseconds.

Example script

```

00:00:00.000 play white_strobe.bmp
00:00:01.000 set BRIGHTNESS 20
00:00:02.000 set BRIGHTNESS 40
00:00:03.000 set BRIGHTNESS 60
00:00:04.000 set BRIGHTNESS 80
00:00:05.000 set BRIGHTNESS 100
00:00:06.000 set BRIGHTNESS 120
00:00:07.000 set BRIGHTNESS 140
00:00:08.000 set BRIGHTNESS 160
00:00:09.000 set BRIGHTNESS 180
00:00:10.000 set BRIGHTNESS 200
00:00:20.000 play iso_rainbow.bmp
00:00:30.000 play butterfly.bmp
00:01:10.500 play egypt.bmp
00:01:30.000 set BRIGHTNESS 255
00:01:30.000 play white_strobe.bmp
00:01:40.000 play celtic_spiral.bmp
00:01:40.000 set AUTOPLAY

```