



psihoops

an instrument
of whirled peace

www.psihoops.com

GETTING STARTED with the Interactive PSIKOHOOP

**PLEASE READ THE FIRST TEN PAGES
BEFORE PLAYING WITH YOUR HOOP**

**Some of this is not intuitive, and if you don't take care
you could have a difficult time and possibly damage your hoop.**

PSI is pronounced "sigh" the "P" is psilent

The word **PSI** is an acronym of **P**sychedelic **S**ensually **I**nteractive
PSI = psychic abilities...."Saiko" means "best" or "awesome" in Japanese.

This hoop is psycho! So... psi-ko-hoop.

Note: There are separate larger Tutorials for the psikohoop, on the website, covering most functions in much greater detail, with lots of examples, videos and exercises. The full tutorial set is intended as a reference and guide for exploring the deep potential of this new interactive instrument.



This “Getting Started” is to show you an easy way in, and give you enough info to have lots of fun with your explorations.

You should then be able to play for hours and hours with the hoop, to discover many things, and to inform your hoop-dance and performance. Following that it might be necessary to read a bit more, look at some more pics and videos, and progress to the “Intermediate” tutorial which will then be enough to fuel hundreds of hours of interactive play and exploration with the psi-ko-hoop. Use the cheat-sheets!

Remember that although you can create amazing patterns and thousands of different hoops, and vary parameters endlessly – the real game is to dance, play, perform and communicate to others with this new instrument; to learn to use this hoop as an instrument of expression and feeling.

This document is also expanded on the web site, under “Tutorials/Getting started...” and the pictures may be easier to see online (here they are in black and white and low resolution).

The video that goes with the starting tutorial :

https://www.youtube.com/watch?v=PvWLXX-Xk_4#t=26

Also see :

<http://youtu.be/UmjbaATfBYA>

And the first part of this video:

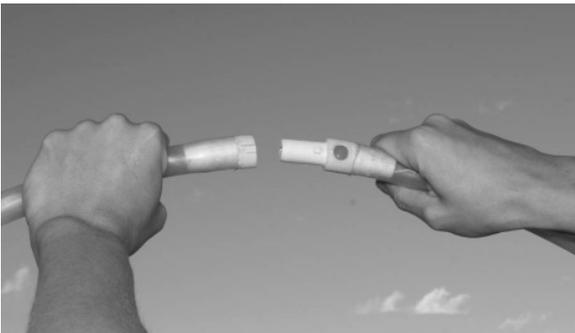
<http://youtu.be/-q7fRE4vnF0>

A mirror makes all this so much easier, as does learning in company.



CONNECTING AND DISCONNECTING THE HOOP

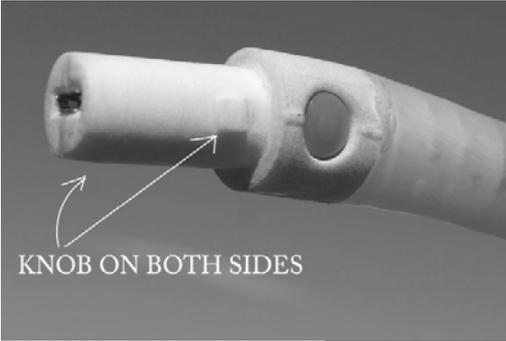
The hoop will arrive curled up and not joined at the connector. Cut the tape that is holding the hoop curled and let it uncurl naturally. There is a wider piece of tubing taped over the switch area – this is to prevent the hoop from turning on during shipping, and give extra protection to the switch and USB. Keep this small piece of tubing for when you ship or travel with the hoop. **Remove this piece of tubing before hooping.**



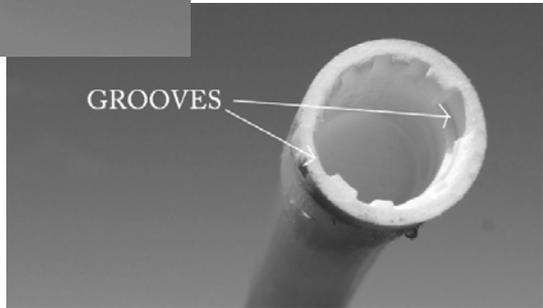
Now you will need to learn how to securely connect your psikohoop.

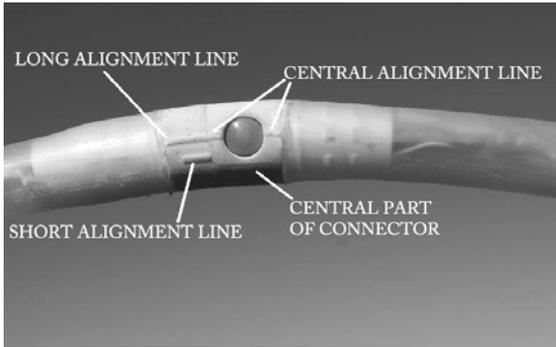
NO forcing it!

There are two tongues/knobs on the thinner connector part and these fit into two grooves on the other end of the tubing.



Look at, and into, the two ends of the hoop and check that out.

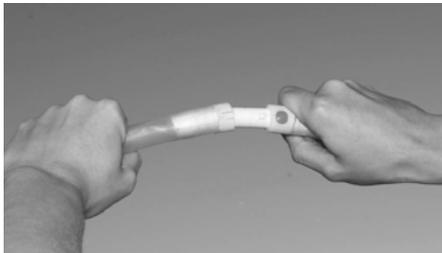
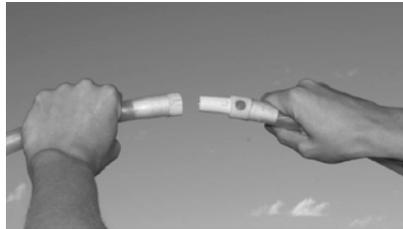




There is a thin raised line at the end of the tubing side and also in the middle part of the connector, and these lines need to align when the hoop is fully connected.

There is another shorter line which marks the place where the tongue/knob needs to be orientated so that it inserts smoothly into the groove.

TO CONNECT: Have the switch pointing towards you. The easiest way to learn this move is to do it sitting down, with the bottom of the hoop in your lap or thighs. You may need to press downwards slightly on the connector area to make connection and disconnection easier. Hold the switch end of the hoop tubing in the right hand, and the other end of the hoop tubing in the left hand.



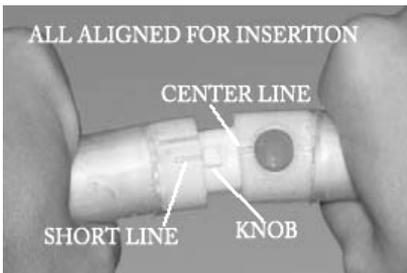
Slide the two hands together till the knob on the connector is right between and next to the two alignment lines on the left side.

Take a close look at the connector now. It isn't fully connected but it will show you how it should be aligned when properly connected.



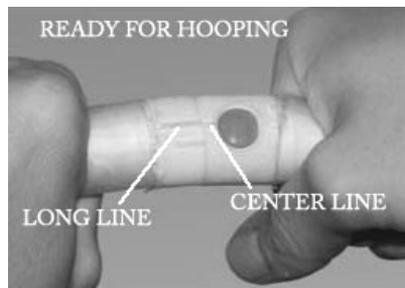
By looking at the inner edge of the left hand socket piece you should be able to see how much you will need to twist the tubing in order to insert the connector pieces together. The tongue or knob on the right hand side needs to slide into the groove in the left hand piece. The amount you need to twist the tubing is shown by the two raised lines on the left hand socket piece – it's the distance between those lines, around 1/8 inch. This is especially good to know when you try to disconnect the hoop so give it a good look-see while its still disconnected.

Twist the hoop tubing about a 1/8 inch to line up the tongue in one hand with the grooves in the other, and then slide the two together. The shorter line will show you the exact amount of twist needed. Twist the top of the right hand towards you and the top of the left hand away from you.

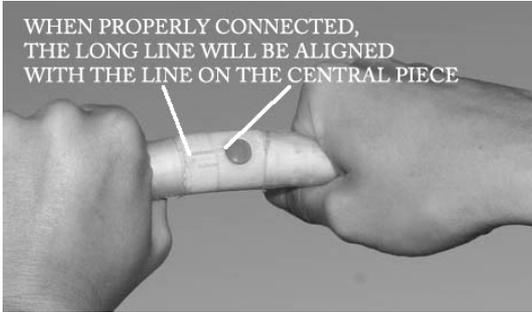


Once the shorter line on the left side of the tubing is aligned with the line on the switch part of the connector, slide the two ends fully together, then let go.

When you let go of the tubing it will untwist and hold the hoop together. If necessary, you can help it to untwist by manually turning it so its aligned. There should be no force necessary to connect the hoop, provided you have the tubing held and aligned correctly. It may require a firm hold and pressure, and a child may not be able to do this easily. Adult supervision/help may be necessary.



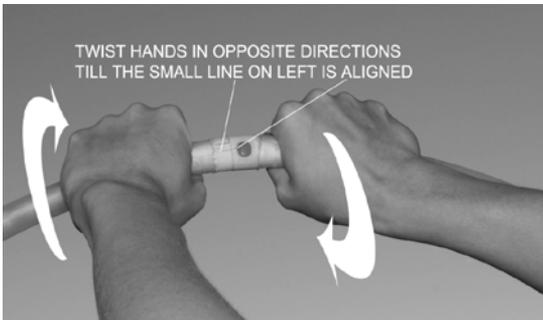
TO DISCONNECT: To disconnect you need to reverse the procedure.



To learn this, sit in a chair with the hoop on your lap, the switch at the top and facing you. Look at the connector. With the hoop connected, the little raised line next to the switch should be

aligned with the long line on the left side of the connector.

Hold the hands as shown in the picture. (same position as connecting the hoop). The fingers are hooked over the tubing, right next to the end of the hoop tubing on each side of the connector.



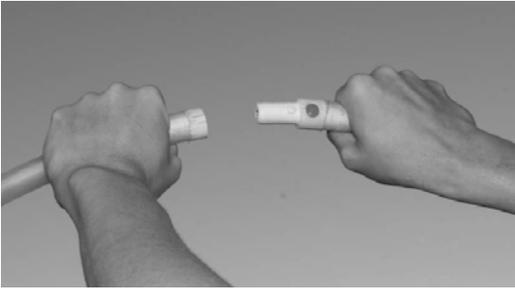
The thumbs are touching or near each other. The thumbs could actually be closer to each other than is shown, and touching.

The top of the right hand rotates towards you and the top of the left hand rotates away until the shorter line next to the switch is exactly opposite the longer line on the middle of the connector, and then pull apart gently but firmly.

Refer back to the pictures above of the knobs and grooves – you want to make sure you have twisted the tube enough so that the knobs are in the grooves and then you can actually pull the two ends of the tube apart. Otherwise pulling will just result in strain to your hands and damage to the connector.

If it feels really sticky or very difficult, after rotating the tube so that its ready to disconnect, make sure its rotated enough, and slightly vary the angle of your pull. If you are positioned correctly with your hands close enough, and maintain a firm grip on the tubing in each hand, then you can press the left thumb tip against the right one and so get more leverage to push the two sides of the hoop tube apart.

Pressing down on the top of the hoop tubing at the same time may also make it easier to disconnect, as it releases the outward/upward pressure inside the connector. You are looking to flatten out the natural curve of the hoop till the area on both sides of the connector is more like a straight line than a curve.



Learn which way you need to twist the hoop to connect it and disconnect it. Do this move holding the hoop in the same way each time and it will soon become second nature.

After a while you will be able to connect and disconnect the hoop with the button facing you or away, or in any orientation, without even looking at the hoop, but please practice the suggested way above for a while so you don't hurt your hands or the hoop by trying to twist the wrong way or too far.... or not having things aligned before pulling or pushing. At first this move may seem to require a lot of strength and concentration, but after doing it a few times you should find it easy.

If the hoop is impossibly difficult to connect or disconnect and you have been over these descriptions and the videos and had a strong handed person try it, then please contact us at merlin@psihoops.com to work out a solution.

TURNING THE HOOP ON AND OFF



A short push on the button switch will turn the hoop on. The push may need to be quite firm but don't force anything. The hoop will go through a couple quick confirmation patterns (which will be explained later) and then into a display.

To turn the hoop off requires a longer push (so that there is less possibility of turning the hoop off accidentally). The "OFF" function has various steps. To fully turn the hoop off requires a lengthy hold on the button, around 2 to 3 seconds, which can seem like a long time. (Slowly count 1001, 1002, 1003). While you are holding the button switch down the display will change several times and then finally go dark. At this point release the button switch. After a second, the hoop will flash white and then stay dark and will be in power save OFF mode. The hoop can stay like that for weeks without any appreciable loss of charge, but will start right up at the touch of the button. For shipping and transport it is a good idea to cover the switch area with a bit of tubing or something similar so the hoop doesn't accidentally turn on.

By holding down the switch for a shorter time you access the "Change orientation" function which will be explained later on. Also you will see the green display that indicates by the number of LEDs lit how much charge remains in the hoop.

If you are in the middle of hooping and you see this kind of green display, (a steady set of green LEDs going partway or all the way around the hoop) it means you are pushing down the button-switch, so immediately release/change your grip on the hoop before the hoop shuts off. Learn to hold the hoop on one side or the other of the switch and avoid pushing down on the switch itself while you are hooping. You will soon become sensitive to where the switch is, and the green display will help you to keep the hoop from turning off unexpectedly.



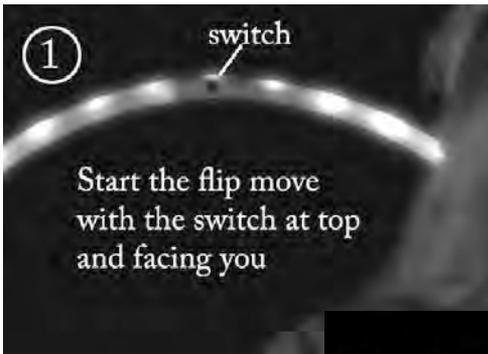
If the hoop is without any movement for several seconds, it gradually dims down a bit to save power. Any movement will then wake it up.

SIMPLE OPERATING INSTRUCTIONS

Best to watch the introductory videos on the web site and to read the full document “getting started with the interactive psi-ko-hoop”.

****Turn the hoop ON with the switch at the top and facing you.**
Wait a second for it to go through various confirmation signals..... **Start hooping!**

****To go from one display to the next, you need to slowly and smoothly flip the hoop.**



Start the flip with the switch facing you and at the top of the hoop.

Hold the hoop in both hands- left and right side of the hoop - and rotate the top of the hoop away from you or towards you to make a slow smooth steady complete rotation.



Practice this till you can change the display on the beat or on an accent of your movement so that it looks and feels natural. The front flip is triggered on the vertical – 360 for first flip and then 180 if you keep flipping.

The pictures above show a **front flip**. If you reverse direction you will **back flip** to the previous display.

SIMPLE FAST LOCK MOVE

Press the button 3 times rapidly. The presses should be as short as can be, provided they are distinct and all 3 occur within about a second.

Doesn't matter where the button is at the time, how the hoop is oriented or what mode you are in.

When the hoop has recognized the signal the whole hoop will briefly flash a dark blue.

To UNLOCK the hoop display and allow flips, wheel turns and signal moves to work again, do 2 quick button pushes, and the whole hoop will briefly flash white to confirm UNLOCK. It will take a moment to recognize the signal. Or to UNLOCK and immediately advance to the next hoop, do 3 short fast button presses and the next hoop appears, unlocked.

If you cant make the hoop respond to your moves, then check to see whether that orientation is LOCKED. (Either by doing the 2 or 3 presses or doing a half-off- changing orientations to see if flip moves now work).

Locking one orientation will not affect the other 5 orientations. But you can have 4 LOCKED hoops waiting for you, each in a different orientation.

NOTE: in the saved quivers the green battery indicator doesn't appear when you are doing the LOCK or UNLOCK presses – this is to reduce distraction during a performance.

LOCK = 3 SHORT FAST BUTTON PRESSES = BLUE CONFIRMATION

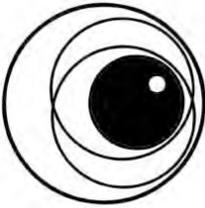
UNLOCK = 2 SHORT FAST BUTTON PRESSES = WHITE CONFIRMATION

UNLOCK AND ADVANCE = 3 SHORT FAST PRESSES = NEXT HOOP

So now you can LOCK and UNLOCK a hoop. Maybe you only need one hoop for a whole performance, and so best that it is locked into place. Note that it is the "hoop" and not the display that is locked, so if the hoop has a display that is constantly varying or cycling or responding to movement in a certain way, it will still do all that when its locked. It just wont change into another hoop until unlocked.

CARE OF YOUR HOOP

The psi-ko-hoop is somewhat weatherproof. We are still testing to see exactly how waterproof it is. Once it is properly closed, you should be able to leave it lying in the wet grass, or hoop with it in the rain and snow, or have it get muddy at a festival, or survive the dust at burning man, etc. **The hoop will NOT survive falling into water (unless its just for an instant). Full waterproofing requires a special kit and instructions, and has to be done each time you charge the hoop.**



If the hoop does get wet, dry the area around the switch and connector, and then open the hoop up and dry the open end of the USB port and the inside of the coupler piece that the USB port fits into. Flick/tip any water out, then use a cloth or paper towel and/or cotton swabs. Leave the hoop open

in a dry and safe place to let the water evaporate completely and make sure the insides of the hoop are dry. You could use a hair drier, or compressed air, but don't overheat the tubing. If you look inside the coupler piece you will see a black circular piece of rubber foam, and this is for the USB port to press up against and to keep the water out of the insides of the hoop.

When the hoop is disconnected or not fully connected it will definitely not be waterproof, and if water gets inside the hoop that may be the end of it. Sea water especially is the enemy of electronic parts.

Plastics, especially PP more than HDPE, get more brittle with exposure to sunlight, so don't leave the hoop lying around in the sun - it will become less responsive and crack more easily. Of course don't leave in a car to bake, or if you must, then lie it flat and cover with a white or light sheet.

Apart from that, the hoop should need no special care.

CARE OF THE USB PORT – VITAL INFO

The USB port is the most delicate part of this hoop. The less you connect and disconnect the cable, the less stress you put on it, the more care you use in connecting and disconnecting the USB cable, and the less frequently you do that, the longer the life of the hoop.

PLEASE PLEASE PLEASE...be super careful, precise, anal, neurotic, fastidious and exacting about this. The sort of attention, gentle control and care you might give to threading a needle and sewing, or putting in contact lenses..... Its up to you. It will only take one yank, one trip over a cable, one forceful misaligned insertion, one clumsy pull...to destroy the hoop.....The psikohoop is strong and durable when connected, but super vulnerable around its USB connection.

To replace the USB port means building a whole new hoop – the tubing has to be cut at both ends, so cannot be re-used, then the connector has to be drilled and cut open (destroyed). A new USB port has to be wired and soldered with many connections. The internal components of the connector (master board, LED strip, switch, USB port etc) have to be reassembled and the new connector glued. The hoop has to be re-assembled into new tubing and then the connector aligned, sanded, and fine tuned. It takes at least two hours work and has to be stretched over a couple days (glue needs a day to set, the connector needs to sit for some hours after each adjustment). So its an expensive fix, around \$100 or more, and in most cases will NOT be covered by warranty....

PLEASE SEE WEBSITE FAQs PAGE and BLOG and TUTORIALS for updates on instructions and operation of the psikohoop.

CHARGING INDICATORS

We now have a single blue LED next to the charging port to show that the hoop is properly connected to the USB charger. If it becomes disconnected, either intentionally or by mistake, then that LED turns red.

When you plug the lit hoop in to a powered USB charger or computer, the display changes to one steady turquoise light. (Note the hoop has to be ON to see the charging indicator, and you can either turn the hoop ON before connecting to USB or when its already charging.)

If the cable becomes disconnected the light changes to red. If it connects again it will go back to turquoise.. It may be that the hoop got bumped or moved and the USB port disconnected, so carefully reset the USB cable in the port and make sure to use the Velcro stabilizer to hold the cable to the hoop and so reduce stress on the USB port.

There is actually no way at the moment to show how charged the hoop is while its still charging (firmware and hardware issue). In order to see how charged the hoop actually is you need to do the usual button push and notice the green battery charge indicator (how much of a full arc the green lights up)

NOTE: if you immediately check the green arc after charging, it will show a false amount of charge – it usually shows a full green arc or a larger arc than is real – so try the button push/cycle through indicators a couple times with a few seconds or half a minute between tries and you will see the green arc settle to an accurate reading .If you have been charging and you simple remove the hoop from the charger and do nothing else, the red light will be on and hoop will still be ON and using a small amount of charge from the batteries (needs to be ON to make the blue/red light).

To power the hoop OFF completely, press the button and let it go through normal cycle, where it will also show the amount of charge, and then power down (on power down it shows battery level green indicator, with brightness setting, then orientation color signal, then goes dark at which point release the button, and it will then briefly flash white, and its now OFF and will use practically no battery charge until you wake it up again with a button push.

CHARGING THE HOOP

When you first receive the hoop it will already be charged. Each time you turn the hoop off, by holding down the button switch, the display will turn green for a second to indicate how much charge is left. When that green indicator covers only a small segment of the hoop, its time to charge. The length of lit time will vary greatly with the settings you use, so its hard to predict exactly, but you will soon get the feel of it. The least amount of lit time you should get, with the hoop set to max brightness (see page 26) and with an all-white static display (which consumes the most power) should be over half an hour. With some settings you will get more than 4 hours. With varied settings, and hooping in a variety of different displays, 2 hours lit time would be an average.

You first need to disconnect the hoop by twisting it around 1/8 inch in the correct direction (one way will feel easier than the other, and do it that way...see the instructions above) and then slide apart. On one end of the connector you will see a small rectangular port which is the USB port. This is used for charging the hoop and for installing/upgrading/sharing programs and settings. The connection is a micro-USB which is currently used by most smart phones. You could use the charger that comes with your phone, if the plug fits into this micro USB port.



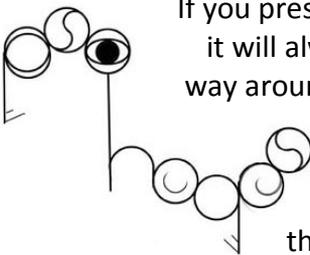
Make sure you have the plug the correct way up, notice that it has a wider flat side and a more curved side, and those need to be oriented correctly. Don't force the USB plug into the port, you will ruin the hoop.

To charge the hoop you need to connect one end of the USB cable to the hoop and the other end to a power source such as a computer or wall socket. When the hoop is plugged into the USB cable, protect the cable from being tripped over or yanked, because that could also destroy your ability to charge the hoop. Its an expensive repair. Could be almost the price of a new hoop.

To help with this we have provided a Velcro strip attached to the USB cable. Once the hoop is disconnected, hold both pieces of tubing together with the ends about one or two inches overlapping, and then secure them with the Velcro strip from the USB cable. Position the Velcro around the thinner part of the tube, not where it widens into the connector. Make it really tight so that the hoop doesn't spring apart, and the slightly thicker ends of the tubing, where the connector is, will hold the Velcro in place. Then connect the USB cable to the port on the hoop and then connect to a power source.

Remove the hoop from the power source when it's charged. It will be fully charged within 3-4 hours but you can leave it overnight if necessary. Then reconnect the two ends of the hoop immediately to protect the delicate USB port connection and to reduce the risk of dust and moisture getting into the hoop, or of someone tripping on the opened hoop, or trying to use it without knowing how to connect it, etc.

It's a quirk of lithium batteries that they can get stressed if left on charge too long. They keep discharging slightly and charging again, and this will lower the overall life of the batteries. So get to know roughly how long it takes to fully charge your hoop and then unplug . A good starting time to try would be 2 hours. Its very unlikely that you will get a significant increase in charge after 3 hours unless you have a low Amp charger through an old computer or similar.



If you press the button while the hoop is charging, it will always show a solid green indicator all the way around the hoop. This will let you know that the hoop is in fact charging. Then, in order to see how charged the hoop actually is, you will have to disconnect the power, and push the button again.

ACCESSING DIFFERENT QUIVERS OF HOOPS

If you turn the hoop ON when the hoop is in different orientations you will access new quivers of hoops. The 6 possible orientations are:

1/ **Hoop upright/vertical with switch at the top.** You already



played with this quiver. The hoops in this quiver are mellow. Later on you will learn how to change their colors and add effects to them.

Quiet quiver: Confirmation signal is turquoise

Discover how you can interact with each hoop. Is this one movement sensitive? How? What moves and style work?

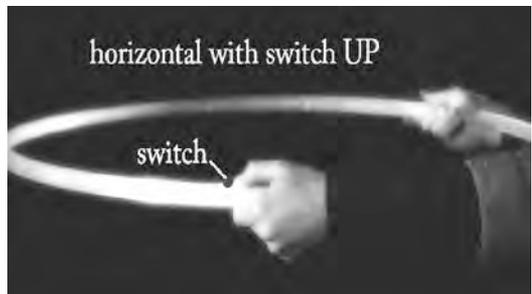
2/**Horizontal (like the hoop was lying on the ground) with switch UP.**

There are many different hoops in this quiver and they get quite psiko!

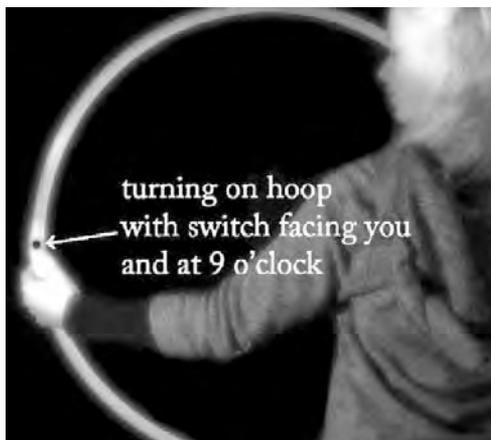
Kix quiver:

Confirmation purple.

Some of these hoops respond differently to isolations or slow and fast movement.



3/ Hoop upright/vertical with the switch to the left (9 o'clock)



In this orientation you have many quivers, each with its set of hoops.

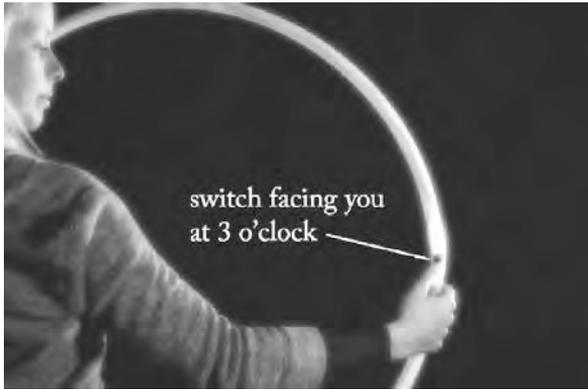
9 pack : Confirmation pink
The first quiver in this pack has the special organic shapes, pictures, symbols and words that appear as you move the hoop. Other quivers are variations on hoops found in the kix quiver. To go from one

quiver to the next you do side flips.

SIDE FLIP: Its exactly the same movement as the front and back flip but starts with the switch facing you at 9 o'clock or on your left side, as in the picture above. The top of the hoop moves away from your face and downwards ,in the forward side flip. You need to do 3 side-flips to move from one quiver to the next. Make them smooth and continuous. The side flip is triggered on the **horizontal** plane. Once in another quiver, use front or back flips to navigate through those hoops.

RESET MOVE: If you get lost in the hoops or quivers of an orientation, or you want to reset a quiver to the default settings, you do a reset move. When you turn the hoop on, you will see the display change a few times in a couple seconds, and then an actual hoop display will appear. As soon as the display appears, start jiggling or bouncing or shaking the hoop, and you will see a red arc start to go around the hoop. Continue your movements, till the arc goes all the way around the hoop and you will have reset that orientation. Might be helpful to check out the introductory videos on this, or play with various speeds and intensities of shaking movement till you find a way that works for you and that you can include in your hooping repertoire.

4/Hoop upright/vertical with switch to the right (3 o'clock).



This is where your saved hoops go. There are 3 quivers each with 3 hoops in them and you go from one quiver to the next with side flips. **Saved pack:** Confirmation yellow.

When you save a new hoop, it overwrites one of the default saved hoops, but those can be retrieved with a reset move. See page 35.

PSIKOHOOP memory function.

In the 4 orientations above, the psi-ko-hoop remembers whatever display you are in when you turn the hoop off. If you turn the hoop back on in that same orientation, you will be back in that same display. So you can have 4 selected hoops waiting for you, even without learning the LOCK or SAVE moves. In random mode the hoop remembers the autocycling speed.

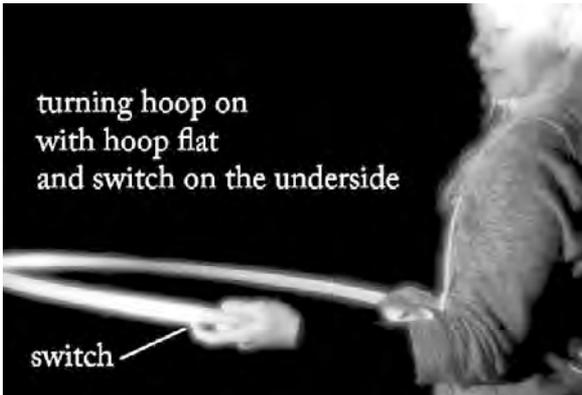
The half-off.

To make it easier and have less time between these hoop displays as you change orientations, there is a “half off” function – just put the hoop in the new orientation, and then hold down the button for a second till you see the new orientation color confirmation and then you can continue hooping with the new hoop and quiver.

Purpose of this psikohoop instrument.

Remember that this hoop is intended to be an instrument of expression, to deepen your hooping experience, to accentuate your hoop dance, to be fun....so don't get stuck in the mechanics and in just trying to see new displays and effects. Get in the flow.

5/ Hoop horizontal with switch on underside.



Random quiver:
confirmation blue.
Random hoops from all the quivers, automatic changes, rate of change controlled by flips. Also manual control with flips
Also truly random displays accessed manually with flips.

FLIPS in the RANDOM quiver.

The front flip in random quiver also changes the display, but the next display will be a random selection from the quivers of the psi-ko-hoop. You cannot get back to the last display with a back flip in this quiver. Since the hoop-displays in the random quiver are changing automatically, the flips in this quiver serve a different function - they act to speed up or slow down the rate

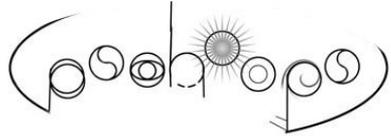
of change. The default setting is about 5 seconds. By doing front flips you can speed up the rate to a maximum of around once every $\frac{3}{4}$ second or about 90 beats a minute. For example, 7 front flips (keep them steady and even) will get you to about 60 BPM. You don't have to do all the front flips at one time, but they do add up. Each time you do a front flip correctly you will see the display change.

Back flips in the random quiver will slow the rate of change. Down from the default of about 5 seconds to over 20 seconds with around a dozen flips. The side flip gives a red confirmation signal when you do it correctly and it locks the current display...so if you are in random mode and you see a hoop you really like, do a side flip and then you can play with that hoop as long as you like. (as long as you don't do another front or back flip which will then take you to another display).

When you turn off the hoop after setting a BPM in random, or go to another quiver, BPM will be remembered in the random mode, and the hoops will be appearing at the rate you previously set.

Doing a side flip in the random quiver (red confirmation signal) allows you to stop the automatic changes and go to manual – so if you want to manually change displays, after doing a side flip and getting the red confirmation signal, you can just do front flips whenever you like, and be surprised with each new hoop you get. You can time these changes to the music or your movement to add accent and character to the hoop dance.

When the hoop is on manual in the random quiver (you have done a side flip and gotten a red confirmation) then a back flip also changes the display but it selects from a truly random set of hoops that include many more strange and wondrous hoops in hidden quivers of the psikohoop and others that are uniquely generated in that moment, hopefully influenced by the energy around! So this quiver has thousands+ hoops in it.



You can LOCK and SAVE (p 20-25) any of these hoops and also once saved, add or vary effects.

Try the LOCK move (from page 9a) in the random quivers.

To go back into automatic changes in the random quiver, do another side flip in either direction and see the green confirmation that you are in auto. Now you can again vary the rate new hoops appear and time that to your choice...

6/ The last of the 6 orientations - Hoop vertical with switch at bottom and facing you. This takes you into **compose mode**, and is beyond this booklet (but see p34). Please also see the tutorials and documents on the website that cover functions and controls in compose mode. Its worth your while to learn this mode, but best to have all the other skills and moves first. **Compose mode quiver:**confirmation red.

SUDDEN CRASHES - The hoop is sensitive to static electricity, and if the atmosphere is very dry and you are wearing staticky clothes, you may experience a sudden turn-off. The hoop will turn back on though. Check website for updates on this.

CRIB SHEETS/ CHEAT SHEETS

There are six pages of color diagrams on three laminated sheets, included with your psiko hoop.

Please use these to help you get familiar with and master the controls and signal moves.

The idea is that you can take them with you wherever you practice, play or perform with your hoop, and use these for reference till all the moves become second nature/automatic.

We would like to get feedback from you as to how useful these cheat sheets are, and what changes you would suggest.

You can order more sets of crib sheets through the website or print and laminate your own.

SAVING EXTRA HOOPS

The save move is covered on pages 23-25. If you want to store these on your computer or the cloud etc, for back-up or to have for later times or to swap with friends, you will need to have some computer savvy, and get the detailed instructions from the tutorial section of the webpage. You can save hundreds of hoops if you like. . You can also save a hoop (p 23) before or after locking it.

Note: you can save a hoop from one place in the saved quivers to another, and so keep the first saved "slot" open for quick saves as you play and perform...see pages 23 -25

CUSTOM LOGO, 3 LETTER WORD OR SIMPLE IMAGE

You can have us make you a custom bitmap to go in the bitmap quiver, or you can make your own. Instructions also in the tutorial section of the website. You will need photoshop skills and be quite savvy with a PC computer. Needs to be super-simple.

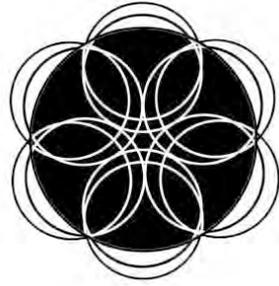
SIGNAL MOVES

Please see the Tutorial video link:

<http://youtu.be/2QiGR1cTL0U>

intermediate_4_signal_moves

And the intermediate level tutorial document on the psihoop website for more extended descriptions and examples of these signal moves.



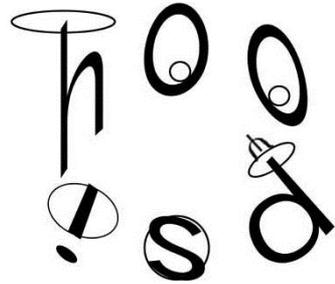
In the psi-ko-hoop “signal moves” are movements that tell the hoop to do something. These signal moves are ways to navigate through the menus and also to select different parameters to change displays in real time or change modes.

There are 2 hoops in the vertical orientation/quiet quiver that can serve as a training set to make the signal moves easier to understand and perform successfully.

Turn the hoop on in the vertical orientation. You will see a turquoise color confirmation and then if you are in the first hoop of this quiver you will be in a gradient orange/yellow/red display which changes colors depending on the angle and rotation of the hoop. If you are not in this display, then please flip frontwards or backwards till you get to this hoop. Or do a quiver reset move (shaking the hoop at the end of the turquoise confirmation and continuing to shake as the red arc goes all round the hoop ... p35). Do a smooth and steady slow back flip and you should notice (when you are about $\frac{3}{4}$ of the way around the complete flip) that the display changes to a short segment of around 10 purple lights, and then as you complete the flip another turquoise segment appears. This “hoop” can show you how the orientations are being recognized.

Slowly and steadily reverse just the last part of the move you did, having the top of the hoop now go away from your face and down to horizontal (the start of a front flip, but only $\frac{1}{4}$ of the way around the flip) and then back to vertical and down to horizontal again and back to vertical etc until you have filled the hoop with alternating segments of purple and turquoise.

What you are seeing is the result of a program in the chip that takes the data coming from the sensor and controls the LEDs. In this hoop it recognizes angles and orientations and changes the display accordingly. Experiment with seeing how speed, position and movement affect the display. You won't have to go all the way up to vertical or all the way down to horizontal to get a change. If you don't have this hoop LOCKED you may flip right out of this hoop. Back flip or front flip to get back to this segmented one. On one side of this training hoop is the default starting hoop for the quiet quiver and it is a gradient of color. On the other side of the training hoop is a hoop with a solid color all the way around the hoop. So you want to get back to the hoop in between those two. And best to LOCK it. Remember to UNLOCK!



Hold the hoop steady and vertical with the switch upwards and facing you, ready to do a two handed clockwise isolation. Your left hand will be up at the top of the hoop near (but not on) the button switch, and your right hand will be somewhere around 3 o'clock. Using your right hand as a guide to steady the hoop and define its path, start a slow isolation to the right, the button going from 12 o'clock to 3 o'clock, and notice where in the arc the yellow segment appears. Should be around 2 o'clock and its telling you that the hoop is recognizing a new orientation. When you get to 3 o'clock, pause, and notice that the turquoise segment disappears, telling you that the hoop no longer recognizes the vertical orientation. It will take a second for this to happen. Then continue slowly in your clockwise isolation towards 6 o'clock and notice when the red segment appears.

Hold the hoop (specifically the button switch/connector) for a second at 6 o'clock and the yellow segment will disappear. Continue around towards 9 o'clock and a pink segment will appear and then go on all the way round to the top again and you should be in turquoise.

Do this isolation at various speeds and watch the play of the colored segments. Try reversing the isolation and doing it in the opposite direction. Try doing $\frac{1}{4}$ turn isolations, for example from 12 o'clock to 3 o'clock and back to 12 and then back to 9 and 6 and 9 and 12 and 3 etc until you can create predictable patterns of colors.

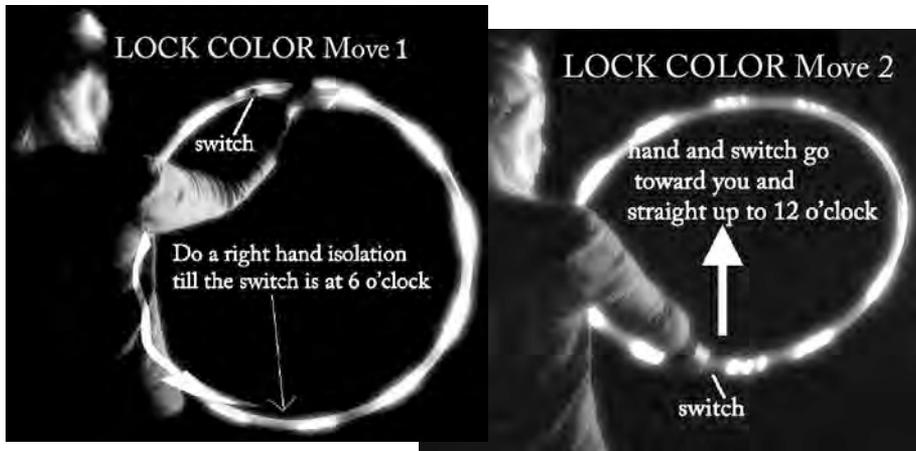
Many of the signal moves will use these skills, although in a regular signal move you won't see these colored segments at all. The segment colors in this hoop are also the same as the orientation color indicators for each of the 6 orientations and their respective quivers of hoops.

LOCK COLOR

The first signal move to try is the "LOCK COLOR" move.

LOCK COLOR MOVE: RH ISOFLIP, HALF-BACK.

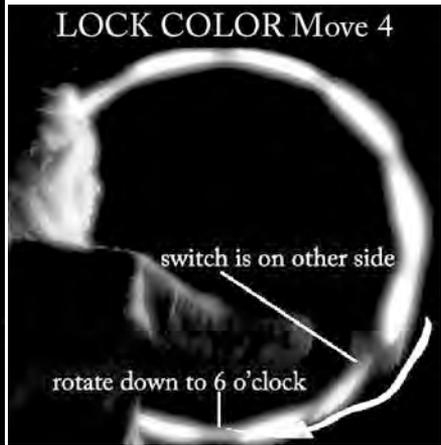
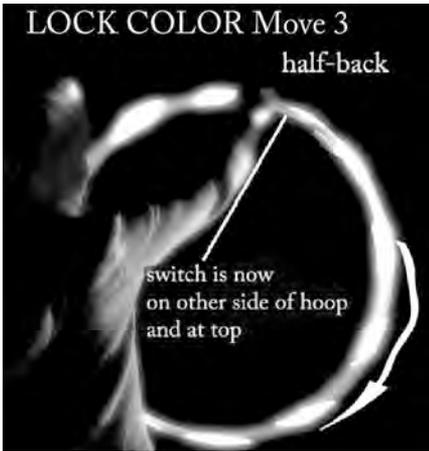
This will lock the current color, so when you flip from one display to the



next in a quiver, all the displays will be in the same color scheme.

For training purposes, try this series of movements with the segmented hoop you have been playing with in the quiet quiver. First LOCK this segmented hoop with 3 button pushes.

As you start the "LOCK COLOR" move in the segmented hoop, you will see turquoise at 12 o'clock, then as you do your counter-clockwise isolation you see pink at 9 o'clock and red at 6 o'clock. While doing this signal move as practice in the segmented hoop, you should still see the turquoise/pink/red segments – if you are going too slowly or pause too long then the previous segments will disappear, and the hoop will not be able to understand your signal. After going straight up to 12 o'clock, as you rotate the hoop now clockwise you might expect to see a yellow segment at 3 o'clock but because the switch is now facing away from you it will act as 9 o'clock (mirror image or like looking at the clock from behind it) and you will again see pink and then turquoise. All the segments should still be there by the time you complete the move.



This is an opportunity to practice your smoothness and timing, and to understand the physics of the signal moves – try doing the LOCK COLOR move jerkily or with bad timing (too fast or too slow or with pauses) or introduce variations in it so that it doesn't work..... and then try it so that you know it **will** work.

Same principles will apply to all the other signal moves.

Now UNLOCK the segmented hoop and practice the LOCK COLOR move in some other hoops from the QUIET or QUIRKY/KIX quivers.

LOCK COLOR move is an example of a "TOGGLE" move. Each time you do the move you either toggle the setting ON or OFF.

There is another kind of signal move = "SELECT" moves – they set the hoop into a mode where you can then select (using a wheel turn) settings from a variety of choices.

LOCK COLOR is useful if you find a color scheme you like (color schemes are either a single color or multiple colors) and you want to keep in that color scheme but vary the displays.

After doing the COLOR LOCK move you will see a yellow confirmation signal and now when you flip you will change hoops (patterns and effects) but stay in the same color scheme.

To find a color you like you can either a/ flip through the existing hoops in a quiver and find a hoop with that color scheme or b/ you can use the select color move or c/ you can use the color flip mode. (see p.28-31, 35)

The COLOR LOCK move will keep the same color for the whole pack of quivers in the 9 pack. The COLOR LOCK works in quiet quiver, kix quiver, random quivers and 9 pack. The save pack acts differently and each hoop is kept separate so there is no reason to do the LOCK COLOR move in the saved quivers.

To clear the LOCK COLOR, do the LOCK COLOR move again and you will get a white confirmation that it is cleared.

SIGNAL MOVE DOESN'T WORK:

If you do the move and don't get the result, check these things:

Did you do the move too fast?

Did you start the move too soon (less than 2 seconds) after the previous try?

Were there jerks, bumps or uneven movements in the move?

Did you pause too long while in the middle of the move?

Did you start with the switch in some other position than facing you at the top of the hoop?

Is the hoop charged enough?

Did you actually complete the move fine, but didn't notice the confirmation color?

Did you do the move incorrectly? Is the hoop LOCKED?

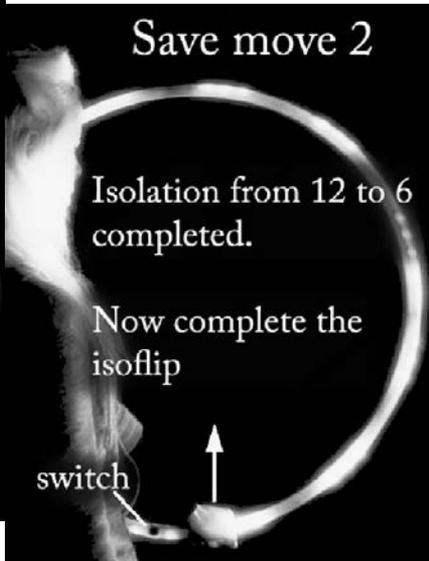
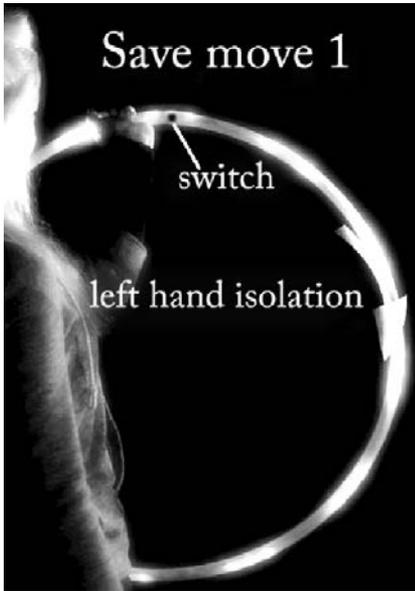
Try doing the move in front of a mirror.

Look at the videos that show the particular move

Work with a friend who has mastered that move....

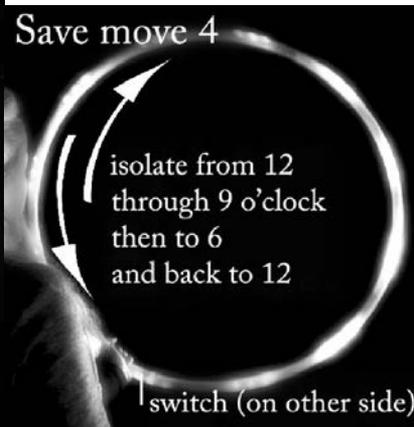
Practice with the 2 learning hoops in the quiet quiver (the segmented one that is back of the default starting hoop in that quiver, and the one back of it that gives just orientation colors).

How to SAVE a hoop



This signal move is just the same as the LOCK/UNLOCK COLOR move,

but done with the other hand and in the opposite direction





When you come to the end of this move, and have done it well enough that the hoop recognizes it, the hoop will flash grayish white... and a row of lights will appear to the left of your left hand. At that point your left hand is holding the top of the hoop with the switch away from you.

Move that left hand in a smooth, slow, even isolation to the left, in the direction of the lights, and you will see the red light next to your hand move along a row of white and yellow lights. You may need to continue the isolation quite a ways to accomplish this. When this display is first activated, there will be a red light lit followed by two white lights, then a yellow light followed by three white lights and then a yellow followed by three more white.



The white lights are the locations of the saved slots in each quiver of three. The yellow light marks the end of one quiver and the start of another. So you have three quivers in the SAVED

pack, with three hoops in each quiver, so a total of 9 possible saved hoops.



Once you have moved that red light to any new spot that you select, by doing a smooth and slow

isolation in the direction of the lights, reverse the direction of your isolation till the hoop flashes white, and the new hoop will be saved to that slot.....Note that the isolation you do to select the slot in the saved quivers has to be very smooth without any jerks or bumps or reversals, so practice this a bit before you have some really cool and useful hoops saved. (In case you overwrite one of your favorites by mistake).

Once you have saved a hoop to a slot, or modified a default saved hoop by changing color or BPM etc, that slot will go blue to show you its customized. If the red dot is above a blue slot then it will show as purple.

The suggestion here is to put some of your favorite hoops in the SAVED quiver. Then when you are under pressure of performance or whatever, just open the hoop in saved orientation (3 o'clock, for the 3 pack of saved quivers) and you can navigate with front or back flips and side flips. You should be able to do that under any kind of pressure! You don't have to remember or do any other moves. Perhaps have one saved quiver of really mellow hoops in 3 different color schemes, have one quiver that is best for isolations or your special style, and have one quiver of crazy hoops for maximum effect. NOTE: your saved hoops can be reset individually with shake move, see page 35.

With a few simple guidelines and a couple hours practice, you will have access to an array of personalized hoop displays that are interactive and tailored to whatever mood/music/costume/intention that suits.

SAVED QUIVERS

The idea of the saved quivers is for you to have an easy to access place with 9 of your favorite hoops, tailored to a specific performance or mood. Each of the three quivers acts independently and each hoop in those quivers is mostly independent of the others.

You can import any saved hoop, or any other hoop from other orientations, into compose mode and modify it and save multiple versions of it to the saved quivers.

The things you set in one of the saved hoops, like color, BPM , segment pattern, speed, or any of the effects from compose mode, will be remembered in that particular saved hoop.

The normal quiver reset shake move acts differently in the saved quivers and only resets that one hoop you are in. The timing of the shake is critical for the reset. You need to start shaking right at the end of the yellow color confirmation and right at the very start of the actual hoop display. It's a very small window.

You can set BPM for each hoop separately. For autcycle the BPM of each of the three saved quivers can be set differently – so for example you could tee up different sets of hoop shuffling at different speeds and side flip between them as the music shifts.

Remember that a global reset will erase all your custom saved hoops. If you want to keep one or more of your saved hoops you can upload to a computer and download them again at a later time, or swap with friends. See advanced tutorials on the web site.

To save a hoop from another quiver/orientation its best to LOCK that hoop first, so you don't flip out of it. In compose mode instead of locking you could flip to the white screen. In the white screen signal moves are more easily recognized.

Remember that front and back flips trigger on the vertical, Side flips trigger on the horizontal. In saved quivers it always takes 360 to trigger.

SAVED QUIVERS AND SENSITIVITY...Note: the hoops described below are the default saved hoops as of July 2016. Some of these may change, we may put other hoops as default saved hoops, but this description is to give you the idea of how sensitivity works:

1st saved quiver

Hoop 1...sequencing 2 colored segments ...sensitivity has effect...try default low, and medium

Hoop 2...sequencing segments with fairy lights...sensitivity has effect..try low, medium and high

Hoop 3... shifting rasta colors...no movement response, sensitivity has no effect

2nd saved quiver

Hoop 4... rainbow gives stars and patterns....sensitivity has effect, try isolations and movement at low and high sensitivity to compare

Hoop 5...flowing sparkles ...sensitivity has an effect..try tapping at high sensitivity to a beat, try hooping at low sensitivity

Hoop 6 white hoop goes into spiral/paisley bitmap patterns....yes...to some extent... try low and medium

3rd saved quiver

Hoop 7.... blue wave...no movement response (though it looks crazy when moving)

Hoop 8.... complex hoop this one changes so much at all levels, its difficult to see the exact influence of sensitivity

Hoop 9... dragons eye/alternating strobe and fade with angle response....slight shift in effects between low and high sensitivity

Also try playing with sensitivity in the 2 quivers in 9 pack that have sequences and moving patterns. They are the fourth and fifth quivers in the 9 pack

DIFFERENCES IN SAVED QUIVERS from other quivers.

Front and backflips always take a full 360 degrees.

BPM can be set for each hoop individually.

Reset move applies to each hoop and not the whole quiver/orientation.

Controls like sensitivity and color apply to each hoop individually. (Brightness and bump sensitivity are global however)

Autocycle speed of hoops can be set separately for each quiver.

Autocycle with bump/manual shuffle must be set in saved quivers and wont carry over from other orientations.

BRIGHTNESS CONTROL

Tutorial video link: http://youtu.be/fu0TtcwL_uc

intermediate_6_brightness and several from the series of short tutorials.

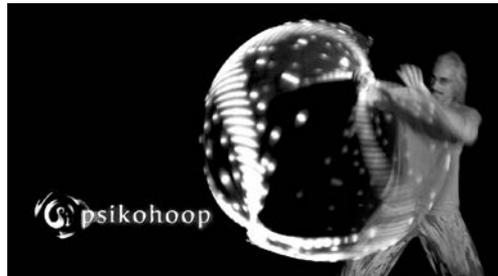
There are several uses for this control. The first is obviously to make a brighter display, perhaps when there is too much ambient light or for the finale of a performance or just when you want to impress people.

Some displays look better at different brightness levels. Sometimes a dimmer display will shift the attention from the hoop to the hooper and their dance, and this is a good thing!

Another use of the brightness control is for parents to regulate the intensity of the light for their young children. If a kid is playing a whole lot with a psi-ko-hoop, I would make sure that the displays were not too bright and disorienting. Some of the quivers like the quiet quiver and the second quiver in the 9 pack are specifically made with mellow hoops which can still be a lot of fun and possibly less stressful to the nervous system.

EXTENDING LIT TIME

A third use for brightness control is to save the batteries and **extend the lit time** of the hoop. We have not yet worked out the exact ratio of lit time to various different displays in the 3 different settings of brightness control. But from dim to very bright, it would be roughly 4 times as long a lit time. Which would be important for all night play etc. The displays that use the most battery power are the steady white with all the LEDs lit. (Because white is made by mixing all three of the red/blue/green colors in each LEDs, each of them fully on, it uses the most juice.) So if you want to get maximum lit time use displays with the minimum of LEDs, and use the displays and settings that have slow strobing effects and no white in them, and also put the brightness on the dim setting.



BRIGHTNESS CONTROL SIGNAL MOVE:

Have the hoop upright with the switch at the top and facing you.

Start with the **right** hand holding the hoop next to the switch (not touching it)

The left hand is steadying the hoop. The right hand moves the hoop in a circle.

Do a half isolation from 12 o'clock through 9 o'clock to 6 o'clock at the bottom of the hoop.

Bring the right hand holding the bottom of the hoop up towards your face and on up to 12 o'clock. Immediately continue in a clockwise isolation through 3 o'clock down through 6 o'clock and around up towards 9 o'clock. The left hand is now not just steadying the hoop but is actually helping to move the hoop, so you are doing a 2 handed isolation.

When you get around 9 o'clock you will see the hoop blink/flash and then near the connector some orange lights will appear. These will be either one, two or three segments of two orange lights each. The rest of the hoop will be dark.

One segment of a pair of orange lights indicates the dim setting.

Continue to turn the hoop and two segments will go orange. This is the default normal setting.

Continue to turn the hoop and three segments will go orange. This is the boost/brightest setting.

Continue to slowly and steadily turn the hoops with no bumps and the one orange segment will reappear...etc

When you have the setting you want, reverse the direction of the isolation for a little, or bump the hoop, and you will see a whitish/pinkish flash and that means you have successfully selected that setting.

NOTE: The brightness setting move is a global setting and will affect all the hoops in the psikohoop.

The hoop will remember brightness settings, so once set you don't need to reset it when turning the hoop back on, and it will affect all quivers and orientations of the hoop. The green battery signal that appears when you turn the hoop ON or OFF or half off, will have the same orange segments in it to indicate the brightness setting. Notice this signal near the connector, whenever you power the hoop on or off.

SENSITIVITY control. We now have control of how much the hoop responds to motion. The sensitivity control works when a particular hoop/display responds to movement – some hoops respond to different directions of movement, some to angles and orientations, some to speed, some to the difference between hooping around core and body and hand, and some to combinations of the above, and some have no movement response....but if a hoop responds at all to movement, then the sensitivity controls will affect it.

On low sensitivity you may not see any response except with very fast movements or sudden changes in direction or bumps to the hoop. High sensitivity can give you reactions to a very light finger tap, or a slight increase in speed or acceleration.

SENSITIVITY CONTROL MOVE- It's the same move as the brightness control but done with the left hand. Do a left-hand isoflip (see the cheat sheets) and then a wheel turn using both hands (so you can keep the wheel turn smooth and even)...hoop goes dim blue then has a signal, which will change as you continue to turn the wheel:

2 blue LEDs = normal default setting low sensitivity ,
4 yellow lights (2 groups of 2 lights) = medium sensitivity,
6 magenta lights (3 groups of 2 lights) = high sensitivity.

NOTE: The next three indicators have additional red lights next to them and they are the BUMP MODE sensitivity settings. See P 27b.

Keep rotating the hoop till you have the setting you want and then carefully and gently without bumping or shaking the hoop, reverse direction of the isolation and it will select that setting and give you a confirmation flash. If you bump or jerk the reversal of direction you could jump into another setting.

To get familiar with this, and the effect it has on different hoops, please go to the saved quivers (turn the hoop ON with the switch facing you at 3 o'clock). Then in each of the 3 saved quivers navigate through the 3 hoops with front or back flips. To go from one quiver to the next, use sideflips. NOTE that sensitivity can be adjusted individually for each hoop in saved quivers. Outside the saved quivers sensitivity is global (affects the whole psikohoop).

BUMP MODE

The controls for this mode are accessed through the same sensitivity move described on page 27a.

Once you have done the sensitivity move and are in the isolation to select the setting you want, continue to isolate past the normal sensitivity settings (one blue, two gold, three pink) and you will get to three levels of bump mode sensitivity (blue+red, gold+red, pink+red) and if you reverse the isolation at the desired setting then you will be in BUMP mode.

Now whichever orientation/quiver/hoop you access, when you bump it or do a reversal etc, the hoop will go into the next color scheme. (Same hoop, different set of colors). It's a global mode, like brightness and so will affect all the orientations and quivers. To turn it OFF, do sensitivity move and select a regular sensitivity level 1, 2 or 3. (the bars with no red)

The sensitivity level you choose will affect how much movement or bump it takes to trigger the color change. A slight tap can do it at max sensitivity. Also a major factor is the position of the switch/connector. Since the sensor is localized in the connector area, you will need to get familiar with how to move in order to trigger or not to trigger the change. For example if you are paddling the hoop around your chest and reversing directions each time, in order to get a change on each reversal its best to orient the connector so you touch it (or near it) each time you reverse the direction.

The seventh hoop in the quiet quiver is already pre-set in BUMP mode. (It's a segmented hoop with 3 lit LEDs in each segment and then a longer dark space in-between). When you bump this hoop it will change color. LOCK this hoop and practice till you can get control and predictability.

If you set the hoop to autcycle and also have BUMP mode engaged, then the bump will trigger a change from one hoop to the next. This also applies in random mode.

In the pink screen of compose mode, there are more choices for the target of the bump mode. You can have the hoop flash white, flash a color, flash from a dark hoop, change color, change segments, and have the bump give a momentary instant speed up of effects. 27b | Page

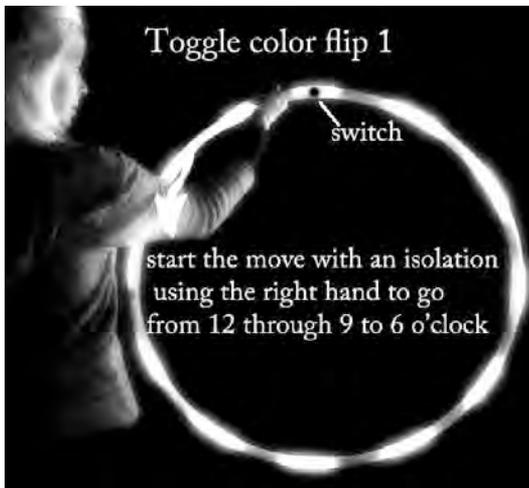
CHANGE THE COLORS OF THE DISPLAY PATTERN.

Tutorial video link: <http://youtu.be/YVCvQf3F7bl>
intermediate_5_colorflips and see several from series of short tutorials.

Note that if you get a red flash at the end of a signal move, it generally means that the hoop is locked and you need to do the UNLOCK move before it will recognize further signals.

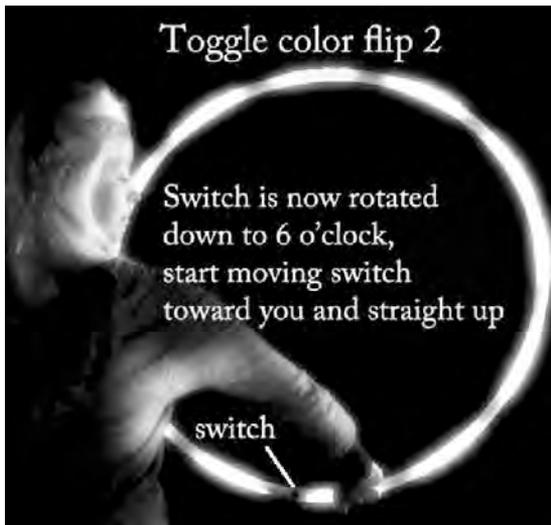
Let's say you like the pattern of a certain hoop display, but you want to try out different colors and different color schemes (combinations of colors) in that same pattern....and you want more predictability than you get with BUMP mode....you need the move called: **TOGGLE_COLOR_FLIP**

This will allow you to stay in the same pattern (layout, arrangement) and effect (the LEDs are fading or strobing or sequencing around etc), but with new colors. And now when you do a flip, the hoop will change color each flip but will stay in the same pattern and effect. For example in the organic shapes quiver of the 9 pack, you might want to stay in one pattern and

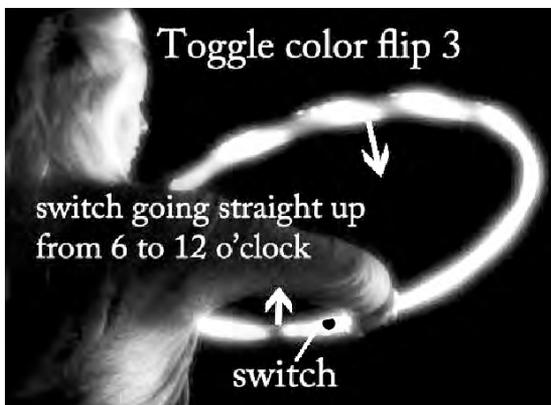


change the colors of it as you hoop, maybe flipping to the beat or using color change as an accent. If you get to one combination or color you really like, then you can LOCK that display and stay there for a while. You could also save it, of course... Grip the hoop with the right hand next to the connector.

Rotate the hoop counter-clockwise from 12 o'clock through 9 o'clock down to 6.



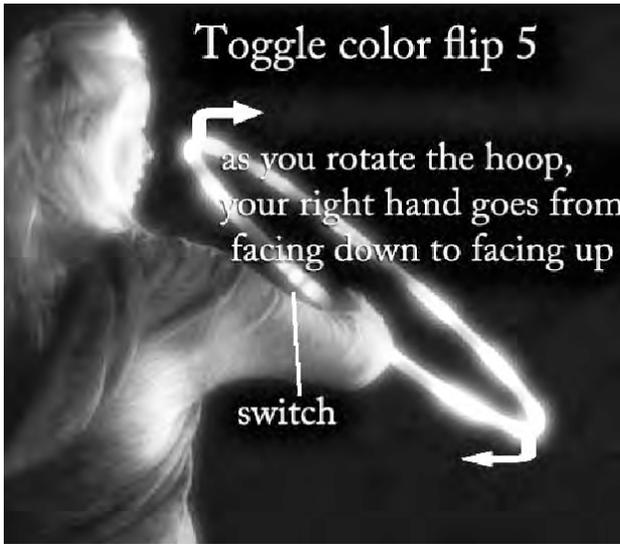
Then start to bring the hoop “straight up” from 6 o'clock towards 12 o'clock till the hoop is parallel to the ground.



(or you could say that the top of the hoop now falls away from you and down) but only go halfway with that move –



And when the hoop is parallel to the ground,



hold it there and turn it 180 degrees in either direction....one way will be easier, so use that way....

and then let the move complete by allowing the far side of the hoop to descend from horizontal to vertical.



You can use two hands in this or any other signal move. In this case use the left hand to steady the hoop and guide it smoothly on its path. Remember – slow, continuous, smooth and clear. Slow....very slow.... like your breath when relaxed.



You will see a confirmation solid yellow color for a second to let you know the hoop is now in toggle color flip mode. Now each time you flip, forwards or backwards, the hoop will change color schemes.

Note that the color schemes will appear differently in different displays – in a blue and white color scheme for example, one hoop display might be all blue or mostly blue, another hoop display might be half white and half blue, etc. If you want the hoop just one color, flip till you get to the set of solid colors.

To toggle out of this mode you need to do the move again and you will get a solid white confirmation that you are now clear of the color flip. Now when you flip you will be back in navigation mode and each flip will take you to the next hoop. Or you could do the quiver reset move and that will clear the color flip as well.

Now with any of the multitude of hoops in the psi-ko-hoop you can select color and lock it in, or flip colors at will. You can do this move in the saved quivers as well. Later on you can learn how to change colors to a beat and change the color each time a sequence goes around a hoop and many other things! But the best thing to learn is the interactivity and integration between you and this instrument.

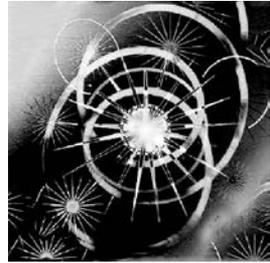
MOVEMENT RESPONSIVENESS AND INTERACTIVITY

Each hoop in the psikohoop has been crafted individually – Some of the hoops have no movement response, some of the hoops have a specific response to only one type of movement, some of the hoops respond differently to different kinds of movement.

What hoop technique or movement best suits each “hoop” you find in the psikohoop? What set of hoops best suits your current mood and expression? **REMEMBER TO TRY DIFFERENT SENSITIVITY SETTINGS!**

Its up to you to discover how each hoop interacts –does the display change predictably with different types of movement?

Try an isolation in each direction, try hooping around the core in each direction, try spinning around the arm, try chaotic movements, try different planes, angles and speeds...some hoop displays will vary their speed based on a type of movement, some will vary their color or pattern, some will display one way if you hoop on the core and another way if you do an isolation, and so forth. You may need to do the movement for a few seconds and be consistent with it (usually slow it down and smooth it out) for the hoop to recognize what you are doing.



NOTE: random quiver, each hoop that appears may have different movement responses! Next to last quiver in the 9 pack are all complex movement hoops. NOTE: some hoops might appear to be movement sensitive but are actually autocycling though a set of similar displays – e.g. the last quiver of 9 pack , and the 2nd hoop in the 3rd saved quiver.

Here are 6 examples of movement responsive hoops:

1st hoop in upright vertical quiet quiver – responds by changing colors with angle and orientation changes. When at the same orientation or angle will be in the same gradient of colors. Best responses will be to slow and very slow movement in different planes.

From the saved quivers, more complex responses (note: all default saved hoops are also to be found in other quivers of the psikohoop).

1st saved quiver - hoop1 : sequencing and changing colors each rotation. Faster isolations increase speed of color change. Jerky movement or hard acceleration cause brief burst of sequence speed.

2nd saved quiver - hoop1: slow fading and sequencing rainbow. Clockwise isolations give moving segmented rainbow. Counter clockwise isolations give alternating colored strobes and fades. Spinning in either direction around hand, arm etc gives stars. Hooping around core gives combinations of these displays.

2nd saved quiver - hoop2: a twinkly moving display gradually fading from one color to another. Tapping, shaking or any sudden movement gives a dark arc swallowing up the lights, can use this hoop to play with the beat of music or practice smooth moves etc.

2nd saved quiver - hoop3: white segmented hoop, display is static at rest or with very slow movement. Clockwise isolations give alternating dark, steady white, dark, white strobes. Faster bumpy isolation changes the display. Counterclockwise isolation gives moving segments speed varying with speed of isolation. Spinning around the arm gives a white paisley pattern. Hooping horizontal gives white paisley or lines depending on speed and angle.

Here is one to test your navigation skills: in the 9 pack do 3 back flips to go from images quiver to the last autocycling quiver of the 9 pack - which will briefly start with a red display. Continue the back side flip slowly and evenly without pausing (or do 3 more back side flips if you paused) through a pink hoop in a quiver of movement responsive hoops (explore these later)..... to the magic quiver with its 1st display of a solid colored hoop that changes colors with angles. Backflip once in this quiver to get to the turquoise display. This hoop will light up the arc sequentially as you do slow wheel turns – its magic to play with.

There are loads more movement responsive hoops in different quivers of the psiko hoop - have fun finding them and discovering how to interact, play and perform with each. Perhaps save three of your favorites to one of the saved quivers. Play with modifying their colors to your taste. Later on you can learn how to modify all their properties.

CRIB SHEETS

ORIENTATIONS:

Quiet quiver....switch UP (12 o'clock) and facing you. Flashes turquoise.
Saved quiver/3 pack quiver...switch to the right/3 o'clock and facing you.
Flashes yellow.

9 PACK quiver....switch on left (9 o'clock) and facing you. Flashes pink.
KIX (Quixotic) quiver....switch UP with hoop horizontal. Flashes purple.
Random quiver....switch DOWN and hoop horizontal. Flashes blue.
Compose quiver...switch at bottom/6 o'clock, facing you. Flashes red.

RANDOM MODE:

Opens in random selected (selected from all the quivers in the psikohoop)...NOTE: some hoops will appear mostly dark or with part of the arc frozen or strange looking, etc (because these displays are part of hoops from some quivers) ...so random mode may not be the best for performance...use the saved quivers for performances!

Front flips increase rate of automatic hoop selection (from around 5 seconds to less than one)

Back flips slow down rate (to around 20 seconds)

Rate is remembered for next time you open random mode. To rest the rate to default, do the orientation reset shake move.

Side flip selects manual mode (red confirmation) - front flip now selects new hoops manually. Backflip now goes into "infinite" random generated mode.

Can LOCK and SAVE any hoops. Easier to do on manual than auto.

Side flip again to go back to auto (green confirmation)

SIGNAL MOVES:

These are movements or series of movements that signal the hoop to do something, or navigate you through menus etc. We covered flips, LOCK/UNLOCK, QUIVER RESET, SAVE and TOGGLE COLOR FLIP in this booklet. They are explored in depth in the tutorials and videos on the website, and hopefully in hoopers' videos as they appear.

ISOFLIP refers to the isolation and then flip movement you did in the first part of the LOCK move (page 20). ISOFLAP refers to the isolation and flat/flip in the first part of the toggle color flip move you did on page 28.

CHANGE DISPLAYS - FLIP MOVE... SWITCH AT TOP AND FACING YOU. SLOW AND STEADY MOVEMENT. Front flip goes forward, backflip back.

ACCESS DIFFERENT HOOPING ENVIRONMENTS – TURN THE HOOP ON IN ANY OF 6 ORIENTATIONS.

NAVIGATE -SIDE FLIP – 3 SIDE FLIPS NAVIGATES BETWEEN QUIVERS (9 pack and 3 pack).

LOCK/UNLOCK – Press the button 3 times short and fast. Blue = LOCKED. White= UNLOCKED and ADVANCE. Works in all orientations.

SAVE: ISOFLIP, HALF-BACK. Wheel moves red dot to slot you want, reverse wheel to select.

TOGGLE_COLOR_FLIP = RH ISOFLAP 180 HORIZONTAL, DROP HOOP DOWN. THEN FLIPS TO CHANGE COLORS

SELECT_COLOR = ISOFLAP 180 HORIZONTAL, DROP HOOP DOWN. THEN WHEEL TO SELECT.

LOCK COLOR: RH ISOFLIP, HALF-BACK. UNLOCK display: Do the same move: RH ISOFLIP, HALF-BACK

BRIGHTNESS CONTROL = RH isoflip, continue onto RH clockwise isolation all the way around

SENSITIVITY CONTROL =LH isoflip, continue onto LH counter-clockwise isolation all the way around... and then to **BUMP MODE** controls

ARC CONTROL in top quiver (hoop upright, switch at top) = SIDE FLIPS

TOGGLE_AUTO_CYCLE = RH ISOFLIP, RH ISOFLIP

TAP_BPM = ISOFLIP, ISOFLIP (with left hand and it stays on the hoop)

QUIVER RESET –shake after turning hoop on in that orientation. Red light has to go all way around.

GLOBAL RESET. In compose mode orientation – Just as it turns on, do ¼ turn isolation cw (clockwise) from 6 to 9 o'clock and back, then repeat

SELECT_HOOP = LH HALF-BACK, RH ISOFLIP = light green confirmation... then isolate through the hoops of that quiver. Reverse the isolation to select = white confirmation. This is often a faster way than flipping to take a quick look at the hoops of a quiver and to find a specific one.

To go directly from a hoop in the KIX quiver to the appropriate quiver in the 9 pack:

FIND_PACK = Lt Hand ISOFLIP, QUARTER TURN CCW, SIDE FLIP (it's the same move as the customize move that you use to go into compose mode from other quivers, but done with the left hand.)

This move allows you to vary the segment pattern of the current hoop:

SELECT_SEGMENTS = RH ISOFLIP, LH on top ISOFLIP (the left hand on top isoflip can also be done by switching positions of the right hand and doing another right hand isoflip) = white confirmation. Then clockwise isolation ..goes through a very wide selection of segment patterns. Reverse the isolation to select= white confirmation.

You can LOCK and/or save the hoop with the new segment pattern and you can do a half off into another quiver or a full off and shut the hoop down and the next time you go back to the same quiver that adjusted/segmented hoop will be there for you....but if you flip out of that hoop it will clear your segment selection.

SELECT_BPM_RESPONSE = RH HALF-BACK, LH ISOFLIP

1 **BPM_RESPONSE_NONE**,...use to cancel BPM response already set or exit without setting

2 **BPM_RESPONSE_FLASH OVERLAY** pulsing/flash is first color of color scheme

3 **BPM_RESPONSE_BRIGHTNESS**, try with varying brightness levels set

4 **BPM_RESPONSE_SYNC**, speed of effect

5 **BPM_RESPONSE_SYNC_FLASH**, effect speed plus flash.

6 **BPM_RESPONSE_SYNC_BRIGHTNESS**, effect speed plus brightness

#2 flash overlay/pulsing is best on hoops that have some dark space.

#4 sync effect speed is best on hoops that sequence, also effective on fades

ARC CONTROL = LH ISOFLIP, RH on top ISOFLIP, then isolate counter-clockwise to choose and reverse the isolation to select (white confirmation). **This move is similar to the side flip arc control in quiet quiver, but allows you to expand control of the lit/dark arcs. ARCs also have controls in compose in the purple screen.**

BRIEF GLIMPSE INTO COMPOSE MODE

NOTE: You need to check out the website videos and intermediate tutorials.

This is a free-wheeling mode where you can generate effects in real time, mainly with flips and wheel turns (isolations) -what we call Merlin's Wheel.

When you open compose mode by turning the hoop on with the switch at the bottom and facing you, you will always be in a rainbow hoop. Wheel turns will now change the colors of the rainbow. Flips take you to a new screen where the wheel turn changes a new set of effects. You can go back to any screen and do more wheel turns and keep modifying your hoop as you play.

You can bring in any hoop from the other orientations and modify it in compose mode and then save it if you like. The move to do this is: **CUSTOMIZE** (import hoop to compose mode): **RH isoflip, turn hoop clockwise ¼ turn so your hand and the connector are now at 3 o'clock, side flip forward once or twice.** Now use the screens and wheel turns of compose mode.

LOCK/UNLOCK IN COMPOSE MODE:

SAME AS 3 BUTTON PUSHES IN OTHER QUIVERS

THE SCREENS IN COMPOSE MODE

- 1st screen....red...color select.....side flip =gradients
- 2nd screen...yellow...segment select...side flip = more segment selections
- 3rd screen....green....LED effects...side flip = second virtual circuit effects
- 4th screen....aqua...# sequence segments....side flip = sequence sizes
- 5th screen....blue...effect speed.....side flip = strobe timing
2 side flips = super-strobe
- 6th screen....purple...arc positions.....side flip = add more effects
- 7th screen...pink...BUMP MODE expanded controls
- 8th screen...white....no effects (with wheel turns). Signal moves work in this screen (like save, lock, toggle).

WHITE SCREEN IN COMPOSE

The white screen in compose is a “safe” screen where you can do signal moves, play with the hoop more freely, and save hoops. The 3 button presses works in compose in any screen so you can also LOCK a hoop if you want to save it or play with it freely. But while in compose the only screen in which you can do regular signal moves is the white screen. Specifically the color select, color flip, BPM moves, brightness and sensitivity moves work in the white screen.

BUMP MODE IN COMPOSE

Bump mode is not normally activated in compose. However, the sensitivity/bump sensitivity setting from the global sensitivity move, will also set the bump sensitivity level in compose mode 7th screen/pink/BUMP. If you have not set any global sensitivity/bump sensitivity settings, then compose mode will use the default middle setting for BUMP responses.

The pink screen in compose allows you to choose what part of the hoop display will respond to your bump – as you isolate clockwise to the right to “scroll down”(you can also isolate counter-clockwise to the left to “scroll up”) :

- 1/ yellow confirmation = flash 1st color of the color scheme
- 2/ green confirmation = flash white
- 3/ aqua confirmation = flash first color from a dark hoop
- 4/ blue confirmation = alternates two flash colors from a dark hoop
- 5/ purple confirmation = cycle color schemes (like default BUMP)
- 6/ pink confirmation = cycle segment patterns
- 7/ white confirmation = momentary speed up of any effect selected
- 8/ red confirmation = no response (clears bump responses)

If you set any of the BUMP target responses in the pink screen, they will stay with that hoop as you continue to compose in the other screens. At any step you can save your composed hoop with its BUMP response.

Note: if you want to have a white flash from a dark hoop, (#3 response) then in the red screen pick a white hoop or one that has white as its primary color.

EXAMPLE OF USING COMPOSE MODE SCREENS

Open up the hoop in **compose mode**. (Switch the hoop on with the switch facing you and at the bottom of the hoop).

1/Keep the rainbow color scheme for this example (may need to dip and turn as you bring switch to vertical – see short tutorials)

2/Front flip to the segment selection screen (yellow bar = second screen). Rotate the wheel clockwise to get a display where there are alternating 3 lit LEDs and 3 dark. May take one and a half rotations to get there. If you go too far, just reverse the isolation.

3/Front flip to the effect selection screen (green bar). Rotate the wheel clockwise to get a strobing effect on the lit LEDs. You will first get to a fade, then continue rotating till you get to the strobe.

5/Side flip 180 (light pink confirmation) to get secondary effects and rotate the wheel to light up the remaining LEDs (like having a second circuit of lights) – use fading settings for this circuit. You can try other LED effects later if you wish.

6/Back-flip to the red bar (color wheel) and rotate the wheel counter-clockwise through various color schemes. Pick a color scheme that has more than one color in it.

7/Front flip to the blue (4th) screen and then adjust the speed of the strobe. Do two side flips (light pink confirmation each time) and then wheel turn to get a superstrobe (very fast strobe). These LEDs will flicker and look white-ish or pastel until you move the hoop.

8/Front flip to the pink screen (BUMP responses) and try out the aqua and blue and purple and pink settings.

You can go back and forth with front flips and back flips with wheel turns and then followed by side flips and wheel turns, and you will discover lots of interesting displays. If it gets confusing at any point, just do a half off back into compose mode and it will be cleared and reset with the rainbow hoop.

If you really like one of these hoops, you can save it before it disappears. Try to recreate it after you save it, just to get practice and confidence.

At this point its best not to worry too much about trying to create an exact look. Just play, dance, experiment and observe

RESET MOVES

There are several different reset moves:

The Quiver reset. See page 14. For the quiet quiver, 9 pack, kix quiver and random mode, this move clears any settings and returns the quiver or pack of quivers to default.

There are many ways to do this shaking move, and you should experiment to find ones that work best for you and integrate well into your dance or performance.

INDIVIDUAL HOOP reset: The same move works in the **saved quivers**, but addresses each hoop individually. This is so you can clear a hoop that has gotten jammed or isn't working as you expect and get the default hoop back again without interfering with your other saved hoops. It's a bit trickier to do this move and I find it best to go to the hoop, do a half-off and then just as the hoop itself begins to load, move the switch to vertical and at the top and begin shaking. Much easier to demo than describe.

Global reset. This move returns the whole psikohoop to its original settings. It will remove your saved hoops, so approach with caution. Holding the hoop in both hands, turn it ON with the switch at the bottom and facing you, and as the red confirmation appears, do a smooth isolation from 6 o'clock up to 8 o'clock and back, and then do that again. You should see a red arc spreading around the hoop and then beginning to flash to remind you this is irreversible (if you want OUT, then just start moving the hoop into another orientation and the global reset will not happen). Wait till the arc completes to get the global reset.

Hard reset. USE IF HOOP WONT TURN ON. Like a computer reboot. Hold the button down and keep holding. The hoop will go through various displays and then go dark – keep holding for a few more seconds, around 10 seconds total and when you let go of the switch the hoop should restart. You wont need to do this unless the hoop totally packs up.

BPM (beats per minute) TAP MOVE and FLIPS TO CHANGE BPM.

The speed of certain effects within any one hoop display can be controlled so that they are in the rhythm you prefer or on the beat of the music. Also the rate at which one hoop display (“hoop”) changes into the next one can also be controlled. There is an “autocycle” move that will get the hoops changing/cycling automatically in the quiet/kix/9 pack and saved orientations. Then either the tap BPM move or front/back flips will control this cycling speed.

When you open random mode, its on autocycle, selecting hoops from all the quivers of the psikohoop, with flips changing the speed of autocycling. Use the tap-BPM move for more accurate and faster shifts. With a combination of flips and tap-BPM you can vary autocycling speed from around 180 BPM to once every 20 seconds or so.

The sequencing speed and autocycling speed are linked together with a certain ratio in the psikohoop software so that they look good together and both will fit into the rhythm you want or the BPM of the music; (one will be a multiple or fraction of the other).

A consequence of this is when you set a very fast BPM with tap-BPM then it will take perhaps 40 backflips to get to the slowest shift of 20 seconds...whereas if you set a very slow BPM (say around once every 3 seconds = 20 BPM) then will only take a few backflips to slow the shift down to 20 seconds.

In hoops that have sequences going around them (try the first hoop in the saved quivers) Tap-BPM will directly affect the sequencing speed. Then in the saved quivers for example, if you do autocycle move, the first three hoops will cycle and the sequencing speed that you set with the individual hoops will also be maintained.

PULSE

If you set tap BPM in a hoop that is already in the saved quivers it will not have a pulse (a color that fills the hoop each beat).

If you set BPM in a hoop in another quiver and then save it, it will be saved with a pulse.

If you do the autocycle move first and then the BPM move, there will be no pulse. If you do BPM move first and then autocycle, you get pulse.

SYNCHRONIZING 2 OR MORE PSIKOHOOPS TO AUTOCYCLE TOGETHER.

See the advanced tutorials on the website. These tutorials will also cover some other cool stuff.

WARRANTY

I am offering a 6 month warranty on the psi-ko-hoop from the date of purchase. The hoops are tested thoroughly before shipping. If there is obvious damage to the hoop when it arrives please notify me immediately at merlin@psihoops.com or 619 921 3544 and we will sort it out with the mail carrier. For other problems, you should keep your receipt and it will be easier if you have the original box. The warranty is supposed to cover defects in workmanship, materials and design, and not extreme or inappropriate use. Not following the instructions in terms of weatherproofing, care of the hoop, opening and closing the hoop, charging the hoop, and so forth, voids the warranty.

Cracks in the tubing will not be covered, unless they are present at the time of receiving the hoop. To crack this PP tubing usually requires cold weather and a lot of force. If you do forceful pinch reversals when the tubing is cold (below around 50 degrees), or drop the hoop onto concrete when its cold, or step on the hoop with shoes, etc... you can put minute stress fractures in the tubing, and then at a later time when you are just hooping normally, the hoop can crack. But in warm conditions and without extreme force, the tubing will last for years. Sunlight will also degrade the tubing and make it more brittle, so if you leave the hoop outside for long periods, the tubing will crack easier and not be so responsive to your movement and touch. I will replace tubing for \$60. However, if the connector area of the hoop is damaged, it may have damaged the sensors, master board, connections to the switch and USB and that could be an expensive repair, could amount to \$150. You will have to pay the shipping back to me, but I will repair the hoop for free provided that you:

a/ haven't obviously abused the hoop by bending it too far, twisting it in half or squashing it with something, stepping on it with shoes, immersing it in water, leaving it in a sun-baked car and so forth

b/ haven't removed the connector at either end of the tubing.

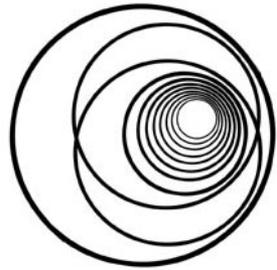
c/ haven't broken the USB port by tripping on the wires or yanking them or forcing the USB port in some way.

i.e I will repair or replace it for six months if it fails under "normal use", which certainly includes fast and extreme hooping, if done with awareness and sensitivity.

After the six month period I will look at it and give you an estimate for repairs. Please be advised that I have a patent on these hoops and patents pending.

WARNING: The displays and the interactions with this hoop can be addictive. The psi-ko-hoop can probably drive you nuts. Flashing lights at close quarters may not be everyone's cup of tea, so be sensitive to people, mood and setting. As with a regular psihoop, hurting yourself or others with this instrument is counter to the intention of whirled peace! Take it easy...

Hopefully none of these displays will trigger any bad reactions. However, as with any flashing lights, there is always a chance that an individual may have a bad reaction, so monitor this in yourself and others, until you are sure. Be especially cautious if you or anyone in the close vicinity is prone to any epileptic events. We have tried to keep the displays safe, but because of the flexibility of the user programming and interactivity between the user and display, especially when there are many hoops involved at the same time, it is impossible to completely control.



CHILDREN:

Some adult supervision is necessary. Make sure that they can twist the tubing well enough to securely fix the hoop together at the connector. Or the adult can be responsible for connecting and charging the hoop.

With younger children, we advise keeping them in the quiet quiver, the still quiver in 9 pack (see later) or a mellow hoop you have saved into the save quiver, so that the displays are easier on the eyes and nervous system. For children, limit the time playing with the hoop, perhaps to 10 to 20 minutes. Try to give them a mirror so that they don't have to stare at the displays from close up. Set the brightness to DIM. Supervise them until you are sure they are safe and responsible for themselves, others around, and the environment.

PRETTY PLEASE

Please make good use of the tutorials, videos, materials and resources that are on the website. This booklet covers only a fraction of the interactive potential of the psikohoop.

Get your questions on the FAQ page by emailing merlin@psihoops.com Share on the Blog page. Give us feedback on the tutorials and videos. Make videos of your own and post them on the site and on youtube etc.

And if you learn better in company, lets organize some classes, skype sessions, workshops, teacher trainings and so on ...

It would help us greatly if you could keep some notes or a diary of your experiences in using the psikohoop - the amount you practice, play and perform with this hoop, the difficulties, frustrations, ease and joys you have with it, and any feedback we might use to improve the hoop. This will be very useful in the evolution of this instrument.



The interactive controls of the psikohoop have been made to align with the physics and behavior of an unsecured wheel turning in space

– specifically, a hoop! - and the challenge is to discover how best to work with each display or set of controls in order to learn new skills, increase fluidity and express more with your hoop dance; and of course to have the most fun doing so.....

US patents 2013/0225037 A1 and 9,370,727 B2
www.psihoops.com