

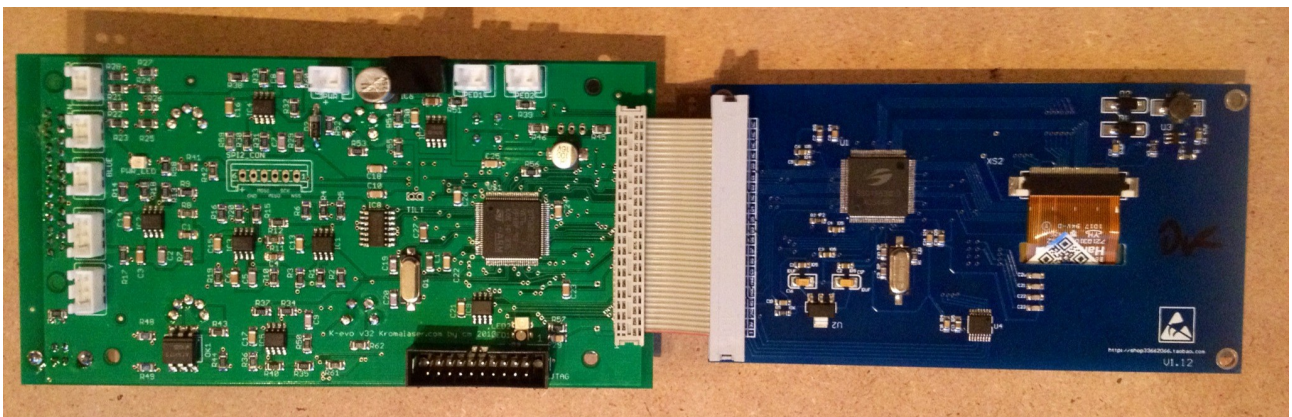
KROMALASER

KONTROL 3D-EVO KIT

ILDA LASER HARP GENERATOR

INSTRUCTION MANUAL

Firmware 1.264



Unpacking instructions

Immediately upon receiving this product, carefully unpack and check the contents to ensure that all parts are present and have been received in good condition.

Notify KROMALASER immediately and retain packing material for inspection if any parts are missing, appear damaged from shipping or the carton itself shows signs of mishandling.

Save the carton and all packing materials.

Should there be any damage, consult KROMALASER at the earliest convenience and do not use the device.

SAFETY:

To maintain perfect conditions and to ensure safe operations, the user should follow the safety instructions and warning notes written in this manual.

Damages caused by manual interventions to the device, made by not KROMALASER authorized personnel, are not subject to warranty.

This device contains no user-serviceable parts.

Please refer servicing to KROMALASER qualified technicians only.

KROMALASER shall in no be liable for any general, indirect or consequential damages arising out of or occasioned by the use of this product.

LASER SAFETY NOTICE:

KROMALASER does not warrant the use of the KL-KROMALASER KONTROL 3D-EVO Laser Harp Generator as a means of implementing safety features.

It is possible for the Software and Hardware to fail in such a way so as to increase the risk of unsafe laser exposure.

You are therefore completely and solely responsible for scan-fail safeguards, beam stops, audience separation distances, aircraft observers, measurements and calculations, and/or any other measures necessary to prevent the software and hardware from presenting a laser safety hazard.

COPYRIGHT: The Software and Hardware is owned and copyrighted by KROMALASER. You may not use, copy or transfer the Software or Hardware or any copy thereof. You may not decompile, reverse engineer, disassemble or otherwise reduce the Software (Software on the Hardware board) to a human- perceivable form.

IMPORTANT:

The Manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device. KROMALASER will not accept liability for any damages caused to the devices connected to the Kromalaser KROMALASER KONTROL 3D-EVO Laser Harp Generator.

CAUTIONS:

Never remove warning or informative labels from the unit

Never leave any cables lying around

Never use the device during thunderstorms, unplug the device immediately

Never leave various parts of the packaging material within children's reach, as they are potential sources of danger

Do not open the device and do not modify the device

Do not connect this device to a dimmer pack

Avoid brute force when installing or operating the device

Do not switch the device on and off in short intervals as this might damage or reduce the system's life

Avoid contact with water and other liquids

Only operate the device after having familiarized with its functions

Avoid flames and do not put close to flammable liquids or gases

Never look directly into the light source of your laser projector

Always disconnect power from the mains, when device is not used or before cleaning.

Make sure that the device is not exposed to extreme heat, moisture or dust

Make sure that the available voltage is not higher than stated in the manual

The cable insert or the female part in the device must never be strained.

There must always be sufficient cable to the device. Otherwise, the cable may be damaged which may lead to electric shocks.

If the external cable is damaged, it should be replaced by a qualified technician

If the sensor lens is obviously damaged it has to be replaced. So that sensor's functions are not impaired due to cracks or deep scratches

If the device is dropped or struck, disconnect mains power immediately.

If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately.

The arising water condensation might damage the device. Leave the device switched off until it has reached room temperature.

If your device fails to work properly, discontinue use immediately.

Contact KROMALASER for service

For adult use only. The device must be installed out of reach of children.

Never leave the unit running unattended

The user is responsible for correct positioning and operation of the KL- KROMALASER KONTROL 3D-EVO Laser Harp Generator and all of its components.

The manufacturer will not accept liability for damages by the misuse or incorrect installation of this device.

Repairs, servicing and electric connection must be carried out by a qualified technician.

Never look directly into the laser beam of your projector. Looking directly into laser beams can seriously damage your eyesight.

Wear safety protection glasses.

Wear gloves for protection and to insure easier note detection

Do not let anyone come near the unit while it is operational

WARRANTY: Till two years after delivery date.

OPERATIONAL CONDITIONS

The maximum environment temperature $t=45^{\circ}\text{C}$ (113°F) must never exceeded.

The relative humidity must not exceed 50% with an environmental temperature of 45°C (113°F).

If this device is operated in any other way than the one described in this manual, the product may suffer damages and the warranty becomes void.

Any other operation may lead to dangers like short-circuits, burns, electric shock, eye damage, etc.

You endanger your own safety and the safety of others!

Improper installation can cause serious damage to people and property!

CLAIMS

The client has the obligation to check the delivered goods immediately upon delivery for any shortcomings and/or visible defects, or perform this check after our announcement that the goods at their disposal.

Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to notify and submit claims with the shipper in the event that the device is damaged due to shipping.

Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times.

Return shipments must be accompanied with a letter defining the reason for return shipment.

Non-prepaid return shipments will be refused, unless otherwise agreed in writing.

Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

KROMALASER KONTROL 3D-EVO Laser Harp Generator is the latest and greatest product from KROMALASER that will turn any standard RGB ILDA-Compatible laser projector into a powerful, one-of-a-kind, virtual light harp of impressive size that employs multi-colored laser beams instead of strings.

This device does not incorporate any kind of laser source.

The KROMALASER KONTROL 3D-EVO is a very powerful controller which drives any commercial Laser Projector (Scanner) equipped with standard ILDA interface.

Whenever you connect a 1, 10W or more powerful laser scanner, the machine produces a customizable Laser Harp pattern and the pure sound of your favourite Synth will be perfectly triggered by touching each beam.

Connecting the MIDI Out of your KROMALASER KONTROL 3D-EVO to a personal computer, through a USB/MIDI Interface and be free to trigger any kind of event with the power of the your favourite RGB Laser Projector.

Stage Concert or Studio? No problem!

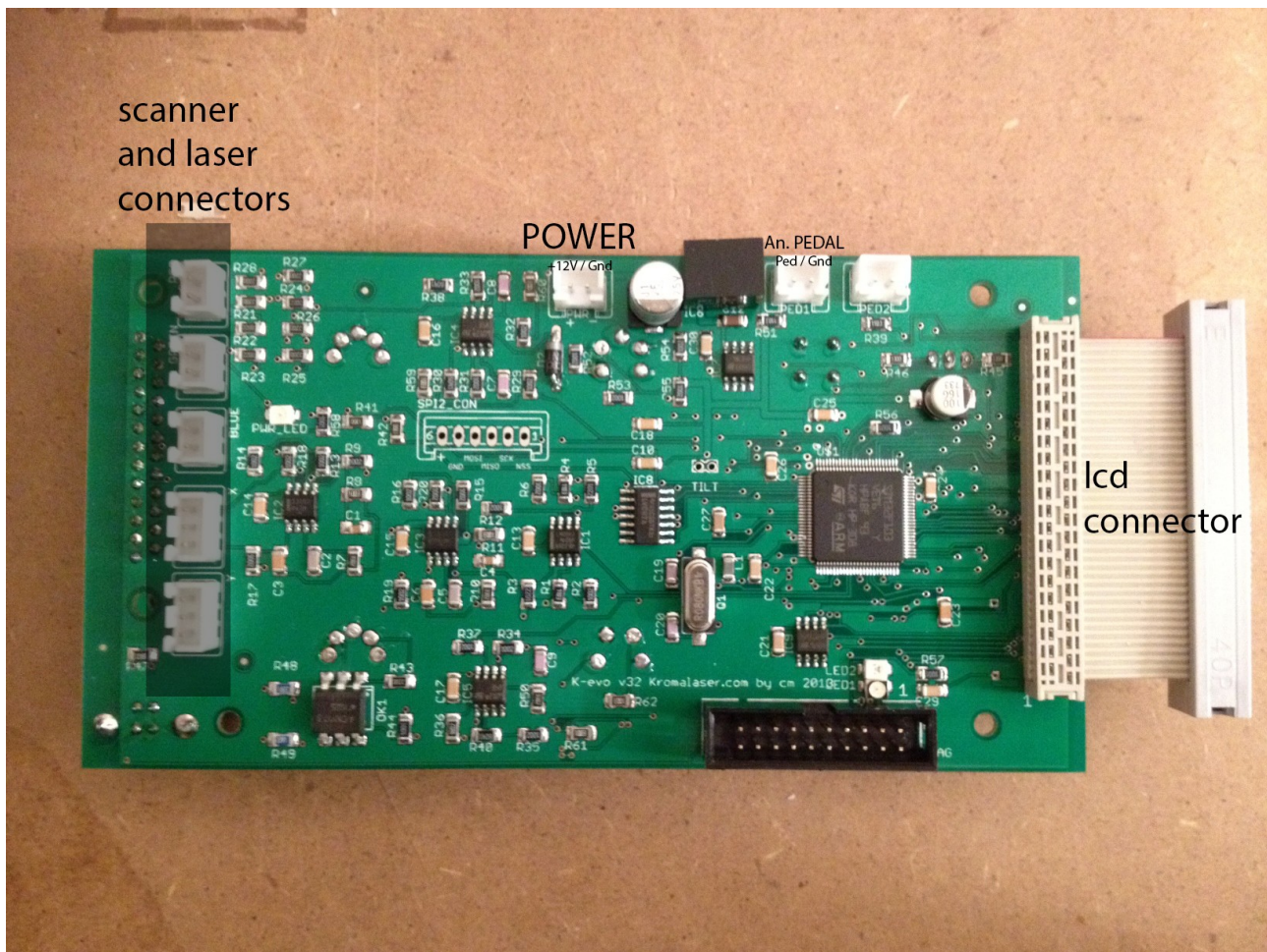
The KROMALASER KONTROL 3D-EVO works perfectly with small cheap commercial RGB Laser Projectors for your own studio and is a great generator to impress thousands of people in the stadium as well as in a TV show.

IMPORTANT: KROMALASER KONTROL 3D-EVO Laser Harp Generator does not include a built-in laser projector. It is a MIDI controller box with a sensor unit.

It requires an ILDA- Compatible RGB laser projector to operate.

Since KL-KROMALASER KONTROL 3D-EVO Laser Harp Generator does not come with a built-in laser projector, you are free to choose your own laser setup for every performance, whether you need a less powerful laser projector for indoor events or high-powered lasers for open air performances.

3d-EVO CPU connections



on the back side of the cpu you find:

scanner and laser connectors: to individually connect a laser or a galvo scanner without using the ILDA connector

Power connector: to give power to cpu: +12Vcc 1A required

Analog Pedal Connector: to give modulation with an analog pedal (like the guitar pedal)

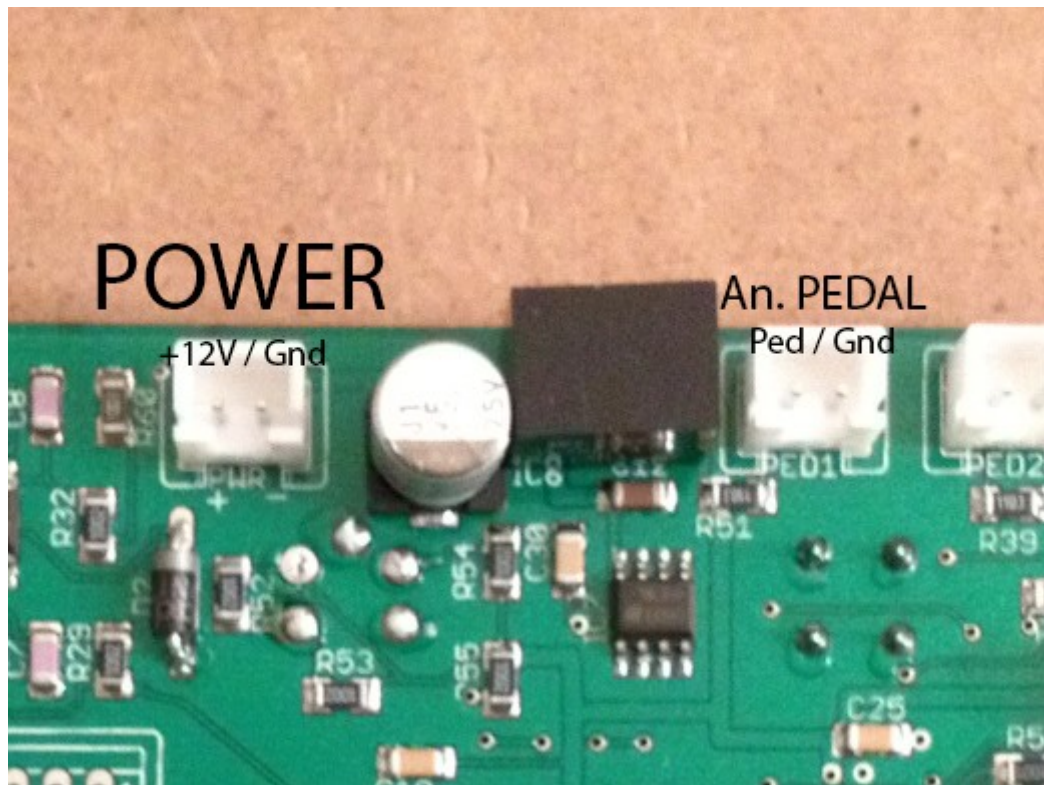
LCD connector: to connect the LCD (pin to pin connection)

Power the card connecting 12Vcc 1A minimum power supply to left connector as described in picture.

The Power LED will lit.

If you accidentally connect power reverted, there is a protection diode (D2) that can resist some seconds before burning.

The polarity is clearly written on the silk screen of the card.



FRONT PANEL CONTROLS



The front panel has:

LCD backlighted Display with Touch Screen

STATUS Led

POWER pushbutton

FOOTSWITCH Plug (described later)

UltraSENSOR Plug (described later)

MIDI OUT Plug

MIDI IN Plug

ILDA Connector

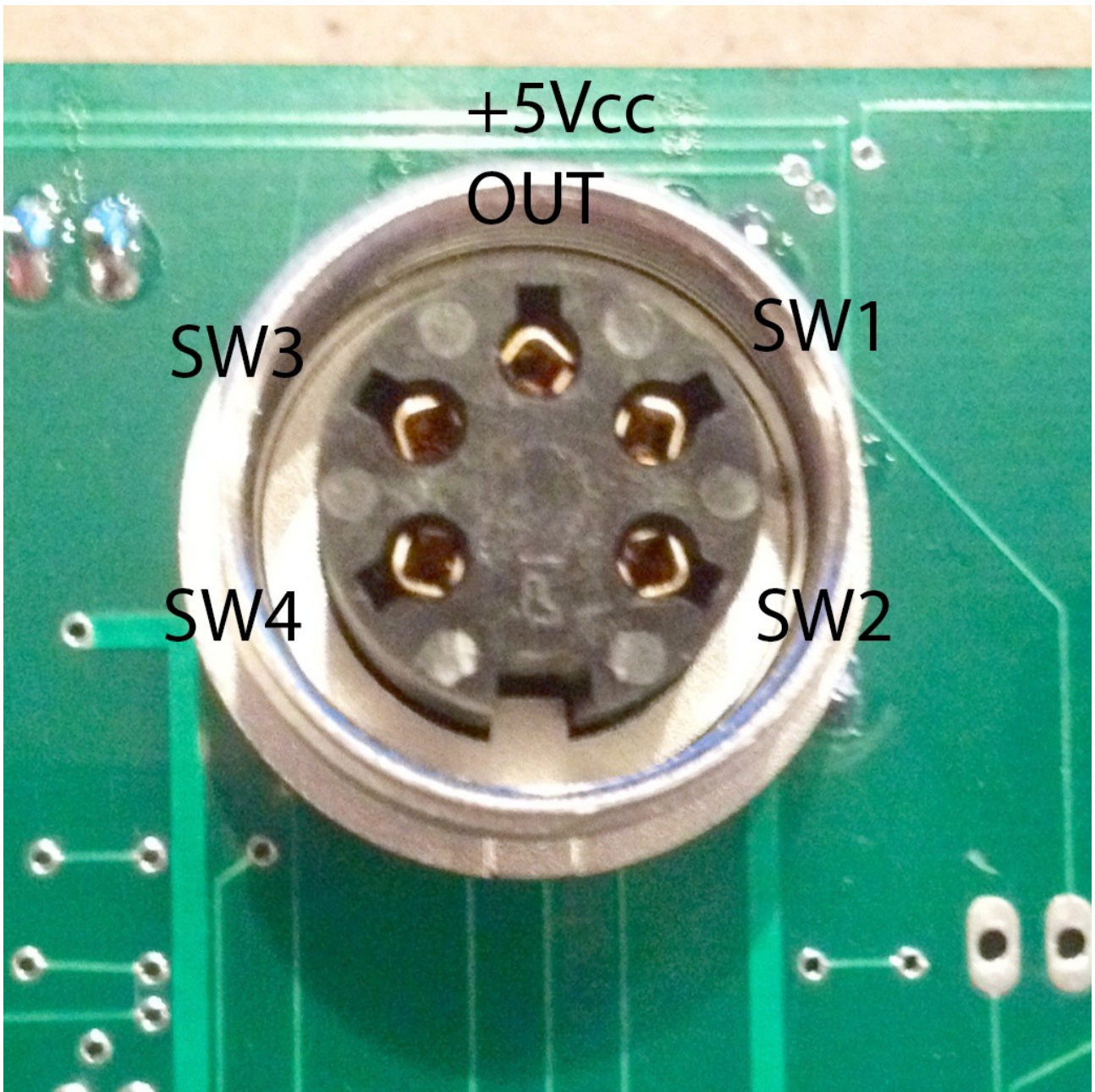
USB connector

Power Supply Socket +12V 1A

Analog PEDAL Jack input

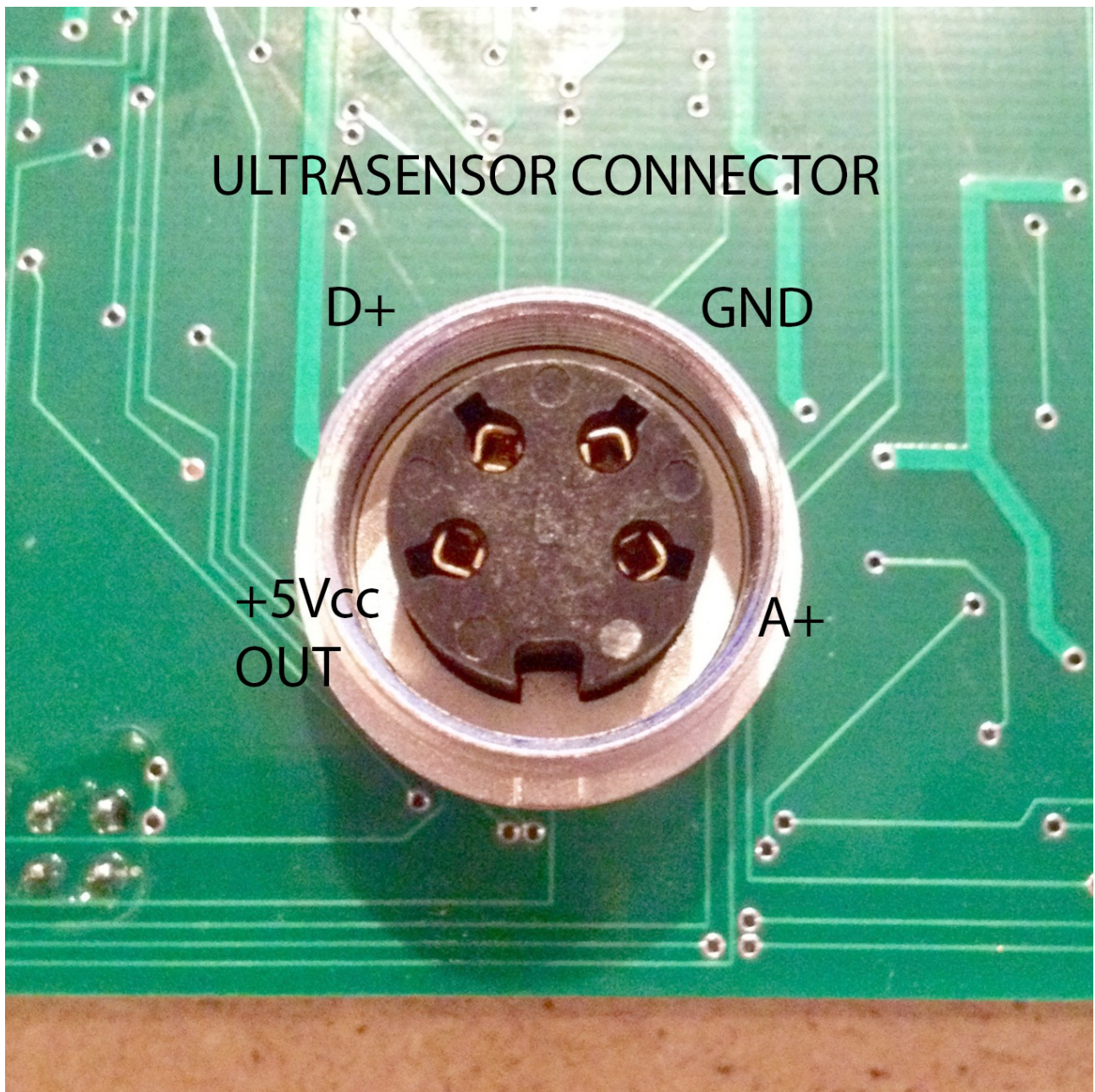
Connecting the Footswitch:

The Footswitch has a common wire (+5Vcc out) and four pushbuttons (sw1,sw2,sw3,sw4) that must be connected to the footswitch connector as described here:



Connecting the ULTRASENSOR

The Usensor has 4 wires, called +5Vcc,GND,A+,D+ that must be connected to the Ultrasensor connector as described here:

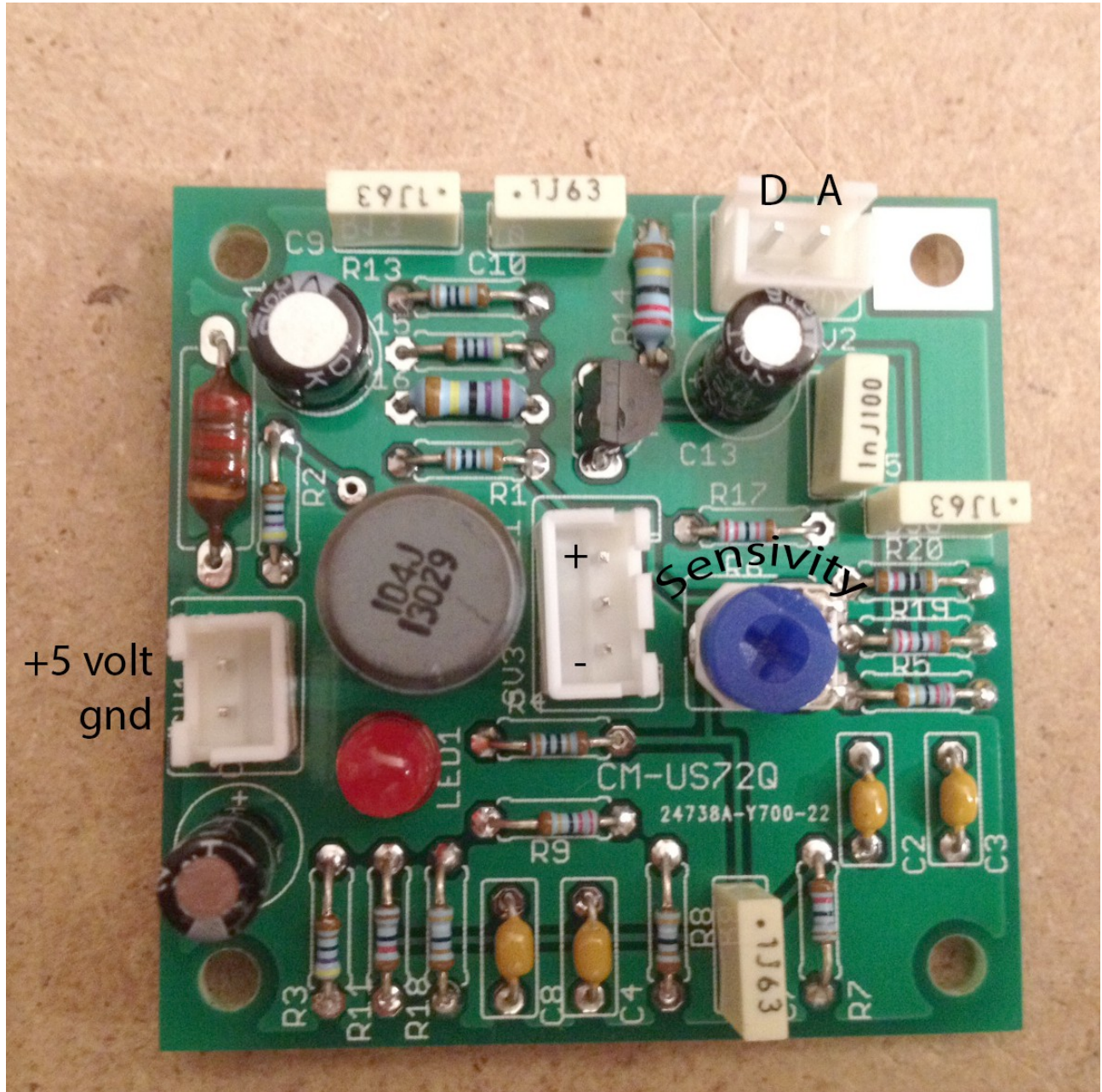


We suggest a 4 wires shielded cable no longer than 2 mt.

The ultrasensor card

This card gets power from the CPU and is connected by the 4 signals as described above. Here the connectors and their description.

Take care not to revert polarity, the chips will burn suddently.



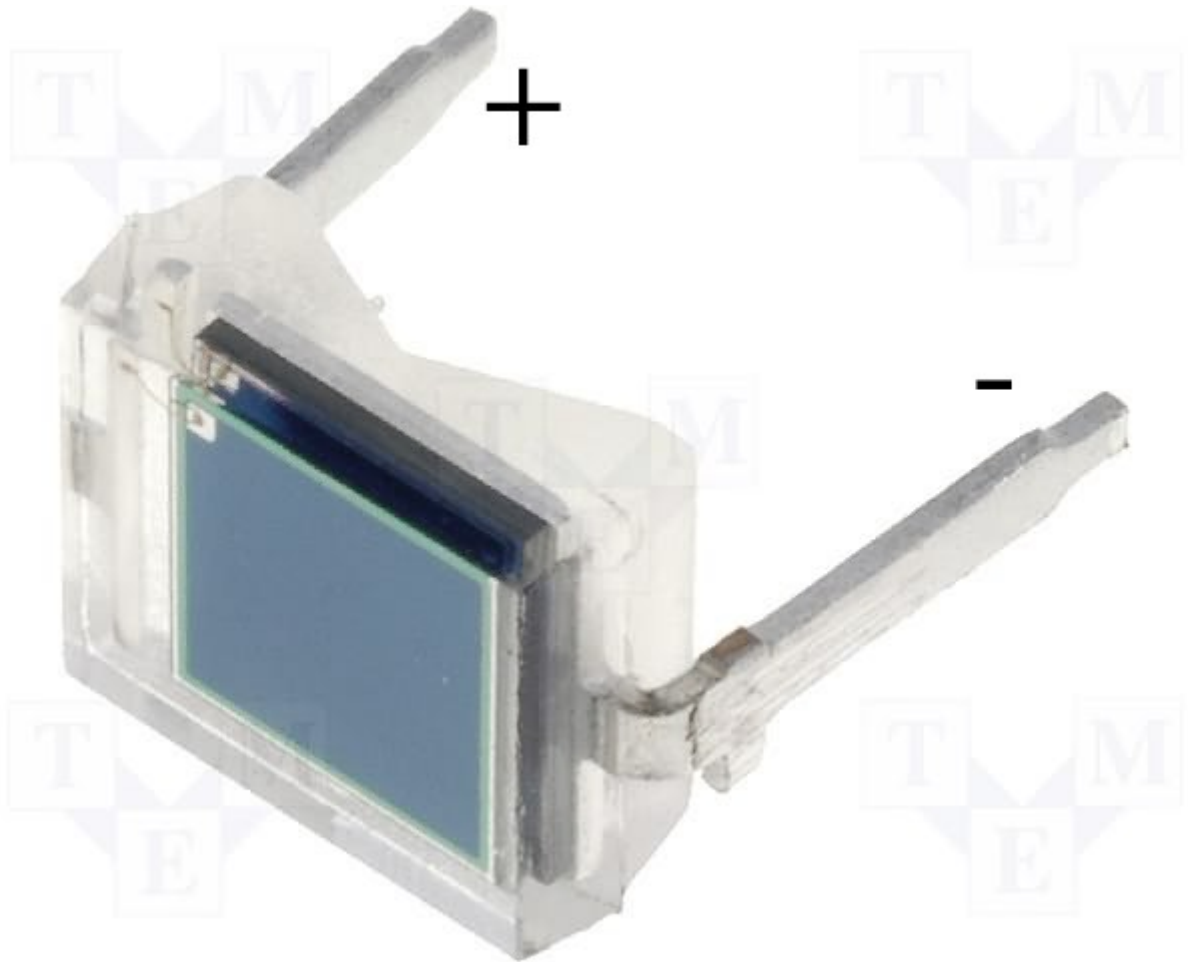
The sensivity increases turning the trimmer clockwise. We suggest to leave it in the middle position.

The Photodiode connector SV3 is polarized (+ / -). The central pin is not connected don't use it.

Connecting the photodiode:

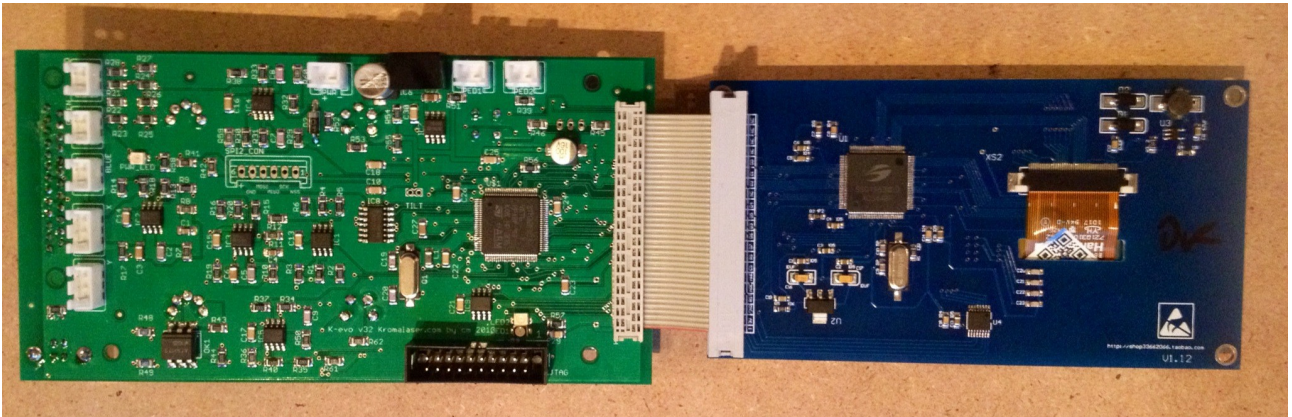
The photodiode BPW34 must be connected as in picture.

Use cable no longer than 5 cm and keep everything in a metal case.



Connecting the LCD

Simply insert the LCD connector as in this picture. Be sure to center the connector male in the female pcb connector.

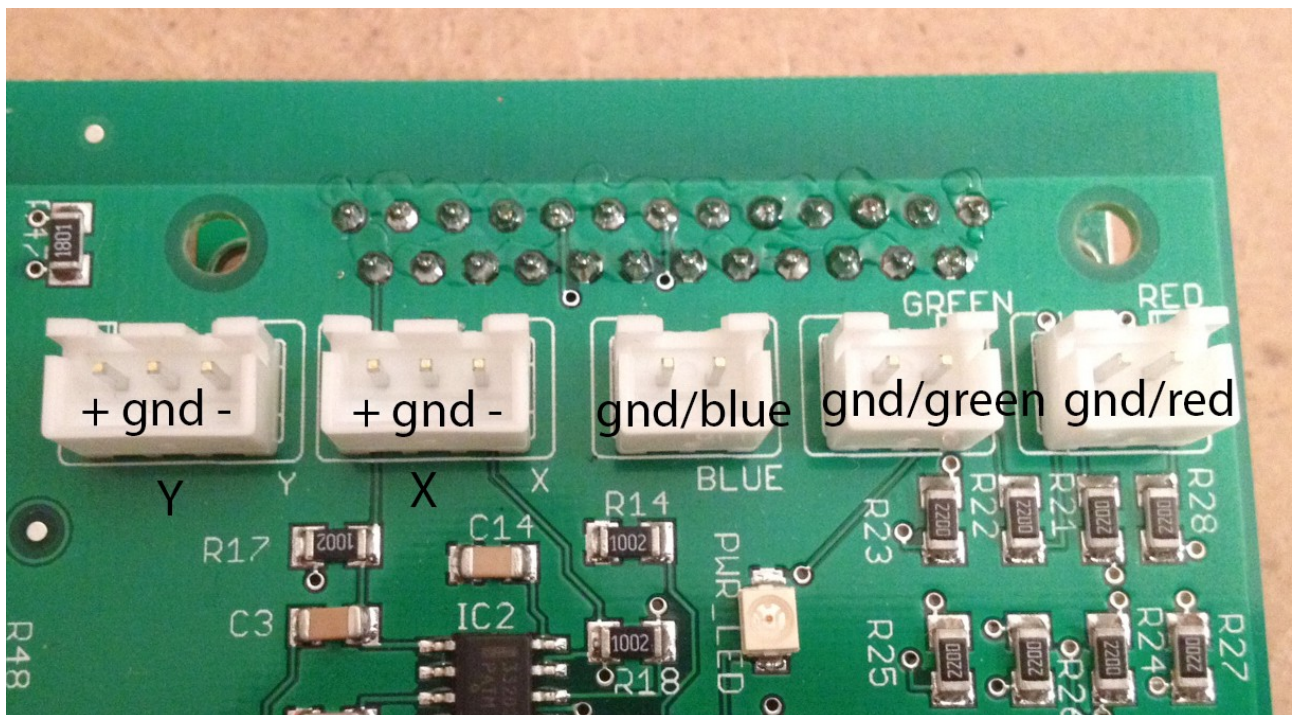


Description of white galvo and laser connectors.

In addition to ILDA, you can use the small white connectors for lasers and galvo as described here:

X and Y refer to balanced signals for galvo scanners. RED, GREEN and BLUE to unbalanced signals for TTL or ANALOG modulated lasers.

NOTICE: this signals are not intended to POWER the lasers but to give them beams MODULATION.



SETTING UP

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. KROMALASER KONTROL 3D-EVO - ILDA Laser Harp Generator is connected to a power supply by 12Vdc 1A out with 110V/240V 50Hz/60Hz in external PSU. Never connect a different PSU than the one given with the device or permanent damage will occur.

Start by selecting proper positions for the KROMALASER KONTROL 3D-EVO - ILDA Laser Harp Generator and the sensor.

Sensor should be placed half a meter away from the laserprojector in such manner that it is facing upwards at around 45 degree angle or approximately where the Harp player's hand will be blocking the laser beams.

The KROMALASER KONTROL 3D-EVO can be placed anywhere where it can be reached by the cables used for connecting the Laser Harp components.

If provided sensor cable is not the required length for your Laser Harp setup, you can order lengthier cables from KROMALASER.

Connect the laser projector and the Controller with the correct DB-25 ILDA cable.

WARNING:

Take care do not to connect your DB-25 ILDA cable to any other device (computers, printers, etc.) other than your laser projector and KROMALASER KONTROL 3D-EVO - ILDA Laser Harp Generator.

NOTE: Only laser projectors with ILDA connector can be connected to the KROMALASER KONTROL 3D-EVO Laser Harp Generator. Check that your laser projector contains the appropriate ILDA DB-25 connector since the Laser Harp Controller cannot be connected to the laser projectors with XLR connectors that operate on DMX protocols.

If the laser projector requires a mirror for upright beam projection, set the mirror right in front of the projector beam opening in such a way that the beams are projected vertically in the air.

Kromalaser projectors already have vertical hole for best laser harp performance.

Place the Pedal footswitch board near the performer so that she can easily reach them with the foot)

KROMALASER KONTROL 3D-EVO PANEL DETAILS

UltraSENSOR™:

Connect the UltraSENSOR™

ILDA:

Connect here the ILDA cable. Your ILDA Laser Projector should be connected to the other lead of that cable

MIDI in and Out:

Connect MIDI OUT of the KROMALASER KONTROL 3D-EVO to the MIDI IN of your synthesizer or your PC

FOOTSWITCH Connector:

Connect the Footswitch of KROMALASER KONTROL 3D-EVO

PSU Connector:

Connect here the plug of the Power Supply you got with the unit.

When ready, switch the laser harp on, by the red ON/OFF Switch shown in the picture aside.

STATUS LED:

RED=standby

FLASHING GREEN=machine ON, waiting for footswitch action

FLASHING RED: Lasers are emitted, take care!

When harp is opened: GREEN LED will lit, each time the UltraSENSOR™ detect a Laser Beam interrupted by your hand(s)

FAST FLASHING RED: waiting for software upgrade (detach the PSU to restore normal activity)

PLAY KROMALASER KONTROL 3D-EVO IN FEW STEPS!!!

Connect the footswitch with proper connector as seen in the previous section

Connect the UltraSENSOR™ to the SENSOR plug

Adjust the sensor position until you achieve perfect sensitivity where the sensor will be activated only when a hand is blocking the laser beam.

Connect the MIDI OUT of the KROMALASER KONTROL 3D-EVO to the MIDI IN of your Synth or PC

Connect the RGB ILDA projector to the KROMALASER KONTROL 3D-EVO

Connect the Power supply to Mains and plug the connector into the POWER plug as above

Turn the Power of the KROMALASER KONTROL 3D-EVO on The RED Led turns off and the GREEN one flashes

Turn the laser Projector ON

Press pedal #1, keep pressed and press pedal #4 : the projector will generate the laser harp pattern (3 beams logo)

Touching a beam, adjust the sensor position until you achieve perfect sensitivity where the sensor will be activated only when a hand is blocking the laser beam.

NOTE: It is sometimes required to physically reposition the sensor so as to achieve the perfect sensitivity. Be careful not to point the sensor too vertically as it might be triggered by the light of the beams hitting the ceiling. A sensor placed 0.5m away from the laser projector and at an angle of about 45° works best in most cases

ENJOY PLAYING

Configuring the device

The KROMALASER KONTROL 3D-EVO is a very powerful device: a lot of parameters can be configured to customize your show and tune your laser projector

The KROMALASER KONTROL 3D-EVO works at its best with a FULL COLOR ANALOG RGB laser projector, but it fits also a cheap TTL RGB scanner, of course with different colorimetry.

NOTICE: We suggest a RGB projector with at least 150mw power of the Red laser.

The KROMALASER KONTROL 3D-EVO does not work with a Green-only laser projector. The UltraSENSOR™ needs red beams to work properly

Configuring the device



SYSTEM PAGE

PARAMETER: Sensor Gain

Adjust here the sensor sensitivity if you experience ceiling's reflections, try a value lower than 25, else leave default value

PARAMETER: TTL out

Check this box if you have a TTL driven RGB laser projector to enable laser color modulation features on TTL projectors. Ask your projector's supplier if you don't know if it has Analog or TTL modulation.

PARAMETER: ALL Mod.

Check this box if you have send beam carrier to all rgb beams. If unchecked the modulation goes only to Red beam (default)

PARAMETER: Red Beam Mode

It assigns a specific function to the RED Beams

ADMITTED VALUES:

ALL (All the beams have the RED color) (DEFAULT)

NONE (this color will never turn on)

TONE (this color will turn on only with diatonic notes: A-B-C-D-E-F-G)

HALFTONE (this color will turn on only with chromatic notes: C#-D#-E#-G#-A#)

TRIG (this color will turn ON only when the harp beam is broken)

UNTRIG (this color will turn OFF when the harp beam is broken)

PARAMETER: Green Beam Mode

It assigns a specific function to the GREEN Beams

ADMITTED VALUES:

ALL (All the beams have the GREEN color)

NONE (this color will never turn on)

TONE (this color will turn on only with diatonic notes: A-B-C-D-E-F-G) (DEFAULT)

HALFTONE (this color will turn on only with chromatic notes: C#-D#-E#-G#-A#)

TRIG (this color will turn ON only when the harp beam is broken)

UNTRIG (this color will turn OFF when the harp beam is broken)

PARAMETER: Blue Beam Mode

It assigns a specific function to the BLUE Beams

ADMITTED VALUES:

ALL (All the beams have the BLUE color)

NONE (this color will never turn on)

TONE (this color will turn on only with diatonic notes: A-B-C-D-E-F-G)

HALFTONE (this color will turn on only with chromatic notes: C#-D#-E#-G#-A#)

TRIG (this color will turn ON only when the harp beam is broken) (DEFAULT)

UNTRIG (this color will turn OFF when the harp beam is broken)

PARAMETER: Pnnn (POWER)

This is the maximum power the beam will reach when ON (3 sliders for Red, Green, Blue)

ADMITTED VALUES: 0..100

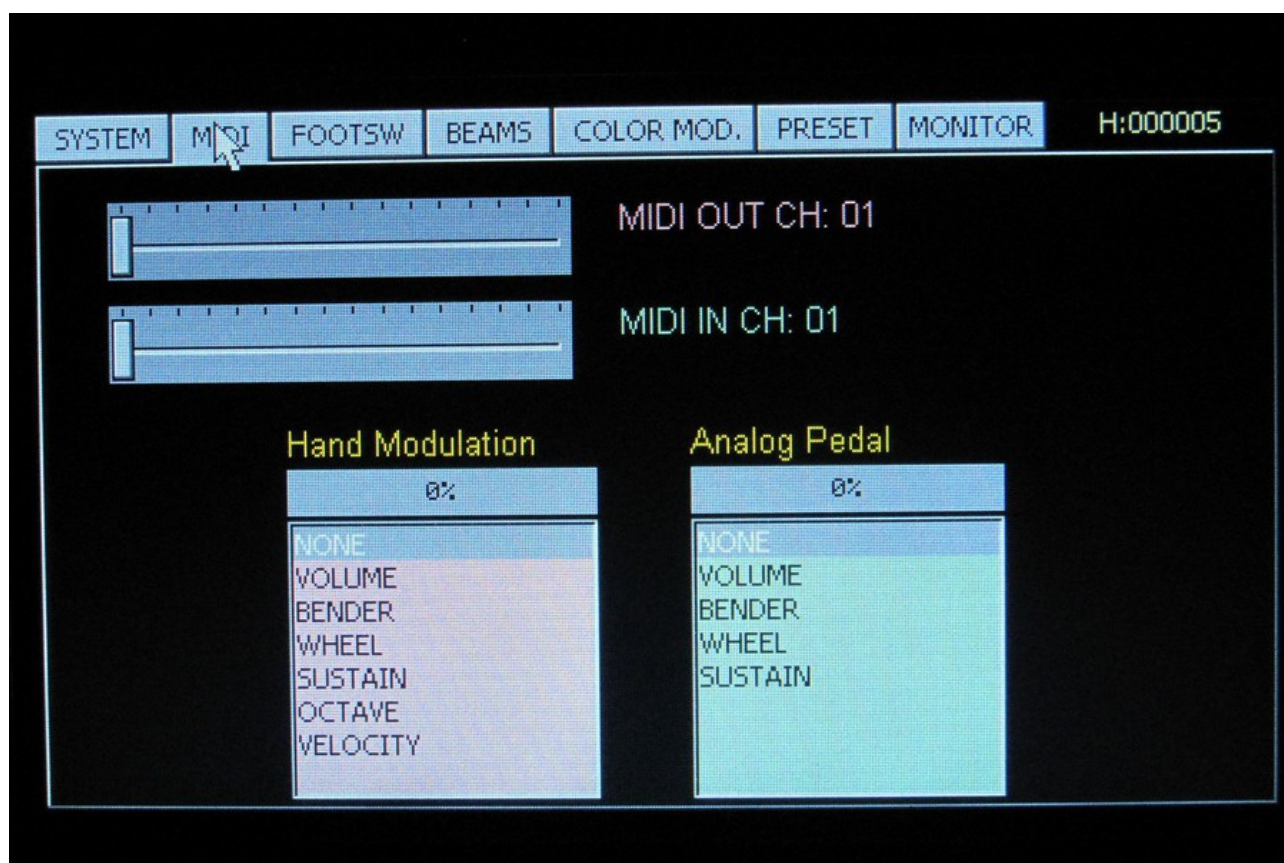
P:xxx on right top of the screen indicates the last recalled preset

An asterisk * appears when you changed a parameter of the actual preset and it has not been saved.

The working preset is saved when you press the POWER red Button or you if you do it in page PRESET.

The H:nnnnn shows how many hours the device worked since it left Kromalaser.

Configuring the device



MIDI PAGE

MIDI OUT CH: the midi out channel 1..16 (default 1)

MIDI IN CH: the midi in channel 1..16 (default 1)

HAND MODULATION:

This assign the Hand position to a Midi Controller

Available choiches: NONE/ VOLUME/ BENDER/WHEEL/SUSTAIN/OCTAVE/VELOCITY

Octave and Velocity are polyphonic parameters

ANALOG PEDAL:

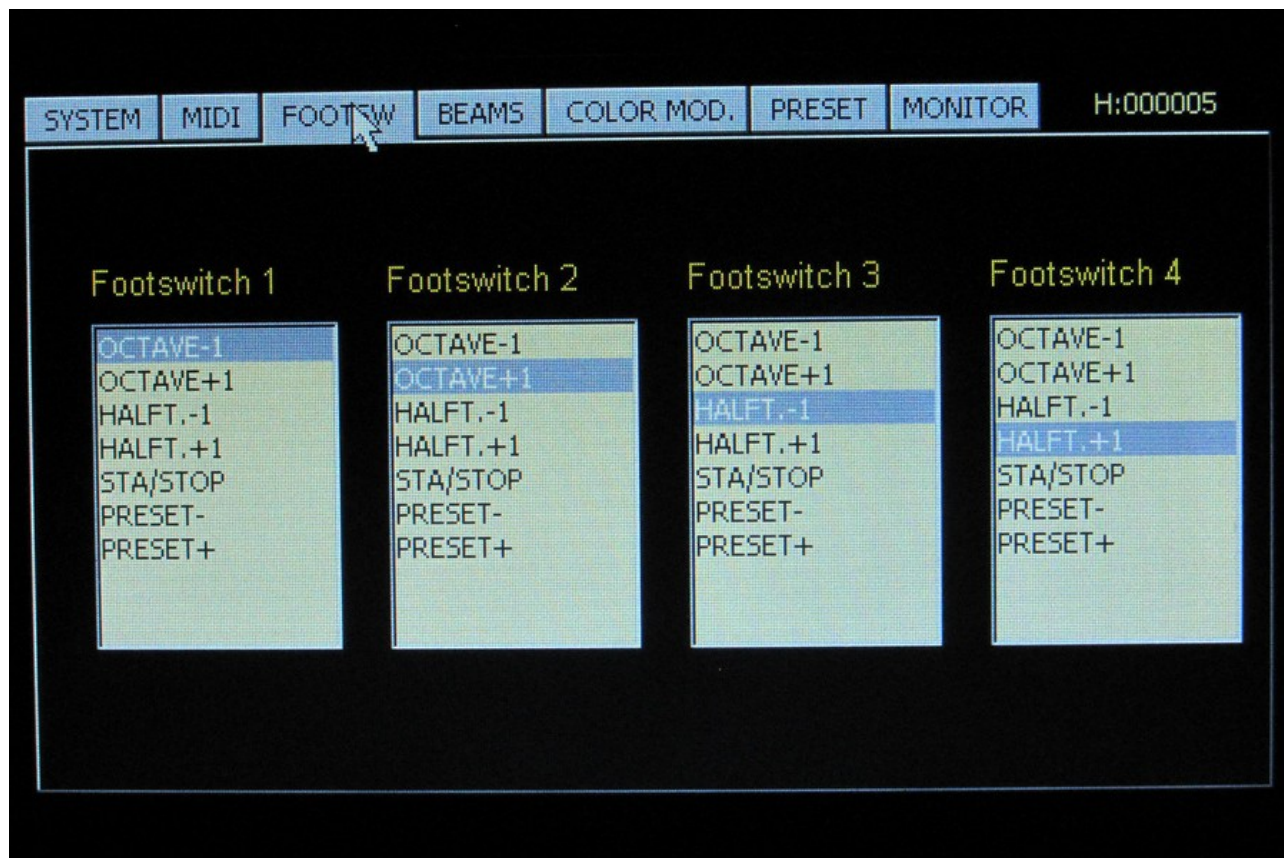
This assign the Analog Pedal input position to a Midi Controller

Available choiches: NONE/ VOLUME/ BENDER/WHEEL/SUSTAIN

The amount of modulation is shown in red bars over the list boxes.

Red bars do not move if controller is set to "NONE".

Configuring the device



FOOTSWITCH ASSIGN PAGE

PARAMETER:

Footswitch #1 / #2 / #3 / #4 assignment

The Footswitch will be assigned to following functions

ADMITTED VALUES:

OCTAVE-1: Pressing the Footswitch will make the harp go down one octave (DEFAULT FOR #1)

OCTAVE+1: Pressing the Footswitch will make the harp go up one octave(DEFAULT FOR #2)

Half.Tone+1: Pressing the Footswitch will make the harp move right one semitone(DEFAULT FOR #3)

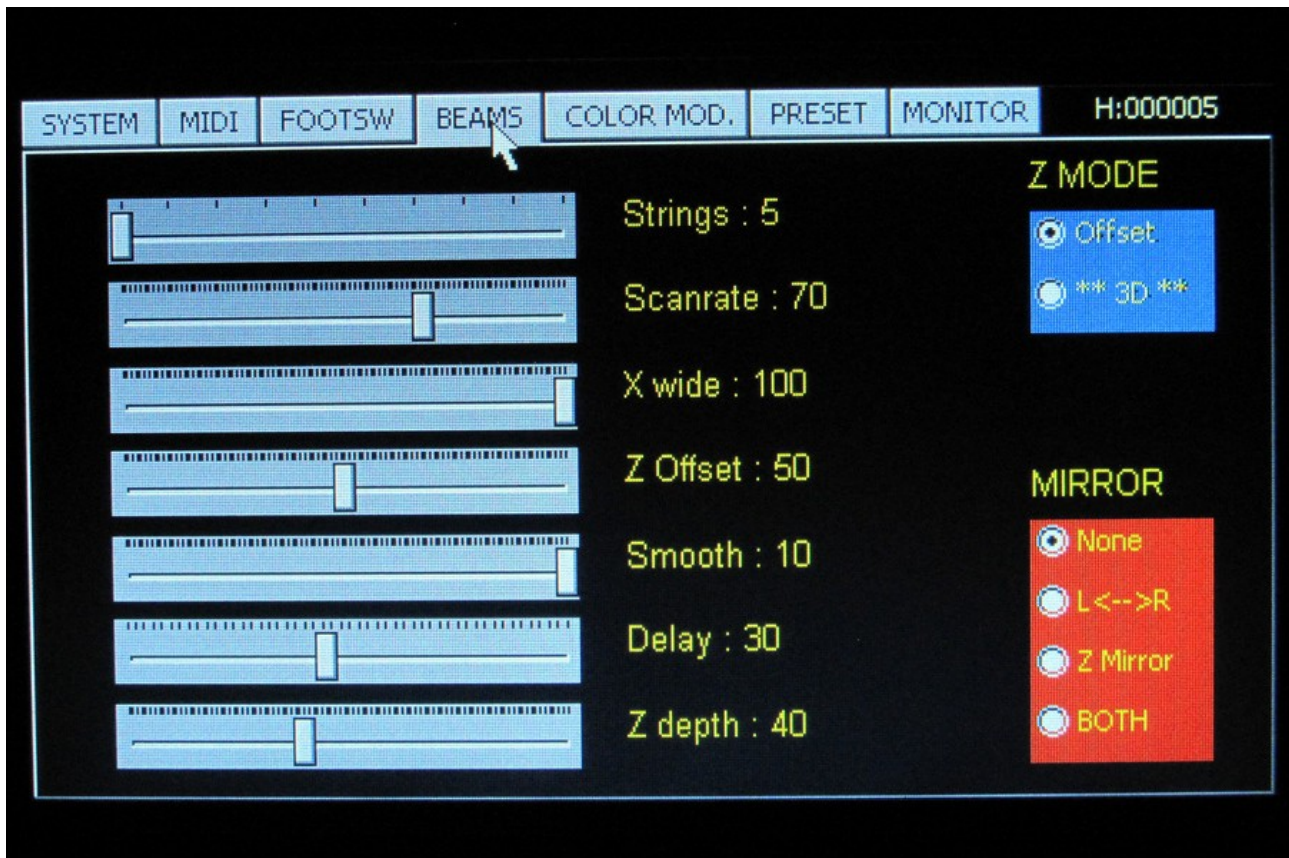
Half.Tone-1: Pressing the Footswitch will make the harp move left one semitone(DEFAULT FOR #4)

START/STOP: Pressing the Footswitch a Start/Stop signal will be sent to a Sequencer, via MIDI Out

PRESET+: Recall next Preset

PRESET-: Recall previous preset

Configuring the device



BEAMS PAGE

- **PARAMETER:** Strings:

The Number of "strings" in the harp can be programmed here

ADMITTED VALUES: Strings in the harp: 5..15.

DEFAULT : 13 (one full octave)

- **PARAMETER:** Scan Rate

The scan rate is programmed here. This affects the speed the main beam will sweep between left to right each second. The higher the value, the less the harp will show as moving rays.

Please use with care: Higher values will work well only in fast scanning laser projectors.

If you experience dimming in beams color or scanning defects, please slow down this parameter.

Default value will work well even in slow projectors (20Kpps minimum)

ADMITTED VALUES: Hertz: 5 .. 100.

DEFAULT Value: 45

Notice: slowing down galvo with "Galvo smooth" and "Delay" values affect this value.

- **PARAMETER:** X Amplitude: The X Amplitude allows you to define the amplitude of the harp (distance between beams)

ADMITTED VALUES: 10..100%. (DEFAULT to 50%)

- **PARAMETER:** Galvo smooth

The projector's scan system will be driven smoothly if you increase this parameter. Try increasing if you experience bad beam "landing" on harp string (e.g. circular patterns around the beam dot when projected on ceiling or on a wall). Good for cheap projectors

ADMITTED VALUES: 0...10

0 = no smoothness (Default Value: 10)

- **PARAMETER:** Delay

The laser turn-on time will be delayed if you increase this parameter. Try increasing if you experience bad beam "landing" on harp string (e.g. circular patterns around the beam dot when projected on ceiling or on a wall). Good for cheap projectors

You will experience less laser brightness at higher values and high scan rate.

ADMITTED VALUES: 0...40

0 = no delay (Default Value: 20)

- **PARAMETER:** "Z" Mode

This parameter is to generate 3D Effect as Circular Laser Harp

The Z axis (distance from the player) will be modulated according to this parameter.

- **PARAMETER:** Z offset: The Z position of the harp (distance between the fan and you)

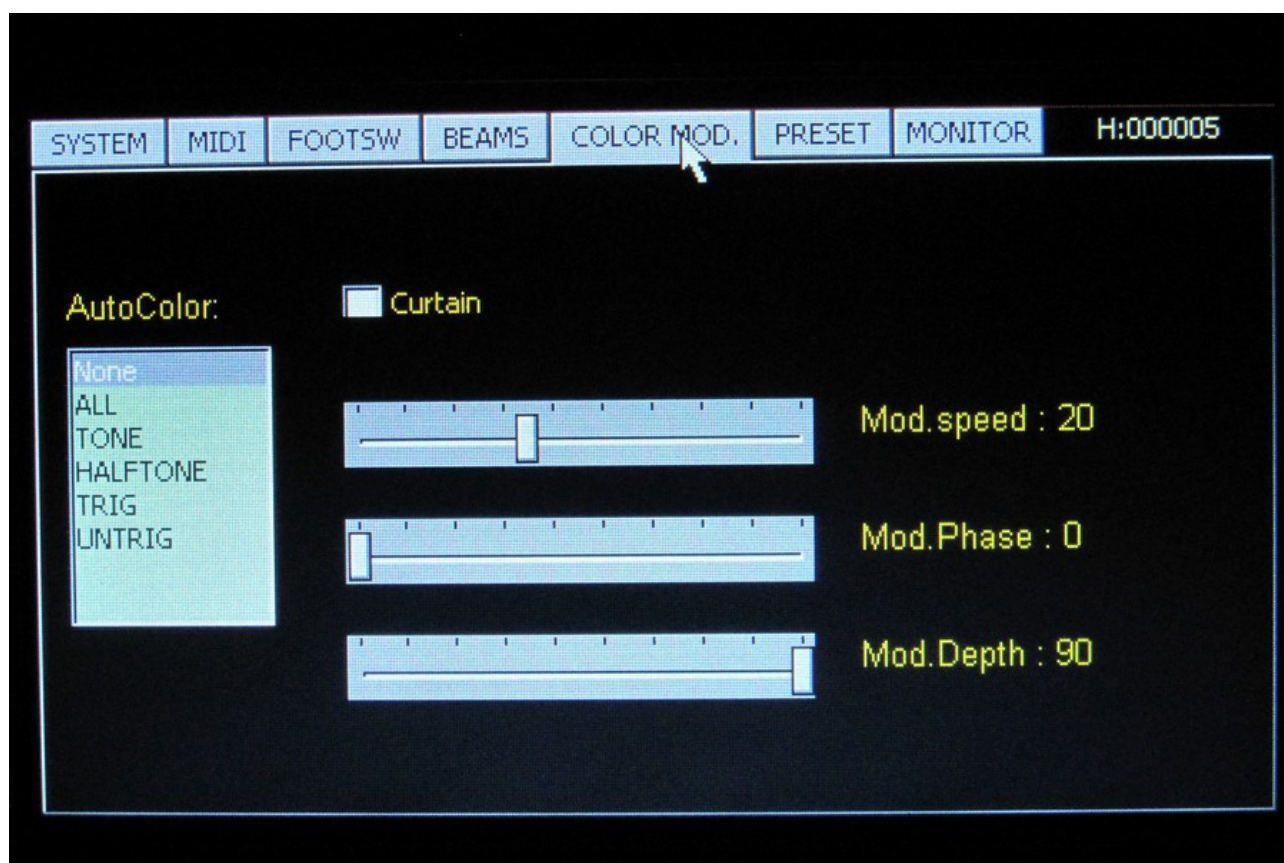
ADMITTED VALUES: 0..100%. (DEFAULT to 50%)

- **PARAMETER:** Z depth: The Z depth of the circle (how deep it is)

ADMITTED VALUES: 0..100%. (DEFAULT to 20%)

- **PARAMETER:** MIRROR: The harp can be reversed in any mode (DEFAULT No mirror)

Configuring the device



PAGE COLOR MODULATION

- **PARAMETER:** Auto Color

The color of harp's strings smoothly changes, while the harp pattern is projected, keeping the difference between Diatonic and Chromatic notes.

ADMITTED VALUES:

NONE: string color won't change

ALL: all string will change color

TONE: only TONE strings will change color

HALFTONE: only HALF TONE (diathonic) strings will change color

TRIG: only touched strings will change color

UNTRIG: the untouched strings will start changing colour

- **PARAMETER:** Color modulation speed

It changes the speed of the Color Modulator

ADMITTED VALUES: 1.. 50 (DEFAULT to 45)

The higher the value, the faster the color changes the speed

- **PARAMETER:** Color modulation depth

It changes the depth of the Color Modulator

ADMITTED VALUES: 1.. 90 (DEFAULT to 90)

The higher the value, deeper is color change

- **PARAMETER:** Color modulation phase

It changes the phase between R,G,B of the Color Modulator

ADMITTED VALUES: 0.. 50 (DEFAULT to 0)

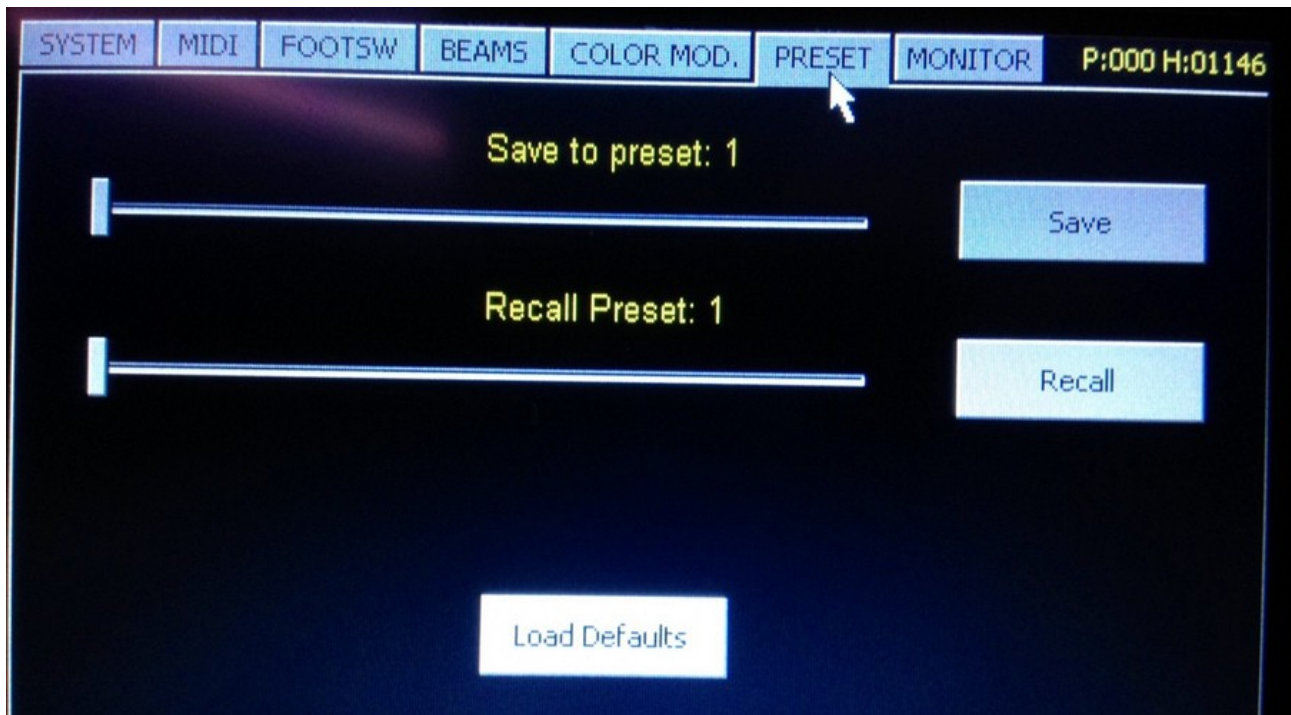
It works on the phase difference among colors (how much percentage of green is given on blue ray, while colors are changing and modulation is active)

This parameter allows you to have every time different patterns.

- **PARAMETER:** Curtain

Laser beams are never turned off between notes to create the so called “curtain effect” when box is checked

Configuring the device



PRESET PAGE

- **PARAMETER:** Save to Preset

Choose a preset to save actual configuration and press “save” button

- **PARAMETER:** Save to Preset

Choose a preset to to be recalled in actual configuration and press “Recall” button

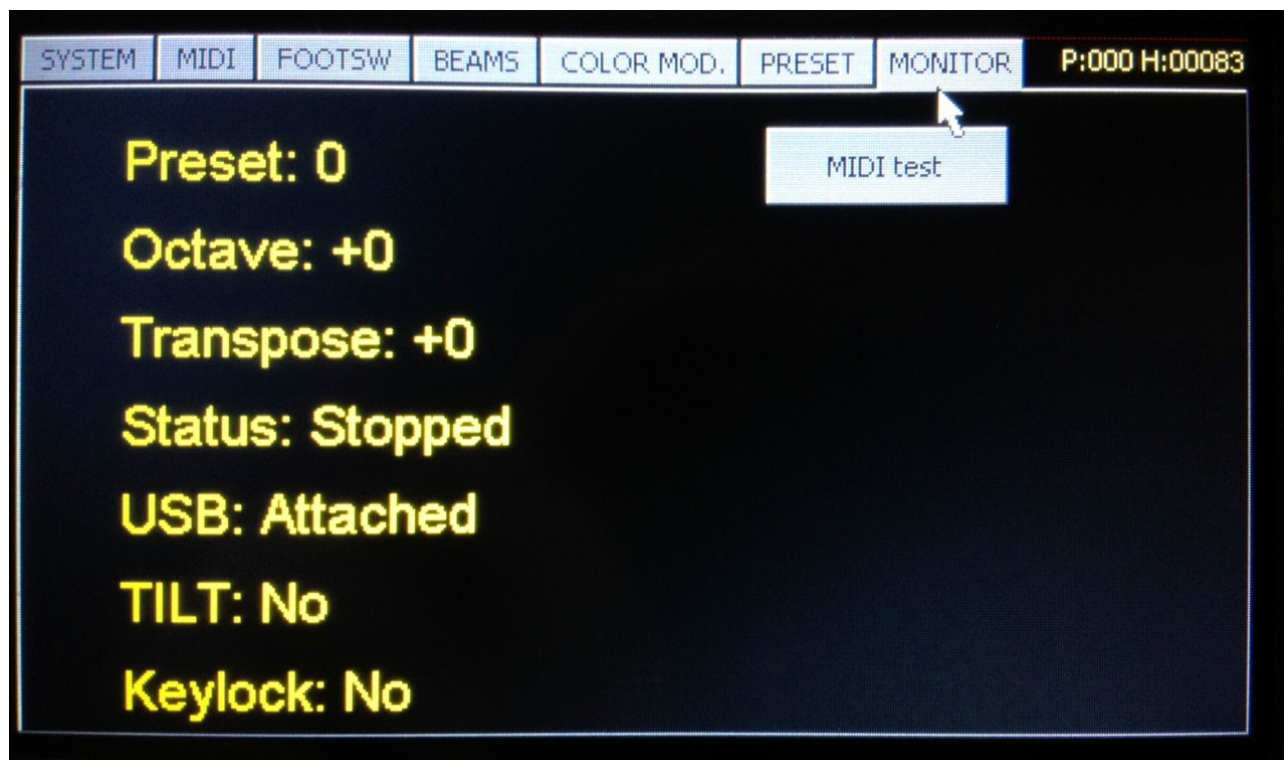
- **BUTTON:** LOAD DEFAULTS

If you press this, your mods will be lost and everything will be restored to defaults

Elsewhere, your parameters are stored into working preset each time you use the “Save” button or you press the Red Power Button.

CAUTION: If you simply disconnect the power supply while you are editing a preset, your changes will be lost forever. Preset is automatically saved when shutting down with red button or 1+4 combination on footswitch.

Configuring the device



MONITOR PAGE

Shows useful information about your KROMALASER KONTROL 3d-EVO

Preset: the actual working preset

Octave: the shift you are playing in respect to central octave

Transpose: If your harp does not start from C note, it will be shown transposition

Status: the status of your machine

USB: The status of USB. If you connect a PC it will be shown "Configured", elsewhere "attached" or "Suspended"

BUTTON: MIDI TEST will send a C3 note on midi when yu press it, useful to check how good is your midi OUT connection.

Firmware Updating



You need the Kromalaser Firmware Updater to upgrade the software within the KROMALASER KONTROL 3D-EVO

Operate in this mode.

Press the RED Power button, keep pressed and insert power supply plug.

The Red STATUS led will flash fast

Launch the Kromalaser Firmware Updater software on your Windows PC

Connect the USB to your PC.

The RED icon on the Kromalaser Firmware Updater software will turn to GREEN

Press “upgrade” and select the last firmware upgrade that Kromalaser sent you

The firmware will be loaded into your machine. DO NOT INTERRUPT LOADING YOU COULD NOT BE ABLE TO TURN ON THE 3D-EVO AGAIN

At the end of upgrade, you'll get a message from the PC.

After upgrade, disconnect the USB and restart the 3d-EVO

Check new software version on the 3d-EVO start splash screen.

MAINTENANCE

The KROMALASER KONTROL 3D-EVOI- ILDA Laser Harp Generator doesn't require particular maintenance.

However, you should keep the unit clean and dust free. Especially mind the UltraSENSOR™.

TROUBLESHOOTING

Problem	Probable cause(s)	Remedy
Harp is playing only the middle beams but not the ones on the sides	Sensor is not positioned correctly	Reposition the sensor or change its angle until you get better results
You can hear the sounds playing but nobody is blocking the beams	The sensor is pointing upwards and is receiving too much light from the beams reflecting off the ceiling	Lower the angle of the sensor in a way that it is pointing directly at the performers hands while they are blocking the beams
MIDI is connected but no sounds can be heard while playing	Damaged MIDI cable	Check if the yellow led is fast flashing when you touch a beam. If they are, then the Controller is operating correctly and is sending the MIDI signal.
	Incorrect PC or Musical keyboard setup	Check the MIDI cable for damage and replace it. Check your PC sound card setup or Musical keyboard setup.
	Incorrectly set up midi channels	The MIDI signal is sent thru the selected midi channel so check if you have problems there.
	The sensor is connected to the wrong input	Check if everything is correctly connected and that all is well connected.
Laser Harp is active but the sensor is not registering		Check if you have correctly connected the UltraSENSOR™.
	The sensor is not correctly oriented	Check the sensor's position, angle and sensitivity.
		Press the correct Footswitch pedal
Musical tones can be heard but are an octave too low	Change octave with footswitch	
Laser Harp is constantly open and does not react to Footswitch commands	Footswitch is not connected	Connect the footswitch switch on the Harp Controller. Restart the device

ACCESSORIES' LIST:

White reflective/protective gloves

MIDI Cables

ILDA Cables

USB Extension Cables

Black tape to put on too reflective ceilings

SkyCeil 2 and 3

Hazer machines

Special smoke, for hazer machines

Color Laser projectors RGB

For a complete and updated list of purchasable accessories you can visit our website

www.kromalaser.com and click on Contact Kromalaser

PRODUCT S' PECIFICATIONS

Model: KROMALASER KONTROL 3D-EVO - ILDA Laser Harp Generator

AC input voltage: 110-240VAC 50/60Hz by Adapter – 12Vdc 1A out

Sensor signal connector: Female 4-poles DIN 45500 series

Laser projector connector: Female DB-25 Sub-D - ILDA Standard

MIDI signal connectors: Female 5-poles DIN 45500 series

Footswitch connector: Female 5-poles DIN 45500 series

Controllers size: W: 35cm x H: 10cm x D: 10cm

DO NOT THROW AWAY YOUR OLD LASER HARP. PLEASE SEND IT TO US. YOU'LL SAVE THE ENVIRONMENT, THE NATURE, YOUR FUTURE AND THE ONE OF YOUR CHILDREN.

Design and product's specifications are subject to change without any prior notice.

Important: By have and/or reading the KROMALASER KONTROL 3D-EVO - ILDA Laser Harp Generator User Manual you agree to be bound and abide by the instructions, terms and conditions stated in this User Manual. If you do not agree to these terms and conditions, do not install or use the 3d-EVO- ILDA Laser Harp Generator or any of its components.

EC Declaration of Conformity

We,

KROMALASER

Hereby declare under our sole responsibility that the product:

Model number: KROMALASER KONTROL 3D-EVO

Product Description: ILDA Controller Musical Instrument

To which this declaration relates is in conformity with the requirements of the following standards:

CE/EMC 2006/95/CE, 2002/96/CE, 2003/108/CE, 2003/118/CE

The measurements shown in this test report were made in accordance with the procedures given in the European Council Directive 2004/108/CE

KROMALASER

San Colombano al Lambro (MI), Nov 1,2013