



**KLEMENTZ**

ELECTRONICS & AUDIO EQUIPMENTZ

**DUB DELAY STEREO**

**- USER MANUAL -**

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## SAFETY INSTRUCTIONS

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1. Read these instructions.
2. Carefully keep these instructions.
3. Respect the warnings.
4. Follow all these instructions.
5. Do not use near a water source.
6. Clean only with a dry and clean cloth.
7. Don't place near a heat source, that is near any equipment that produces heat.
8. Don't use another Power Supply than the one that is provided with the purchase.
9. In case of lost or damage of the Power Supply, contact KLEMENTZ before using a new power supply.
10. Make sure that the Power Supply block is not getting trampled, neither on the transformer part, nor on the cable or connector part.
11. Unplug this equipment during a thunderstorm or as soon as you have finished using it.
12. Please directly contact KLEMENTZ for any After Sale service. This is mandatory in case the equipment is damaged : if the cable, the Power Supply or connectors of the equipment are damaged, if liquid has been knocked over it or if objects have fallen on it, if it has been exposed to rain or humidity, if it does not work correctly or if it has fallen.
13. Do not let the power supply block plugged in a socket when the equipment is not in use. The power supply bloc is always powered even if the power switch of the unit is in OFF position. To completely disconnect the machine, remove the power supply block from the mains plug.
14. In any setup case, leave a sufficient space for the equipment to cool properly. You can arrange other equipment on the top and/or on the bottom of the unit, but some (like amplifiers) may cause a buzz or generate too much heat, it may cause damage your equipment or degrade its performances.
15. In order to evaluate any risk of fire or electric chock, keep this equipment away from any source of humidity and splash of any type. The equipment must also be kept away from any object filled with liquid (bottled drinks, vase, ...)

## CHECK LIST

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First of all, thank you from all the KLEMENTZ team for buying this DUB DELAY.

These items are included in the box:

- 1 x DUB DELAY STEREO
- 1 x POWER SUPPLY (15V AC)

## QUICK START

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For a correct use of your DUB DELAY, please read the instructions below:

1. This DUB DELAY must be plugged into a LINE input of your mixer or preamp. An effect processor can be plugged between your DUB DELAY and the LINE input of your mixer, only if the input of your effect processor is also a LINE type input. In any case, do not plug your DUB DELAY in a Microphone input or it may damage it. Please see the « *Typical wiring* » section for a more detailed description of the possible wirings.
2. In you use the DUB DELAY with a DJ mixer, two [TRS JACK 6.35mm] to [RCA (Cinch)] are necessary.
3. Before powering the DUB DELAY, ensure that the Volume potentiometer is at the minimum position. Put your DUB DELAY on, activate the trigger and progressively increase the volume until you have a sound.
4. Only use the provided power supply block.

## OVERVIEWS

### FRONT PANEL OVERVIEW



### BACK PANEL OVERVIEW



## CONTROLS & USE

### FRONT PANEL



The table below explains the features of the controls above.

FUNCTIONS	USAGE
TIME	<p>Rotary potentiometer allowing setting the time between two repeats.</p> <ul style="list-style-type: none"> <li>When in minimum setting (fully anti-clockwise), the time between two repeats will be very short and thus the repeat time will be fast.</li> <li>If it is at the maximum, the repeat time will be long and thus repeat speed will be slow.</li> </ul>
FEEDBACK	<p>Rotary potentiometer allowing setting the gain between each repeat.</p> <ul style="list-style-type: none"> <li>When set at minimum (full anti-clockwise), there will be only one repeat.</li> <li>When set at Unity Point (Orange dot), the number of repeats tends to infinity.</li> <li>When set at the maximum, the level will increase at each repeat.</li> </ul>
DRY/WET	<p>Rotary potentiometer allowing mixing between the effect (WET) and the original signal (DRY) that will be outputted.</p> <ul style="list-style-type: none"> <li>If it is at the minimum (fully anti-clockwise), only the original signal (DRY) will be outputted (on the AUDIO OUTPUT)</li> <li>If set at maximum position, only the effected signal (WET) will be outputted.</li> <li>Between these two positions, a mix between DRY and WET will be on the output of the machine.</li> </ul>
FILTER	<p>Rotary potentiometer allowing to set the Internal Filter of the Delay:</p> <ul style="list-style-type: none"> <li>In Middle position (OFF), internal filter is bypassed</li> <li>When turned on the right of the OFF, the filter is set in HPF Mode (High Pass), and its frequency can be varied by turning the potentiometer between Middle Position (OFF) and Max Position (Fully Clockwise).</li> <li>When turned on the left of the OFF, the filter is set in LPF Mode (Low Pass), and its frequency can be varied by turning the potentiometer between Middle position and Min Position (Fully Anti-Clockwise).</li> </ul>

## DELAY MODE

3 Delay Modes are available :

- In Middle position, the delay is in Normal Mode, it is acting as Two separate Mono Delays. All the modifications will affect the two, but the signal will not leak from one to the other.
- In Ping Pong / PP Position, the delay is in Ping-Pong Mode, the output of each delay is wired to the input of the other, creating a Stereo Ping-Pong Effect. The hold function may not work in this mode.
- In Series Position, the delay is in Series Mode, the output of the first delay is wired into the input of the second, and the second has a Delay Time set to 10 times less than the first delay.

This switch is used to engage the HOLD or MODULATION functions. In Middle position, none are enabled.

## HOLD / MODUL

- In HOLD function, the delay will loop through the last loop and repeat the last delay sample without overwriting it.
- In MODULATION function, the delay time is being modulated around the setting of the TIME potentiometer.

## FILTER MODE

This switch sets the position (and resonance) of the delay's internal filter in the circuit.

- In Middle position, the Filter is INSIDE THE FEEDBACK LOOP and is NON-RESONANT ( $Q=0.707$ ), meaning that if you push the feedback over unity, it will more or less keep the sound the same (depending on how you've set the FILTER potentiometer)
- In RES position, the filter is INSIDE THE FEEDBACK LOOP and is RESONANT ( $Q \geq 1$ ) meaning that it will quickly be peaking in the frequency that is set by the FILTER potentiometer, if you push the feedback over unity.
- In OUT position, the filter is OUTSIDE THE FEEDBACK LOOP, and is VERY RESONANT ( $Q \geq 1.5$ ) meaning that it will keep the sound the same inside the feedback loop, but you will be able to play with the FILTER potentiometer without affecting the internal sample.

## TAP/REVERSE

This Push Button can be used :

- In EVERY MODES, if pushed at least 2 times, to set the Delay Time with the TEMPO you're tapping. Please Tap at least 3 or 4 times in order for the delay to be able to sure of the tempo you're tapping. If the Tempo has been successfully detected, then the delay time will be set to the tapped tempo.
- In HOLD function, if pressed continuously, it will play the sampled sound Reverse, it will keep playing the sound in reverse during all the time you will keep it pressed.

### NOTE

When Tapping the Tempo with the TAP/REVERSE push button, if you tap a tempo that is too long, the delay will not be able to affect it to the delay time (because it doesn't have enough internal memory to sample that long !) so, it will automatically divide by 2, synchronizing the delay time to Half of the Tempo you've tapped !

## BACK PANEL



The table below explains the features of the connectors shown above.

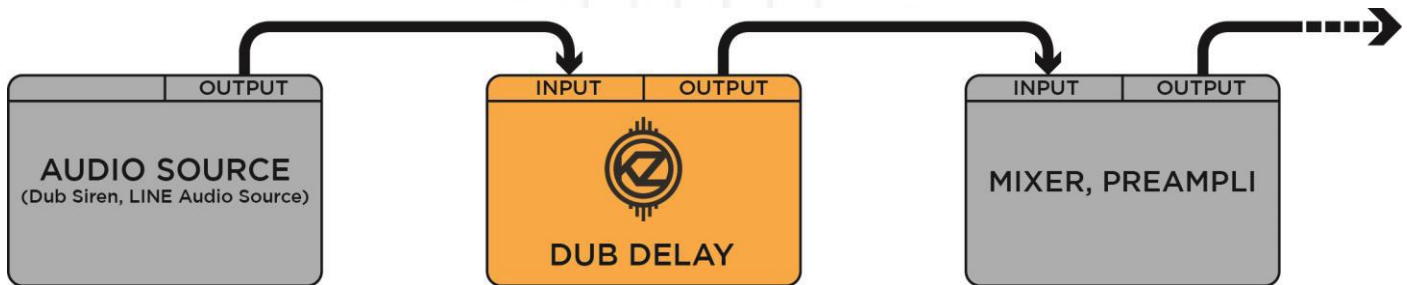
FUNCTIONS	USAGE
AUDIO OUTPUT	6.35mm TRS JACK balanced, or XLR output connectors (check the « Typical Wiring » section below).
AUDIO INPUT	6.35mm TRS JACK balanced, or XLR/JACK combo input connectors (check the « Typical Wiring » section below).
AC JACK INPUT	AC JACK type power supply connector, with the following characteristics : <ul style="list-style-type: none"><li>• Barrel type connector 2.1 x 5.5mm</li></ul>



## TYPICAL WIRING

### INSERT MODE

The simplest connection is the « Serial » one, meaning that the effect is inserted between the source and the target. This example is drawn below:



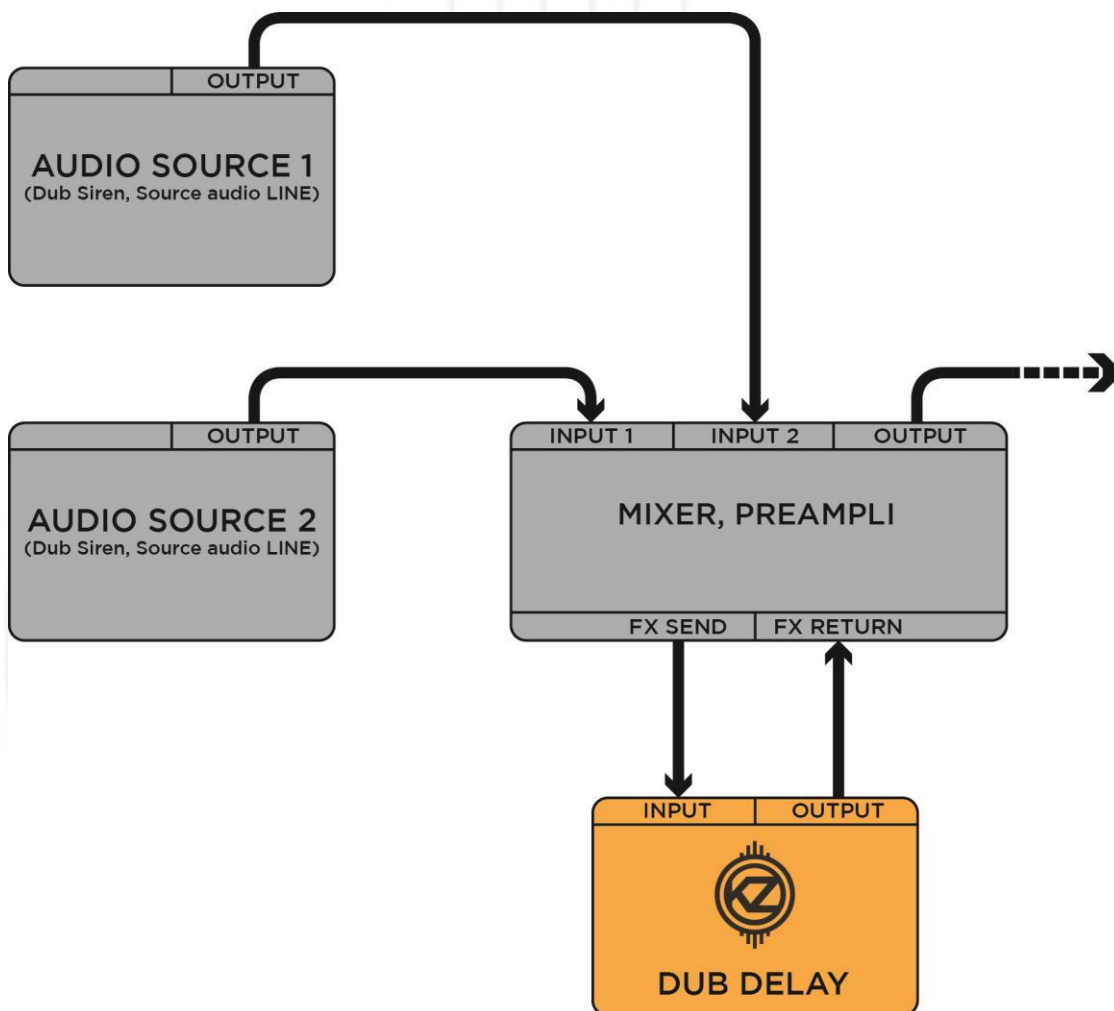
This setup is the simplest, but does not allow using the effect on multiple sources in the same time.

The “Dry/Wet” setting will allow, in this setup, to set the level of the effect and the level of the source signal. At the maximum position (fully clockwise), the setting will be on “Wet” and then the source signal will not be outputted anymore, on the contrary, in the “Dry” position, there will only be the original source signal outputted, without effect.

## EFFECT SEND/RETURN MODE

The effect loop wiring has the advantage of allowing the DUB DELAY to be used with multiple sources. In this way, effect can be added on multiple sources without having as many effect units as the number of sources you have. Only one effect unit can be used on multiple sources.

However, it is necessary to have a mixing equipment that has the Effect Loop feature (Effect Send [output] and Effect Return [input]). The wiring diagram for a such setup is presented below :



In this way, all the sources are mixed and managed directly by the mixing tool. It is the mixing equipment that sends more or less of each source into the input of the effect by its “Effect Send” output. It is then necessary to have a mixing desk have this feature to use it in such setup.

### NOTE

In this setup, the “Dry/Wet” setting must be set at the maximum (fully clockwise), that is in the “Wet” position. Indeed the original signal must not be send into the mixing equipment because it is already proceeding to the mix of the original sources signal on its “Master” way. Thus, the signal that is outputted from the effect should only contain the effect signal WITHOUT the original signal.

## TECHNICAL SPECIFICATIONS

POWER SUPPLY	15 VAC, 2.1 x 5.5mm barrel type connector
CURRENT DRAW	Less than 500mA
AUDIO INPUT	2x 1/4" balanced MONO Jack or 2x XLR
AUDIO OUPUT	2x 1/4" balanced MONO Jack or 2x XLR
SIZE	250 x 250 x 47mm approximately



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