

# MINI-FREQ

## **Quick Start Guide**

- 1. IN: A standard 1/4"(TS) input jack.
- **1a. PEDAL:** A 1/8" (TRS) jack used to connect an expression pedal. We recommend an expression pedal that employs a 10k or 50k linear pot. This allows you to manually sweep either FILTER or to control the rate of either or both FILTERS for stereo WAH-WAH effect.
- **2. OUT:** A standard 1/4"(TS) output jack sending a mono output signal to whatever comes next in your signal chain.
- **3. POWER:** The MINI-FREQ runs on a 9V DC power supply center negative, draw 50mA.
- **4. DIRECT GAIN:** Continuously-adjustable control that determines the level of dry signal to be blended with effect as determined by FILTER GAIN.
- **12. FILTER GAIN:** Continuously-adjustable control that determines the level of the effect to be blended with dry signal as determined by DIRECT GAIN.
- **6. MODE:** Toggle to determine the FILTER shape or mode.
- LP: LOW PASS mode allows for bass or "bottom end" signal to pass through.
- BP: BAND PASS modes allows for a more mid-range sound and is useful for cutting out muddy lows and shrill highs.
- HP: HIGH PASS mode cuts out most bass and mid-range and produces sharp, nasal sounds.
- **7. FREQUENCY:** Continuously-adjustable control that sweeps the FREQUENCY of the FILTER. Turning the control clockwise, SWEEPS the FILTER into higher frequency range. Sweeping the control counter-clockwise SWEEPS the FILTER into lower frequency range. When in ENVELOPE mode or WAH-WAH mode, this controls the start point of the FILTER sweep controlled by playing dynamics or foot pedal.
- **8 PEAK:** Continuously-adjustable control that determines the width of the frequency range. It adds a resonant PEAK or "Q" to the FREQUENCY of the FILTER. The greater the PEAK, the narrower the frequency range that is swept, and the sharper and more dramatic is the FILTER sound. PEAK may be set to RESONANCE mode or DAMPER mode internally. RESONANCE mode is suggested when configuring either FILTER in ENVELOPE FILTER mode.
- 9. EFFECT FOOTSWITCH: Determines whether the MINI-FREQ effect is engaged or bypassed.
- EFFECT LED:

When the LED is OFF, the MINI-FREQ effect is bypassed.

When the LED is ON, the MINI-FREQ effect is engaged.

- **9. MAN-ENV FOOTSWITCH:** Determines whether the MINI-FREQ effect iis in manual mode or envelope mode or wah-wah pedal mode.
- MAN: Modulation source of FREQUENCY to be controlled manually by FREQUENCY knob.
- ENV: Modulation source of FREQUENCY is the ENVELOPE FOLLOWER. There are internal jumpers to determine the UP or DOWN drive of the FILTER. There are also internal trimmers which will allow for fine calibration of UP and DOWN modes as well as FILTER ATTACK.
- **PED:** Modulation source of FREQUENCY to be controlled manually by external expression pedal. This is WAH-WAH mode.

### Operating Instructions:

The MINI-FREQ is an optical, state variable FILTER. The FILTER can be configured as ENVELOPE FILTER (auto-wah), WAH-WAH (pedal), or PARAMETRIC EQ (manual). The FILTER has LOW PASS, BAND PASS, and HI PASS modes as well as HI or LOW ranges. The UP or DOWN mode of the ENVELOPE FILTER can be set internally. PEAK also can be set internally to operate in RESONANCE mode of a traditional Mu-Tron III or in DAMPER mode of an Alembic style active filter. Either FILTER has the ability to blend DRY signal together with the FILTERED signal. Many EQ applications can be achieved as can strange effects by utilizing WAH-WAH and/or ENVELOPE FILTER settings.



Reggae Dub

#### Sample Settings



Envelope



Wah- Wah

#### SAFETY INFORMATION

FOR YOUR PROTECTION, PLEASE READ THESE SAFETY INSTRUCTIONS COMPLETELY BEFORE OPERATING THE PRODUCT AND KEEP THIS MANUAL FOR FUTURE REFERENCE

CAREFULLY OBSERVE ALL WARNINGS. PRECAUTIONS AND INSTRUCTIONS ON THE PRODUCT AND DESCRIBED IN THE OPERATING INSTRUCTIONS SUPPLIED WITH THE PRODUCT

POWER SOURCE - CONNECT THE PRODUCT TO A POWER SUPPLY ONLY OF THE TYPE DESCRIBED IN THE OPERATING INSTRUCTIONS OR AS MARKED ON THE PRODUCT.

POWER-CORD PROTECTION - ROUTE THE POWER CORD SO THAT IT IS NOT LIKELY TO BE WALKED ON OR PINCHED BY HAVING OBJECTS PLACED ON IT, PAYING PARTICULAR ATTENTION TO THE PLUGS, RECEPTACLES, AND THE POINT WHERE THE CORD EXITS FROM THE PRODUCT.

HEN NOT IN USE - UNPLUG THE POWER ADAPTER CORD OF THE PRODUCT FROM THE OUTLET WHEN LEFT UNUSED FOR A LONG PERIOD OF TIME. TO DISCONNECT THE CORD, PULL IT OUT BY GRASPING THE POWER ADAPTER. NEVER PULL THE POWER ADAPTER PLUG OUT BY THE CORD

AC RECEPTACLE - CHECK TO MAKE SURE THAT THE AC RECEPTACLE HOLDS THE POWER ADAPTER PLUG FIRMLY AND SECURELY. IF THE POWER ADAPTER IS LOOSE, CONTACT YOUR ELECTRICIAN TO REPLACE THE DEFECTIVE AND UNSAFE AC CONNECTION

FOREIGN OBJECTS - BE CAREFUL THAT FOREIGN OBJECTS AND LIQUIDS DO NOT ENTER THE ENCLOSURE THROUGH OPENINGS

CLEANING - UNPLUG THIS PRODUCT FROM THE WALL OUTLET BEFORE CIEANING. DO NOT USE LIQUID CLEANERS OR AEROSOL CLEANERS. USE A DAMP CLOTH FOR CLEANING



DO NOT REMOVE COVER(OR BACK).
NO SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

#### **CALIFORNIA PROPOSITION** ♠ 65 WARNING ♠

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. ation: www.P65Warnings.cg.gov

UNPLUG THE PRODUCT FROM THE WALL OUTLET AND CONSULT

- THE PRODUCT HAS BEEN EXPOSED TO RAIN OR MOISTURE.
- THE PRODUCT DOES NOT APPEAR TO OPERATE NORMALLY
  OR EXHIBITS A MARKED CHANGE IN PERFORMANCE.
   THE PRODUCT HAS BEEN DROPPED, OR THE ENCLOSURE

DO NOT ATTEMPT TO SERVICE THE PRODUCT BEYOND THAT DESCRIBED IN THE OPERATING INSTRUCTIONS. FOR ALL OTHER SERVICING, REFER TO QUALIFIED SERVICE PERSONNEL ONLY.

#### WARRANTY INFORMATION

MU-TRON OFFERS A ONE-YEAR LIMITED WARRANTY ON ALL OF OUR PRODUCTS.

IN THE UNLIKELY EVENT OF A MALFUNCTION DUE TO COMPONENT FAILURE OR DEFECTIVE WORKMANSHIP, CONTACT US AT MU-TRON.COM FOR RETURN AUTHORIZATION. WE WILL QUICKLY RESPOND WITH ASSISTANCE AND WILL THEN REPAIR OR REPLACE YOUR PRODUCT AND SEND IT BACK.

PLEASE NOTE THAT WE CANNOT REPLACE A PRODUCT UNTIL WE HAVE RECEIVED IT HERE AT THE FACTORY.

USER-GENERATED MALFUNCTIONS DUE TO DROPPING. INTENTIONALLY BREAKING, ATTEMPTING TO REPAIR
DURING THE WARRANTY, OR OPENING THE PRODUCT WILL NOT BE COVERED BY THE WARRANTY. YOU MAY SEND THE UNIT TO US AND WE WILL GIVE YOU AN ESTIMATE REPA CHARGE, AND UPON YOUR AUTHORIZATION WE WILL REPAIR AND RE-CALIBRATE THE PRODUCT.

#### LIMIT OF LIABILITY REGARDING THE PRODUCT AND ITS POWER SUPPLY

MU-TRON ASSUMES NO REPONSIBILITY FOR DAMAGE TO ONFLIDS THE PRODUCT FROM THE WALL SOFTED AND CONSULT QUALIFIED SERVICE PERSONNEL WHEN:

- THE POWER CORD OR THE PLUG HAS BEEN DAMAGED.

- THE POWER CORD OR THE PLUG HAS BEEN DAMAGED.

- TO BY ANY MEANS, OR ANY OTHER PROPERTY DAMAGE.

- A SOLID OBJECT OR LIQUID HAS FALLEN INTO THE ENCLOSURE. INJURY OR DEATH RESULTING FROM IT'S USE OR MISUSE. THE PRODUCTS, OTHER EQUIPMENT THEY MIGHT CONNECT TO BY ANY MEANS, OR ANY OTHER PROPERTY DAMAGE,

> IT IS POSSIBLE THAT CONNECTING THE TRANSFORMER TO AN INCORRECT VOLTAGE MAY RESULT IN INJURY OR DEATH TO ANYONE OPERATING THE EQUIPMENT.

USE OF ANY OTHER POWER ADAPTER NOT SUPPLIED BY MU-TRON IS NOT RECOMMENDED.