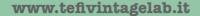
TECHNICAL SPECIFICATIONS

	-
Dimensions	120x127x53 mm
Weight	470gr (without battery)
Chassis	Die-cast aluminum
Input impedance	500 k0hm
Output impedance	470 Ohm
LFO frequency range	Min 0.7Hz, Max 15Hz
Pedal Expression for external LFO control	Any expression pedal equipped with a 100 kOhm potentiometer
Switch pedal for remote T.R.F.I. control	bistable ON/OFF or momentary.
Signal switching	True bypass
Power supply/ Power consumption	9Vdc/approx. 315mW (I-max: 35mA @ 9Vcc)
Power connection/ground	Negative tip/negative ground
Battery type	+9V (6LF22)



TEFI Vintage Lab is pleased to welcome you to our family. We hope you enjoy using our new dynamic Tremolo/Percussion Repeater The Smilin' Ghost. Feel free to get in touch for any suggestions or clarifications as to how you might best use the effect. Play music and enjoy using our products!

The Smilin' Ghost

The Smilin' Ghost is a versatile Tremolo and Percussion Repeater effect with a special dynamic control. Completely analog, it is equipped with an opto-coupler (OCR), selected on our own specifications, driven by our special wide range LFO. Thanks to a band frequency response, The Smilin' Ghost will not affect or change the original sound of any instrument. Achievable effects range from a classic sweet Tremolo, with an LFO wave selectable, to the Percussion Repeat, an effect conceived during the 60s in electronic organs to emulate the fast



THE SMILIN' GHOST Operating Manual

Pizzicato of a Mandolin, but definitely useful for any kind of electric instrument.

A special proprietary circuit, called T.R.F.I. (Touch Response Fade In) allows proportional dynamic control of the effect, depending on the dynamics used by the musician during the playing of a melody line or a rhythmic pattern.

T.R.F.I also solves the frequent problem that can occur when the Tremolo is activated where the attack melody is "eaten" when the OCR closes. Combined with an electric piano, the T.R.F.I. function allows you to discover previously unexplored musical territory.

CONNECTION AND USE

- Connecting to instrument and amplifier/gear: connect your instrument (or gear effects chain) to the Input jack on the pedal's right side with a 6.3mm Jack instrument cable. Connect the output jack on the pedal's left side to an amplifier (or to the next effects in your chain) with a 6.3mm Jack instrument cable.
- External Speed Control: connect with a stereo 6.3mm Jack to an expression pedal potentiometer configured, 50 kOhm or 100 kOhm internal potentiometer. Other potentiometer resistance values (minimum resistance value >= 10 kOhm) will not damage the effect, but the pedal expression "feel" is not optimized.
- T.R.F.I. remote On/Off: connect to a bi-stable or momentary pedal switch as required.
- Battery: to access the battery compartment, remove the four screws on the bottom cover. Connect the 9V battery (6LF22 type) to the battery clip connector. Do not reverse the polarity! Insert the battery into the battery compartment located between the two footswitches. Be careful not to damage the wires and/or the battery clip. To preserve battery life, disconnect the instrument cable from the pedal Input jack when the pedal is not in use.
- **Power supply:** connect a 9V stabilized external power supply adapter to the pedal's power connector located on the upper-right side (5.5mm connector with 2.1mm pole type). Do not reverse polarity! (external positive, internal negative). In the presence of reversed polarity the pedal will not power up; no damage will be caused below 25V reversed polarity.

TEFI Vintage Lab invites you to activate the warranty within 10 days of the purchase of the product. It is necessary to connect to our website www.tefivintagelab.it and, on the page describing your product, fill in the required form in the "register product" section. TEFI Vintage Lab products are covered by a 5-year warranty. If the user finds an anomaly due to component defects and erroneous assembly, please contact us by sending an e-mail to info@tefivintagelab.it, describing the problem encountered in detail and the circumstances in which it was verified.

In compliance with the regulations defined in the following clauses, TEFI Vintage Lab undertakes to repair the instrument with no additional costs.

- 1. Warrantly is valid for 5 years. Does not include parts subject to wear such as jacks, switches, potentiometers, dip-switches, 9V battery clip or 9V battery holder, nor does it include aesthetic parts such as knobs.
- 2. Warrantly does not extend to damage caused by inexperience or negligence in the use of the effects pedal, or bad/neglected maintenance.
- 3. TEFI Vintage Lab undertakes to replace at its own discretion the malfunctioning or incorrect manufacturing parts, only after a careful check and verification of bad construction
- 4. In the presence of incorrect use of the warranty, shipping costs will be charged to the user.
- 5. During the warranty period, the replaced parts/products become the property of the manufacturer.
- 6. This warranty is only valid for the original purchaser who has followed the normal maintenance instructions described in this manual. Our warranty liability expires at the moment the original owner surrenders ownership of the product, or modifications are made to it.
- 7. Warranty does not include damage caused by excessive stress, such as the use of the product after the detection of an anomaly, the use of inappropriate methods of operation, as well as the failure to observe use and maintenance instructions.
- 8. The manufacturer assumes no responsibility for any difficulties that may arise in resale or use abroad due to the provisions in force in the country where the product was sold.
- 9. The product part of the defective unit must be delivered to TEFI Vintage Lab for replacement, otherwise the replaced part will be charged to the buyer.
- 10. Any product repair or modification by the user or by companies not authorized by TEFI Vintage Lab will invalidate the warranty

EII DIRECTIVE AND DISPOSAT

TEFI Vintage Lab products are designed to comply with the standards laid down by EU directives regarding safety and the environment. Pursuant to Legislative Decree No. 49 of March 14, 2004 "Implementation of Directive 2012/19/EU on waste electrical and electronic equipment (RAEE)".

The crossed-bin symbol indicates that the product, at the end of its useful life, must be separately collected from other waste

The user must therefore confer the equipment with the essential components at the end of their life to the appropriate collection centers for electrical and electronic waste.

CONTROLS AND FUNCTIONS

Tremolo or Percussion Repeat mode is selected by pressing the footswitch located on the right side of the pedal faceplate. The active function is displayed by the related blinking led.

SPEED knob: controls the LFO speed modulation in Tremolo or Percussion Repeat mode. The frequency range of the LFO can be adjusted from 0.7Hz to 15Hz. You can also control the modulation speed by connecting an external expression pedal via a 6.3mm stereo Jack cable. When an expression pedal is in use, the Speed knob is disabled.

BLEND knob: controls the balance between the direct (dry) and effected (wet) signal.

SENS knob: this knob controls the T.R.F.I. threshold depending on the instrument's instantaneous signal level. Enable T.R.F.I. via the toggle switch or a remote switch pedal, set the Blend knob to the middle position or more CW and initially set Sens knob all CCW. While playing a note or chord, slowly rotate the Sens knob until the modulation stops: the Blue LED will light up, indicating that T.R.F.I. is working. At this point you can newly set the Sens knob to obtain the desired delayed releasing of T.R.F.I. and consequently the effect's return, based on playing dynamics. Playing louder will stop the modulation, while playing more softly will cause the modulation to gradually return.

Toggle switch "T.R.F.I": enables the T.R.F.I. effect. When activated, a slight luminescence is noticeable on the LED at the center of the faceplate between the T.R.F.I. knob and the toggle switch.

Toggle switch "Waveform": in Tremolo mode, this command selects the envelope waveform, either sine or square.

Toggle switch "Percussion Lenght": selects the decay envelope of Percussion, regardless of the speed of the LFO. Set to "Short" to obtain quick decay percussion, set the "Long" position to get a longer decay envelope, similar to the renowned Percussion Repeat effect installed in many old Farfisa Organs. Percussion Repeat in combination with T.R.F.I. also works well with an electric piano.

