

## GENERAL INFORMATION

### 1. DEAR MORLEY OWNER

You are about to use one of the finest effect boxes made. Morley products are designed for years of trouble free operation. To insure maximum satisfaction please take the time to read this booklet which points out many features of the product, some of which may be new to you.

### 2. POWER SOURCES - Battery and AC (mains)

All Morley effect boxes are designed to operate from one or two 9 volt (NEDA 1604A) batteries or an optional AC (mains) adapter. The battery can be installed by removing the 4 screws which hold the bottom cover in place. The adapter automatically disconnects the battery when it is plugged into the effect box, thereby prolonging battery life.

The adapter is more economical to use than batteries, however there are times when using the battery is more convenient. Morley therefore provides both capabilities.

### 3. INDICATORS (LED) Lamps

The use of two indicator lamps tells you when power is on, or if either or both sources are not functioning (such as a dead battery) or the adapter is not plugged into a live receptacle.

In addition the two indicators tell when the musical effect is turned on, or if the unit has been switched to the normal signal condition.

### 4. LOW NOISE

All electronic devices generate some noise. Good design and materials make possible high signals relative to the amount of noise. This "high signal to noise ratio" can make the noise virtually unnoticeable. This characteristic and capability is very important in the design of all Morley products.

### 5. HIGH INPUT IMPEDANCE

This is important because the effect box can operate from very weak or high impedance sources without loading down the signal.

### 6. LOW OUTPUT IMPEDANCE

This is important because it reduces high frequency losses and hum pickup by the cable which comes from the output side of the effect box. It makes it possible to use much longer cables over greater distances without signal deterioration and reduces or eliminates loading by the device to which it connects.

## SET UP AND OPERATING INFORMATION

Plug a cord from a signal source, or a musical instrument, etc., into the jack marked "Input." This will automatically turn the power on and one of the indicator lamps will light. If a power adapter is used, the unit will turn on and the lamp will light without the signal cord being plugged in.

Plug another cable from the jack marked "Output" and connect it to the "Input" of your amplifier.

Activate the foot switch. The lamp that is lit will go off and the other one will come on. Set it so the "effect off" lamp lights. Now make some sounds from the instrument and set the amplifier for its normal response. Next activate the foot switch one time which will turn on the effect.

## DELUXE FLANGER (FLB)

### WHAT IT IS AND DOES AND WHY

The Morley Deluxe Flanger (FLB) contains among other things, a circuit which delays a signal from a fraction of a cycle per second to many cycles per second, depending on the setting of the Depth control. The delay continually fluctuates from zero up to 28 milli-seconds at a rate determined by the Speed control which has a range of one excursion every 12 seconds to 12 times a second.

The resulting signal which passes through this system is greatly enhanced musically because of the addition of:

1. Pitch changes resulting from the changing delays; similar to pitch changes which occur when a re-

recording is speeded up or slowed down.

2. Varying beat notes from mixing delayed signals with original signal.
3. Creation of many rich harmonics not present in the input signal.
4. Chorus effects at slower speeds.
5. Capability of very full, rich vibrato.

## CONTROL FUNCTIONS AND SETTINGS

All controls go from minimum to maximum in a clockwise direction.

1. The "Speed" knob controls the rate at which the system cycles through its delay and back again, sometimes referred to as "sweep rate." It is used for setting vibrato at the faster rate and chorus at the slower and many variations in between.
2. The "Depth" knob controls the amount of excursion or travel of the delay circuit. At lower settings a vibrato will sound shallow or subtle; at much higher settings it will go sharp and flat and quite bizarre from a normal musical point of view. The music and musician determines what is most useful.
3. The "Regeneration" control, recirculates signals from the output and back into the input again, and produces many interesting harmonic structures. Again, the musicians' creativity is the final determinant of a proper setting.
4. The "Manual" control. If the "Depth" control is turned off (completely counter clockwise) the delay ceases to fluctuate. If then a musical note is sent through the system, and the manual control is rotated back and forth, its effect can be heard as it changes the amount of delay. It can also change the operating center if the "Depth" is turned up a little. The ear can then hear a difference of tonality as the manual knob is set at different points of its rotation. Try it at vibrato speeds and slightly slower. Many interesting variations will also result if the "Regeneration" is advanced and diminished.