

TURNIMATOR™

HANDS-FREE KNOB CONTROL

Thank you for purchasing a Turnimator product. This manual will provide you with all the necessary information to safely and correctly operate your Turnimator system. We are not responsible for damage to any equipment as a result of using the Turnimator in any other way than as described in this manual.

IMPORTANT NOTES

- Exercise common sense and caution when using this system. The motors turn very fast and some amplifiers can get very loud, very fast when turning “Volume” or “Gain” controls. Hearing damage can occur if you are not careful.
- The Turnimator systems are designed to be attached to 1/4” solid-shaft potentiometers and 6mm “18T” knurled/split-shaft potentiometers with the Shaft Adapter Sleeves.
- Make sure the Attachment Coupler and thumbscrew will not be obstructed when rotating.
- Always supply power to the Motor Box before mounting and during operation.
- The Motor Box can rotate up to 300 degrees. Some potentiometers may have a hard stop at 270 degrees or less. It is your responsibility to check the potentiometer for the maximum allowable rotation before attaching the Motor Box. If the Motor Box rotates beyond the maximum allowable rotation of the potentiometer while it is attached and mounted, your equipment can be damaged. **Never set the “Range Control” higher than the maximum allowable rotation of the potentiometer!**
- The Attachment Coupler and mounting bolt are on the same rotational axis. If any further adjustments need to be made to the Motor Box’s inactive “home” position after the motor is attached to the potentiometer shaft, you can simply loosen the clamping knob and turn the Motor Box (and potentiometer) by hand without disconnecting it from the potentiometer shaft. Once the adjustment is made, tighten the clamping knob again.

POWER ADAPTER

The DC power adapter has to be 9 volts, with a center-negative polarity, and at least 500ma/.5A of current to sufficiently power the Motor Box. You can also power your Turnimator system with any pedalboard power supply of the correct voltage, polarity and current.

MOTOR BOX CONNECTION

The “Motor” jack delivers power to the Motor Box and positioning feedback to the foot controller. You can use any standard 3.5mm TRS (stereo) cable. These are also commonly called headphone or auxillary cables.

SWITCH INPUT (Only on the Dual-Position Footswitch and Expansion Module)

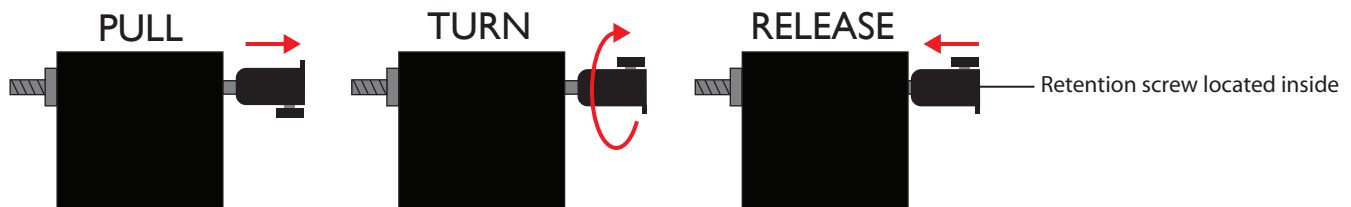
The “Switch” jack can be used to connect the Dual-Position Footswitch to the Expansion Module to control an additional Motor Box. It can also be used to activate and deactivate the Motor Box from an external switch or switching device. This is useful if you want to integrate your Turnimator into a larger switching system (Voodoo Lab Control Switcher, Fractal FX8, Suhr microMIDI etc...) and keep the Dual-Position Footswitch next to your amplifier. You can use any standard 1/4” TS (mono) cable.

MOTOR BOX OPERATION

The Motor Box will always return to it’s “home” position whenever it is supplied with power from the foot controller and not in an activated state. (LED off for the Dual-Position Footswitch, or “heel-down” position for the Variable-Position Control Pedal). Always make sure it is receiving power and it is in it’s inactive home position before mounting it to any equipment.

ATTACHMENT COUPLER

The Attachment Coupler on the Motor Box is spring-loaded and the indicator arrow’s position can be adjusted by pulling, turning, and releasing it back into a new position. This is useful if you want the potentiometer to rotate from a different starting position. Use the included 2mm hex wrench to tighten the retention screw located on the inside of the Attachment Coupler from time to time as this can become loose with frequent adjustments.



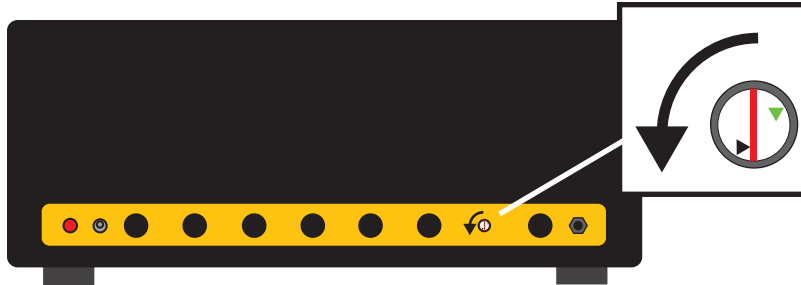
RANGE CONTROL

Dual-Position Footswitch - The “Range Control” knob will control how far the potentiometer will rotate from the inactive “home” position when the footswitch is pressed (LED on).

Variable-Position Control Pedal - The “Range Control” knob (located on the side of the pedal) will set the potentiometer’s maximum amount of rotation when the pedal is in the “toe-down” position.

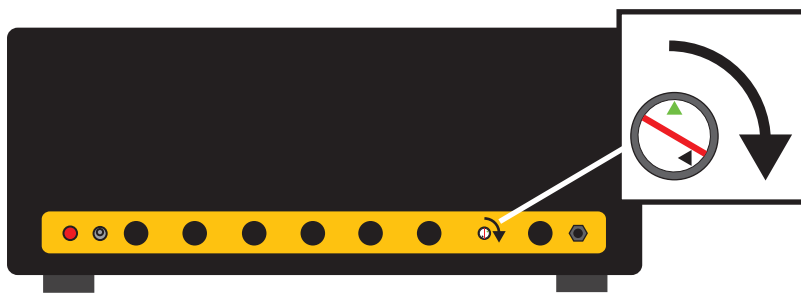
MOUNTING INSTRUCTIONS

1. Remove the knob from the potentiometer you want to control by loosening the set-screw and pulling (or just pulling if there is no set-screw). Once the knob is removed, turn the potentiometer shaft fully counter-clockwise by hand until it stops.
2. Lightly apply and position one of the provided guide circles to the tip of the potentiometer shaft so that the red line is as vertical as possible. Once the guide circle is positioned correctly, apply pressure. The guide circles are used to determine the position of the potentiometer shaft before the Motor Box is mounted. The black triangle is now the shaft's position indicator.



The red line should be vertical when the potentiometer is fully counter-clockwise.

To check the maximum allowable rotation of the potentiometer, turn the potentiometer fully clockwise by hand until it stops. If the green triangle is now at the "12 o'clock" position, the potentiometer rotates 300 degrees and you can safely use the full rotation range of the Turnimator system. If the green triangle does not reach the 12 o'clock position, be very careful not to allow the mounted Motor Box to rotate past the position of the black triangle. When the shaft is rotated fully clockwise, the black triangle indicates the end point of the potentiometer's range of rotation.



The green triangle should be at the "12 o'clock" position when the potentiometer is fully clockwise. (If the potentiometer rotation range is 300°)

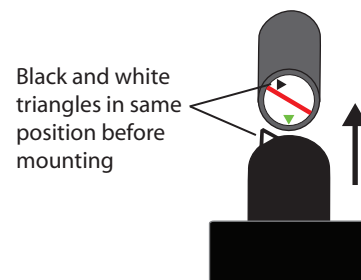
3. Plug in the Motor Box so it is receiving power and is in its inactive "home" position - **Never mount the Motor Box without power connected!**

Dual-Position Footswitch - The Motor Box is in its inactive home position if the LED is off.

Variable-Position Control Pedal - The Motor Box is in its inactive home position if the pedal is in the "heel-down" position.

4. Turn the potentiometer shaft by hand to its minimum desired position and adjust the Motor Box's Attachment Coupler (pull & turn) so that the white indicator arrow will be roughly in the same position as the black triangle on the potentiometer shaft's guide circle when it is attached.

5. Attach the Motor Box by sliding the Attachment Coupler on to the potentiometer shaft. Tighten the thumbscrew and lightly pull on the Motor Box to ensure the connection is secure. The Motor Box should stay attached when you pull on it. If the Motor Box detaches, tighten the thumbscrew. After the Motor Box is securely attached, follow one of the relevant procedures on the next page for your chosen mounting bracket...

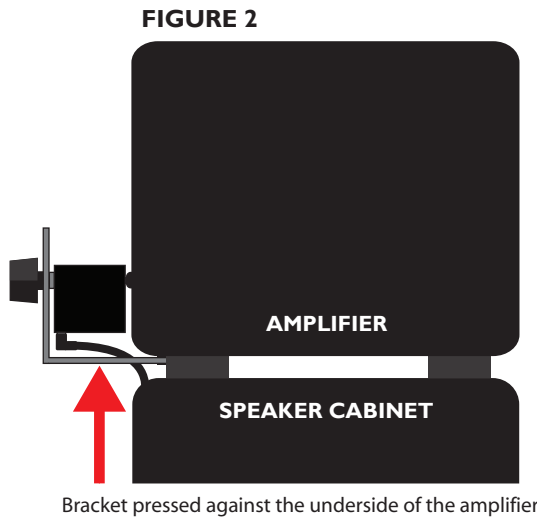
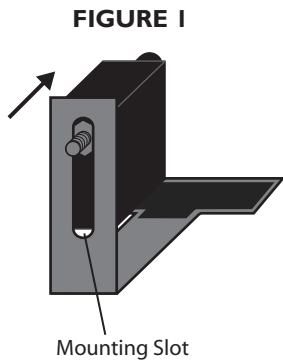
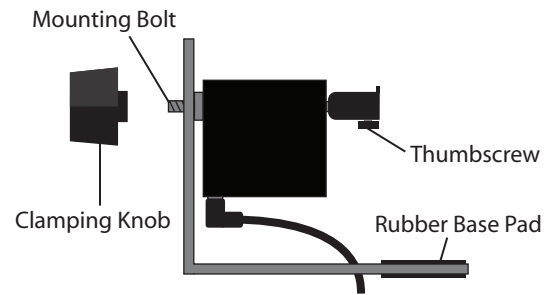


Black and white triangles in same position before mounting

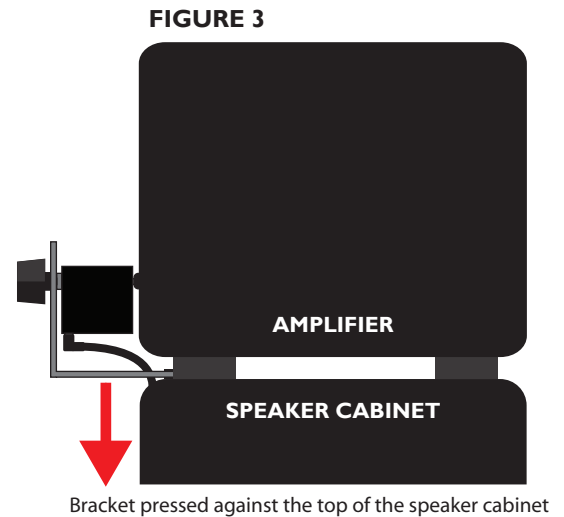
“T” BRACKET

Slide the bracket on so that the mounting bolt on the back of the Motor Box fits into the vertical mounting slot (Figure 1). Press on the bracket so the rubber base pad is making firm contact with either the underside of the amplifier (Figure 2) or the top of the speaker cabinet that the amplifier is sitting on (Figure 3). Hold the bracket in this position and screw on and tighten the clamping knob. Check the connection by lightly trying to turn the Motor Box by hand. If the Motor Box turns when checking the connection, you will need to tighten the clamping knob or readjust the mounting bracket so that the rubber base pad is making a more firm contact with the underside of the amplifier or top of the speaker cabinet.

Note: When mounted correctly, the “T” Bracket may wiggle a little bit during operation. This is due to the loose tolerance and the spring in the Attachment Coupler. This behavior is normal and expected.



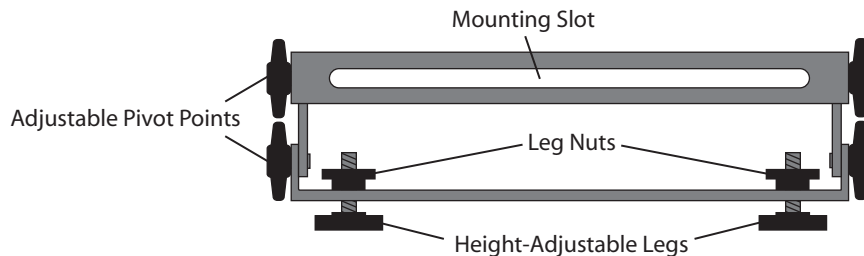
Bracket pressed against the underside of the amplifier



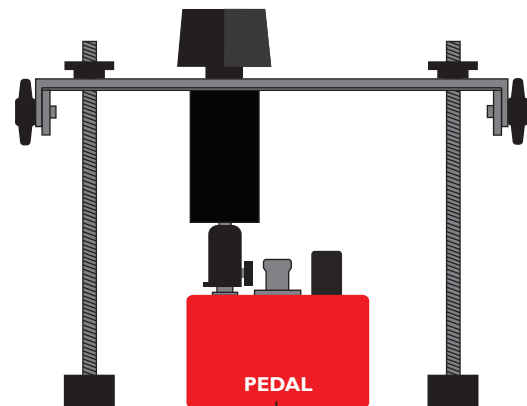
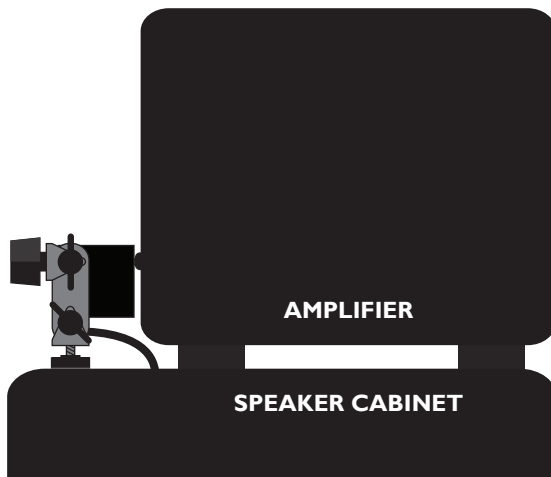
Bracket pressed against the top of the speaker cabinet

UNIVERSAL BRACKET

The Universal Bracket is tilt-adjustable at two points and the legs are height-adjustable. The stock legs can be replaced with Extension Legs (sold separately) to accommodate most pedals and amplifiers with top-facing controls.



Adjust the bracket height by loosening the leg nuts and turning the legs. Tighten the leg nuts once the desired height is reached. Adjust the angle from the pivot points so that the mounting bolt on the back of the Motor Box fits through the bracket's mounting slot and both feet of the mounting bracket are firmly resting on a surface. Screw on and tighten the clamping knob. Check the connection by lightly trying to turn the Motor Box by hand. If the Motor Box turns when checking the connection, you will need to tighten the clamping knob or readjust the mounting bracket so that the feet are making a more firm contact with the surface on which it sits. See below for mounting examples...



The pedal should be secured to the floor or a pedalboard.