

**Important: Read Before Using Operating/Safety Instructions**  
Tailgator LM1000 LaserMetronome™  
<http://www.lasermetronome.com>  
978.270.3193

Congratulations on purchasing the LaserMetronome™. The LaserMetronome™ has numerous advantages over a standard metronome. For studio use, it can be slaved to your sequencer and can provide a visual cue for the click track for everyone in the room. For live use, there are 48 memory locations where you can store your songs' tempos. These can be stepped through with a standard footswitch (see operation section).

## Safety & Protection

**WARNING:** Read and understand all instructions before use. Failure to follow all instructions may result in electric shock, fire or serious personal injury.

1. Never aim the LaserMetronome™ laser beam at a person or animal's eye.
2. Do not leave the LaserMetronome™ operating unattended.
3. Do not stare into the beam or view directly with optical instruments.
4. Do not look directly into the LaserMetronome™ laser beam or aperture opening.

5. Lasers can be reflected off mirrors or shiny surfaces. Check for reflections before actual use.
6. Do not set up laser such that people can walk or are present between the device and the surface displaying the laser.
7. Do not disassemble or tamper with this device. This can cause injury or hazardous radiation exposure. No user serviceable parts are inside. Opening the LaserMetronome™ will void the warranty.
8. Keep the LaserMetronome™ away from water and other liquids. Handle with care, do not drop.
9. Remove battery when not in use.

## Feature and Control identification:

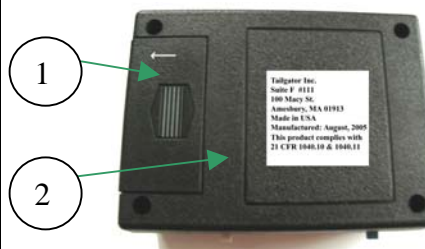
### Top:



1. Radiation safety labels: Labeling required by 21 CFR 1040.10 and 1040.11



### Bottom:



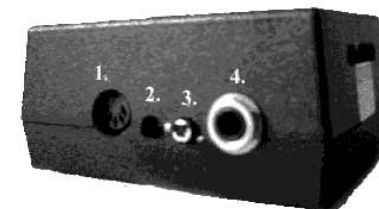
1. **Battery Compartment:** Slide battery compartment cover (as indicated by the white arrow above) to remove and attach 9V battery to strap snaps. Insert battery into compartment and re-attach cover being careful not to damage wires. The battery is not necessary if using AC Adapter.
2. **Product ID Label:** With FDA compliance statement.

### Front:



1. **Laser Aperture:** Laser Light is emitted from this slot. Do not look directly into this opening.

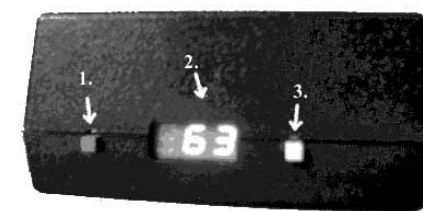
### Right:



1. **Midi DIN input jack:** 5-pin DIN jack for midi-in connection.
2. **Power Supply Jack:** For optional AC Adapter 9V DC 500 mA 2.1 mm plug center positive.
3. **Power Switch:** Three-position toggle switch;
  - Center is off.
  - Up causes the Laser to oscillate.
  - Down causes the laser to blink in one position instead of oscillate.

4. **Footswitch jack input:** ¼ inch phone jack for a normally open (off) foot pedal. This input is identical in function to the Next button on the left side of the box.

### Left:



1. **Mode button:** Toggles the display from tempo to program address when not in midi control mode.
2. **Tempo/Program display:** LED display showing either current tempo in beats per minute or the current program memory address (the first character of the display is “P”). The display will show one or more symbols if operated by midi control.
3. **Next button:** Increments the tempo or program address. Hold down for faster increment.

## Operation

### **Overview:**

The LaserMetronome™ comes pre-programmed with 120 beats per minute stored in the 48 program memory locations. When the power switch is turned on, the display will flash the program memory number in use when the LaserMetronome™ was last turned off, and will then display the associated tempo. If the LaserMetronome™ detects a MIDI device plugged in, then special characters will be displayed instead of the tempo. Always power off the LaserMetronome™ when plugging or unplugging the Midi connector.

### **Setup:**

**Power:** Install 9V battery as described above or use the optional transformer inserted into power jack on the right side of the LaserMetronome™.

**Operating location:** Select a location such that there is no pathway for people to come between the LaserMetronome™ and the surface you want to project the laser beam on. Place the LaserMetronome™ on any flat surface or clamp it to any suitable object. Position the LaserMetronome™ so the laser will project on the desired surface.

### **Operating modes:**

**Oscillate:** By placing the power toggle switch in the up position the tempo will be displayed as a moving beam.

**Blink:** By placing the power toggle switch in the down position the tempo will be displayed as a flashing dot. This mode will extend battery life.

### **Midi Operation:**

This unit only recognizes MIDI clock, start, stop and continue commands. Make sure that your sequencing software or hardware is set to transmit these commands.

### **Tempo adjustment:**

While displaying the tempo, press the Next button to increment the tempo. Hold down the Next button for fast increment. If the tempo is at 230 beats per minute, pressing the Next button will change the tempo to 60 beats per minute.

### **Tempo storage memory:**

Pressing the mode button while a tempo is displayed will change the display to “PXX” where XX is a program number between 01 and 48. While displaying a program number, pressing the next button will increment the program number displayed. To save a tempo into a program number, press the mode

and/or next buttons to get to the program number you want to save the tempo in. Press the mode button to change to tempo mode and adjust the tempo to the desired beats per minute. Press the mode button twice will save the current tempo in the current program number.

**Example 1:** LaserMetronome™ is displaying 100 bpm. Press the next button 5 times and 105 is now displayed. Press the mode button twice and 105 is now stored in the current program number.

**Example 2:** LaserMetronome™ is displaying 100 bpm. Press the mode button and P05 is displayed. Press the next button and P06 is displayed. Press the mode button and the tempo stored in program 6 is displayed. Press next button until the desired tempo is indicated. Press the mode button twice and the desired tempo is stored in program number 6.

### **Footswitch Use:**

This is identical in function as the next button. Use a normally open or off footswitch. This can be used to switch programs during a performance with the footswitch. Program the tempos for the songs in a set list into the program memory first.

## **Specifications:**

Model Number: LM1000  
 Recommended use: Indoors  
 Power Supply: 9 Volt battery or 9V DC 500 mA AC adapter  
 Operating Frequency: 60 to 230 beats per minute  
 Laser Class: IIIa  
 Max power output: <5mW  
 Wavelength: 630-680 nm  
 Operating Temperature: 35 – 100 °F  
 Memory Capacity: 48 locations for tempo storage

## **Limited Warranty of Tailgator LaserMetronome™ for indoor use.**

Tailgator Inc (“Seller”) warrants to the original purchaser only, that LaserMetronome™ will be free of defects in material or workmanship for a period of 60 days from date of purchase. Seller’s sole obligation and your exclusive remedy under this Limited Warranty, and to extent permitted by law, any warranty or condition implied by law, shall be the repair or replacement of parts, without charge, which are defective in material or workmanship and which have not been misused, carelessly handled, or repaired by persons other than the Seller. To make a claim under the limited warranty, you must return the product, transportation prepaid, to Tailgator Inc. In no event shall Seller be liable for any incidental or consequential damages including but not limited to loss of profits arising from the sale or use of this product. This limited warranty applies only to products sold in the USA, Canada and Puerto Rico.