

For eye safety, the laser beam should always be blocked before adjusting the plate of the Flipper. (The reflective surface of the mirror should be placed so that it faces down when the Flipper plate is in the down position.)



“Safety First!”

Seymour says,



Model 8892 Motorized Flipper Instruction Card

patent pending

GETTING STARTED

Take the handpad and remove the battery cover on the back. Insert the included 9-V battery (carefully noting polarity) into the battery compartment and replace the cover. Plug the control cable into the handpad. Use the switch on the handpad to flip the Flipper up and down.

TTL INPUT

The 8892 Motorized Flipper can be controlled using a TTL-compatible signal (5-V high and 0-V low) applied to the edge-sensitive TTL-input port. A rising edge (low-to-high transition) raises the Flipper while a falling edge (high-to-low transition) lowers the Flipper. A 2.5-mm plug is included that allows you to make your own cable for TTL control.

Since the handpad switch overrides the TTL input, we recommend that you send a rising-edge signal before you start your experiment to verify that the Flipper is in the up position.

POWER SOURCE

The 8892 Motorized Flipper comes with a 9-V battery. This battery is good for 1,000 flips over a 6-month period, or 2,000 flips over a 3-month period. When the 9-V battery runs low, the low-power indicator on the handpad will flash.

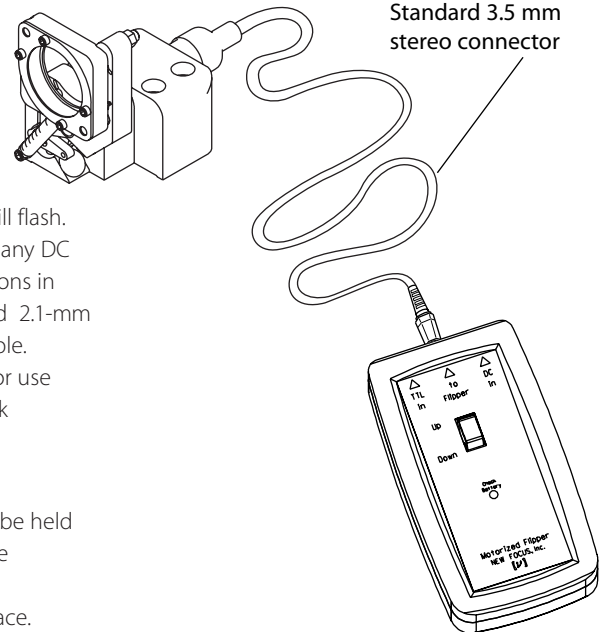
You can also power the Flipper with any DC power supply that meets the specifications in the table on the next page. The included 2.1-mm plug lets you make your own power cable.

A good off-the-shelf power supply for use with the Flipper is available from Newark Electronics (Part #84F2067).

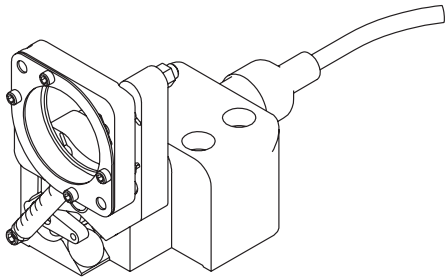
HOLDING YOUR OPTICS

Thick optics (thickness < 5 mm) can be held with a nylon-tipped setscrew or with the included retaining ring.

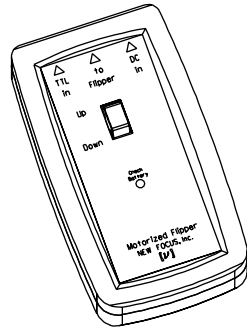
Thin optics must be adhered into place.



What You Get



Motorized Flipper



Flipper Handpad



2.1-mm Plug for DC Power Input



9-V Battery



2.5-mm Plug for TTL Signal Input

Specifications

Power Supply

Standard:

9-V Battery (included with Flipper)

The low power indicator light blinks when the battery is low

Optional:

DC IN external power supply:

9-VDC power supply

300–500 mA

2.1-mm plug 

Suggested DC IN external power supply:

Newark Electronics Part #84F2067

TTL Signal

Positive edge=up 

Negative edge=down 

Push button overrides TTL signal.

2.5-mm plug 

Range of Tilt: $\pm 2^\circ$

Number of Flips per Battery:

1,000 over a 6-month period, or

2,000 over a 3-month period

