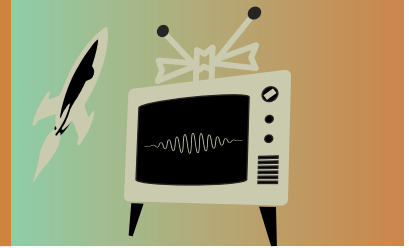




## Mini Retro TV Video Player

# Supplemental Guide for Pinball Machines Page 1



The Pinball version of the Mini Retro TV Video Player is easy to install and provides various power supply options. Although a functioning speaker is included, we recommend that you save videos with their volume levels disabled or very low. We found that the audio from videos detracts from the pinball machine sound effects and therefore should be disabled or set very low.

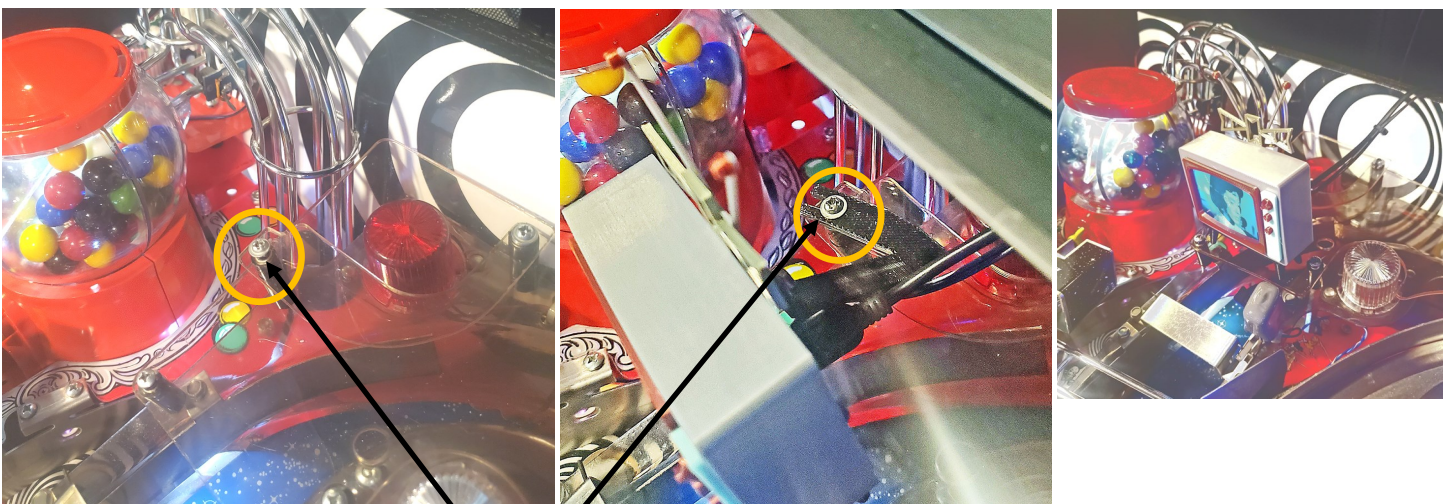
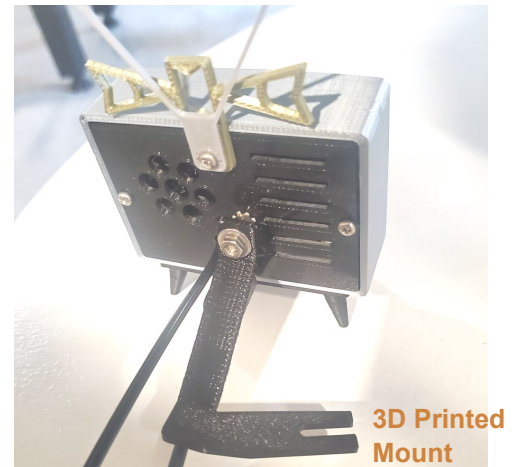
**Video Clips:** Contact us at [support@nplabs.ca](mailto:support@nplabs.ca) and we'll send you a link to some TZ video clips.

## Mounting Options

### Mounting In Twilight Zone Pinball

Included is a black 3D printed mount designed for Twilight Zone Pinball. Attach the mount to the back of the video player on the stud, between the washers. Do not over-tighten. If you plan to power the video player using the USB cable and AC adapter (see back of this page), plug the USB cable into the back of the video player at this time.

Mounting is near the gumball machine as shown in the pics below. Back the screw out 2 to 3 turns and slide the forked end of the mount under the screw head. Position the video player as you like then re-tighten the screw. Be careful not to over-tighten or the mount could be damaged. Drape the wires and/or USB cable over the rear backboard.



Mount here

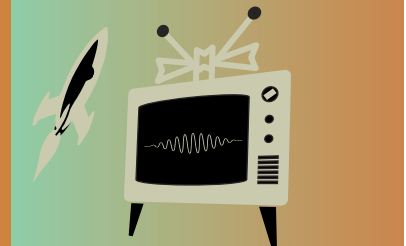
If you wish to mount the video player in a different location or different pinball machine, you can make a custom mount using the 1mm wire provided. You will need needle nose pliers for bending and some means to cut the steel wire.

**See Page 2 for Power Supply Options**



## Mini Retro TV Video Player

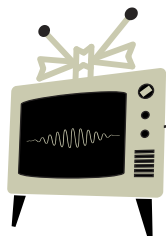
# Supplemental Guide for Pinball Machines Page 2



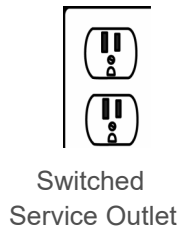
Power Supply Options (Video Player current draw is 200ma max.)

### Option 1

#### Plug into 120VAC Service Outlet Inside Pinball Machine



USB Cable

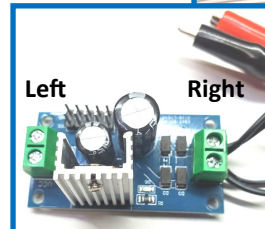
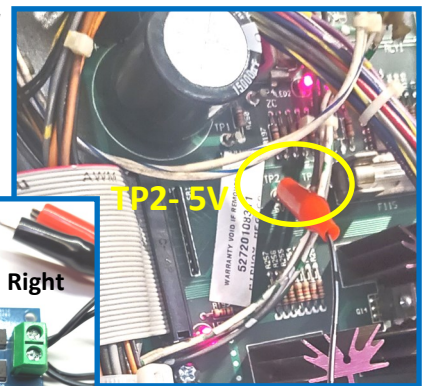
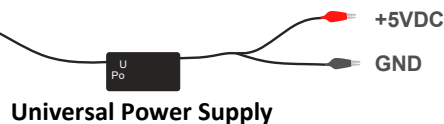
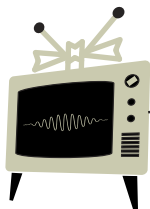


Your pinball machine must have a switched service outlet that is powered when you switch on the machine. If the outlet is powered all the time, consider buying a Wi-Fi smart plug and plug your pinball into it, or rewire the service outlet so it is switched on.

### Option 2a

#### Clip onto a 5VDC Source

Clip onto a 5VDC source such as TP2 5V on the main board of Twilight Zone. Open the black box (universal power supply) and move the wires from the left terminal block to the right terminal block. Make sure you pair the grey striped wires together and the pure black wires together. The terminal each pair goes into does not matter. Close the box. Now you can clip onto a 5VDC source and a ground point such as a braid.



### Option 2b

Direct connect to a 5VDC source by detaching the universal power supply and connecting directly to a 5VDC source such as an existing terminal block, fuse or via a header adapter or solder point. Be sure to connect the wire with the grey stripe to +5VDC and the other to ground.



Wire Polarity Detail

### Option 3

#### Clip onto a Playfield Light or Other Source

Under the playfield, clip onto the electrical terminals of a playfield light that is permanently on. Usually they are powered by 6VAC. Anything less is too low of voltage.

Alternatively, clip onto a different power source that is between **6VAC to 12VAC** or **8VDC to 12VDC**.

**Warning:** Some lights may be connected in series. If when connected, the light goes out, try connecting to another light in a different area. If the video player intermittently turns off, voltage is too low.

Connect to  
6VAC to 12VAC or  
8VDC to 12VDC.

Universal Power Supply

