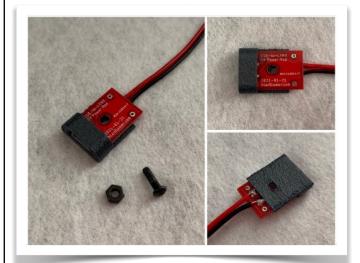


Assembly and User Manual v1.0 12-Dec-2023 USB 5V Power Mod Kit for Atari Lynx 2



This kit adds a micro-USB power socket to the back of your Lynx and bypasses the 9V circuit to power your Lynx directly from USB.

SKU: LNX-USB5V

Product link: <u>https://k-retro.com/atari-</u>lynx-power-capacitor-and-nimh-kits/ 47-usb-5v-power-mod-kit-for-atarilynx-2.html

We sell kits, replacement parts, tools and soldering consumables at our online store at <u>k-retro.com</u>

Kit Contents

1x Micro-USB PCB 1x 3D Printed Shim/Cover for USB port

1x M2.5 Bolt and Nut 1x Black and Red wires cut to size

Required Tools and Consumables

Drill and 2.5mm drill bit, 2.5M Allen key, Soldering Iron, Side Cutters,

Assembly Instructions

1. This manual assumes you followed our disassembly guide and your Lynx is already taken apart.

This mod takes a 5V DC input from USB using a micro-USB port and patches it directly into the Lynx past the 9V circuit. As a result, the on/off buttons on your Lynx will not function when it's powered from USB. It is recommended to get a USB cable with a built in on/off switch (we sell those in our store).

2. Lynx Model 2 has two metal strap loops on the back, under the "ATARI" logo. These were never actually used for anything as far as I know, but they are a perfect fit for a micro-USB port. First you will need to disassemble your Lynx. With the Lynx in two halves, take the rear part of the shell and unscrew the metal strap loop on the right (when looking at the back of the Lynx).

Then, using a scalpel or Exacto knife (or you can use a rotary tool if you like), remove the ridge of plastic that the metal loop was pushing up against. See photo for reference.



3. Insert the USB socket. Once the strap loop space is cleared out, insert the PCB with the USB socket as pictured. You may need to cut out more on the sides around where the strap loop was. The PCB and 3D printed cover should slide in easily when you get the cutout right.



4. Drill a screw hole. Make sure the PCB is flat against the inside of the Lynx shell (you may need to hold it). Using a 2.5mm drill bit, drill out a hole in the Lynx case that lines up with the screw hole in the PCB and 3D printed cover. Clean up any plastic shavings left over after drilling the hole.



5. Secure the PCB. Push the screw through the outside of the case, through the PCB and the 3D printed cover, so that it's visible on the inside of the case. Tighten the nut on the screw. You can use a 2.5mm Allen key or just tighten it as much as you can using your hands. Don't tighten too hard to avoid cracking the plastic.



6. Solder to the Lynx motherboard. You will need to split the end of the power cable into two - red and black wires. Then strip the ends of the wire and tin them using a soldering iron. Then look at your Lynx's motherboard and find the C41 capacitor, it should be in the top-right corner (when looking at the back of the Lynx motherboard). This is the capacitor we need to solder the wires from the USB PCB to. The +ve side of the capacitor is marked on the motherboard, but should be closest to the edge. Solder the wires in as per the photo below. Red goes to positive, black goes to negative.



7. Test and re-assemble the Lynx. Use a USB power supply or a USB battery bank with a micro-USB connector to test your mod. You will need to have at least a 1A USB power source. If you're using a McWill LCD modded Lynx, you will need to have more than 1A to avoid the power LED on the Lynx from flashing. Plug in a micro-USB cable into your Lynx and USB power source, your Lynx will power on immediately. There is no on/off functionality when using this mod as mentioned earlier.

Once everything is working, re-assemble your Lynx and enjoy!

