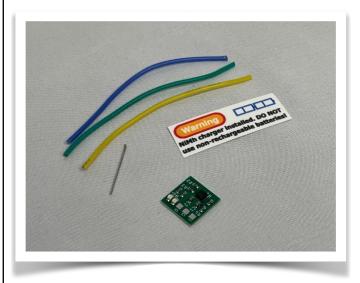


Assembly and User Manual v1.0 23-May-2024

NIMH CHARGE KIT FOR ATARI LYNX Lynx 2 Instructions



With the NiMh charge kit, you can charge NiMh AA batteries directly inside your Atari Lynx. This includes Eneloop batteries as well as cheap Varta NiMh rechargeable batteries. The batteries charge when a power adapter is plugged into the Lynx's power socket.

SKU: LNX-NIMH

Product link: https://k-retro.com/atari-lynx-power-capacitor-and-nimh-kits/48-nimh-charge-kit-for-atari-lynx.html

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

Kit Contents

1x NiMh charge module

1x Pre-cut bridge pin

3x Pre-cut wires

Required Tools and Consumables

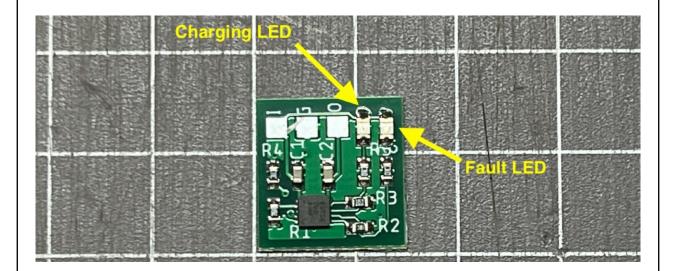
Soldering Iron, Solder Braid, Side Cutters, Tweezers, Isopropyl Alcohol (IPA), Kapton tape (optional)

Assembly Instructions

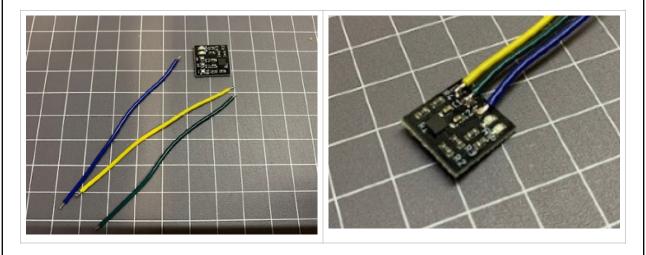
- **1.** This manual assumes you followed our disassembly guide and your Lynx is already taken apart.
- **2.** The charge module has over voltage, over current, short circuit protection, 10hr safety timer, and an intelligent charge controller IC manufactured by Texas Instruments. There are two LEDs the LED closest to the edge is the fault LED, the one in from the edge is the charge LED. During normal operation, only the charge LED should light up when the batteries are charging. Please see the image over page for reference.

When the Lynx is plugged into a power supply, the charge module will flash both LEDs, this is just a temporary startup state.

Note: Once the NiMh power module is installed, DO NOT USE NON-RECHARGEABLE BATTERIES IN YOUR LYNX.

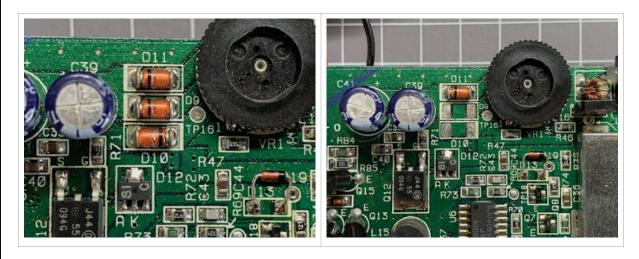


3. Strip and tin the green, blue and yellow wires on each end. Then solder the wires to the contacts on the charge module - I (yellow) G (green) O (blue).



4. Remove the D9 and D10 diodes from the Lynx motherboard.

These diodes are SMD type but are fairly easy to remove, just heat one side and use a scalpel or screwdriver to lift that side slightly, then heat the other side and lift it too. Go back to the other side again, heat it up with the iron and it should come off. Clean up any remaining solder residue with some solder braid. Clean up any solder flux with IPA and cotton tip.



For an alternative method of removing these diodes, see this video - https://youtu.be/dnY10RPplco

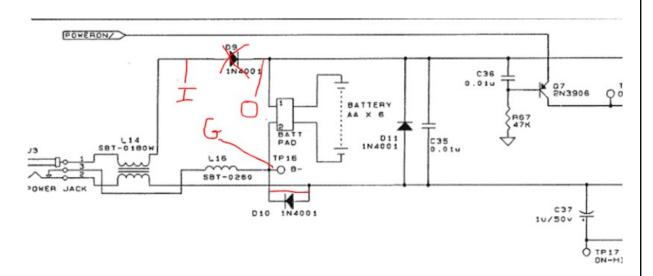
5. Short D10 pads and solder wire

Using the supplied length of metal pin, solder it across the D10 pads, then solder the green wire from the charge board to the pad closest to the wheel. On the D9 pads, solder the blue wire to the pad closest the capacitor, and yellow wire on the pad closest the wheel.





Below is a rough diagram of the circuit change based on Lynx 2 schematics.



6. Attach charge module to RF shield

The charge module comes with double sided tape on its back. Peel the protective plastic off the tape and secure the module to the RF shield of your Atari Lynx. This module can get quite hot (55C) when charging, so it's important to have it stuck to something that can dissipate that heat.



7. Optional, but recommended - Kapton tape the charge module

This is an optional step but if you have Kapton tape, you can tape the charge module down to the RF shield. This is in case the double sided tape comes loose with heat.



8. Apply the warning sticker on the outside of the Lynx shell to make sure that users do not use non-rechargeable batteries in the Lynx with a NiMh charge module installed.