



Canon Macro Ring Lite MR-14EX Teardown

Work in progress

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INTRODUCTION

The MR-14EX is a 2-piece flash apparatus, designed for close-range macro photography (~1:1 or greater); extreme close-ups, and tiny subjects.

The main controller (DSLR hotshoe mount), and the flash lamps (lens mount), are tethered by a coiled retractile cable.

I decided to make a few personal modifications to my own, so I contacted Canon directly, requesting some information and a service manual. Basically, they refused to co-operate, forcing me to do things the hard way. So now I'm documenting my process; sharing the relevant information with you, as I progress.

Diagrams are adapted from the official spare parts catalogue.



TOOLS:

- [Pro Tech Toolkit](#) (1)
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Step 1 — Canon Macro Ring Lite MR-14EX Teardown



- Remove four screws from the top of the main control module. One in each corner.
- Plus one in the middle.
- And four more (one is obstructed from view in the photo) at the foot of the module.
 - The base will drop out quite easily.

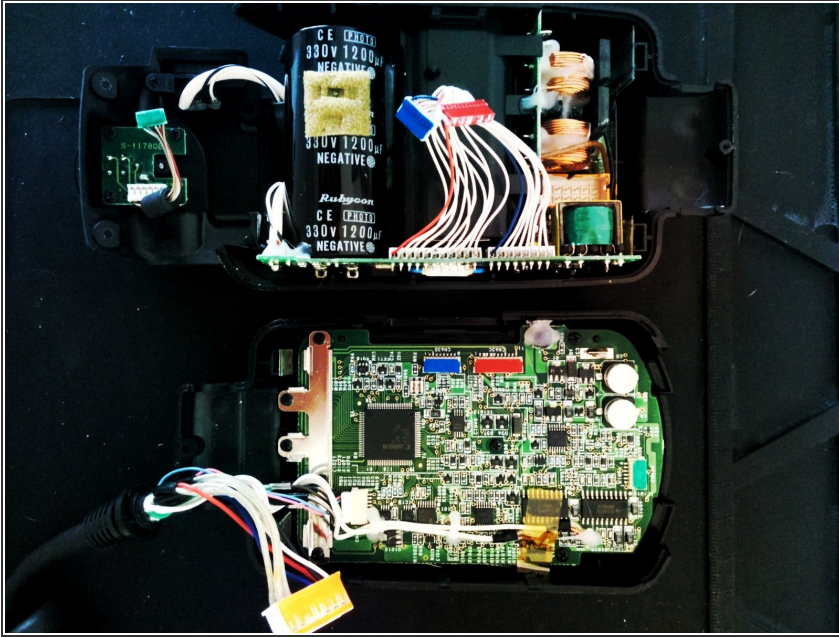
⚠ Be careful. Only one of these cables is designed to be disconnected from this end. If possible, try to pry it with a tool, rather than tugging it.

Step 2 — Breaking the Control Module.



- The outer shell is held together by internal plastic clips. The two halves come apart at the sides. If you can free a single clip, the rest will slip out, and the rest will fall apart with minimum effort.
- ⚠ As you can see, I was a bit rough and broke one of the clips a little bit. I'm not too concerned about it, but try to avoid doing the same if you can help it.
- ⓘ Some other pieces may fall out. Including the battery hatch, and some metal pieces. I'm not exactly sure what their purpose is. Perhaps structural reinforcement, or something like that.

Step 3 — Disconnect the PCBs.



- Unplug the various connectors holding it all together.

⚠ As you can see, I marked up all the plugs and sockets with colour coded paint pens. I recommend doing the same.

⚠ Only one end of each wiring loom can be disconnected. Inspect with a lamp or refer to my images to make sure you're pulling the right ends.

⚠ Don't tug on the wiring looms. Some will be stuck tight. I used a long nose plier & hooked pick/probe/scraper.