openSX70.com

your SX70

double exposure | mirror delay
led | shutter speeds selector
PC flash jack
flashbar socket
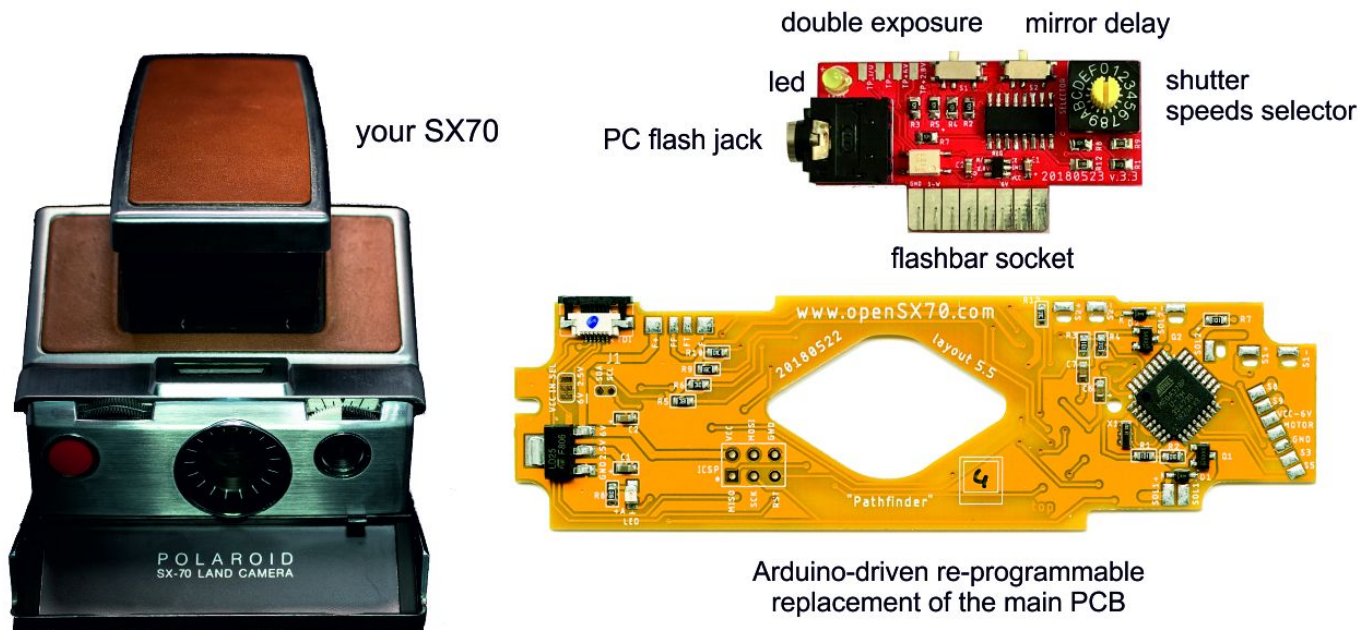
Arduino-driven re-programmable replacement of the main PCB

openSX70 *FAQ - Press Release (October 2018)*

What is the Polaroid SX70?
An SLR instant camera using integral film, once manufactured by *Polaroid*, then by the *Impossible Project,* and now by *Polaroid Originals**. The Polaroid* SX70 camera and film are Edwin H. Land's incredible achievement. One of the most amazing and iconic products of the XX century. It was introduced in late 1973.

What is openSX70?
The openSX70 is many things at once, but, in a nutshell, openSX70 is a open source project that aims to take the SX70 beyond what is possible now.
The project aims to make an Arduino-based replacement PCB to gain manual camera control, and, in the future, Bluetooth/app camera control and much more.
At the same time the project aims to be a hub of all things SX70 related, with documents and tips, repairs or hacks, like the electronic modification of your camera to accept 600-ISO film. There are other web pages about hacking the SX70, but most seem to be abandoned. We would like to compile as many resources as possible.

But, hasn't this already been done?
Yes… and no. There are at least two awesome commercial projects that accomplish something similar but this is the first open source project.

So openSX70 is a product?
Maybe, since it is an open project anyone will be able to make their own pcb (as long as it has no commercial purpose).

Ok, I like it, where can I get one?
Again, openSX70 is not yet a product, and may never be, and at this moment in time it's still a work in progress. Think of it as an ever improving experimental platform. It is an open project, so basically free as long as you use it for non commercial purposes under Creative Commons "Attribution-NonCommercial 4.0 International (CC BY-NC 4.0)"
Since we acknowledge that modifying the SX70 is definitely not for everyone, we might end up setting up a network of authorised installers. Nevertheless it is a non-destructive project when done properly. We will encourage people to keep the original board.

So then… where are you now?
We are in the testing phase. After successful tests with an external prototype board various SX70-sized PCBs we are testing and adjusting the timings on the Arduino sketch. "Auto" exposure is not possible with current boards. The control "dongle" board, nicknamed uDongle is a bare PCB but we hope to have a nicer design and a 3D printed enclosure soon. We want to replace the light sensor with a simpler and faster photodiode. We consider that (dongleless) auto mode is very important.

We are also trying to replicate and make more affordable some of the special tools needed to open and fix the SX70, and find replacements and alternatives of critical parts.

Great! Can I join the project and help?
Yes you can! We want **you** to join us on the openSX70 project, we need your help, to maintain the openSX70 portal, we need arduino and microcontroller programmers, we need help designing the PCB, and above all, we need enthusiasts to join and spread the word on the project!

Press contact: sx70 at opensx70 dot com
Facebook group (closed): https://goo.gl/3qjne2
web: www.opensx70.com
github: https://goo.gl/1A1QbY
twitter: @openSX70
instagram: openSX70
hashtags*: #openSX70 #SX70 #OriginalPolaroids #PolaroidOriginals #Polaroid #Arduino #InstantFilm #DIY

Tagline:
 "Polaroid SX70's 45th birthday, teaching an old camera new tricks: the openSX70 project"

brief:
The openSX70 project wants to hack the SX70 camera by replacing its 45-year old "brains" with a new, open-source, Arduino-based PCB, giving photographers manual control of the camera.

improved functionality:
- Manual shutter speed control.
- Double/Multiple exposures.
- B (Bulb) mode.
- T mode.
- PC-flash connector (on dongle).
- Optional f/8 flash operation.
- Delayed mirror operation (optional).
- Built-in shutter delay timer (long press on red button).
- Built-in light meter (possible auto 125ISO or 600ISO)
- Led blinks as picture counter (true remaining shots).