Camera of the Future

scope

The *Camera of the Future* takes advantage of technological advances in mini photography, making it a useful tool for record keeping in the sciences. The goal of the project is to create a camera that is convenient and unobtrusive in order to make photographic record keeping easier. The deliverables are a minicamera and glasses.

solution overview

The camera solves the problem of making photography for record keeping purposes convenient and efficient. The scientist can easily take a photo by looking at the subject and tripping the shutter which is practical in both the lab and in the field. The camera also produces images instantly that can be enlarged or projected for review.

The technologies used to create this camera are mini photography and dry photography. There are two options for dry photography, film treated with diazo dyes or treated film and electrical currents. A photographic englarger or projector would be necessary to view the photos to scale.

The camera is small and unobtrusive, slightly larger than a walnut. It instantly produces photographs three millimeters square and holds enough film for 100 exposures. The camera has a short focal length resulting in universal focus and a wide angle shot. It also has a built-in photocell, a sensor that detects light, and automatically adjusts exposure and shutter speed making the camera fully automatic. The camera has stereoscopic lenses which enhance the illusion of depth. A shutter release cable can be run down the user's sleeve for easy access. The camera is mounted onto a pair of glasses above the bridge and squares of fine lines near the top of the lenses function as the viewfinder.

requirements specification

The camera produces photographs three millimeters square that can be enlarged or projected for viewing. The photographs are in full color and are stereoscopic. A shutter release cable can be run down the user's sleeve within easy reach of the hand, so that a scientist can move freely and quickly make a record of his observations. The camera uses dry photography to produce images immediately after taking them.

use cases

To take a photo, the user:
1. turns camera on
2. puts on the glasses
3. runs shutter release cable down their sleeve
4. looks at desired subject
5. ensures subject is within viewfinder
6. trips shutter release cable
7. camera takes the picture
8. photo is produced immediately

non-functional requirements

Multiple frame styles, allows for personal preference.

Julia Del Pozzo
ARTS 486
Project 1: As We May Rethink
Functional Specification
January 31, 2020