**Minimum System Requirements**

* 8" telescope
  * ~1m effective focal length
  * Equatorial mount or derotator
  * Tracking at lunar rate
* Astronomical video camera with adapter to fit telescope
  * NTSC or PAL
  * 1/2" detector
* Digitizer - for digitizing video and creating a 720x480 .avi
  * Segment .avi to files less than 1GB (8000 frames)
* Time encoder/signal
  * GPS timestamp or WWV audio
* PC compatible computer
  * ~500GB free disk space
* Software for detecting flashes

**System Examples**

* Telescopes:
  1) 10" f/4.7 Newtonian
  2) 14" (355mm) f/8 Meade RCX400 on an equatorial wedge with a 0.33x Optec focal reducer
  3) 20" (500mm) f/8.1 from Ritchey Chretien Optical Systems on a Paramount ME with an Optec focal reducer spaced for 0.25x
* Pyxis rotator to adjust camera angle
* C-mount 1 1/4" adapter and baffle
* ASTROVID StellaCam-EX (Sony HAD/EX chip) or Watec Ultimate 902H2 1/2" CCD
* SONY Video Walkman, GV-D800 NTSC, used as a FireWire digitizer
* KIWI-OSD GPS time encoder
* ICOM R8500 receiver for WWV time signal (if GPS not available)
* HP 2GHz Intel P4 with 1GB RAM
  * 480GB, 7200rpm SATA hard drive
  * FireWire card
* Software
  * Windows XP
  * WinDV, used for recording and segmenting an .avi; vid+auds setting, segmented to 8000 frames
  * LunarScan, used to locate impact flash candidates in an .avi
  * VirtualDub, used for making flash and stellar calibration video clips
  * Virtual Moon Atlas, used to locate the position of the flash on the moon

Diagram not to scale