

## DroneMapper CHDK

### More Information:

[http://chdk.wikia.com/wiki/Prepare\\_your\\_SD\\_card](http://chdk.wikia.com/wiki/Prepare_your_SD_card)

<http://chdk.wikia.com/wiki/>

[FAQ#Q. How can I get the original firmware version number of my camera.3F](#)

<http://chdk.wikia.com/wiki/>

[FAQ#Q. How can I make the CHDK program load automatically at startup.3F](#)

### DroneMapper Intervalometer Script and CHDK Install Instructions:

[ ] Charge Camera Battery

[ ] Format Memory Card w/ Camera (low level is good)

[ ] Remove Card From Camera, Insert Into Card Reader (make sure card is unlocked)

[ ] Open Windows Terminal, Change Directory To Memory Card

1. E: <enter>
2. echo > ver.req <ENTER>
3. echo > vers.req <ENTER>

*\*\* You can't use Windows explorer, it creates the files as .txt or ver.req.txt. Won't Work!*

[ ] Close Terminal, Eject Memory Card (use memory card / usb eject at bottom right icon bar)

[ ] Insert Memory Card Into Camera

- Switch on the camera in playback mode and wait for the main screen (caution: switching on in rec mode and changing to playback later with open lens does not work with all models!)
- Press the func set+disp. buttons together (i.e. press set first, keep holding it down, then press disp.).

You will see Model Name, P-ID, a string like **Firmware Ver GM1.00E**, Error State and Firmware Date. The **1.00E** part is the firmware version.

[ ] Now, Download The Matching SX260HS Firmware From: <http://mighty-hoernsche.de/trunk/>

[ ] Remove Memory Card From Camera, Insert Into Computer

[ ] Extract Matching Firmware For SX260HS To Memory Card Root Directory (E:\)

[ ] Eject Memory Card (use memory card / usb eject at bottom right icon bar)

[ ] Insert Memory Card Into Camera, Locate "Update Firmware" Option

[ ] Update Firmware To **CHDK**

1. Put the SD card back into in your camera.
2. Start your camera directly into Play Mode by pressing the Play button or Play switch. Do not start the camera with the On/Off button - the firmware update method will not work if you do.
3. Press the Canon Menu key and scroll around until you find a menu item that says "Firm Update...". There are usually three or four tabs in the Menu (varies by camera). You can probably stay on the first tab (typically Playback Settings) but some experimentation might be necessary.
4. Select "Firm Update..." and press FUNC.SET button.
5. It should say "**Update firmware version?**" Press OK. If everything went correctly, the **CHDK** splash screen will appear briefly on the Camera's screen.
6. Go back to the camera mode and you should see some new OSD (on screen display) elements.
7. Activate the **CHDK** menus with the <ALT> key or key sequence defined for your camera.

[ ] Access **CHDK** Mode

- short press ALT mode, long press original playback mode
- access <ALT> mode by pressing PLAYBACK button.

[ ] Go To **CHDK** Settings, Memory Card and Choose "Make Memory Card Bootable"

[ ] Remove Memory Card, Lock Memory Card and Reinsert

[ ] **CHDK** Should Boot Auto

To Add Scripts To **CHDK**:

[ ] Remove Memory Card and Unlock

[ ] Copy newDM\_interval.bas Into E:\**CHDK**\SCRIPTS\

[ ] Unmount Memory Card and Lock, Insert Into Camera, Go To **CHDK** Script Menu

\*\* Be sure to check or uncheck **CHDK** settings to save parameters after you've set them. It takes a minute to get used too.

\*\* Be sure to choose auto load script and auto start

\*\* Be sure to clear settings to TV / shutter speed to preserve 1/1250 shutter.

\*\* make sure to enable camera GPS and GPS camera time sync. (these are outside the **chdk** parameters) (allows geo-tagging from flight logs)

\*\* update CHDK GPS settings and set update interval at 1 second (more accurate backup tags)

**Test, test, test: Take the camera and start the intervalometer script and let it run to verify that all of your settings have been retained and the camera operates as you expect prior to flight. Nothing worse than an 1-hour flight without photos or photos that cannot be used for processing.**

#### **newDM\_interval.bas:**

```
@title DroneMapper Intervalometer
@param a = interval (sec)
@default a 3
@param c Time active (m)
@default c 5
@param j Zoom-step
@default j 30 rem step 30 is equivalent to 50 mm SLR focal length
@param z Start delay (s)
@default z 5
@original script by conservationdrones.org

rem e is time for script to remain active in milliseconds
e=c*60000

rem First shot
rem set_zoom j
rem shoot

rem Delay
for n=0 to z
  print "Starting DroneMapper in: ";z-n;"s"
  sleep 1000
next n

rem g is time elapsed and f is start time and p is shots
g=0
f=get_tick_count
p=0

do
  set_zoom j
  s = get_tick_count
  shoot
  sleep a*1000 - (get_tick_count - s)
  g=s-f
  rem t is time remaining in milliseconds
  t=(e-g)/1000
  p=p+1
  print "DroneMapper Script Running..."
  print "Interval: ";a;"s; Zoom: ";j
  print "Time Remain: ";t;"s (" ;c*60;"s)"
  print "Shots Taken: ";p;" (" ;c*60/a;"s)"
  print "(Press shutter to quit)"
  if g>e then shut_down
until ( 0 )
```

**SX260HS Settings:**

For more in-depth Canon SX260HS Settings please refer to DroneMapper document:  
[DroneMapper\\_CHDK\\_Settings-Screenshots.doc](#)