

# ArcLib Python Testing API

## Interactive use:

```
>>> Import ArcLib as al
>>> al.init(tim.lod.0x04_0x8C_20V_straight)
>>> camera_open()
>>> set_memory_map(1048576)
>>> set_row_col(100, 100, 1, 1)
>>> set_subframe_size(0, 100, 100)
>>> set_subframe_position(230 220)
>>> stop_idle()
>>> set_image_parameters(0x10, 1, 1, 1)
>>> set_exposure_time(160)
>>> start_exposure()
>>> start_idle()
>>> display_image(100, 100, 0)
>>> camera_close()
```

## Programmatic use:

Import ArcLib as al

# Load timing DSP and open the camera.

al.init(tim.lod.0x04\_0x8C\_20V\_straight)

camera\_open()

# Set memory map and row\_col.

set\_memory\_map(1048576)

set\_row\_col(100, 100, 1, 1)

# Take five images with the camera, starting in the lower left and

# moving up and to the right 50 pixels with each subsequent image.

for i in range(5):

    set\_subframe\_size(0, 100, 100)

    set\_subframe\_position(i\*50, i\*50)

    stop\_idle()

    set\_image\_parameters(0x10, 1, 1, 1)

    set\_exposure\_time(160)

    start\_exposure()

    start\_idle()

    save\_image\_as\_fits("image" + str(i))

camera\_close()