

## Appendix A. Script file reference

### Overview

The script file contains information to control the optimizer and to build panoramic images. The file is a plain text file (which can be created with almost any word processor or editor). The following rules apply to the script file:

- Blank lines are legal anywhere in the file
- a # character marks the beginning of a comment and everything following it on a line is ignored

### Script file commands reference

#### Image Parameters

All the script commands except for the Control Point command allow a number of parameters to be specified. This is a description of all the possible image related parameters. Each command lists which of these options are valid for that command:

##### Correct Parameters

a  
b  
c  
d <horizontal shift>  
e <vertical shift>

##### Euler Parameters

r <roll in degrees>  
p <pitch in degrees>  
y <yaw in degrees>

Image specifications - these parameters describe an image

v <horizontal field of view in degrees>  
w <image width in pixels>  
h <image height in pixels>  
f <format>

where format is one of

1 rectilinear  
2 panorama  
3 circular fisheye  
4 full frame fisheye

##### Framing Parameters

The following options control framing. For rectangular images, use:

mx <frame width> my <frame height>

and for circular images use:

m <frame radius>

##### Buffer Naming Parameters

+ <src name>

- <dest name>

#### File Naming Parameters

n <filename>

#### Stitching Parameters

u <feather (default is 10)>

s <seam type>

where seam type is one of:

0 Place seam in middle of the overlap

1 Place seam at the edge of the image to be inserted

k <color correction>

where color correction is one of:

0 – do not color correct image

1 – color correct destination (individual) image before merging

2 – color correct source (panoramic) image before merging

3 – color correct both images before merging

#### Interpolator Parameters

t <val1> <val2> <val3>

i <val>

#### Control Point Type

t <type>

where type specifies what to optimize between images

0 – total distance between the points

1 – x distance only

2 – y distance only

## Panorama Command

The panorama command describes the panorama which is being built. The syntax is:

p <options>

where options can be zero or more of:

Image specifications (v360, w, h, f2) – Only f1 and f2 are legal

Correct Parameters (a0, b0, c0, d0, e0)

Euler Parameters (r, p, y)

Stitching Parameters (u, s, k)

Framing Parameters (m)

Buffer Naming Parameters (+, -)

## Image Commands

li <options> to save the modified buffer

i <options>

where options can be zero or more of:

Image specifications (v, w, h, f)

Correct Parameters (a=0, b=0, c=0,d=0,e=0)

Euler Parameters (r, p, y)

File Naming Parameters (n)

Framing Parameters (m)

## Interpolator Description Command

NOTE: This option is parsed but does not appear to affect the operation of ptools at all

a <options>

where options can only be:

Interpolator Parameters (t, i)

## Control Points Command

c <options> n<number> N<number> x<number> X<number> y<number> Y<number>

where options is ?? of

## Variables to Optimize Command

This command controls what variables the optimizer will attempt to optimize. The syntax is:

v <things to optimize>

where things to optimize are zero or more of:

y <image> - optimize yaw

p <image> - optimize pitch

r <image> - optimize roll

v <image> - optimize horizontal field of view

a <image>

b <image>

c <image>

d <image>

e <image>

## End of Script File Indicator

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