

## How to collimate P+S Technik's 16Digital lenses



Preamble: In order to follow this document and to perform this collimation process you need to own a lens collimator (normally to be found only in bigger rental houses) and you should be familiar to this process. P+S Technik can not train/teach you to do a collimation process if you are not used to do it.

### Reference Value of Back Focus of 16Digital lenses:

The 16Digital lenses come precollimate to a back focus of 19,00mm with a tolerance of +/- 0,02mm.

1. Before you start please make sure that you IMS mount on your camera (i.e. SI-2K) is correct: In a first step please make sure that your IMS camera Mount has the correct back focus! In order to do this please refer to the Technical Document "89\_TD\_SI-2K\_How to collimate the SI-2K IMS Mount for 16mm and 35mm PL mount lenses", available through our service department (service@pstechnik.de).
2. In the next step please check your lens on a projector at a distance of 1m/3ft. In a second step you can recheck the back focus for  $\infty$  on a collimator (please step down the lens for about one stop). PLEASE NOTE: Make sure that your scale is set correctly at a distance of 1m/3ft - slight disalignments on the  $\infty$  mark may be balanced out on set as the focus ring allows overfocussing (you can move the focus ring over the  $\infty$  mark).

This table should give you an overview, what is to do in which case of collimation:

		Chase 1	Chase 2
<b>Projection</b>	Projection distance = 1 m -> Scale shows	less (i.e. 0,95 m)	more (i.e. 1,05 m)
<b>Collimator</b>	Collimator feedback @ $\infty$		
	that means that $\infty$ is	before $\infty$ mark (i.e. 25 m)	behind $\infty$ mark
	focal flange of lens is	less than reference value (means below 19,00 mm)	more than reference value (means over 19,00 mm)
	action to be done	put in shims	take out shims

If you need to adjust the back focus of a lens please follow the below pictures:

1. Open the 4 screws that holds the lens mount carefully.



2. Take of the lens mount and take in/out the right amount of shims.



3. Close the 4 screws carefully again and recheck the lens to make sure your collimation process was successfully.



This is a list of appropriate (PL-Mount) shims you can use for the collimation of the lens:

15038	0,0254	blue-violette
15039	0,0380	red
15040	0,0640	white
15041	0,0760	green
15042	0,1020	orange
15043	0,1270	bright-violette
15044	0,0127	silver-grey