

C-Mount Calibration for Fire-i 501/601/701/810 Series

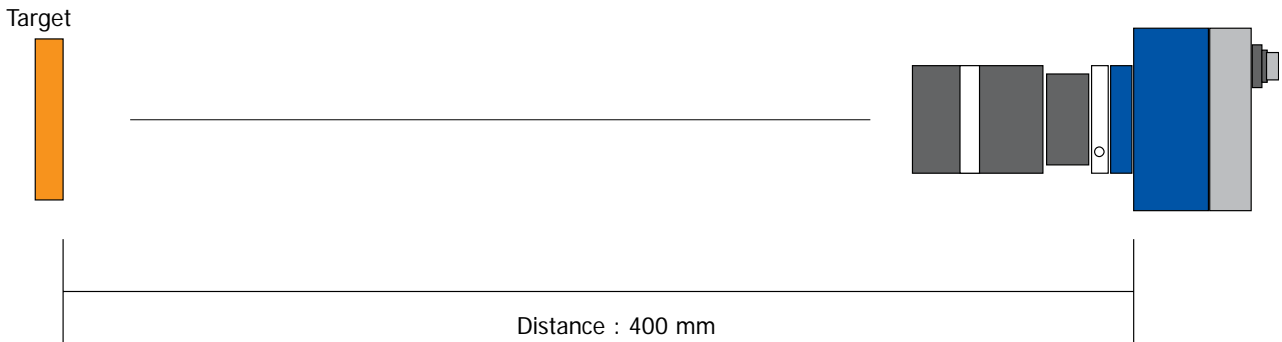


Fig 1. Adjustment Setting Scheme

Adjustment Method

First Set the camera and target as of Fig 1. Adjustment setting scheme and follow the instruction below.

- STEP 1** Distance between camera and target should be set at 400mm. (Starting from rectangular body of camera to target surface).
- STEP 2** Refer to the table below for lens selection and choose the lens corresponding to your camera. Fix the lens firmly on the C-Mount ring.

CCD Size	Model	Reference for Lens for adjustment.
1/1.8"	Fire-i 810	12.5mm
1/2"	Fire-i 701	
1/3"	Fire-i 501 & Fire-i 601	8.5mm
1/4"	Fire-i 400	

STEP 3 Set the lens f value to be 0.4m (or about 1.31ft) and fix or lock on that position.

STEP 4 Un-tighten all 3 adjustment screws as of Fig 2 Adjustment screw location. (1.5mm hexagonal wrench is required for this job.)

STEP 5 Focus the target using the C-Mount Ring. DO NOT move the lens's focus. (Recommend locking the lens's focus adjustment to avoid undesired movements.)

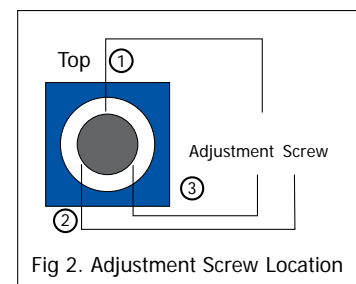


Fig 2. Adjustment Screw Location

STEP 6 When target is focused properly, before tightening the adjustment screw slightly turn the C-Mount ring counter clockwise around one notch away from the sensor. This is to compensate the C-Mount ring slightly moving towards the CCD upon tightening the adjustment screws.

STEP 7 Tighten No. 1 screw just enough that it would hold the C-Mount. Check the focus. If the focus is accurate proceed to STEP 8. If not, repeat STEP 5.

STEP 8 Tighten No. 2 and 3 adjustment screws in this order and check focus. If the focus is correct firmly tighten all the screws starting from No. 1. If not, repeat from STEP 5.