

# How to Test Optical-Axis Calibration for Clip-On Shooting

**Version: v1.1**

**(December 14, 2021)**

## 1. Equipment List

### Clip-on Device:

HM-TR16-50XG/W-TQ50C
HM-TR16-50XG/CW-TQ50C
HM-TR12-19XG/W-TE19C
HM-TR12-19XG/CW-TE19C
HM-TR13-35XF/CW-TH35C

**Caution! TH35C version needs to be V5.4.26 build210309 and above.**

## 2. Calibration Steps

### Step 1.

Get the rifle and daylight scope corrected. Make sure the shooting with the only daylight scope is correct.

### Step 2.

The re-correcting steps of clip-on are as follows:

1) Looking for a distant target (about 20 meters). It would be best to distinguish the target clearly through the daylight scope sight and thermal clip-on devices, such as a

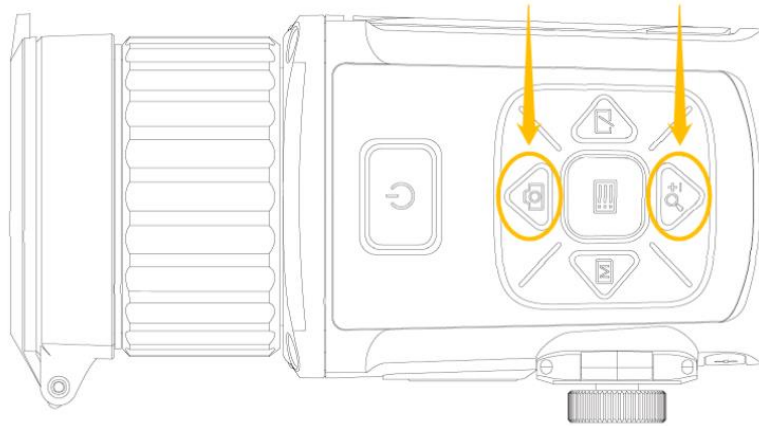
hot water cup or other objects that can generate heat.



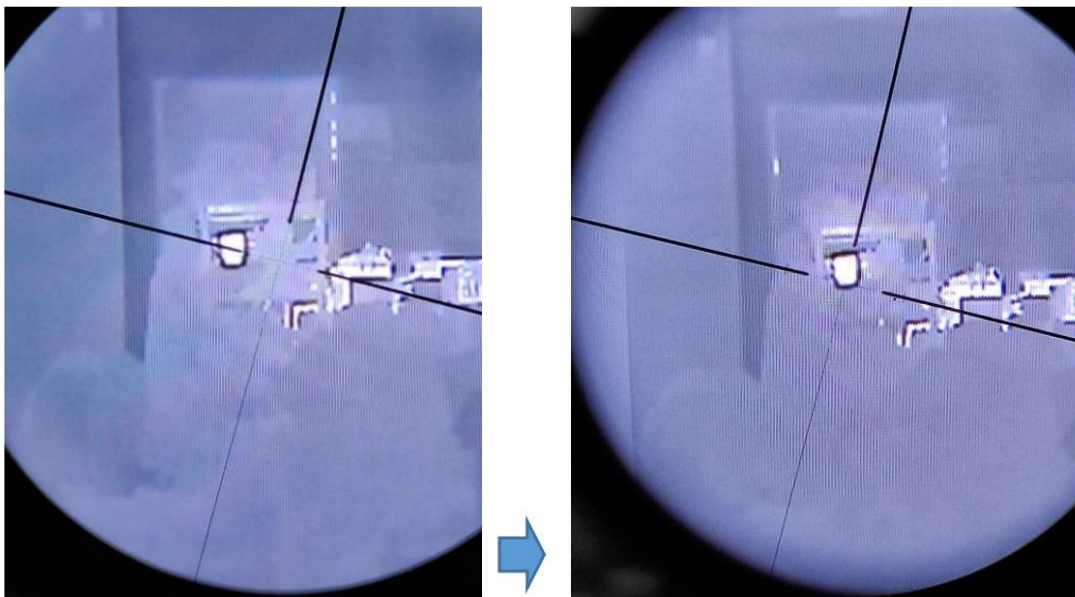
2) Place reticle of daylight scope on target, and fix the scope and the gun on the ground.  
**Note:** the system should not be shaken after it is fixed. Do not move them during the process of clip-on optical axis correction.



3) Install HIKMICRO clip-on to the daylight scope. Press both “ $\Delta$ ” and “ $\nabla$ ” to enter the image calibration mode and do re-optical axis calibration.



Observe whether the image of the target on the clip on device is still in the same reticle position through the daylight scope. If the target image deviates from the reticle, adjust the position of the display image area of clip-on, until the reticle has coincided with the former target image. Like follows:



4) Remove the clip-on and make sure the reticle position of optic sight has not been changed (to prove the software system has been moved during the calibration).

### **Step 3.**

After the last step (correction of the optical axis), the actual shooting at target A at 100 meters should prove that it can shoot to the target center without deviation. If this step is successful, it proves that clip-on could be under normal use.

### **Step 4.**

After the shooting in **Step 3**, enter the image calibration mode. Move one of the directions only **once click**, and move the rifle to let the daylight scope reticle overlapped on the center of the target again. **Take a second shooting.**

**After the above steps, you could get the shooting deviation between one click of image adjustment.**

## **3. Notes**

- It would be better if you could write a test report, which includes the whole operation process description and test results (words description, target picture after shooting, etc.).
- You could record the whole shooting process with the record function of the device.
- Make sure to get only **one click of image calibration moving between two shoots**, and please record the X, Y values before and after. It could help to get the relation between these materials.

### **Remarks:**

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