



**WILLIAM OPTICS**

**WIFD**

GRAN TURISMO 81

MANUAL



THE NEW GAME CHANGER

PATENTED DESIGN

Specification ..... 2-3

Package Contents ..... 4

Parts ..... 5

Telescope Diagram ..... 6-9

Operation Guide ..... 10-13

Accessories Map ..... 14

**Warning**

Never aim your telescope or finder scope at the Sun without proper Solar filters installed on the front of the telescope. Doing so for even a moment may permanently damage your vision. Proper Solar filters consist of filters made by reputable manufacturers, designed to fit tightly over the front of the dew shield. Solar eyepiece filters are not considered safe, and should not be used. With proper front mounted Solar filters, the telescope will not be harmed by viewing the Sun.



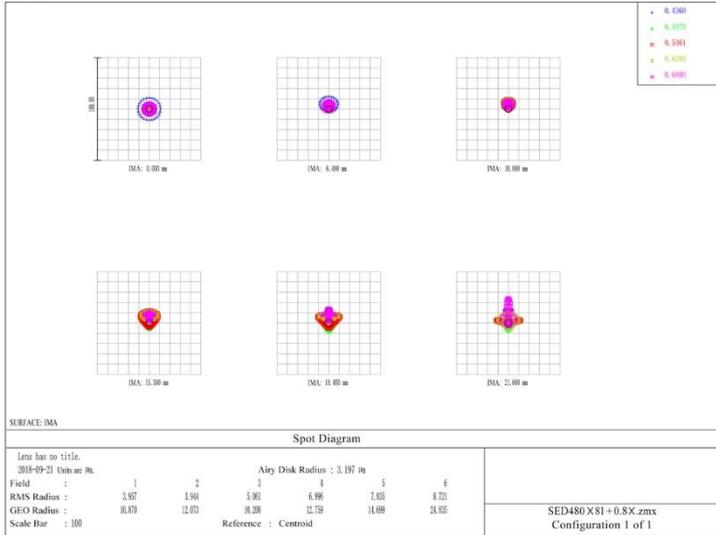
# WIFD GRAN TURISMO 81 SPECIFICATION



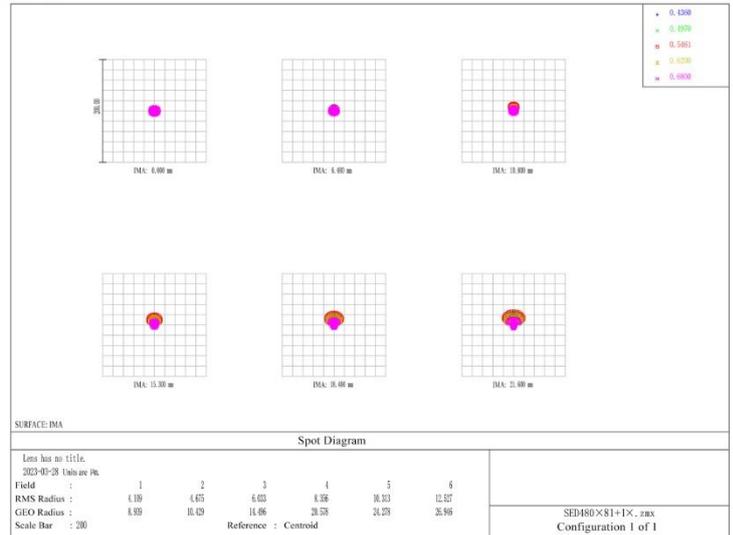
- **Focal Length** : 478mm
- **Diameter** : 81 mm
- **Aperture** : f/5.9
- **Focuser** : WIFD (WO INTERNAL FOCUS DESIGN)  
(Compatible with EAF)
- **Image Circle** : >Full Frame (45mm)
- **Retracted Length** : 421 mm
- **Extended Length** : 502mm
- **Dew Shield Circumference** : 382mm
- **Dew Shield Diameter** :  $\phi$ 121mm
- **Weight** : 7.89lbs / 3.580kg (OTA only)  
10.06lbs / 4.565kg (OTA with  
ring, dovetail and saddle)

## Spot Diagram

WIFD GT81 + 0.8x Flat (P-FLAT6AIII)

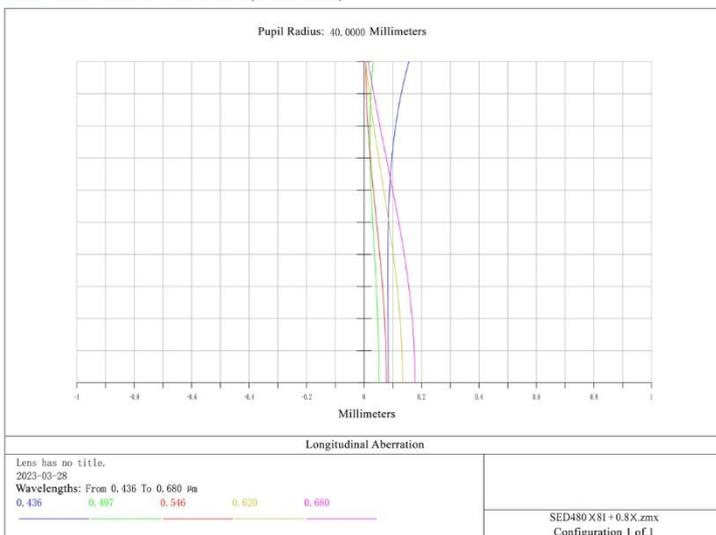


WIFD GT81 + 1x Flat (P-FLAT68III)

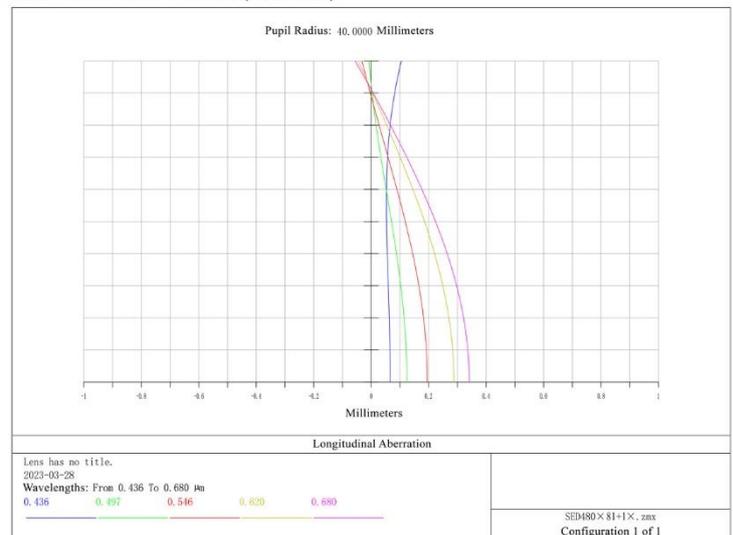


## Longitudinal Aberration

WIFD GT81 + 0.8x Flat (P-FLAT6AIII)



WIFD GT81 + 1x Flat (P-FLAT68III)



### NOTE:

We are using a new lens cell design that includes FP53 glass in the WO triplet series (GT and FLT series). This design is perfect for temperature compensation to better prevent pinched optics, that can occur in cold weather conditions.

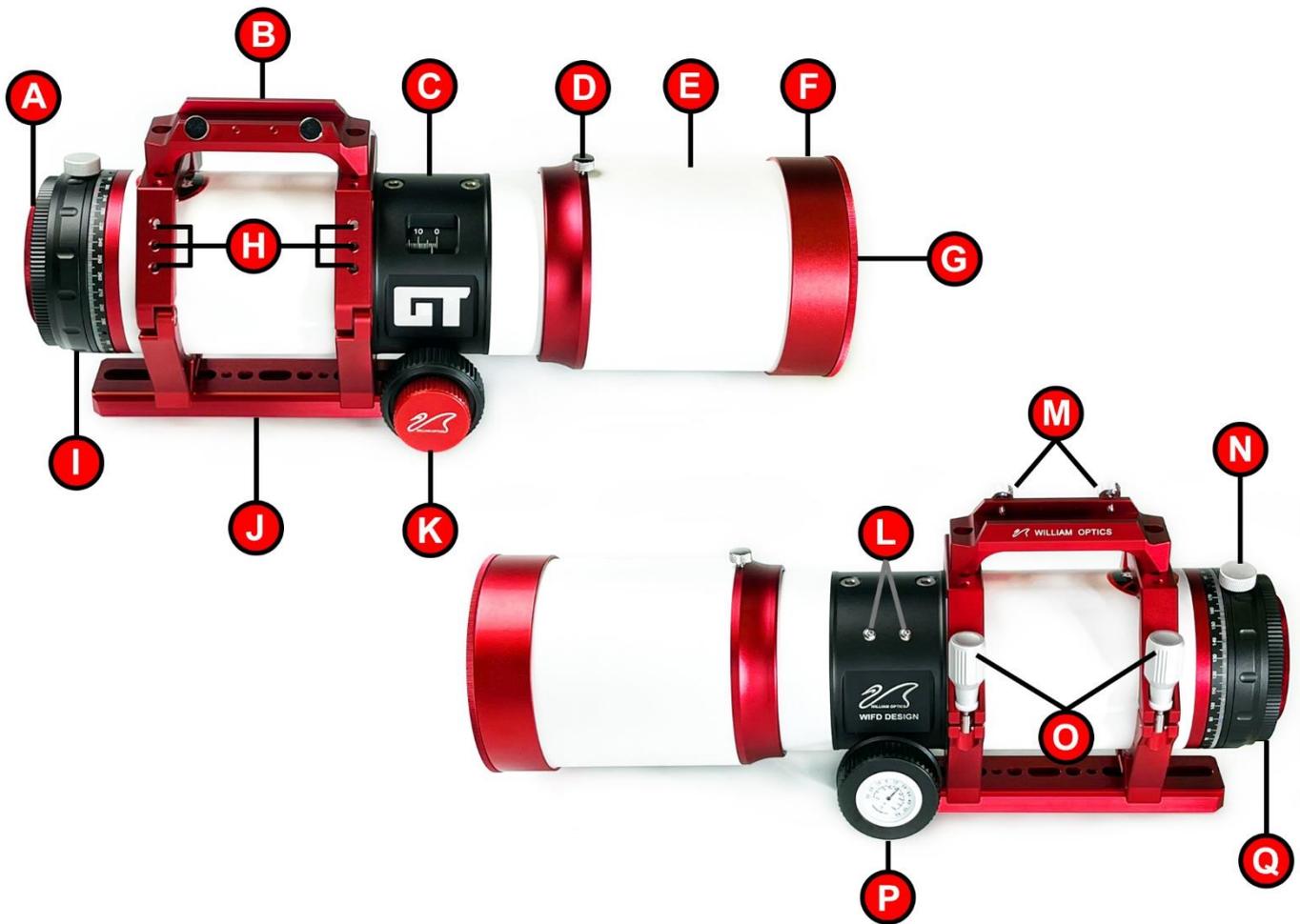
Before storing your telescope, you must leave it uncovered, with the tube opened for enough time to allow it to adjust to the room temperature. You must make sure the telescope is completely dry of any dew or moisture before it can be safely stored.

The telescope should always be stored in a dry location, with a consistent temperature.

# WIFD GRAN TURISMO 81 PACKAGE CONTENTS



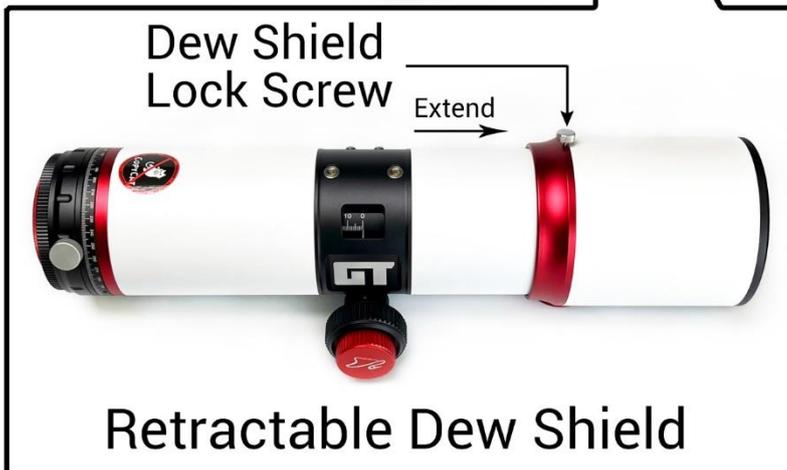
- A. Dust Cover with Bahtinov Mask
- B. Main Tube
- C. 120mm Saddle Handle Bar
- D. Camera Angle Rotation Device
- E. M92 to M63 Adapter (for FLAT6AIII)
- F. 210mm Vixen Style Dovetail Plate
- G. Soft Carry Case
- H. ZYGO Test Report



- A. Rear Dust Cap (M63)
- B. 120mm Saddle Handle Bar
- C. WIFD Focuser
- D. Dew Shield Locking Screw
- E. Dew Shield
- F. Lens Cover with Bahtinov Mask
- G. Front Bahtinov Mask Cover
- H. M6 Screw Holes for Finder Bracket
- I. Camera Angle Rotator
- J. 210mm Dovetail

- K. 2 Speed 10:1 Ratio Fine Knob
- L. M4 Screw Holes for Finder Bracket
- M. Locking Screws on Saddle Handle Bar (M4)
- N. Camera Angle Rotation Locking Screw
- O. Mounting Rings / Knobs
- P. Focuser Adjusting Knob with Thermometer
- Q. M92 to M63 Adapter

# WIFD GRAN TURISMO 81 TELESCOPE DIAGRAM



# WIFD GRAN TURISMO 81 TELESCOPE DIAGRAM



Camera Angle  
Rotation  
Locking Screw

Focuser Tension Screw  
Do not over tighten  
(Release the lock tension  
when focusing)

Adapter for  
FLAT-6AIII

10:1 Ratio Fine Knob



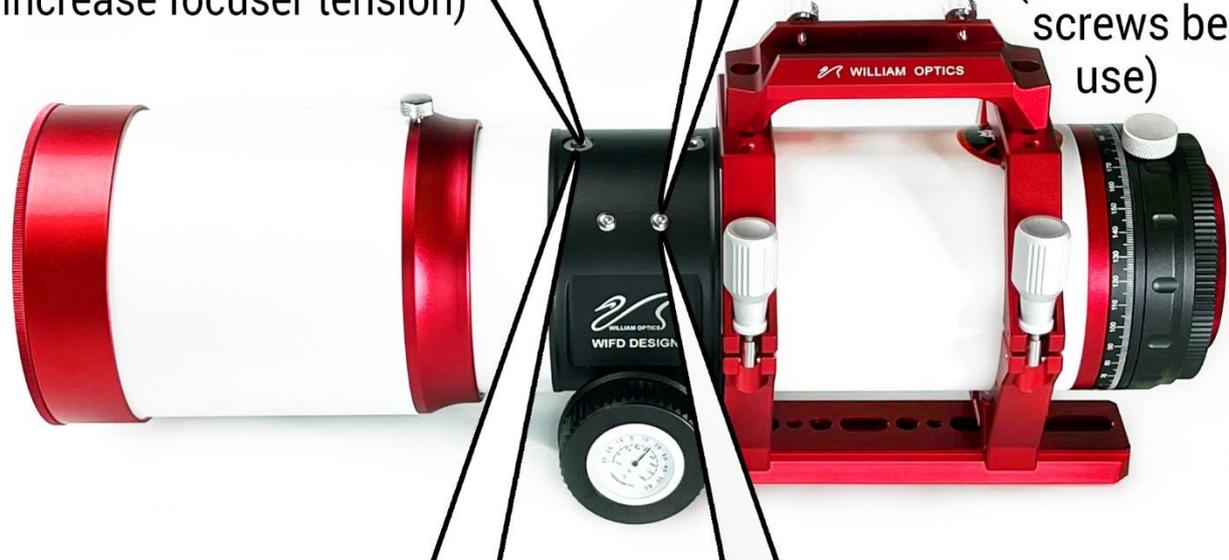
# WIFD GRAN TURISMO 81 TELESCOPE DIAGRAM



Tension Screws  
(for increase focuser tension)



Finder Bracket Holder  
Screws (remove both  
screws before  
use)



Use 5mm Allen Key



Use 2.5mm Allen Key

## R & P GEAR SPACING SCREWS

- Adjustment Screws (3 mm Allen Key) - Pull Screw
- Adjustment Screws (2 mm Allen Key) - Push Screw
- Can be Removed to Attach the Electronic Motorized Device such as EAF (Please refer to the instructions on page 12)
- Tension Screw (Please refer to Note 2)
- Do Not Touch



### IMPORTANT NOTE:

1. The focuser smoothness adjustment **ONLY** when necessary by progressively push & pull screws until you reach the desired smoothness.
2. When using the telescope with the motor, please ensure that the tension screw is not over-tightened. Over-tightening the tension screw may cause damage to the focuser.

Think of it like driving a car and pressing the gas pedal while also pressing the brake simultaneously. Just as this action could harm your car's systems, over-tightening the tension screw could compromise the functionality of your telescope's focuser.

# How to Connect the FLAT68III



## Step 1.

Remove the M92 to M63 adapter by unscrewing it from the rotator.

## Step 2.

Connect the FLAT68III to the rotator by screwing it on to the M92 thread.



## Step 3.

Choose M48 or M54 longer adapter to replace the original shorter one (optional, for WIFD GT81 only).

# How to Connect the FLAT68III

## Step 4.

Remove the original shorter adjusting adapter from Flat68III and replace it with the longer one.



## Step 5.

Set 1.89mm for best performance and lock the retaining ring when distance is settled.



## Step 6.

Connect to M48 or M54 astronomical camera, or connect to the T-mount before connecting to DSLR. (Maximum camera loading 18Kg.)



## How to Install EAF



### Step 1.

Remove the top screw with 2mm Allen key.

### Step 2.

Release two inner knob screws.



### Step 3.

Remove the knob.

## How to Install EAF



### Step 4.

Align the screw holes.

### Step 5.

Lock two set screws on shaft.



### Step 6.

Tighten both bracket screws.

Visit W.O. webpage for details by Scanning the QR Code of the products

## Focuser

