

# INFINITY PHOTO-OPTICAL

# TS-160 ROADMAP Instructions

## MICROSCOPE TECHNOLOGY MEETS PHOTOGRAPHY & CINEMATOGRAPHY

The InfiniProbe TS-160 Lens System consists of a unique, patented internally-focusable microscope body which accepts 5 front lenses for macro, micro and special deep focus effects with imaging capabilities beyond any other known optical devices.



**Unique lenses that utilize Micro Technology  
for unrivaled sharpness and detail**

- Incredibly Deep Depth of Field
- Facilitates Forced Perspective
- Exceptional Sharpness
- Redefines the IMMERSIVE EXPERIENCE
- Unheard-of MACRO/MICRO to 16x
- Full Range of Focal Length Lenses
- Universal T2 Mount
- Easy to Use
- Made in the U.S.A.



**InfiniProbe TS-160 Lens System Based on R&D 100 Award  
Winning Microscope Technology with Universal T2 Mount**



Fruit Fly shot with  
Micro HM lens at 16x



Deep Focus Depth  
with SFX-3 lens

[www.ts-160system.com](http://www.ts-160system.com)



 **INFINITY**  
PHOTO-OPTICAL

# Macro Pro 135mm

- Use as a 4x Macro lens at 32mm (1.25in) to create unique close-up photography.
- Use as 135mm Telephoto lens and focus on a face to make an interesting portrait.
- Use with the FlipR as an extension tube.



- Micro HM • SFX-1 • SFX-2 • SFX-3  
Use the FlipR to invert the upside-down image. Also doubles as an extension tube.



## ASSEMBLED WEIGHT

W: 372.4g (13.14oz) L: 169.8mm (6.69in) Dia: 48mm (1.89in)

# Micro HM 100mm

- Extreme Micro images with a magnification up to 16x at 18mm.
- Focus to Infinity when shooting tabletop and the Micro HM will maintain sharp focus from INFINITY to ~ 50cm (20in), allowing the camera to move without losing focus.
- Functions like a 100mm.



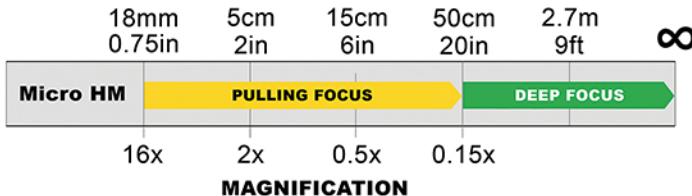
## ASSEMBLED WEIGHT

W: 399.4g (14.09oz) L: 225.8mm (8.89in) Dia: 48mm (1.89in)

Micro HM Lens must first be focused to visual infinity  $\infty$



## OPERATING RANGES



## LENS SYSTEM TIPS

1. Lens Coverage
  - a. TS-160 w/ 30mm tube covers S-35 / APS-C 34mm
  - b. TS-160 w/ 30mm + 24mm tubes cover full frame 44mm
2. The Macro Pro accepts multiple filter options (see QR code on front page for options)
3. The TS-160 has an Iris that can be used to control softness / sharpness. When set to the solid white dot you have the best sharpness and contrast.
4. How to Focus Lenses:
  - a. Focus to INFINITY is necessary before use
  - b. Set the Iris to the solid white dot for best sharpness and contrast
5. SFX Lens focal lengths and operating ranges
  - SFX-1 lens 100mm EFL holds Focus from INFINITY to ~ 50cm (20in)
  - SFX-2 lens 50mm EFL holds Focus from INFINITY to ~ 15cm (6in)
  - SFX-3 lens 35mm EFL holds Focus from INFINITY to ~ 5cm (2in)

6. Micro HM has two preferred operating ranges:
  - Micro focus range starts at 50cm (20in) and goes to 18mm (0.75in) for (16x Mag)
  - Holds focus from INFINITY to ~ 50cm (20in)
7. Image is upside down on all three (3) SFX lenses and the Micro HM. Flip image in camera, monitor, or use the FlipR.
  - a. The FlipR with the TS-160 and 45 degree prism produces an upright image.
  - b. The FlipR with the TS-160 and 90 degree right angle produces an upside-down image.
8. To orient the prism to match your horizon, unlock Horizon Adjust (see prism diagram for more details).
9. Lens support bracket (mounting clamp and bar) can be used wherever needed for additional support.

ALL SFX Lenses must first be focused to visual infinity 

## **SFX-1 100mm**

- 100mm lens when focused to infinity can hold sharp focus from INFINITY to ~ 50cm (20in).



### ASSEMBLED WEIGHT

W: 457.4g (16.13oz) L: 250.1mm (9.85in) Dia: 48mm (1.89in)



### OPERATING RANGES

50cm  
20in

2.7m  
9ft

**SFX-1**

MAINTAINS DEEP FOCUS 

## **SFX-2 50mm**

- 50mm lens when focused to infinity can hold sharp focus from INFINITY to ~ 15cm (6in).



### ASSEMBLED WEIGHT

W: 443.4g (15.64oz) L: 232.1mm (9.14in) Dia: 48mm (1.89in)



### OPERATING RANGES

15cm  
6in

50cm  
20in

2.7m  
9ft

**SFX-2**

MAINTAINS DEEP FOCUS 

## **SFX-3 35mm**

- 35mm lens when focused to infinity can hold sharp focus from INFINITY to ~ 5cm (2in).



### ASSEMBLED WEIGHT

W: 440.4g (15.53oz) L: 235.6mm (9.28in) Dia: 48mm (1.89in)



### OPERATING RANGES

5cm  
2in

15cm  
6in

50cm  
20in

2.7m  
9ft

**SFX-3**

MAINTAINS DEEP FOCUS 

# FlipR™

- Used to invert the upside-down image created by the SFX-1,2,3 + Micro HM.
- Doubles as an extension tube.



Assembled Weight: 717.4g (25.3oz)  
Assembled Length: 300.3mm (11.82in)  
Diameter: 48mm (1.89in)

## 45° Prism



- The 45 & 90-degree prisms allow the TS-160 to function at different vantages and with the 90° version as a periscope with 4 unique lenses that offer up to 16x Micro and Infinity focus to within inches of the subject.
- 45-Degree Prism — allows a more relaxed set up for the camera and lens.
- 90-Degree Prism — use to create a right-angle periscope lens.
- Follow the simple building directions found in the "Prism Assembly Guide".
- Use the Micro HM for up to 16x micro or the SFX-1, 2, 3 lenses for Deep Focus even with the Prisms.
- Macro Pro does not work with the Prisms.

## 90° Prism



## Accessories



45° Prism



90° Prism



T2 PL Mount



Mounting Clamp  
and Bar

## Additional T2 Mounts

Sony  
Canon  
Nikon  
Leica  
Lumix  
Olympus