

## WFL02 USER MANUAL

## 24mm / M52 Underwater Ultra-Wide Angle Conversation Lens

Lens Construction	5 elements; 5 groups (4G1P)
Magnification	0.47X
Compatible Camera (Up to)	Sensor Size: 6.4mm X 4.8mm(1/2") Camera Lens: 24mm(35mm Equivalent) - F/1.4
Field of View Conversation	24mm(84.1°) → 5.7mm(150°) 28mm(75.4°) → 10.8mm(127°) 35mm(63.4°) → 17.2mm(103.6°)
Dome Lens	Optical Grade Polycarbonate Resin
Glass / Coating	Optical Glass / Multi-Layer BBAR Coating
Lens Barrel	Aluminum with Type II Anodizing
Mounting	M52 X P0.75
Dimension	Ø150 X 88mm
Weight	690g(Air) 255g(Underwater)
Depth Rate	60m (197ft)



- WEEFINE WFL02 is an underwater conversion lens. It converts a standard 24mm (35mm Equivalent) camera to a maximum 150-degree field of view ultrawide angle camera system.
- The lens is designed by four high quality optical glasses and one hard coated polycarbonate dome. The high refractive index lenses and low dispersion lenses had been used to correct unwanted aberration.
- All glass lenses have been coated with Broadband Anti-Reflection (BBAR) Coating. Each lens surface is guaranteed to provide less than 0.5% reflectivity over the visible spectrum (420nm 680nm).
- Besides the ultra-wide angle shot, the WFL02 will extend the hyper-focal distance. User can capture a very close distance object with a wide view background.
- WFL02 was built with a custom design Lens Hood. It minimizes the flare and give the best protection to the lens.
- The M52 X P0.75 thread mount allows the lens mounting directly on the camera waterproof housing with the M52 X P0.75 female thread mount.
- It is recommended to use natural light, external strobe or video light with the WFL02. The camera built-in flash may be blocked by the lens and causes partial underexposed image.
  - Install the WFL02 as following steps:
  - 1. Align the lens with the 52mm lens ring on the waterproof housing.
  - 2. Turn the lens in clockwise direction until you feel the lens is locked secure on the lens ring.
  - 3. Rotate the lens hood to the correct orientation.
  - 4. Tighten the set screws on the Lens Hood
- When using an external strobe, avoid the flash beam pointing directly to the lens. It helps to prevent the unwanted ghost image.
- Do not impact the lens with large shock and vibrations or try to disassemble it, these will lead to damage or even flood the lens. During transportation, put on the rubber rear lens caps and put it in the carry pouch to have a better protection.
- Do not place the lens inside an extreme environment for example inside a high temperature car compartment, boiling water or under direct sunlight. It may damage the sealing parts and eventually flooding.
- Do not clean the lens with organic solvent or other chemicals. It may damage the plastic dome and degrade the coating on the lens.
- Never look at the sun though the lens.
- Attach the lens with appropriate force, improper installation may damage the thread on both the lens and the water-proof housing. To prevent corrosion, it is recommended to apply small amount silicone grease on the thread area.
- Water is considered as an optical component in the design. To optimize the performance, water is needed to fill up the space between the rear lens of WFL02 and the housing port lens (without trapping air bubble).
- Be careful while attaching the lens to the housing. Dust, dirt or any other particles caught on the lens may lead to its damage.

## NOTE:

Vignetting may occur on some camera and waterproof housing. Use the zoom function on the camera and zoom in until the dark corner disappear.

The thread mount on the lens is possible to remove and would not cause any damage to the lens. But only replace the thread mount when the thread is worn or bruised.