

Tilta WLC-T06-K1

Tilta Nucleus-M II Wireless Lens Control System Hand Wheel Kit User Manual

Model: WLC-T06-K1

1. INTRODUCTION

The Tilta Nucleus-M II Wireless Lens Control System is designed for precise remote control of cinema lenses. This Hand Wheel Kit provides a versatile FIZ (Focus, Iris, Zoom) Hand Unit for adjusting lens settings. The system supports multiple wireless motors and offers advanced features such as lens mapping and camera control.

Key features include:

- **Multi-Motor Control:** Accommodates wireless adjustment of focus, iris, zoom, and ND motors.
- **Lens Mapping:** Allows users to save and display focus, iris, and zoom information.
- **Camera Control:** Enables wireless adjustment of camera settings like ISO, White Balance, and Shutter Speed.
- **Compatibility:** Works with cinema and photography lenses via the motor's 0.8 or 0.5 gear pitch.
- **Ecosystem Integration:** Compatible with previous Nucleus systems, including Nucleus-M and Nano II.

2. WHAT'S IN THE BOX



Image: All components included in the Tilta Nucleus-M II Wireless Lens Control System Hand Wheel Kit, neatly arranged with the carrying case.

The Tilta Nucleus-M II Wireless Lens Control System Hand Wheel Kit includes the following components:

- 1x Nucleus-M II Motor (with 0.8 Mod Motor Gear)
- 1x Nucleus-M II Motor Rod Mount (15mm)
- 1x Nucleus-M II Motor Rod Mount (19mm)
- 1x Nucleus-M II 7-Pin to 7-Pin Connection Cable (30cm)
- 1x Nucleus-M II 7-Pin to 7-Pin Connection Cable (50cm)
- 1x Nucleus-M II P-Tap to 7-Pin Power Cable (70cm)
- 1x Nucleus-M II FIZ Hand Unit
- 1x Nucleus-M II Electronic Focus Marking Disk
- 5x Nucleus-M II Follow Focus Marking Disk
- 1x Nucleus-M II FIZ Hand Unit Lanyard
- 1x Nucleus-M II Soft Shell Carrying Case
- 2x Tilta Universal Focus Gear Ring - Black

3. SETUP

3.1 Powering the FIZ Hand Unit

POWERED BY NP-F550 BATTERY

Both FIZ Hand Unit and Hand Grips are each powered by one NP-F550 Battery, which supports 8-12 hours of operation.

*Battery life varies based on battery condition and specifications.

Image: The FIZ Hand Unit with an NP-F550 battery being inserted into its dedicated slot, illustrating the power source.

1. Locate the battery compartment on the FIZ Hand Unit.
2. Insert a fully charged NP-F550 battery into the compartment. Ensure correct polarity.
3. Close the battery compartment cover securely.

3.2 Mounting the Motor

SMALLER, STRONGER, AND FASTER

Improved 0.02s fast response and ultra-smooth focus adjustments. Higher torque than the Nucleus M1 & Nano II Motor at a compact size.

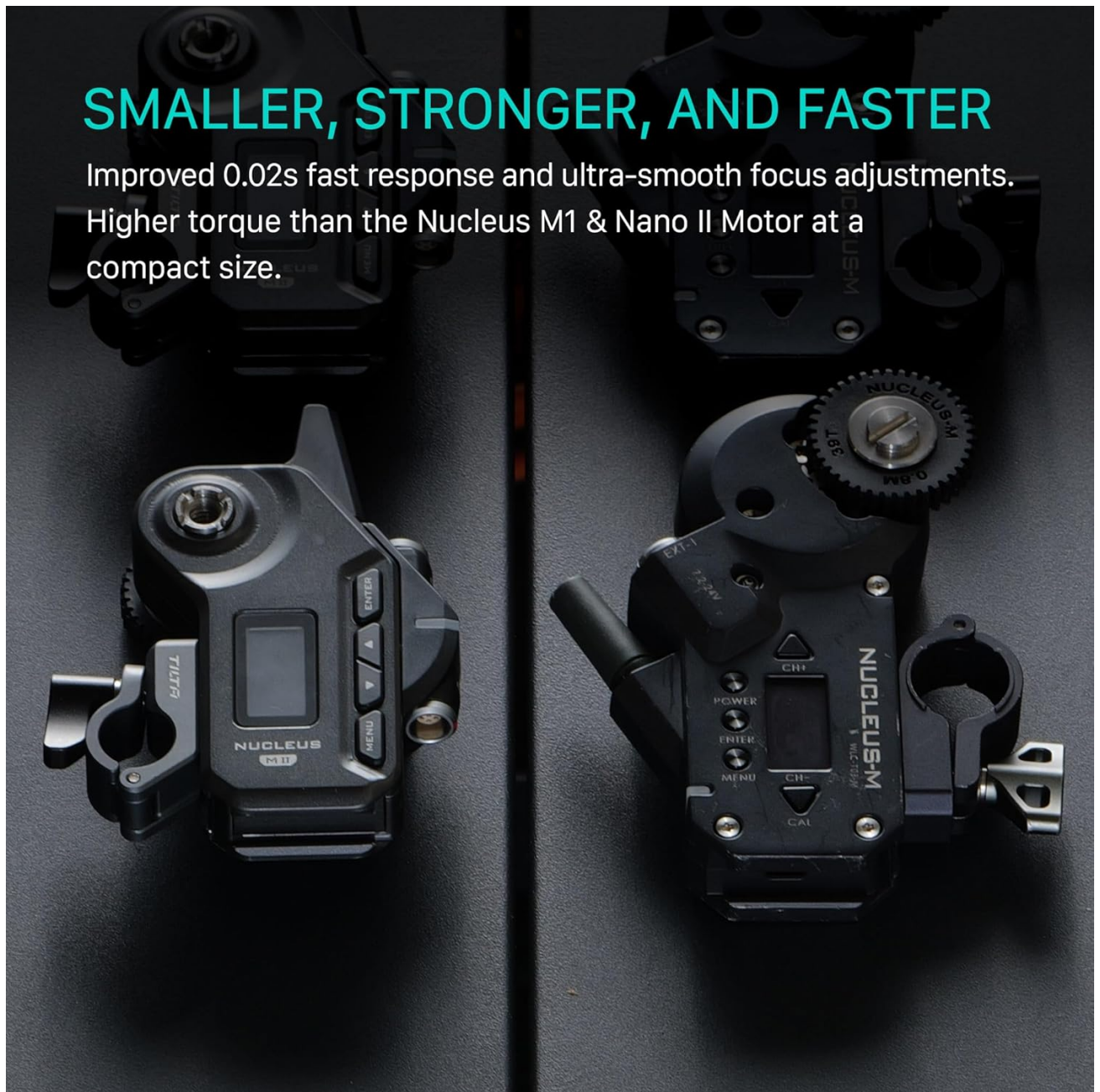


Image: A comparison of the compact Tilta Nucleus-M II motor (left) with a previous generation motor (right), highlighting its streamlined design.

1. Attach the appropriate motor rod mount (15mm or 19mm) to the Nucleus-M II motor.
2. Mount the motor onto your camera rig's rod system, positioning it to align with the lens gear.
3. Ensure the motor's gear engages properly with the lens's focus, iris, or zoom gear. Use the Tilta Universal Focus Gear Ring if your lens lacks a standard gear.

3.3 Connecting Components

1. Connect the Nucleus-M II motor to a power source using the P-Tap to 7-Pin Power Cable (70cm) or a 7-Pin to 7-Pin Connection Cable (30cm or 50cm) if daisy-chaining multiple motors.
2. The FIZ Hand Unit and motors will automatically attempt to pair upon power-up. Refer to the FIZ Hand Unit display for connection status.

3.4 Attaching the Hand Wheel

DETACHABLE HAND WHEEL

Switch the hand wheel to your preferred side for ergonomic operation.



Image: A user detaching or attaching the hand wheel to the FIZ Hand Unit, demonstrating its modular design for ergonomic flexibility.

1. Align the detachable hand wheel with the port on the FIZ Hand Unit.
2. Gently push and twist to secure the hand wheel in place. It can be switched to either side for ergonomic preference.


4. OPERATING INSTRUCTIONS


4.1 FIZ Hand Unit Overview

SEAMLESS OPERATION & INTUITIVE CONTROL



 2.4-inch Touchscreen Display

 Built on a Classic Design

 Detachable Electronic Focus Marking Disk


 Detachable Hand Wheel

Image: The FIZ Hand Unit's 2.4-inch touchscreen display, showing digital readouts for focus, iris, and zoom, along with menu options.

The FIZ Hand Unit features a 2.4-inch touchscreen display for intuitive control. It provides real-time information on focus distance, iris, and zoom settings. Use the menu and enter buttons to navigate the interface.

4.2 Adjusting Focus, Iris, and Zoom

1. Use the main hand wheel to control the assigned lens function (typically focus).
2. Utilize the smaller dials or dedicated buttons on the FIZ Hand Unit to adjust iris and zoom.
3. The hand wheel tension can be adjusted for fine-tuned focus pulls. Refer to the unit's settings menu for this adjustment.

4.3 Electronic Focus Marking Disk

INTRODUCING THE NEW ELECTRONIC MARKING DISK

With its innovative detachable design, this marking disk expands the ability of the physical focus marking disk by adding smart digital functionality.

Digital Display Mode

Switch to an on-screen digital overlay with a precise depth-of-field indicator—a helpful tool for more accurate focus pulling.

Manual Marking Mode

Mark focus points directly on the disk for tactile control with a pen or marker.



Image: The Electronic Marking Disk displaying digital focus information, including depth-of-field indicators, for precise focus pulling.

The Electronic Focus Marking Disk offers two modes:

- **Digital Display Mode:** Provides an on-screen digital overlay with a precise depth-of-field indicator for accurate focus pulling.
- **Manual Marking Mode:** Allows direct marking of focus points on the disk with a pen or marker for tactile control.

4.4 Lens Mapping

The Nucleus-M II allows you to store and load mapped lens data. This feature enables quick and easy adjustment of focus to specific distances, iris to standard T-stops, or zoom to exact focal lengths. Consult the FIZ Hand Unit's menu for lens mapping procedures.

4.5 Camera Control

The FIZ Hand Unit supports wireless camera control, allowing you to adjust settings such as ISO, White Balance, and Shutter Speed directly from the unit. Ensure your camera is compatible and properly configured for remote control.

5. MAINTENANCE

To ensure the longevity and optimal performance of your Tilta Nucleus-M II system, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the FIZ Hand Unit, motors, and cables. Avoid abrasive cleaners or solvents.
- **Battery Care:** Always use recommended NP-F550 batteries. Store batteries in a cool, dry place when not in use. Remove batteries from the unit during extended storage.
- **Storage:** Store the system in its soft shell carrying case to protect it from dust, moisture, and physical damage.
- **Cable Inspection:** Regularly inspect all cables for signs of wear or damage. Replace any damaged cables immediately.

6. TROUBLESHOOTING

If you encounter issues with your Nucleus-M II system, consider the following troubleshooting steps:

- **No Power:** Ensure batteries are fully charged and correctly inserted. Check all power cable connections.
- **Motor Not Responding:** Verify that the motor is properly powered and connected. Check the FIZ Hand Unit display for connection status. Re-pair the motor if necessary.
- **Inaccurate Focus/Iris/Zoom:** Perform a lens calibration through the FIZ Hand Unit menu. Ensure the motor gear is correctly engaged with the lens gear.
- **Interference:** If experiencing signal drops, try changing the wireless channel on the FIZ Hand Unit. Ensure no other wireless devices are causing interference.
- **Firmware Update:** Check the Tilta website for any available firmware updates for your Nucleus-M II system, which may resolve known issues.

7. SPECIFICATIONS

Product Dimensions	14 x 10 x 5.5 inches
Item Weight	4.44 pounds
Item Model Number	WLC-T06-K1
ASIN	B0FV28VJHR
Manufacturer	Tilta
First Available	October 7, 2025

8. WARRANTY INFORMATION

For detailed warranty information regarding your Tilta Nucleus-M II Wireless Lens Control System, please refer to the official Tilta website or contact Tilta customer support directly. Warranty terms and conditions may vary by region and product.

9. SUPPORT

If you require further assistance or have questions not covered in this manual, please visit the official Tilta support page or contact their customer service team. You can find contact information and additional resources on the [Tilta Store on Amazon](#) or the main Tilta website.

