

## NEEWER CM28 Set (Model Number: 21000052)

# NEEWER CM28 Wireless Lavalier Microphone System User Manual

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## 1. INTRODUCTION

The NEEWER CM28 Wireless Lavalier Microphone System is designed for high-quality audio recording across various platforms, including cameras, smartphones, and computers. This system features two transmitters (TX) and one receiver (RX), housed in a portable charging case. Key functionalities include smart noise cancelling, uncompressed audio recording, and a stable wireless transmission range.



Image 1.1: The NEEWER CM28 Wireless Lavalier Microphone System, showing the two transmitters and one receiver within their charging case.

## 2. PACKAGE CONTENTS

Verify that all items listed below are included in your package:

- 2 x Transmitters (TX)
- 1 x Receiver (RX)
- 1 x Charging Case
- 2 x OTG Adapters (Type C to Type C, Type C to Lightning)
- 2 x Magnets
- 2 x Furry Windshields
- 1 x Camera Audio Cable (3.5mm TRS)
- 1 x USB A to Type C Data Cable (for PC/MAC transmission)
- 1 x Storage Bag



## Lightweight & Portable

**TX:** 0.6oz/18g

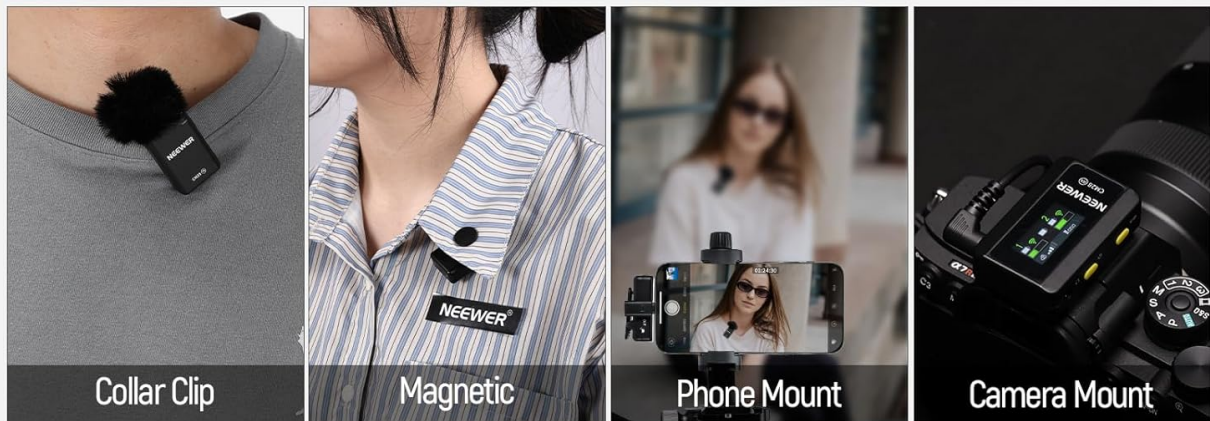
**RX:** 0.7oz/21g

**Case:** 5.1oz/144g

## Compact Design

### TRANSMITTERS

### RECEIVER



(magnetic clip not included)

Image 2.1: All included components of the NEEWER CM28 system, including transmitters, receiver, charging case, cables, adapters, and accessories.

## 3. PRODUCT OVERVIEW

The CM28 system consists of compact and lightweight units designed for ease of use and portability.

### 3.1 Transmitters (TX)

- Each TX unit features a built-in microphone and a 4GB internal storage for standalone recording.
- Equipped with a power/noise cancelling button and an LED indicator.
- Can be clipped onto clothing or attached magnetically.

### 3.2 Receiver (RX)

- The RX unit connects to your recording device (camera, phone, PC).
- Features an LCD screen displaying modes, volume, battery levels, connection status, and noise reduction.
- Includes a 3.5mm headphone jack for real-time audio monitoring.

### 3.3 Charging Case

- Provides protection and recharges the TX and RX units.
- Can fully charge the units twice, extending operational time.



Image 3.1: A detailed view of the individual components: two transmitters, one receiver, and the open charging case.

## 4. SETUP

### 4.1 Initial Charging

1. Place the TX and RX units into the charging case.
2. Connect the charging case to a power source using the provided USB-C cable.
3. The TX and RX units require approximately 1.5 hours for a full charge. The charging case itself takes about 2 hours to fully charge.

### 4.2 Power On/Off

- To power on, press and hold the power button on each TX and RX unit.
- To power off, press and hold the power button again.

### 4.3 Pairing

The TX and RX units are pre-paired at the factory. If re-pairing is necessary:

1. Ensure both TX and RX units are powered on.
2. The units should automatically connect. The RX screen will display connection status.
3. If connection fails, refer to the troubleshooting section or consult the quick start guide for specific pairing instructions.

# Integrated HD Wireless Audio System

Dual transmitters (TX) + single receiver (RX) setup. The fully rechargeable case fuels all 3 devices twice, enabling 2 rounds of mobile recording.



Safe Track Mode



Mono/Stereo /Ms Output



Real Time Monitoring



One Click Noise Cancelling



Type C charging port of the case.

**1.5** h  
TX/RX Charge Time

**2** h  
Case Charge Time

**8-9** h  
Each TX/RX Use Time

Image 4.1: Visual representation of the integrated wireless audio system, highlighting charging times and key features like safe track mode and one-click noise cancelling.

## 5. OPERATING INSTRUCTIONS

### 5.1 Connecting to Recording Devices

- **For Smartphones (iPhone/Android):** Use the appropriate Type C to Lightning or Type C to Type C OTG adapter to connect the RX unit to your phone's charging port. Ensure 'OTG' is enabled in settings for some Android phones.
- **For Cameras:** Use the provided 3.5mm TRS camera audio cable to connect the RX unit's output to your camera's microphone input.
- **For PC/MAC:** Use the Type C OTG adapter or the white USB A to Type C data cable to connect the RX unit to your computer.

### 5.2 Noise Cancelling

The CM28 features a smart noise cancelling function to reduce ambient noise.

- To activate/deactivate noise cancelling, click the power button on the TX unit.

- A blue steady light indicates noise cancelling is active.

## One Click Noise Canceling & Recording

**Click**  
Turn On/Off Noise Cancellation

**Press and Hold for 2s**  
Start/Stop Recording



Before

After



①

**Blue Blinking**  
Not Connected

**Blue Steady**  
Connected

**Red Blinking**  
Not Connected & Low Battery

②

**Blue Steady**  
Noise Canceling

**Red Blinking**  
Noise Canceling & Recording

**Blue Blinking**  
Recording

Image 5.1: The transmitter unit showing the button for one-click noise cancelling and recording, along with LED indicator states.

### 5.3 Standalone Recording (TX Units)

Each transmitter can function as a standalone recorder with 4GB of internal storage.

- To start/stop standalone recording, press and hold the power button on the TX unit for 2 seconds.
- The TX units can store up to 9 hours of uncompressed 48KHz WAV audio files.
- To export files, connect the TX unit to a computer using the white USB A to Type C data cable.

# Supports Standalone Recording

The receiver serves as a mini recorder for pristine capture and storage.



10 Hours of  
Audio Recordings



4GB of Internal  
Storage Capacity



48kHz HD WAV  
Audio Files



Image 5.2: A user demonstrating standalone recording with the CM28 system, highlighting its ability to capture and store audio independently.

## 5.4 Output Modes (RX Unit)

The receiver supports three audio output modes: Mono, Stereo, and MS (Mid-Side).

- Tap and hold the mode switching button on the RX unit to cycle through Mono, Stereo, and MS modes.
- **Mono:** Merges audio from both transmitters into a single track.
- **Stereo:** Records audio from each transmitter as separate left and right channels for post-production flexibility.
- **MS:** Provides a safe track design with a 6 dB lower gain to prevent clipping and distortion.

# Three Output Modes

MONO



STEREO



MS



Image 5.3: The receiver's display illustrating the three selectable audio output modes: Mono, Stereo, and MS.

## 5.5 Volume Adjustment (RX Unit)

- Tap the volume adjustment button on the RX unit to change the decibel (dB) gain.
- The LCD screen will display the current volume level.

## 5.6 Real-Time Monitoring

Connect headphones to the 3.5mm jack on the RX unit to monitor audio in real-time during recording.



## Real Time Monitoring

The RX receiver has a 3.5mm headphone jack for live audio monitoring.

Image 5.4: The receiver unit with headphones connected, demonstrating the real-time audio monitoring feature.

## 6. FEATURES

- **Professional Wireless System:** Kit includes 2 transmitters (TX) and 1 receiver (RX) for versatile audio capture.
- **Extended Battery Life:** TX units operate for 9 hours, RX for 8 hours on a full charge. The charging case provides two additional full charges.
- **Standalone Recording:** Each TX unit has 4GB storage, capable of saving up to 9 hours of uncompressed 48KHz WAV audio.
- **Smart Noise Cancelling:** One-click activation of an advanced chip for clear audio in noisy environments.
- **Multiple Audio Output Modes:** Supports Mono, Stereo, and MS (Mid-Side) for flexible post-production.
- **Long Range Transmission:** Achieves up to 656ft (200m) of stable wireless transmission in unobstructed areas.
- **Wide Compatibility:** Connects to iPhone, Android phones, DSLR cameras, and PC/MAC via included adapters and cables.
- **Real-Time Monitoring:** 3.5mm headphone jack on the RX allows for live audio monitoring.

- **Compact and Portable:** Lightweight design with magnetic and clip-on options for discreet placement.

## Long Range Wireless Operation

True ranging with a constant stable frequency, giving you long distance wireless shooting in a variety of recording scenes.

# 200M



Image 6.1: A visual representation of the CM28's long-range wireless capability, showing stable transmission up to 200 meters (656 feet) in an open environment.

## 7. COMPATIBILITY

The NEEWER CM28 system offers broad compatibility with various devices:

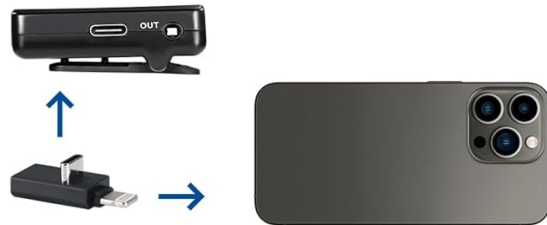
- **iPhone:** Compatible with iPhone 11, 12, 13, 14, 15, 16 Pro Max Plus and other models using the Type C to Lightning OTG adapter.
- **Android Phones:** Compatible with Samsung Galaxy S23, S24 Ultra and other Android cell phones using the Type C to Type C OTG adapter. (Note: Enable "OTG" in settings for some Type C phones).
- **PC/MAC:** Connects via the Type C OTG adapters or the white USB A to Type C data cable for computer transmission.
- **DSLR Cameras:** Connects using the camera audio cable (3.5mm TRS) to the camera's MIC input.

# Wide Compatibility

Comes with 2 OTG adapters (Type C to Type C, Type C to Lightning), a camera audio cable, and a USB Type C charging cable for computer connection.

## Compatible with iPhone

Use Type C to Lightning OTG Adapter.



## Compatible with Android phone

Use Type C to Type C OTG Adapter.



Note: Enable "OTG" in settings for some Type C phones.

## For PC/MAC

Use the OTG Adapters or the Type C charging cable.



## For Camera

Use the Camera Audio Cable for Audio OUT to the camera's MIC input.



Image 7.1: A comprehensive diagram illustrating the wide compatibility of the CM28 system with different devices and connection types.

## 8. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the units and charging case. Avoid liquid cleaners or solvents.
- **Storage:** Store the system in a cool, dry place away from direct sunlight and extreme temperatures. Keep units in the charging case when not in use to protect them.
- **Battery Care:** For optimal battery life, fully charge the units and case at least once every three months if not used regularly.

## 9. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No audio output	Units not powered on; Not paired; Incorrect cable connection; Low battery.	Ensure TX/RX are on. Check pairing status. Verify cables are securely connected to correct ports. Charge units.
Poor audio quality/Interference	Obstacles between TX/RX; Too far from RX; Strong electromagnetic interference; Noise cancelling off.	Reduce distance between units. Ensure clear line of sight. Move away from other wireless devices. Activate noise cancelling.
TX not recording	Recording not initiated; Full storage; Low battery.	Press and hold TX power button for 2s to start recording. Check available storage. Charge TX unit.
Cannot connect to phone	Incorrect OTG adapter; OTG not enabled (Android).	Use the correct Type C to Lightning or Type C to Type C adapter. Enable OTG in your Android phone's settings.

## 10. SPECIFICATIONS

Feature	Specification
Product Model	CM28
Wireless Frequency Range	2400-2483.5MHz
Modulation Method	GFSK
Audio Frequency Response	20Hz-20KHz
Wireless Transmitting Power	<10dBm
Signal-to-Noise Ratio	>80dB
Built-in Battery	3.7V Lithium Polymer Battery
Charging Input	5V &#x2248; 500mA
Energy Saving Mode	TX/RX connection auto shuts down after 5 minutes
Operating Temperature	0°C – 55°C
Storage Temperature	-20°C – 55°C
TX Product Specification	1.85"x1.02"x0.5" / 47x26x13mm
RX Product Specification	1.85"x1.14"x0.55" / 47x29x14mm
TX Weight	0.63oz / 18g
RX Weight	0.74oz / 21g

Feature	Specification
Charging Case Input	5V &#x2248; 2A
Charging Case Battery	3.7V/2000mAh Lithium Polymer Battery
Item Weight (Total)	8.82 Ounces
Item Dimensions L x W x H	0.5 x 1.9 x 1.9 inches
Microphone Form Factor	Lavalier
Power Source	Battery Powered
Number of Channels	2
Connectivity Technology	USB
Connector Type	3.5 mm Jack
Polar Pattern	Unidirectional
Audio Sensitivity	47 Decibels

## 11. WARRANTY AND SUPPORT

For warranty information and customer support, please refer to the official NEEWER website or contact their customer service directly. Specific warranty terms may vary by region and retailer. Please retain your proof of purchase for any warranty claims.