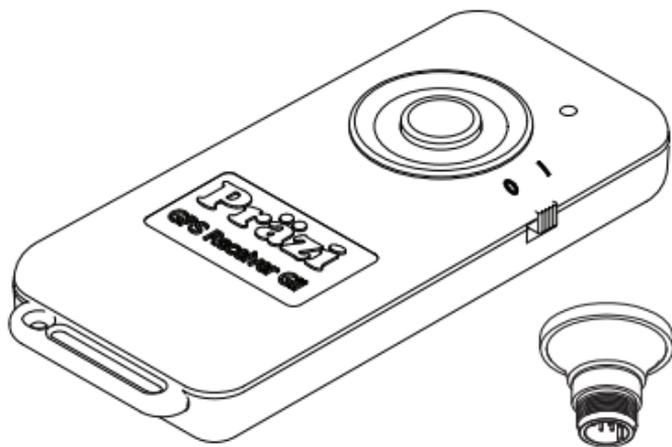


Praži

GPS Unit with BLE Wireless Smart Remote for Nikon Cameras

User Manual



Praži Solutions LLC

Features

1. GPS positioning, transmitting location information wirelessly to the camera.
2. Wireless Bluetooth remote control.
3. Time-lapse photography, scheduled shooting, and complex exposure control (via mobile app).
4. Indoor positioning (via mobile app).

Specifications

Dimensions: 1 1/2 x 3 x 5/8 inch. (main unit)

Weight: 1.6 Oz (main unit)

Continuous working time: Approx. 36 hours

Charging time: Approx. 3 hours

Charging port: Type-C

Charging voltage: USB 5V

Operating temperature: 0 to + 185°F

BLE working distance: 32 ft (unobstructed)

GNSS signal: Cold start -148dBm, Hot start -155dBm, Lock tracking -165dBm

GNSS update frequency: 1Hz

Coordinate system: WGS-84

Positioning accuracy: Approx. 5 ft

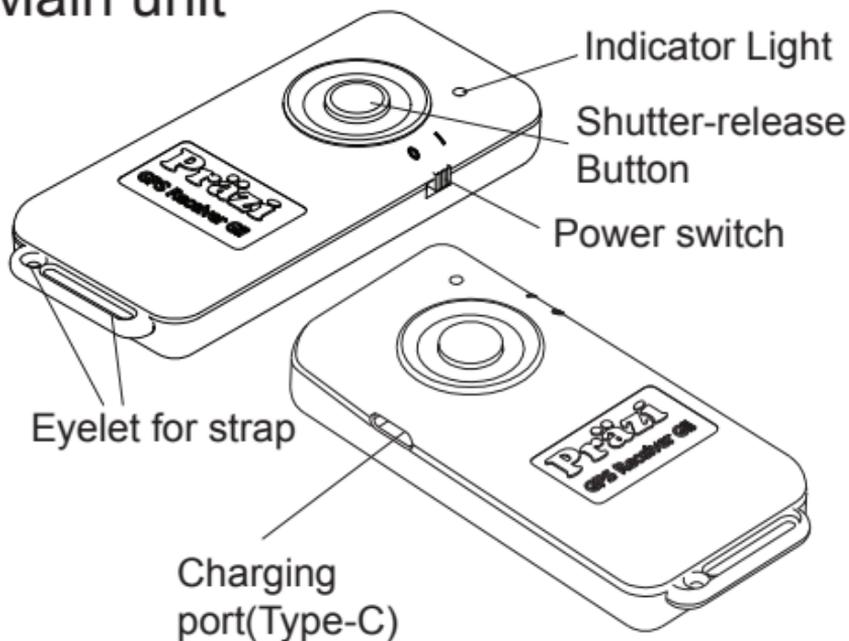
Cold start time: Fastest 24s

Hot start time: 1s

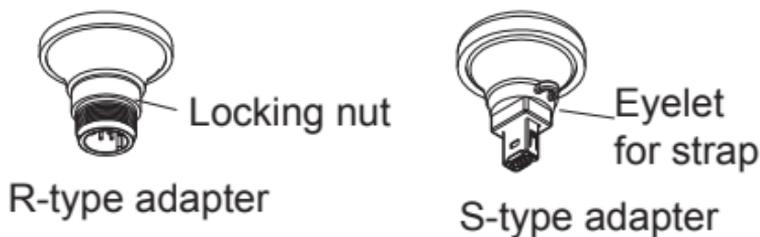
Max speed: 1000 mph

Max altitude: 59000 ft

Main unit



Adapter



Compatible Camera Models

R Version (Main unit + R type ten pin adapter):

Nikon: Z8, D850, D810, D6, D5, D800s, D800, D700, D4s, D4, D300s, D300, D300s, D300, D3s, D3 etc.

S Version (Main unit + S type adapter):

Nikon: Z7ii, Z7, Z6iii, Z6ii, Z6, Z5, D780, D750, D7500, D7200, D7100, D7000, D5300, D5200, D5000, D3300, D3200, D3100, D3000, D90, Df, Coopix P7800, Coopix P7700, Coolpix A etc.

Usage Instructions:

No special settings are required for the camera, just install the adapter and power on the main unit.

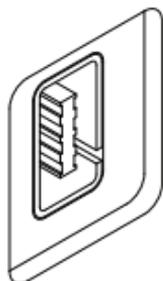
For a ten-pin remote terminal camera, the terminal is usually located next to the lens mount on the front of the camera. Align the three positioning slots on the adapter plug with the three positioning protrusions inside the port.

Insert the adapter, and tighten the locking nut.

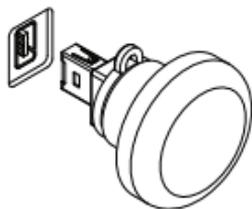


Accessory terminal
of the camera

For a square accessory terminal camera, the terminal is usually located on the side of the camera. Align the small protrusion on the port with the black groove on the adapter plug. Please use



Accessory terminal
of the camera



anti-lost strap to secure the adapter to the camera body. Insert the adapter until it feels slightly locked.

Slide the power switch on the main unit to "I". The blue indicator light will turn on and quickly switch to green. During the initial satellite search, the green light will stay on. Once satellites are locked, the green and blue lights will alternate, indicating successful positioning. After that, You can place the main unit in your backpack or pocket, or hang it around your neck using the lanyard. Just take photos as usual, and the location information will be embedded in the in the photo's EXIF data. The shutter-release button on the main unit functions as the camera's shutter-release button, allowing remote focusing and shooting.

Note: If the camera is in autofocus mode and fails to focus, the remote shutter may not work. Adjust the focus mode or ensure there is an object at the focus point.

Indicator Light Status:

1. Light off: Power off.
2. Blue light dim: Powered on.
3. Blue light slow flash: Not connected.
4. Green light steady(in using): GPS searching for satellites.
5. Blue-green alternating: Positioning successful.
6. Blue light fast flash: Adapter not bound, but adapter detected nearby.
7. Blue light slow flash with long intervals: Sleep mode.
8. Red light flashes every 10 seconds during normal use: Battery over half consumed, but can still work for several hours. Charge if planning long-term use.
9. Red light fast flash: Battery depleted, please charge.
10. Red light steady(in charging): Charging.
11. Green light steady(in charging): Battery fully charged.

Battery Charging

It is recommended to charge while powered off. Use a computer USB port or a standard 5V phone charger. The red indicator light stays on during charging and turns green when fully charged. Avoid over-discharging the lithium battery. The device has smart protection and will automatically shut down when the battery is nearly depleted. Charge promptly after automatic shutdown. If not used for a long time, store it powered off and complete a "discharge-charge" cycle at least every six months.

Unbinding from Original Adapter

The main unit and the included adapter are pre-bound. To replace the adapter, unbind from the original: Power on, ensure the adapter is disconnected (either removed from the camera or more than 15 meters away from the main unit). The blue indicator should flash once per second. Press and hold the shutter-release button for over 10 seconds until the blue light flashes quickly (twice per second), then release. Repeat if unsuccessful.

Binding a New Adapter

Insert the new adapter into the camera, keep it within working distance of the main unit, and ensure no other similar adapters are nearby. Power on the main unit, the blue light should flash quickly. Half-press the shutter-release button, the green light should stay on. Fully press the shutter-release button to bind. Repeat if unsuccessful.

Indoor Positioning and Advanced Smart Remote

Download and install the "Prazi Smart Photography Assistant" app. click the red "?" in the top right corner of the screen, and follow the instructions to bind with the adapter. Once bound, you can remotely control the camera via the phone, perform bulb mode timed exposures, calculate ND filter exposure compensation, schedule exposures, time-lapse photography, star photography, etc. The built-in GPS module in the main unit provides high positioning accuracy and fast updates ,but requires satellites signal to work. In indoor environments without

satellite signals, it cannot position. After connecting to the app, turn off the main unit, turn on the GPS switch at the bottom of the app screen, and the phone will send location information to the camera, but network positioning may not be accurate enough.

Sleep and Wake

If the main unit fails to connect to the adapter within 5 minutes of powering on or disconnects for over 5 minutes, it will enter ultra-low power sleep mode. During normal operation, half-press the main unit shutter-release button for over 10 seconds to force sleep mode. In sleep mode, the blue light flashes slowly. The adapter will also enter sleep mode. To wake, lightly press the main unit shutter-release button, and both the main unit and adapter will wake immediately.

Package Contents

R Version:

Main Unit	1
R-type Adapter	1
Type-C Charging Cable	1
User Manual	1

S Version:

Main Unit	1
S-type Adapter	1
Type-C Charging Cable	1
Adapter Anti-lost Strap	1
User Manual	1

* Promotional items: Main unit lanyard

Quality and Safety Certifications



Main Modular:

FCC ID: 2ABU6-MS50SFA

CE: BCTC2105687267C



Adapter Modular:

FCC ID: 2AD56HLK-B40

CE: WTX20X11086096W

Hazardous Substances Content

	Pb	Hg	Cd	Cr6+	PBB	PBDE
Circuit Board Components	X	○	○	○	○	○
Metal Components	○	○	○	○	○	○
Plastic Components	○	○	○	○	○	○
Other Components	○	○	○	○	○	○

O: Indicates that the content of the hazardous substance in all homogeneous materials of the component is below the limit requirements specified in GB/T 26572.

X: Indicates that the content of the hazardous substance in some homogeneous materials of the component may exceed the limit requirements specified in GB/T 26572.

Note:

This product still complies with the restrictions of the EU RoHS Directive.

Warranty Terms

Within one year of purchase, if this product fails

to function properly due to quality issues (excluding faults caused by water ingress, fire, physical damage, etc.), please return the product to the dealer where it was purchased or contact our customer service at Service@prazisolutions.com. We will replace it for you free of charge. After one year, if you encounter any issues, we welcome you to return the product to us for evaluation. We will do our best to resolve the problem for you. Our product uses high-quality lithium batteries. When used according to our recommendations, after 500 charge-discharge cycles, the battery capacity will not be lower than 80% of the rated capacity. Based on normal usage intensity, it can be used with confidence for more than 5 years. However, improper use can significantly affect the performance of the lithium battery, and we cannot guarantee the usage time of the battery. If within one year, the continuous working time after full charging is less than 24 hours, we will replace the battery for you free of charge.

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Background Knowledge:

1. Exif

Digital photos exist as digital files containing image information and other data. Exif (Exchangeable Image File) is a standard for digital camera image files developed by the Japan Electronic Industry Development Association (JEIDA). Due to the global leadership of Japanese digital cameras, this standard has become a de facto global industry standard, adopted by all digital camera manufacturers, cell phone manufacturers, and related software developers. Exif not only specifies the recording method for digital images but also records useful information such as equipment model, lens specifications, shooting time, exposure parameters, and location information in standard tags. The term Exif now often refers to this embedded information in photos.

2. Bluetooth BLE

Bluetooth is a short-range wireless communication technology for data and voice communication. It is based on low-cost, short-range wireless connections, creating a communication environ

ment for fixed and mobile devices. With the development of portable and wearable electronic products, new requirements for short-range wireless communication have emerged, leading to the development of Bluetooth Low Energy (BLE). BLE's main feature is its extremely low power consumption while maintaining strong functionality. Certainly! BLE is not compatible with traditional Bluetooth and has its own technical standards. In the field of photography equipment, traditional wireless remotes and synchronizers often use custom 2.4G wireless technology, which has high power consumption, poor universality, and insufficient connection reliability and customizability. By adopting BLE technology, power consumption is greatly reduced, extending the battery life of cameras and accessories. BLE also offers more flexible and open pairing, improved anti-interference capabilities, and device interchangeability, enabling seamless integration with computers, smartphones, smartwatches, and more.

3. Cold Start and Hot Start

GPS positioning relies on satellite signals.

Once satellites are locked, their positions and other operational parameters are recorded as ephemeris data. This data is valid for a few hours. If the GPS device is turned off briefly and then back on, it can quickly lock onto satellites using the saved ephemeris data, known as a hot start. Conversely, if the device is off for an extended period or moved a significant distance, the ephemeris data becomes invalid, requiring a cold start. Cold start time depends on the environment; in open areas with strong satellite signals, it is shortest, while in obstructed environments, it may take longer or fail to lock onto satellites. Our device's cold start time in open environments is approximately 24 seconds, making it one of the top-performing consumer GPS receivers.

4. WGS-84 Coordinate System

GPS positioning results are expressed as longitude, latitude, and altitude, but these data differ conceptually from traditional geographic information. Traditional geographic information is based on astronomical measurements with significant positional errors. A digital model of the Earth was developed for the GPS system, using

the Earth's center of mass as the origin and a reference ellipsoid as the base shape. This model provides a precise, measurable coordinate description for every point relative to the Earth's center of mass. GPS positioning systems operate based on this coordinate system, accurately determining the receiver's location.

5. UTC Time

UTC (Universal Time Coordinated) is a global standard time that does not change with time zones. It allows satellite positioning systems to operate globally. UTC time is close to Greenwich Mean Time but differs in definition, acquisition, and value by a few seconds. Digital camera with GPS devices record three times in Exif data of the photo: shooting time, file time, and UTC time. The first two come from the camera's system settings, while UTC time comes from satellites. These times are related but independent. When using a mobile app for positioning, the recorded UTC time is replaced by the phone's system time, which is for reference only.

6. Static Drift

Satellites providing positioning signals orbit over 20,000 kilometers above the Earth. GPS devices determine their location based on the time difference of signals from different satellites. Even when stationary, the calculated position data fluctuates due to various errors or interferences, especially during the initial seconds after a cold start or when fewer satellites are locked. This phenomenon is known as static drift. In our device, it may initially show successful positioning, but the camera may not see the location due to large positioning errors. Static drift can be eliminated by waiting a moment or moving slowly. Satellite positioning systems improve accuracy during continuous movement by predicting direction and distance, calibrating positioning information based on data changes at different points. Positioning accuracy may decrease if standing still.