# LinkTap

# DT1 User Manual

## 1. Product Overview

The LinkTap DT1 is a data transmission unit that connects to one wired sensor, such as the LinkTap SP1S Wired Soil Sensor. The sensor takes measurements and sends the data to the DT1, which then transmits it wirelessly to a LinkTap Gateway.

## 2. Safety Information

- Small parts, including the battery cover, are a choking hazard. Keep them away from children.
- Use one 1.5 V AA alkaline or lithium battery. Do not use carbon-zinc, NiMH or Ni-Cd batteries, and do not mix batteries of different types, brands or ages.
- Observe polarity: the positive terminal faces the battery cover.
- Do not recharge a non-rechargeable battery, and do not short-circuit, puncture, crush, heat or incinerate a battery.
- Remove the battery if the sensor will not be used for an extended period. Leakage corrodes the electronics and voids the warranty.
- If a battery has leaked, remove it with gloves, wipe the compartment with a dry cloth, and do not reuse the sensor until it has been checked.

## 3. Setup

### Before you start

You need:

- A powered LinkTap Gateway connected to your broadband router, and a LinkTap account.
- The LinkTap app (iOS, Android) or the web app at link-tap.com/signin.
- One 1.5 V AA alkaline or lithium battery.

The DT1 uses the same LinkTap Gateway as LinkTap water timers and ValveLinkers. One Gateway supports up to 15 devices in any combination — for example 15 DT1, or 10 timers and 5 DT1. If you already have a LinkTap system in the house, start at Step 3.

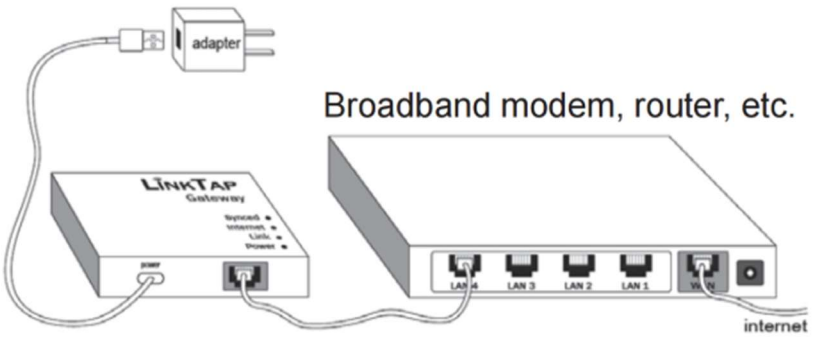
## Step 1: Connect the Gateway

Use the supplied Ethernet cable to connect the LinkTap Gateway to any available LAN port on your home broadband modem, router, network switch, or Wi-Fi repeater.

Then power the gateway using the supplied USB power cable and power adapter.

When all three gateway indicators — Power, Link, and Internet — turn solid green, the gateway has successfully connected to the cloud server. This process usually takes from 10 seconds to several minutes.

Note: To reduce possible wireless interference, place the LinkTap Gateway at least 60 cm away from power supplies and other electronic devices. Placing the gateway in a higher location may help improve wireless coverage.



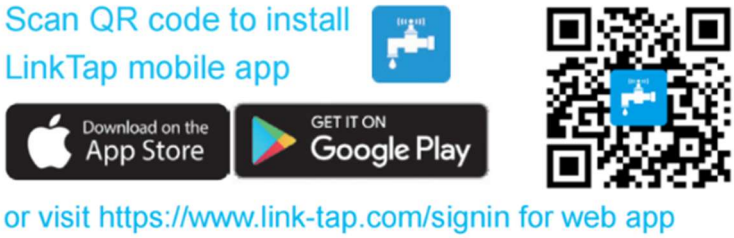

## Step 2: Register the Gateway

Use the free LinkTap mobile app or the LinkTap web app to register your user

account and gateway.

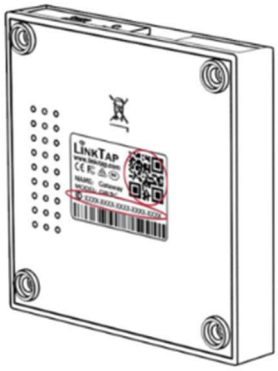
Web app: https://www.link-tap.com

After registration is complete, the Synced indicator on the gateway will turn solid green.









## Step 3: Add the DT1

In the LinkTap app, scan the QR code label on the DT1 to associate it with your gateway.



After successful pairing, the newly added DT1 will appear in the sensor list in the

app.

## Step 4: Install the battery

Use one 1.5V AA alkaline battery or one 1.5V AA lithium battery.

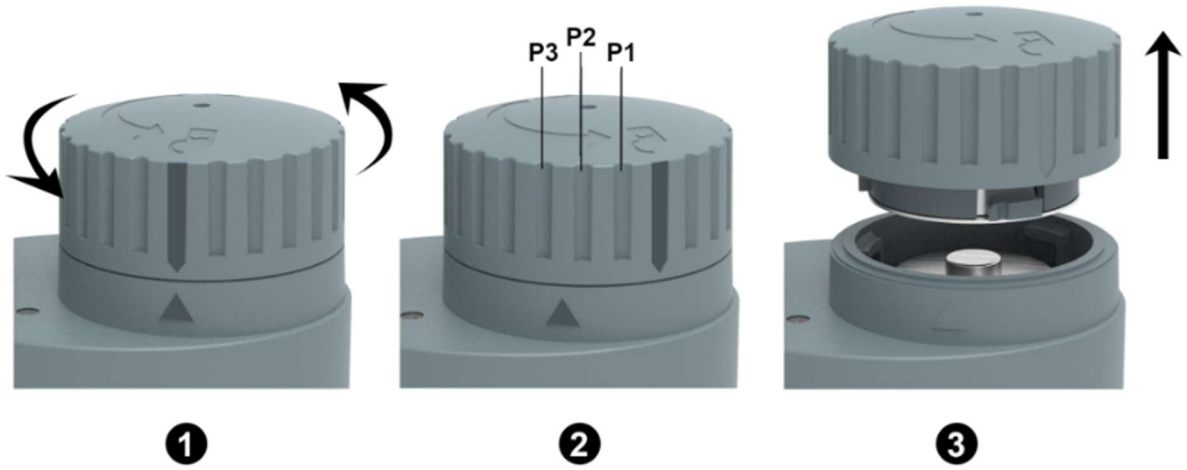
Do not use:

- carbon-zinc batteries,
- NiMH rechargeable batteries,
- NiCd rechargeable batteries.

1. Open the Battery Compartment
Turn the battery compartment cover counterclockwise until the triangle alignment mark on the device body is aligned between the P2 and P3 grooves on the battery cover. The cover will then pop up automatically. Remove it.

2. Insert the Battery
Insert one 1.5V AA battery into the battery compartment in the correct direction:

3. Close the Battery Compartment
Align the area between the P2 and P3 grooves on the battery cover with the triangle alignment mark on the device body, then put the cover back in place and press it down. Rotate the cover clockwise until the long anti-slip groove is fully aligned with the triangle mark. The cover is then fully locked.




After the battery is installed, the DT1 indicator will begin flashing green as it starts connecting to the gateway. This process usually takes about 1 minute.

When the indicator remains solid green, the DT1 has successfully connected to the gateway.

To save battery power, the indicator will automatically turn off after 15 seconds.

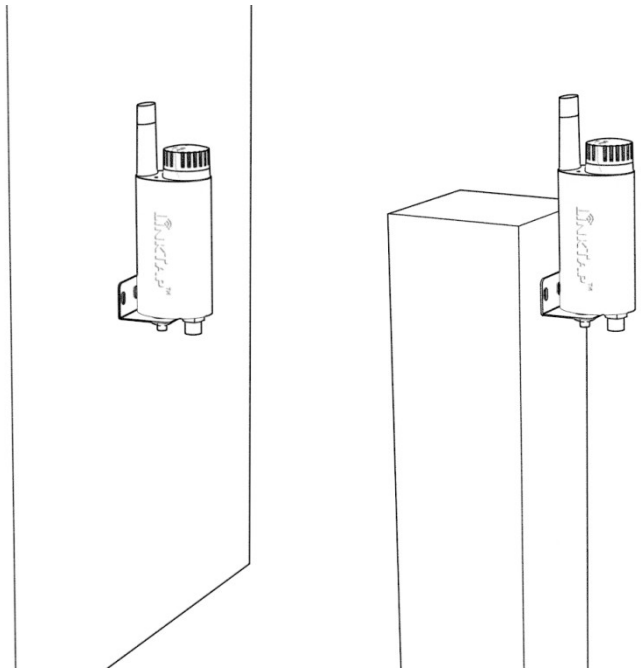
## Step 5: Install the DT1 in a Suitable Location

The DT1 can be installed on a wall or a wooden stake. To ensure stable wireless communication between the DT1 and the gateway, follow these recommendations:

- Install the DT1 at least 60 cm above the ground.
- Avoid obstructions such as metal structures, water tanks, Low-E glass, and dense foliage.

To maintain waterproof performance:

- Keep the power switch and connectors facing downward.
- Install the device vertically.



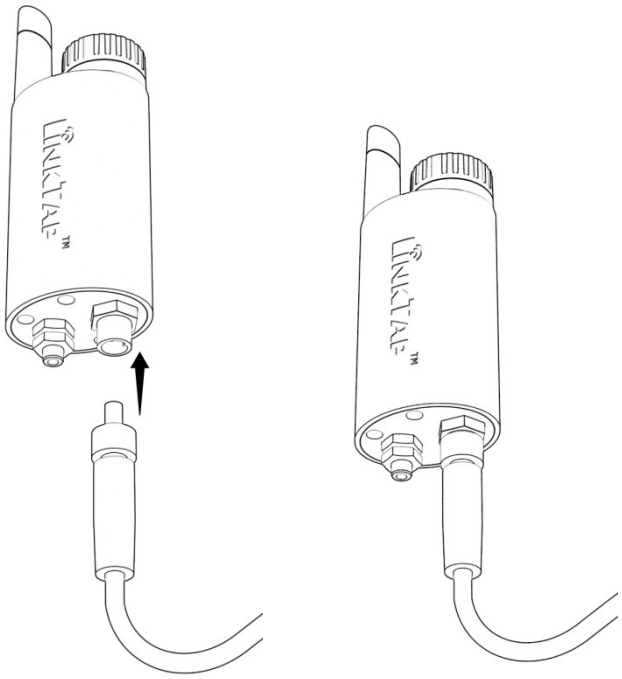
## Step 6: Connect the SP1S Soil Sensor to the DT1

Insert the connector of the soil sensor cable fully into the Sensor port of the DT1 and tighten it securely.

⚠ Note

The DT1's Sensor port is keyed. Align the notch carefully before insertion. Do not force it, as this may damage the connector.

Also prevent foreign matter from entering the Sensor port, as this may cause abnormal sensor connection behavior.



After the connection is completed, information for the SP1S soil sensor will appear in the sensor list under the DT1 in the app within 10 minutes at most.

Tip

To reduce power consumption, the DT1 periodically checks the connection status of

the SP1S. Therefore, after connecting the sensor, it may take up to 10 minutes before its status and data appear in the app.

If you want to speed up the process, you can use either of the following methods:

Method 1: Tap Find Sensor under Device Settings for the DT1.

Method 2: Unscrew and reinstall the battery cover to restart the DT1.

If the sensor still does not appear as expected, please refer to the troubleshooting section or visit the official FAQ: www.link-tap.com/faq

## 4. Status Indicator Definitions

The DT1 is equipped with a dual-color LED indicator, which shows the device working status through different colors and flashing patterns.

| Device Operating Stage | Indicator Status | Meaning |
|---|---|---|
| From startup until successfully connecting to the gateway | Flashes red once, then flashes green once | Startup self-check completed; the device has powered on and the LED is functioning normally. |
| | Flashes red once, then flashes green once (or may not flash | Battery level is too low and the system cannot complete the startup process. |

| | | |
|---|---|---|
| | green), then turns off | |
| | Flashes red for 15 seconds, then starts flashing green | Battery level is low. The system can still start, but it can no longer maintain normal sensor operation. Replace the battery as soon as possible. |
| | Continues flashing red for more than 15 seconds | Battery is depleted and the system cannot operate normally. |
| After successfully connecting to the gateway | Solid green for 15 seconds, then turns off | Connected to the gateway and operating normally. |

## 5. Specifications

| | |
|---|---|
| **Dimensions** | 43 mm (L) × 34 mm (W) × 120 mm (H) |
| **Power Supply** | 1 × 1.5V AA battery (alkaline / lithium) |
| **Battery Life** | More than 10 months<br>*** Tested in a laboratory environment using factory default parameters.** |
| **Operating Temperature** | Operating temperature: -31°C to 60°C |
| **Protection Rating** | IP66 |
| **Wireless Range** | Up to 200 m, line of sight |

| | |
|---|---|
| **Wireless Frequency** | 2.4 GHz ISM band |
| **Wireless Security** | AES-256 encryption |

# 6. Warranty, Disclaimer, and Support

## 6.1 Limited Warranty

LinkTap provides a limited warranty for this product against defects in materials and workmanship under normal residential use.

The warranty period is: **1 years from the date of original purchase.**

During the warranty period, LinkTap will, at its discretion, repair or replace the defective product or defective component free of charge, provided that the product has been used, installed, and maintained in accordance with this user manual.

To obtain warranty service, proof of purchase may be required.

## 6.2 Warranty Coverage

This limited warranty covers defects caused by:

- Manufacturing defects
- Material defects
- Failure of electronic components under normal use
- Defects occurring during normal installation and operation as described in this manual
- Replacement products or parts may be new, refurbished, or functionally equivalent, subject to local laws and LinkTap’s warranty policy.

## 6.3 Warranty Exclusions

This warranty does not cover damage or malfunction caused by:

- Improper installation, misuse, abuse, neglect, or unauthorized modification
- Failure to follow the instructions in this user manual
- Use of incorrect batteries, mixed batteries, rechargeable batteries where not

recommended, or leaking batteries
- Incorrect external power supply voltage, polarity, or wiring
- Physical damage, impact, dropping, crushing, or excessive force
- Bent, broken, corroded, or damaged sensor probes
- Water ingress caused by incorrect installation direction, loose covers, damaged seals, or improperly tightened connectors
- Damage caused by insects, animals, rodents, or plant roots
- Damage caused by extreme weather, lightning, flooding, fire, frost, freezing, or other natural events
- Exposure to chemicals, fertilizers, pesticides, solvents, corrosive substances, salt spray, or contaminated environments beyond normal garden use
- Normal wear and tear
- Consumable parts, including batteries
- Signal problems caused by building structures, wireless interference, network issues, gateway placement, or Internet service interruptions
- Use in commercial, industrial, agricultural production, or safety-critical applications unless expressly approved by LinkTap

This warranty also does not cover any labor cost, removal cost, reinstallation cost, travel cost, shipping cost, or any indirect cost unless required by applicable law.

## 6.4 Disclaimer

This product is designed to provide environmental monitoring data to assist with garden irrigation management. It is not intended to be used as a precision laboratory instrument, safety device, medical device, or the sole basis for critical irrigation, agricultural, environmental, or property-protection decisions.

Soil moisture, soil temperature, EC, air temperature, and air humidity readings may be affected by many external factors, including but not limited to:

- Soil type and soil structure
- Soil compaction and air gaps around the probes
- Installation depth and position
- Root distribution
- Stones, metal objects, fertilizer granules, or organic matter near the probes
- Local salinity and fertilizer concentration
- Soil temperature variation
- Sensor aging, contamination, or corrosion
- Wireless communication conditions
- Gateway and Internet connectivity
- App configuration and firmware version

Therefore, measurement data should be used as a reference for irrigation decisions and should not be considered an absolute guarantee of soil or plant condition.

Users are responsible for verifying that the product is suitable for their specific application and local environmental conditions.

## 6.5 Limitation of Liability

To the maximum extent permitted by applicable law, LinkTap shall not be liable for any direct, indirect, incidental, consequential, special, or punitive damages arising from the use or inability to use this product.

This includes, but is not limited to:

- Plant damage or plant death
- Lawn, garden, greenhouse, or landscape damage
- Water loss, overwatering, or underwatering
- Soil nutrient imbalance or fertilizer-related loss
- Property damage
- Loss of data
- Loss of revenue, profit, or business opportunity
- Costs related to inspection, removal, replacement, or reinstallation
- Network, Internet, cloud service, or third-party platform interruptions

The total liability of LinkTap, if any, shall not exceed the original purchase price paid for the product.

## 6.6 User Responsibility

The user is responsible for:

- Installing the product correctly according to this manual
- Selecting the appropriate soil type in the app
- Checking sensor readings after installation
- Maintaining proper soil contact around the probes
- Keeping connectors clean and properly tightened
- Replacing battery when required
- Ensuring safe cable routing to prevent tripping hazards
- Confirming that the gateway, network, and app remain operational
- Monitoring irrigation results and plant condition regularly

This product is intended to assist irrigation management, but it does not replace regular inspection of plants, soil, irrigation equipment, and local weather conditions.

## 6.7 Product Updates and App Changes

LinkTap may update product firmware, app functions, cloud services, user interface designs, and documentation from time to time to improve performance, reliability, and user experience.

Descriptions, screenshots, features, and functions in this manual may differ from the

actual app or product firmware version.

For the latest instructions, please refer to:

**LinkTap App**
Official FAQ: **www.link-tap.com/faq**
Device Health Check Tool: **www.link-tap.com/health**
Web App: **https://www.link-tap.com**

## 6.8 Support

For warranty service, troubleshooting assistance, or product support, please contact LinkTap after-sales support (**support@link-tap.com**) or visit the official website.

When contacting customer support, please provide:

- Product model
- App account information
- A description of the issue
- Photos or videos showing the installation, wiring, sensor position, and indicator status, if applicable

**FCC Statement**
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority
to operate the equipment.
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of
the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a
residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and
used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no
guarantee that interference will not occur in a particular installation. If this equipment does cause harmful
interference to radio or television reception, which can be determined by turning the equipment off and on, the user is
encouraged to try to correct the interference by one or more of the following measures:
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help
This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions (1)this device
may not cause harmful interference, and (2) this device must accept any interference received, including interference
that may cause undesired operation.
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This

equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

**IC statement**

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science
and Economic DevelopmentCanada's licence-exempt RSS(s). Operation is subject to the following
two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired
operation of the device.
The term "IC: " before the certification/registration number only signifies that the Industry Canada
technical specifications were met.
This product meets the applicable Industry Canada technical specifications.
Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS)
d'Innovation, Sciences etDéveloppement économique Canada. L'exploitation est autorisée aux
deux conditions suivantes : (1) l'appareil ne doit pasproduire de brouillage,et (2) l'utilisateur de
l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible
d'en compromettre le fonctionnement.
L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme auxCNR
d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio
exempts de licence.
L'exploitation est autorisée aux deux conditions suivantes :
1)L'appareil ne doit pas produire de brouillage;
2)L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible
d'en compromettre lefonctionnement.
This transmitter must not be co-located or operating in conjunction with any other antenna
ortransmitter. This equipment should be installed and operated with a minimum distance of
20centimeters between the radiator and your body.
Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre
antenne ouémetteur. Cet équipementdevrait être installé et actionné avec une distance minimum
de 20 centimètres entre le radiateur et votre corps.