

PDDAXLQUE DX-CP27

PDDAXLQUE DX-CP27 Wireless Bluetooth Beacon User Manual

Model: DX-CP27

1. INTRODUCTION

This manual provides comprehensive instructions for the PDDAXLQUE DX-CP27 Wireless Bluetooth Beacon. This device supports both iBeacon and Eddystone protocols, making it suitable for various applications such as indoor cargo tracking, asset management, personnel tracking, and advertising push.

2. WHAT'S IN THE BOX

The DX-CP27 Bluetooth Beacon package typically includes:

- DX-CP27 Bluetooth Beacon(s)
- Instruction Manual
- Product Guide
- Battery (pre-installed or included)
- Outer Packaging



Image: Contents of the DX-CP27 Bluetooth Beacon package, including the beacon, user manual, and foam tape.

3. PRODUCT OVERVIEW AND KEY FEATURES

The DX-CP27 is a compact, low-energy Bluetooth 5.1 beacon designed for precise indoor tracking and positioning. It integrates a Renesas DA14531 chip for reliable performance.

Ultra Small ibeacon DX-CP27

Customizable ▼

Logo
Customization

Chip
Selection

MAC
Address

UUID
Customization

PCBA
Customization

Programming
& Testing



Image: The compact design of the DX-CP27 iBeacon.

Key Features:

- **iBeacon & Eddystone Support:** Compatible with both iBeacon and Eddystone protocols, allowing for custom broadcast data configuration.
- **Multiple Data Sets:** Supports broadcasting 6 sets of data, including iBeacon, UID, URL, TIM, Device Info, and sensor data.
- **Extended Range & Battery Life:** Offers an open-space communication distance of 50-70 meters and a battery life of 6-12 months.
- **Free App & SDK:** Companion Android and iOS apps ("DX-SMART" or "DX-Ibeacon") are available for configuration, along with a free app SDK for development.
- **IP67 Waterproof:** Designed with an IP67 rating for water and dust resistance, suitable for various environments.

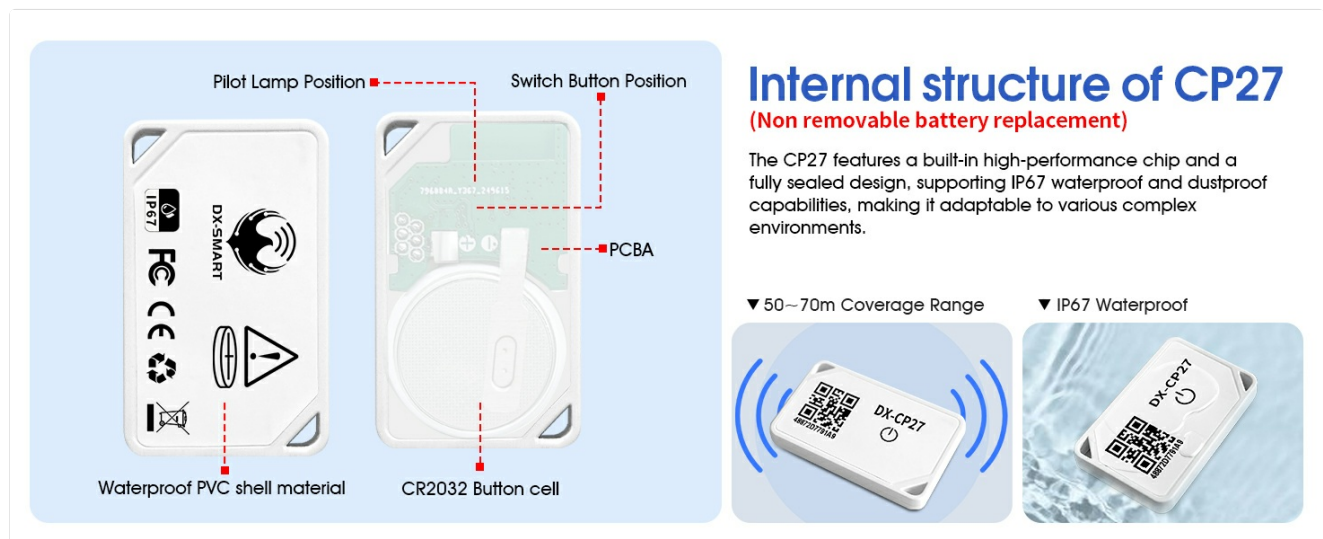


Image: Diagram showing the internal components of the DX-CP27, highlighting the non-removable battery and PCBA.

4. SETUP

4.1 Powering On/Off

- **Power On:** Long-press the power key on the beacon for approximately 2 seconds. The indicator light will blink twice, confirming successful startup.

- **Power Off:** Long-press the power key for approximately 5 seconds. The indicator light will stay on steadily for a moment and then turn off, indicating the device has shut down.

4.2 App Installation and Connection

1. **Download the App:** Search for "DX-SMART" in the Apple App Store (for iOS devices) or "DX-Ibeacon" in the Google Play Store (for Android devices) and install the companion application.
2. **Enable Bluetooth:** Ensure Bluetooth is enabled on your smartphone.
3. **Connect to Beacon:** Open the DX-SMART app. Refresh the device list to find your DX-CP27 Beacon. Tap on the beacon to connect. The default password is "dx1234" (this can be changed later).

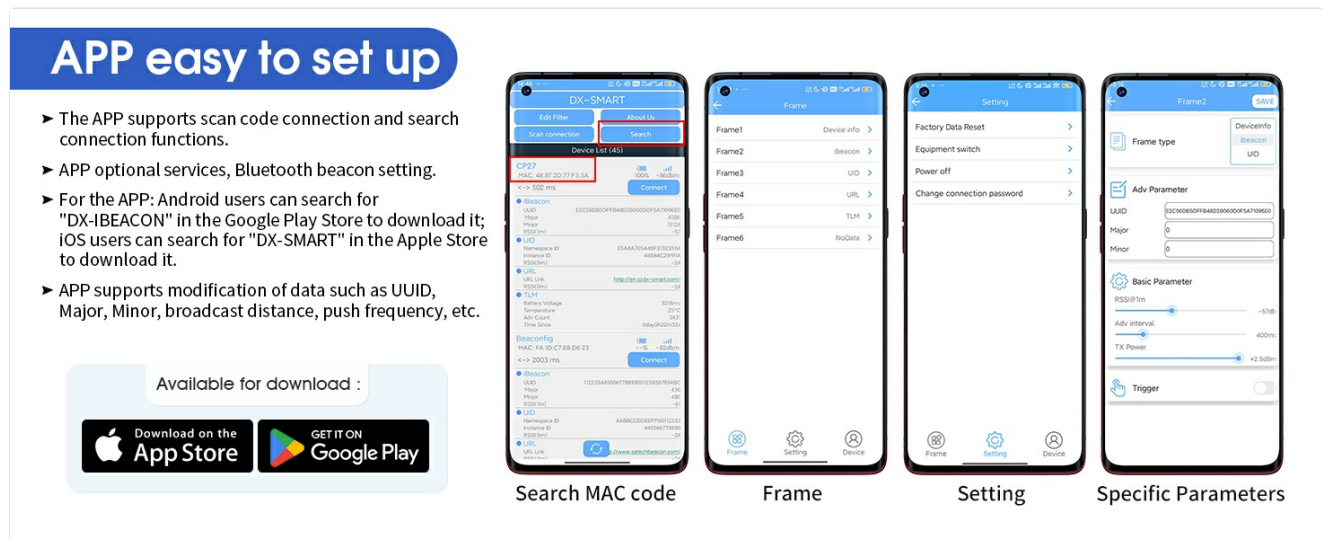


Image: Screenshots of the DX-SMART app, demonstrating easy setup and parameter configuration.

Your browser does not support the video tag.

Video: A quick verification guide for the CP27 Wireless Bluetooth Beacon, demonstrating unboxing, power on/off, and initial app connection steps.

5. OPERATING INSTRUCTIONS

5.1 Configuring Beacon Parameters

The DX-SMART app allows you to customize various broadcast parameters of your beacon:

1. **Access Settings:** After connecting to your beacon, navigate to the parameter settings interface within the app.
2. **Select Frame:** Choose any of the available frames (e.g., Frame1, Frame2) to configure its broadcast type (Device Info, iBeacon, UID, URL, TLM, NoData).
3. **Modify Parameters:** Adjust specific parameters such as UUID, Major, Minor, BLE Name, advertising interval, and transmission power as needed for your application.
4. **Save Changes:** Click the "SAVE" button in the app to apply your modifications to the beacon. A "Save Success" prompt will confirm the update.

6. APPLICATION SCENARIOS

The DX-CP27 Bluetooth Beacon is versatile and can be deployed in numerous scenarios:

- **Warehouse Asset Management Tracking:** Efficiently manage and locate important goods within a

warehouse environment.

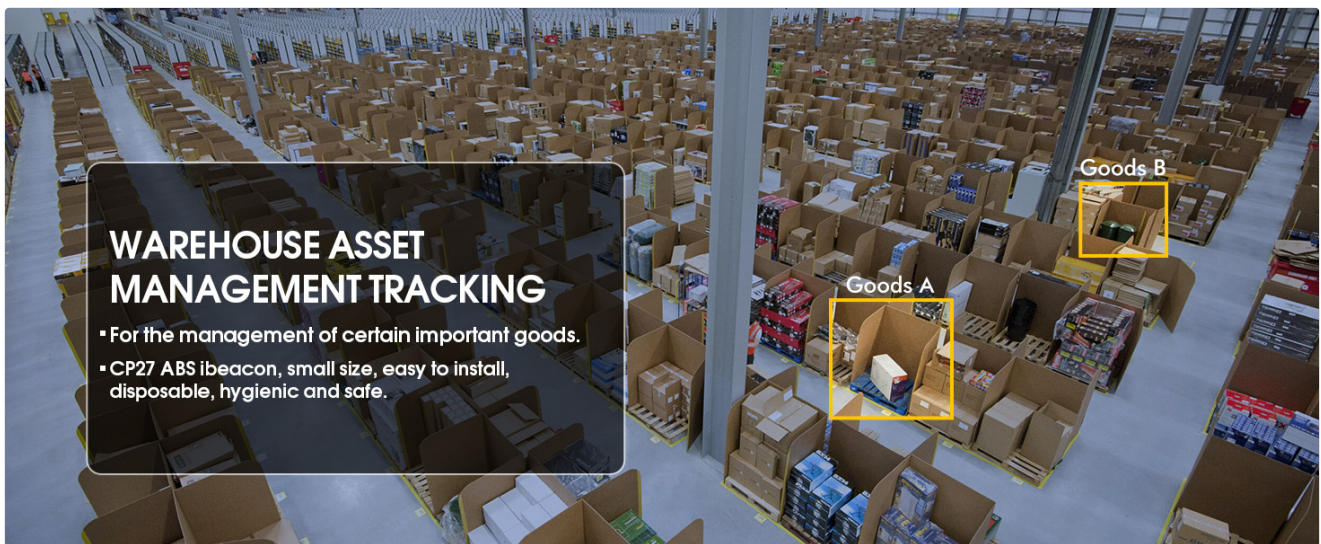


Image: DX-CP27 beacons used for tracking goods in a warehouse setting.

- **Personnel Tracking:** Monitor and manage the location of staff in various settings such as hospitals, schools, music festivals, or large events.

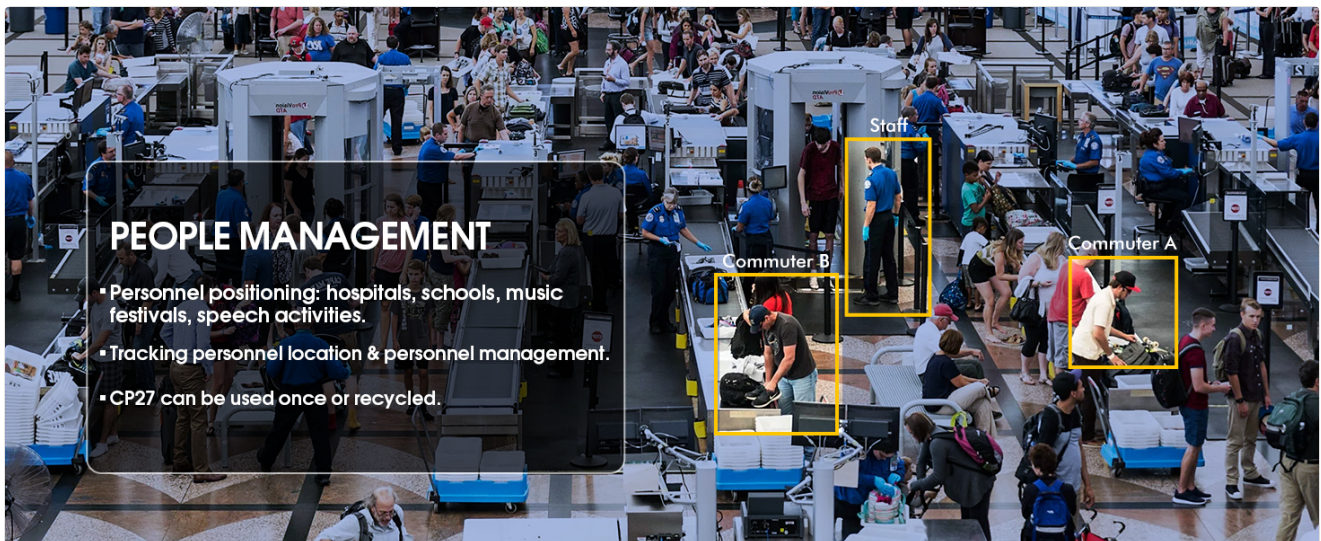


Image: DX-CP27 beacons assisting in personnel tracking and management in a busy environment.

- **Cargo Tracking:** Track the production date and location records of goods, including logistics, wineries, and hazardous chemicals.

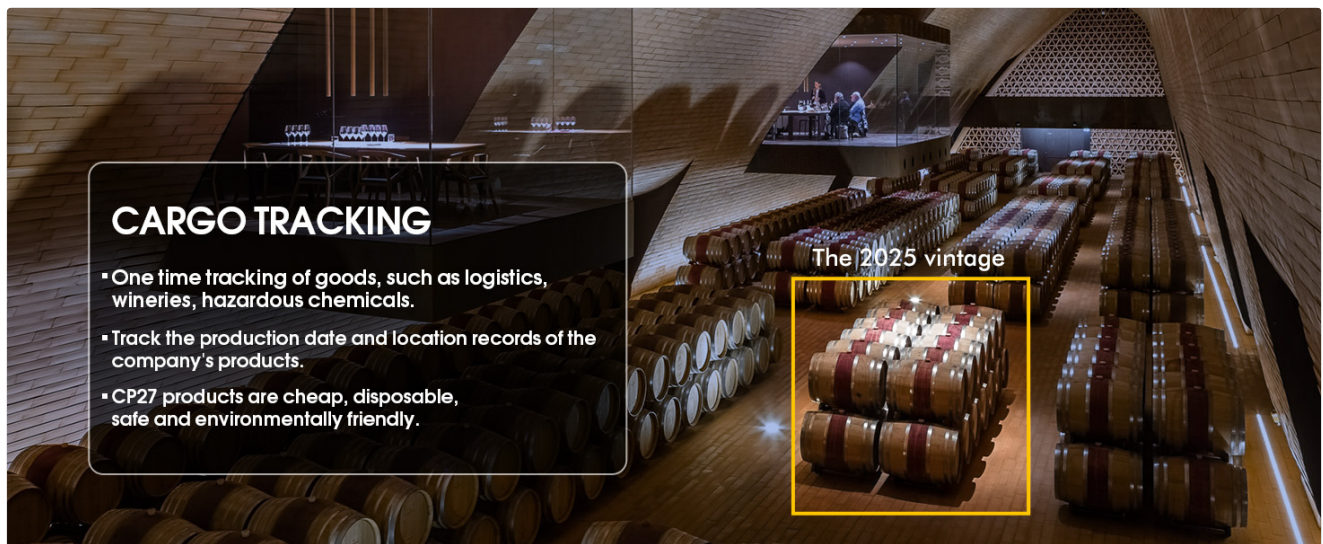


Image: DX-CP27 beacons used for tracking cargo, such as wine barrels in a cellar.

- **Push Advertising:** Accurately identify the location of target audiences to provide personalized service experiences, such as coupons or product introductions.

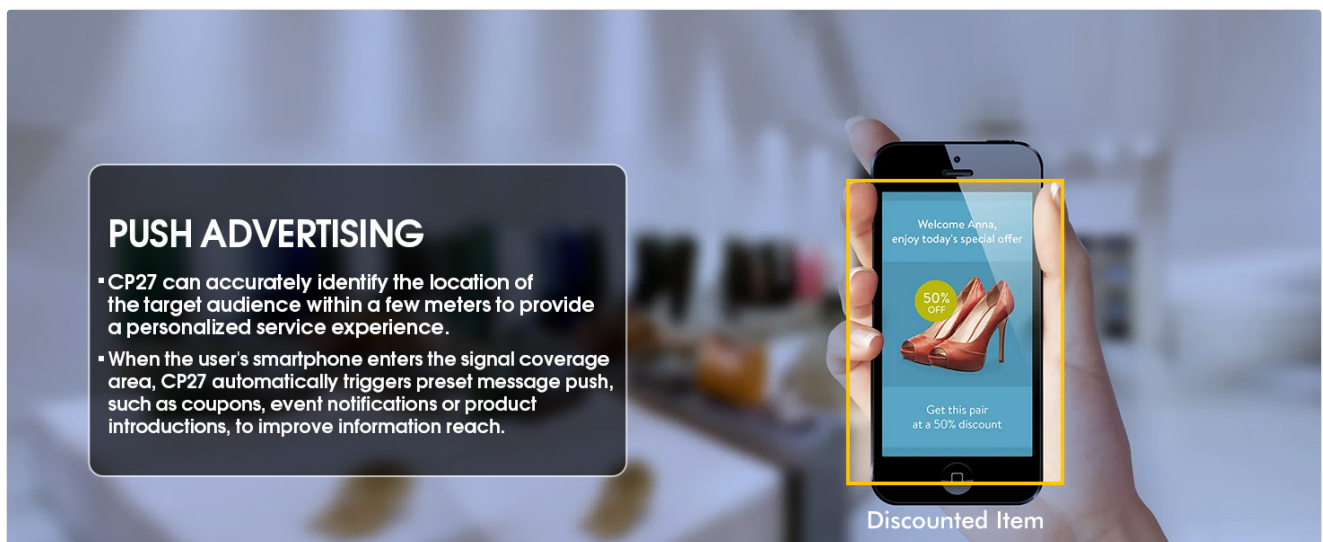


Image: A smartphone displaying a push advertisement triggered by proximity to a DX-CP27 beacon.

Your browser does not support the video tag.

Video: Demonstrates the DX-CP27 mini-sized Bluetooth beacon's IP67 waterproof capabilities and various application scenarios.

7. MAINTENANCE

7.1 Battery Information

The DX-CP27 beacon is powered by a CR2032 Lithium button cell battery. The battery is designed for long-term use with an estimated life of 6-12 months. Please note that the battery in this model is non-removable.

7.2 Cleaning and Care

Due to its IP67 waterproof rating, the beacon can withstand exposure to water and dust. For cleaning, gently wipe the device with a damp cloth. Avoid using harsh chemicals or abrasive materials.

8. TROUBLESHOOTING

8.1 Common Issues and Solutions

- **Device not found in app:**
 - Ensure your phone's Bluetooth is enabled.
 - Verify the beacon is powered on (indicator light blinks twice upon startup).
 - Try refreshing the device list in the app or using the "Scan connection" feature.
 - If many Bluetooth devices are nearby, use the "Edit Filter" function to narrow down the search.
- **Parameters not saving:**
 - Always click the "SAVE" button in the app after making any parameter changes.
 - Ensure a stable connection to the beacon during the saving process.
- **Connectivity issues:**
 - Check the beacon's battery level.
 - Ensure there are no significant physical obstructions between the beacon and the receiving device (e.g., thick walls, metal objects).
 - Reduce the distance between the beacon and the receiving device.

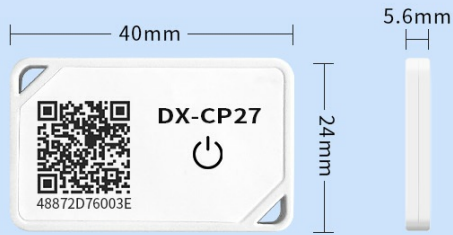
9. SPECIFICATIONS

Technical Details:

Feature	Detail
Brand	PDDAXLQUE
Model Number	DX-CP27
Connectivity Technology	Bluetooth 5.1
Special Feature	IP67 Waterproof
Maximum Range	70 Meters (open space)
Battery Type	Lithium (CR2032)
Battery Life	6-12 months
Item Dimensions (L x W x H)	1.57"L x 0.95"W x 0.22"H (40mm x 24mm x 5.6mm)
Item Weight	0.1 Pounds
Supported Protocols	iBeacon, Eddystone, GATT
Chipset	Renesas DA14531
Operating Temperature	MIN: -40°C ~ MAX: +85°C
Humidity	10%-95% non-condensing

About Size Support Option Service

► Examples include appearance, NFC, G-sensor, buzzer



Parameter Name	Details	Parameter Name	Details
Chipset	Renesas DA14531	Model Number	DX-CP27
Bluetooth Protocol	BLE 5.1	Product Size	40*24*5.6mm
No. of UUIDs	6	Protocol	GATT,iBeacon, Eddystone
Battery Type	CR2032(210mah)	Broadcast Interval	100ms~1500ms
Battery Life	1 year	Transmit power	-19.5~+2.5dBm
Power Supply	Button Cell Battery	Sensitivity	-94dBm@0.1%BER
Modulation Method	GFSK	Frequency Band	2.402GHz~2.480GHz ISM band
RF input Impedance	50Ω	Frequency hopping and channels	1600hops/s 2MHzspacing 40channels
Operating Temperature	MIN:-40°C - MAX:+85°C	Humidity	10%-95% non-condensing

Image: Detailed dimensions and technical specifications of the DX-CP27 beacon.

10. WARRANTY AND SUPPORT

PDDAXLQUE is a manufacturer that supports OEM and ODM services. We are committed to providing comprehensive technical support for our products.

10.1 Customer Support

If you encounter any problems or require technical assistance, please contact us through the service support information provided in your product's user guide or product information documentation. We are dedicated to resolving any issues you may experience.