

PDDAXLQUE DX-CP11

PDDAXLQUE DX-CP11 Bluetooth to USB Serial Adapter User Manual

Model: DX-CP11 | Brand: PDDAXLQUE

1. PRODUCT OVERVIEW

The PDDAXLQUE DX-CP11 is a versatile Bluetooth to USB serial adapter designed for wireless communication. It allows seamless data exchange between devices with a USB interface and compatible Android, iOS, or PC systems. This adapter is built with a BT27 BLE 5.1 Bluetooth module, offering long-distance transmission capabilities.

Key Features

- **Wireless Communication:** Enables wireless data transfer with USB-compatible devices.
- **Broad Compatibility:** Fully compatible with Android, iOS smartphones, and PC systems.
- **Advanced Bluetooth:** Integrated BT27 BLE 5.1 Bluetooth module for enhanced performance.
- **Extended Range:** Achieves a connection transmission distance of up to 420 meters between master and slave devices.
- **High Data Rate:** Supports a transmission rate of 10K Bytes/s.



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CP11 Master and Slave Paired Version

| PARAM | VALUE |
|------------------------|---------------|
| Working Voltage | 5V |
| Communication Distance | 420M |
| Master Or Slave | master+slave |
| Bluetooth Protocol | BLE5.1 |
| Transmission Speed | 10KB/s |
| Working Temperature | -40°C + 85°C |
| Transmit Power | -6.5~+14.5dBm |
| Module Size | 67x25x10mm |



Image 1.1: The DX-CP11 Bluetooth to USB Converter, highlighting its compact design and key specifications such as working voltage, communication distance, Bluetooth protocol, transmission speed, working temperature, emission power, and module size.

2. PACKAGE CONTENTS

The DX-CP11 adapter is available in various packages to suit different application needs. Please verify your package contents against the list below.

T1 Package (Mobile Phone Control)

- 1 x DX-CP26 Converter
- 1 x Rod Rubber Antenna
- 1 x USB Data Cable
- 1 x Instruction Manual
- 1 x Product Description
- 1 x RJ45 Adapter Cable
- 1 x RS232 Adapter Cable (Male Connector)

T2 Package (Computer Control)

- 1 x DX-CP26 Converter

- 1 x CP11 Adapter
- 1 x Rod Rubber Antenna
- 1 x USB Data Cable
- 1 x Instruction Manual
- 1 x Product Description
- 1 x RJ45 Adapter Cable
- 1 x RS232 Adapter Cable (Male Connector)

T3 Package (Device-to-Device Control)

- 2 x DX-CP26 Converters
- 2 x Rod Rubber Antennas
- 2 x USB Data Cables
- 1 x Instruction Manual
- 1 x Product Description
- 2 x RJ45 Adapter Cables
- 2 x RS232 Adapter Cables (Male Connector)



Image 2.1: The official PDDAXLQUE brand logo.

Unboxing and Package Overview Video

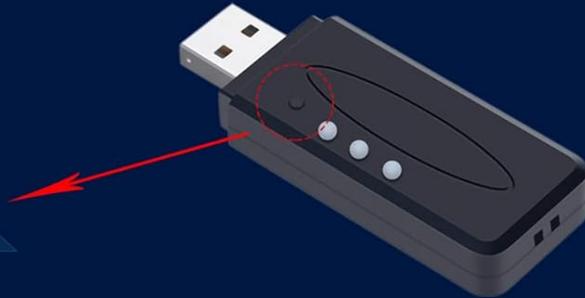
Video 2.1: This video provides a quick verification guide for the DX-CP26, including an unboxing of the T1, T2, and T3 packages and their respective components. It demonstrates the initial setup steps for each package type.

3. SETUP AND INSTALLATION

Device Components and Indicators

Instructions of Key

Instructions of Key



| Model | Status | Functiont |
|--------|------------|---|
| Slave | Connecting | Disconnect after holding for 7s |
| | Standby | Long press to enter pairing mode, and release after being connected |
| Master | Connecting | Disconnect after holding for 7s |
| | Standby | Press and hold for 7s to clear the memory address code |

Image 3.1: Diagram illustrating the function of the 'KEY' button on the DX-CP11 adapter for both Slave and Master modes, including actions for connecting, standby, disconnecting, and clearing memory.

Multifunction status indicator

Built-in 4 status lights to indicate different working states



| | |
|---------------------------|--|
| Not connected | <u>Red light flashing</u> |
| Connected | <u>Red light permanently on</u> |
| When sending instructions | <u>Transmitting green light flashing / receiving blue light flashing</u> |
| Sending/receiving data | <u>Transmitting green light flashing / receiving blue light flashing</u> |

Image 3.2: Explanation of the multifunction status indicator lights on the DX-CP11, detailing their behavior for 'Not connected', 'Connected', 'When sending instructions', and 'Sending/receiving data' states.

Initial Setup Steps

1. **Install Antenna:** Screw the rod rubber antenna onto the CP26 converter.
2. **Connect RS232 Converter:** Attach the RS232 converter to the CP26.
3. **Power On:** Press and hold the 'KEY' button for approximately 1 second to power on the device. The blue light will blink three times, indicating a successful startup.
4. **Download App:** For mobile phone verification, search for and download the 'DX-SMART' app from your device's app store.
5. **Enable Bluetooth & Location:** Ensure Bluetooth and location services are enabled on your mobile phone.
6. **Connect via App:** Open the 'DX-SMART' app, navigate to the homepage, and click 'Transmission' to search for Bluetooth devices. Locate 'RS232/485' and connect. A 'Connected' message confirms success.

Computer Connection Overview Video

Video 3.1: This video demonstrates the connection of the CP26 RS232 to Bluetooth Serial Adapter to a computer, showing the physical connection and initial power-on sequence.

4. OPERATING INSTRUCTIONS

Data Transmission Verification (Loopback Test)

To quickly verify the transceiver functionality and proper serial communication, perform a loopback test:

1. Ensure the device is powered on and connected to the 'DX-SMART' app.
2. Use the included jumper cap to short-circuit the TX (Transmit) and RX (Receive) interfaces on the RS232 connector. **Important:** This short-circuit must be performed *after* the device has successfully started up. Failure to do so will result in verification failure.
3. In the 'DX-SMART' app, send data. If the sent data is received and displayed correctly, it confirms successful transceiver operation and serial communication.



Image 4.1: The DX-CP11 adapter connected to a laptop, demonstrating its role in Bluetooth 5.1 serial port transmission, with a mobile phone displaying the companion app interface.

Baud Rate Configuration

The default factory baud rate is 9600 bps. You can change the baud rate by double-clicking the 'KEY' button. The number of flashes of the 'WORK' status light indicates the current baud rate:

- Once: 2400 bps
- Twice: 4800 bps
- Three times: 9600 bps (Default)

- Four times: 19200 bps
- Five times: 38400 bps
- Sixth: 57600 bps
- Seven times: 115200 bps

The default serial port parameters are 9600bps/8/n/1 (baud rate/data bit/no parity/stop bit). Note that the DX-BT27 does not support software flow control.

5. MAINTENANCE

To ensure the longevity and optimal performance of your DX-CP11 adapter, follow these maintenance guidelines:

- **Keep Dry:** Avoid exposure to moisture or liquids, which can damage internal components.
- **Clean Gently:** Use a soft, dry cloth to clean the device. Do not use harsh chemicals or abrasive materials.
- **Temperature Control:** Operate and store the device within the specified working temperature range of -40°C to +85°C.
- **Protect from Impact:** The device features a durable housing that is dustproof and anti-static, but avoid dropping or subjecting it to strong impacts.
- **Proper Storage:** When not in use, store the adapter in a safe place away from direct sunlight and extreme temperatures.

Bluetooth module features



**Imported chips, stable
for 15 years+**



**Hibernation power
as low as 2uA**



**With housing,
dustproof&anti-static**



**Standard USB interface,
secure&reliable**

Image 5.1: Visual representation of the Bluetooth module's features, emphasizing imported chips for stability, low hibernation power, dustproof/anti-static housing, and a standard USB interface.

6. TROUBLESHOOTING

If you encounter issues with your DX-CP11 adapter, refer to the following common problems and solutions:

- **Device Not Powering On:** Ensure the USB connection is secure and providing adequate power (5V). Check the 'KEY' button for proper function.
- **No Bluetooth Connection:** Verify that Bluetooth and location services are enabled on your mobile

device. Ensure the 'DX-SMART' app has necessary permissions. Try restarting both the adapter and your mobile device.

- **Data Transmission Failure:** Perform the loopback test as described in Section 4 to confirm the transceiver's functionality. Check serial port parameters (baud rate, data bits, parity, stop bits) for correct configuration. Ensure the TX and RX pins are not accidentally shorted unless performing a loopback test.
- **Intermittent Connection/Poor Range:** Ensure the antenna is securely attached. Minimize physical obstructions between the adapter and the connected device. Check for potential interference from other wireless devices.
- **App Not Detecting Device:** Confirm the adapter is powered on and within range. Try refreshing the device list in the 'DX-SMART' app.

7. TECHNICAL SPECIFICATIONS

| Feature | Specification |
|--------------------------------|---|
| ASIN | B0C2BSJ6F6 |
| Brand | PDDAXLQUE |
| Hardware Interface | Bluetooth, USB |
| Compatible Devices | Desktop, Smartphone |
| Data Link Protocol | Bluetooth BLE 5.1 |
| Chip | DA14531 |
| Module Model | BT27 |
| Module Size | 67 (L) x 25 (W) x 10 (H) mm |
| Working Voltage | 5V |
| Working Current | 10mA |
| Working Temperature | -40°C to +85°C |
| Emission Power | -8.5 ~ +13.5dBm |
| Frequency Band | 2.402GHz - 2.480GHz ISM band |
| Transmission Distance | Up to 420 meters (Master and Slave devices) |
| Transmission Rate | 10K Bytes/s |
| Default Serial Port Parameters | 9600bps/8/n/1 (baud rate/data bit/no parity/stop bit) |
| Module BLE UUIDs | SERVICE UUID: FFE0, NOTIFY/WRITE UUID: FFE1, WRITE UUID: FFE2 |

8. WARRANTY AND CUSTOMER SUPPORT

PDDAXLQUE is committed to providing high-quality products and excellent customer service. Your DX-

CP11 adapter is packaged with multi-layer protection to prevent damage during transit, ensuring it arrives in perfect condition for immediate plug-and-play use.

For any technical inquiries, operational assistance, or if you encounter any issues with your product, please do not hesitate to contact our customer service team. We are dedicated to resolving your concerns within 24 hours.

For additional technical documentation and video tutorials, please refer to the 'Product Description' document included with your package or visit our official website and YouTube channel as indicated in the product description.