

K-PO DX-5000PLUS

K-PO DX 5000PLUS 10m Band HF Transceiver User Manual

Model: DX-5000PLUS



1. PRODUCT OVERVIEW

The K-PO DX-5000 PLUS is a compact, multi-mode HF transceiver designed for the 10-meter band (28.000 MHz to 29.700 MHz). This model features significant improvements over its predecessor, the DX-5000V6, offering enhanced performance and user experience. It supports various modulation modes including AM, FM, LSB, USB, and CW.

Key features include adjustable power output, an integrated SWR meter, and advanced noise reduction capabilities. The transceiver is designed for both fixed and mobile operations, providing reliable communication across its frequency range.



Figure 1.1: The K-PO DX 5000PLUS Transceiver shown with its retail packaging. This image provides a general view of the product and its box, highlighting the model name and key frequency range.

Features:

- Multi-mode operation: AM, FM, LSB, USB, CW.
- Frequency range: 28.000 MHz to 29.700 MHz.
- Adjustable power output: 1 to 20 Watts in SSB, 1 to 12 Watts in AM, FM, and CW.
- Integrated SWR meter for antenna tuning.
- Selectable frequency steps: 10 Hz, 100 Hz, 1 kHz, 10 kHz.
- VOX (Voice Operated Transmit) function.
- CTCSS/DCS Subtone codes for selective calling.
- RX Comander for improved audio quality.
- Noise Reduction Gate (RX) with an extra PCB inside the radio.
- Selectable microphone type: Electret or Dynamic.
- PC programmable (software and cable not included).
- Enhanced ventilation with holes in the top and bottom covers.

2. PACKAGE CONTENTS

Upon unpacking your K-PO DX 5000PLUS, please ensure all the following components are present:

- K-PO DX 5000PLUS Transceiver Unit
- Power Cable
- Microphone for Transceiver
- Mounting Bracket



Figure 2.1: The K-PO DX 5000PLUS Transceiver displayed with its standard accessories, including the power cable, microphone, and mounting bracket.

3. SETUP AND INSTALLATION

3.1. Front Panel Controls and Indicators



Figure 3.1: Close-up view of the K-PO DX 5000PLUS front panel, showing the display, buttons, and rotary controls for various functions like volume, squelch, RF gain, and mode selection.

Familiarize yourself with the front panel controls. The large digital display shows the operating frequency. Knobs are

provided for Volume (VOL), Squelch (SQ), RF Gain (RF GAIN), and Clarifier. Buttons allow selection of functions such as FUNC, R.B., NB/ANL, DW, BP, +10kHz, SWR, LOCK, LCD OFF, EMG, SC.LIST, HI-CUT, TOT, SIRF, E-TONE, and various mode selections (AM, FM, CW, USB, LSB).

3.2. Rear Panel Connections



Figure 3.2: Rear panel of the K-PO DX 5000PLUS, showing antenna connector, power input, and data ports. This view is crucial for understanding how to connect the transceiver to external components.

1. **Antenna Connection:** Connect a suitable 10-meter band antenna to the ANT connector on the rear panel. Ensure the antenna is properly tuned for the 10-meter band to prevent damage to the transceiver.
2. **Power Connection:** Connect the supplied power cable to the POWER input on the rear panel and to a stable 13.8V DC power supply capable of providing sufficient current (refer to specifications for current draw). Observe correct polarity.
3. **External Speaker/Headphone:** (If applicable, not explicitly shown but common) Connect an external speaker or headphones to the designated jack for improved audio.
4. **Data Port:** The DATA port (USB) is used for PC programming. A programming cable and software are required and sold separately.

3.3. Microphone Connection



Figure 3.3: The K-PO DX 5000PLUS Transceiver with its standard microphone connected to the front panel. This illustrates the typical setup for voice communication.

Connect the supplied microphone to the microphone jack on the front panel. Ensure the connector is fully seated.

4. OPERATING INSTRUCTIONS

4.1. Basic Operation

1. **Power On:** Turn the transceiver on using the power switch (usually integrated with the Volume knob).
2. **Volume Adjustment:** Adjust the VOL knob to a comfortable listening level.
3. **Squelch Adjustment:** Rotate the SQ knob clockwise until the background noise disappears. This mutes weak signals.
4. **Frequency Selection:** Use the main tuning knob to select the desired operating frequency. The frequency steps can be adjusted (10 Hz, 100 Hz, 1 kHz, 10 kHz) using the appropriate function button.
5. **Mode Selection:** Press the MODE button to cycle through AM, FM, LSB, USB, and CW modes.
6. **Transmission:** Press the PTT (Push-To-Talk) button on the microphone to transmit. Release to receive.

4.2. Advanced Features

- **SWR Meter:** The built-in SWR meter allows you to check the Standing Wave Ratio of your antenna system. A low SWR (ideally 1.5:1 or less) indicates a well-matched antenna, which is crucial for efficient operation and preventing damage to the transceiver.
- **VOX:** Activate the Voice Operated Transmit function to transmit automatically when you speak into the microphone, without needing to press the PTT button. Adjust VOX sensitivity as needed.
- **CTCSS/DCS:** Use CTCSS (Continuous Tone-Coded Squelch System) or DCS (Digital Coded Squelch) codes for selective calling, allowing you to only hear signals that transmit the same code.
- **Noise Reduction (NR):** The RX Noise Reduction Gate significantly reduces background noise on received

signals, improving clarity, especially in noisy environments. This feature is active in SSB and FM modes.

- **Microphone Type Selection:** The transceiver allows selection between Electret and Dynamic microphone types, ensuring compatibility with various microphones. Refer to the menu for this setting.
- **PC Programming:** The DX-5000 PLUS can be programmed via a PC. This allows for customization of various parameters, including frequency ranges, channel settings, and other advanced functions. (Software and cable sold separately).

5. MAINTENANCE AND CARE

To ensure the longevity and optimal performance of your K-PO DX 5000PLUS transceiver, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. Avoid using abrasive cleaners or solvents, which can damage the finish.
- **Ventilation:** Ensure the ventilation holes on the top and bottom covers are not obstructed. Proper airflow is essential to prevent overheating.
- **Storage:** When not in use for extended periods, store the transceiver in a cool, dry place, away from direct sunlight and extreme temperatures.
- **Connections:** Periodically check all cable connections (power, antenna, microphone) to ensure they are secure and free from corrosion.
- **Antenna System:** Regularly inspect your antenna and coaxial cable for damage. A damaged antenna system can lead to poor performance and potential damage to the transceiver.

6. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your K-PO DX 5000PLUS transceiver. If the problem persists after trying these steps, please contact customer support.

Problem	Possible Cause	Solution
No power	Power cable disconnected; Power supply failure; Incorrect polarity; Blown fuse.	Check power cable connection. Verify power supply operation. Ensure correct polarity. Check and replace fuse if necessary.
No reception / Weak reception	Antenna not connected; Antenna faulty; Squelch set too high; Incorrect mode/frequency.	Connect antenna securely. Inspect antenna and cable. Adjust SQ knob counter-clockwise. Verify correct operating mode and frequency.
No transmission / Low power output	Microphone not connected; PTT not pressed; SWR too high; Power setting too low.	Ensure microphone is connected. Press PTT button firmly. Check SWR and tune antenna. Adjust power output setting.
Distorted audio	Volume too high; RF Gain too high; Incorrect microphone type selected.	Reduce volume. Adjust RF Gain. Verify correct microphone type setting (Electret/Dynamic).

7. TECHNICAL SPECIFICATIONS



Figure 7.1: Diagram illustrating the physical dimensions of the K-PO DX 5000PLUS Transceiver, showing its length, width, and height in centimeters.

Specification	Value
Model	DX-5000PLUS
Brand	K-PO
Frequency Range	28.000 - 29.700 MHz
Modulation Modes	AM, FM, LSB, USB, CW
Output Power (SSB)	1 - 20 Watts
Output Power (AM/FM/CW)	1 - 12 Watts
Frequency Steps	10 Hz / 100 Hz / 1 kHz / 10 kHz
Tuner Technology	UHF
Special Features	SWR Meter, VOX, CTCSS/DCS, RX Compander, Noise Reduction Gate
Dimensions (L x W x H)	Approx. 24 x 20 x 6 cm (unit only)
Item Weight	2.31 Kilograms
International Protection Rating	IP04

Note: The product packaging dimensions are 39.2 x 22.7 x 7.5 cm. The dimensions provided in the table are for the transceiver unit

itself, as depicted in Figure 7.1.

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or contact your authorized K-PO dealer. Specific warranty terms and support channels may vary by region.

For general inquiries, you may visit the K-PO website or contact their customer service department. Please have your model number (DX-5000PLUS) and purchase details ready when seeking support.

