

## Xiaomi POCO X7 PRO

# Xiaomi Poco X7 PRO 5G User Manual

Model: 2412DPC0AG

## 1. OVERVIEW

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The Xiaomi Poco X7 PRO 5G is a high-performance smartphone designed for demanding users, including gamers. It features a flagship-grade processor, a large battery with fast charging, and an advanced camera system, all housed within a durable and sleek design. This manual provides essential information for setting up, operating, and maintaining your device.



Figure 1: Front and rear view of the Xiaomi Poco X7 PRO 5G smartphone.

## 2. SETUP & INITIAL USE

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### 2.1 Unboxing

Upon unboxing, you will find the Poco X7 PRO smartphone, a 90W in-box charger, a USB-C cable, and a phone case. The device comes with a pre-applied screen protector.

### 2.2 SIM Card Installation

The Poco X7 PRO supports dual SIM cards. Locate the SIM tray on the side of the device. Use the provided SIM ejector tool to open the tray. Insert your activated SIM cards into the designated slots. Ensure the tray is securely reinserted into the phone.

### 2.3 Powering On

Press and hold the power button on the side of the device until the Xiaomi logo appears. Follow the on-screen prompts to complete the initial setup, including language selection, Wi-Fi connection, and Google account sign-in.

### 3. PERFORMANCE & GAMING

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The Poco X7 PRO is powered by the flagship Dimensity 8400-Ultra processor, built on a 4nm manufacturing process with an Octa-core CPU up to 3.25GHz and a Mali-G720 GPU. This configuration delivers exceptional performance for demanding applications and gaming.

- **WildBoost Optimization 3.0:** Enhances performance, graphics, connectivity, and game audio for an optimized gaming experience.
- **LiquidCool Technology 4.0 (POCO 3D IceLoop system):** An advanced cooling system designed to maintain optimal performance during extended use by effectively dissipating heat.

The device can maintain a 120Hz refresh rate during intensive gaming sessions, such as Real Racing 3, without significant glitches or excessive heat generation. Performance benchmarks indicate that the Dimensity 8400-Ultra is competitive with high-end Snapdragon processors, offering a strong price-to-performance ratio.

### 4. CAMERA SYSTEM

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The Poco X7 PRO features a versatile camera setup:

- **50MP Main Camera with OIS:** Equipped with a Sony IMX882 sensor (1/1.95" sensor size, f/1.5 aperture, 6P lens) and Optical Image Stabilization (OIS) for clear and stable photos and videos, even in challenging lighting conditions.
- **8MP Ultra-wide Camera:** Features an f/2.2 aperture for capturing broader scenes.
- **20MP Front Camera:** OV20B sensor (1/4" sensor size, f/2.2 aperture, 4p lens) with Soft-light ring and AI beautify features for high-quality selfies.

#### 4.1 Photography Features

Dynamic shots, Motion tracking focus, Motion capture, 50MP mode, Film Camera, Portrait mode, Documents, Night mode, Pro mode, Panorama, HDR.

#### 4.2 Video Recording

The main camera supports 4K video shooting at 24fps/30fps/60fps, and 1080p/720p at 30fps/60fps. Slow motion video is available at 1080p/720p at 120fps/240fps/960fps. Video features include Director mode, Video pro mode, Video log format, ShootSteady, Slow motion, Dual video, and Time-lapse.

The optical image stabilization (OIS) on the main camera significantly improves video stability, making it suitable for capturing moving subjects even in low-light environments. While the ultrawide camera is primarily for extended field of view in daylight, it also offers electronic image stabilization for video recordings.

For a detailed review of the camera's capabilities, including sample photos and videos, please refer to the 'Poco X7 Pro Smartphone Review' video. This video, created by an Influencer, provides practical demonstrations of the camera's performance in various scenarios.

Video: Poco X7 Pro Smartphone Review (Creator Type: Influencer)

This video provides an in-depth review of the Poco X7 Pro's camera features, including sample photos and video footage captured with the device. It covers daytime and nighttime photography, as well as video stabilization capabilities.

### 5. DISPLAY TECHNOLOGY

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The Poco X7 PRO features a 6.67-inch CrystalRes 1.5K AMOLED display with a resolution of 2712 x 1220 pixels. Key display features include:

- **Refresh Rate:** Up to 120Hz for smooth scrolling and gaming.
- **Touch Sampling Rate:** 480Hz, with 2560Hz instant touch sampling rate (supports only with Game Turbo mode on) for highly responsive interactions.
- **Brightness:** 700 nits (typical), 1400 nits (HBM brightness), and 3200 nits (peak brightness) for excellent visibility in various lighting conditions.
- **Color Depth:** 12-bit, with DCI-P3 (typical) color gamut for vibrant and accurate colors.
- **Contrast Ratio:** 5,000,000:1.
- **Protection:** Corning Gorilla Glass 7i for enhanced durability.
- **Additional Features:** Supports Dolby Vision, sunlight mode, and reading mode.
- **Wet Touch Display:** Enhanced touch accuracy even with wet or oily fingers.
- **PWM Dimming:** Features 1920Hz PWM dimming for reduced eye strain, especially in low-light environments.

## 6. BATTERY & CHARGING

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The device is equipped with a large 6000mAh (typical) battery, providing extended usage times. It supports 90W HyperCharge technology, allowing for rapid recharging. The 90W in-box charger ensures you can take full advantage of this fast charging capability.

- **Surge P2 Chip:** A self-developed chip for faster and more reliable charging.
- **Surge G1 Battery Chipset:** Optimizes battery efficiency and cold resistance.
- **Battery Protection:** Includes 58 safety measures to ensure safe charging.

With active use (2-3 hours per day), the battery can last up to two days between charges. The device also offers smart charging features to extend battery lifespan by stopping charging when the battery level reaches 80%.

## 7. CONNECTIVITY

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The Poco X7 PRO offers comprehensive connectivity options:

- **Network Support:** Dual SIM (no Micro SD slot). Supports 5G (Sub6G: n1/3/5/7/8/20/28/38/40/41/77/78) and 4G LTE (FDD: B1/2/3/4/5/7/8/20/28/66; TDD: B38/40/41). Compatible with T-Mobile, Mint, Tello, and global GSM carriers.
- **Wireless:** Bluetooth 5.4, Wi-Fi Protocol: 802.11 a/b/g/n/ac/ax.
- **NFC:** For contactless payments and data exchange.
- **GPS:** Beidou: B1I, GPS: L1, Galileo: E1, GLONASS: G1, QZSS: L1. Supports A-GPS supplementary positioning, Wireless network, Data network, and Sensor Assisted Positioning.
- **Infrared Blaster:** Allows the phone to function as a universal remote control for compatible devices.

## 8. SOFTWARE (HYPEROS)

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The Poco X7 PRO runs on HyperOS, based on Android 14. HyperOS provides a customized user interface with various features and optimizations. While HyperOS has historically faced some criticism regarding battery

consumption and update quality, Xiaomi has committed to improving the user experience and update consistency in 2025.

- **Xiaomi Interconnectivity:** Seamlessly connect and interact with other Xiaomi devices.
- **AI Services:** Includes AI summary, AI layout, AI proofreading, AI translate, AI image expansion, AI erase, and AI film features.
- **Digital Wellbeing & Parental Controls:** Tools to manage screen time and app usage.

Users can manually uninstall most pre-installed bloatware applications to optimize storage and performance. The UI offers extensive customization options for a personalized experience.

## 9. PHYSICAL DESIGN & DURABILITY

The Poco X7 PRO features a plastic back, which is lightweight and cost-effective to replace if damaged. The front is protected by Corning Gorilla Glass 7i, offering good scratch and drop resistance for a mid-range device. The phone boasts an IP68 rating for dust and water resistance, providing robust protection against environmental elements.

## 10. MAINTENANCE

- **Software Updates:** Regularly check for and install system updates to ensure optimal performance, security, and access to new features.
- **Cleaning:** Use a soft, lint-free cloth to clean the screen and body. Avoid harsh chemicals.
- **Battery Care:** Utilize the smart charging feature to extend battery lifespan. Avoid extreme temperatures.
- **Storage Management:** Periodically clear unnecessary files and uninstall unused apps to free up storage space.

## 11. TROUBLESHOOTING

- **Device Freezing/Unresponsive:** Press and hold the power button for about 10 seconds to force restart the device.
- **Battery Drain:** Check background app usage in battery settings. Reduce screen brightness. Enable smart charging.
- **Connectivity Issues:** Toggle Wi-Fi/Bluetooth/Mobile Data off and on. Restart the phone. Check router/network settings.
- **App Crashes:** Clear app cache/data or reinstall the app. Ensure the app is updated to the latest version.
- **Overheating:** Close background apps, reduce gaming intensity, or remove the phone case temporarily. The LiquidCool Technology should manage most heat.

## 12. SPECIFICATIONS

| Feature            | Detail                    |
|--------------------|---------------------------|
| Model Name         | POCO X7 PRO               |
| Product Dimensions | 7.09 x 3.54 x 2.36 inches |
| Item Weight        | 1.23 pounds               |

|                              |   |
|------------------------------|---|
| Operating System             | HyperOS Base on Android 14                          |
| CPU Model                    | Dimensity 8400-Ultra (Octa-core CPU, up to 3.25GHz) |
| RAM Memory Installed Size    | 12 GB   |
| Memory Storage Capacity      | 512 GB  |
| Standing Screen Display Size | 6.67 Inches   |
| Resolution                   | 2712 x 1220 (1.5K resolution)                       |
| Refresh Rate                 | Up to 120Hz   |
| Peak Brightness              | 3200 nits   |
| Battery Power Rating         | 6000 Milliamp Hours (typical)                       |
| Charging                     | 90W HyperCharge                                     |
| Main Camera                  | 50MP with OIS                                       |
| Front Camera                 | 20MP  |
| Water & Dust Resistance      | IP68  |
| Color                        | Black   |
| Wireless Carrier             | Unlocked  |

## 13. WARRANTY & SUPPORT

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For information regarding the manufacturer's warranty, please refer to the documentation included with your product packaging. Extended protection plans are available for purchase separately, such as the 2-Year Protection Plan or the Complete Protect monthly plan.

For additional support, product information, and to explore other Xiaomi products, please visit the official Xiaomi Store online. You can access the store via the following link: [Visit the Xiaomi Store](#).