

## OBO HANDS V7024B

# OBO HANDS 4-Wire Video Intercom System User Manual

Model: V7024B

## 1. INTRODUCTION AND OVERVIEW

This manual provides detailed instructions for the installation, operation, and maintenance of your OBO HANDS 4-Wire Video Intercom System. This system includes two 7-inch indoor monitors and an outdoor doorbell unit with two call buttons, designed to enhance your home security and communication.

### Key Features:

- **Dual Monitor & Dual Button System:** Features two 7-inch indoor monitors and an outdoor doorbell unit with two call buttons, allowing communication and door control from two internal locations.
- **High-Definition Day and Night Vision:** Equipped with a 2MP AHD camera for 1080p video, a 120° wide-angle view, and IR night vision up to 3 meters. The monitors display at 1024 × 600 pixels, and the outdoor unit is IP65 rated for weather protection.
- **Tuya App & Two-Way Audio:** Manage visitors, communicate, and unlock doors remotely via the Tuya app on your smartphone. The app requires a 2.4 GHz WiFi network and offers motion alerts, three scene modes, and a multilingual interface.
- **Local Recording on Both Monitors:** Each monitor comes with a pre-installed 32GB TF card, expandable up to 128GB. Supports automatic or manual recording with local video and visitor log playback.
- **Mandatory 4-Wire Installation:** The system requires a 4-wire connection between the doorbell unit and monitors. Cat5e or Cat6 cables up to 100m can be used. A 1m test cable is included; definitive wiring and electric locks are not.

## 2. SETUP AND INSTALLATION

Careful installation is crucial for optimal performance. It is recommended to consult a qualified electrician if you are unfamiliar with electrical wiring.

### 2.1 Wiring Requirements

- The outdoor doorbell unit and indoor monitors require a 4-wire connection.
- Use Cat5e or Cat6 cable for connections up to 100 meters.
- Only a 1-meter test cable is provided. You will need to supply appropriate length cables for permanent installation.
- Electric locks are not included and must be purchased separately if desired.

## 2.2 Component Identification

Before installation, familiarize yourself with the system components:

- **Outdoor Doorbell Unit:** Contains the 2MP AHD camera, IR LEDs for night vision, two call buttons, and speaker/microphone.
- **Indoor Monitors (x2):** 7-inch touchscreen displays with speaker/microphone, control buttons, and TF card slot.
- **Power Adapters:** For powering the indoor monitors.

## 2.3 Wiring Diagram

Connect the outdoor unit to the indoor monitors using the 4-wire cable as shown in the diagram below. Ensure correct polarity for power and signal lines.



Figure 2.3.1: System Wiring Diagram. This image illustrates the 4-wire connections between the outdoor doorbell unit and the two indoor monitors, including power supply connections for each monitor.

## 2.4 Mounting the Units

- **Outdoor Unit:** Mount the outdoor unit at a height of approximately 1.45-1.60 meters (57-63 inches) from the ground for optimal camera view. Ensure it is protected from direct heavy rain if possible, despite its IP65 rating.
- **Indoor Monitors:** Mount the indoor monitors in convenient locations within your home, ensuring they are within range of your 2.4 GHz WiFi network for app functionality.

# 3. OPERATING INSTRUCTIONS

## 3.1 Basic Operation

- **Answering a Call:** When a visitor presses a call button on the outdoor unit, both indoor monitors will ring. Tap the 'Answer' icon on the monitor to establish two-way audio communication.
- **Two-Way Communication:** Speak clearly into the monitor's microphone. The visitor's voice will be heard through the monitor's speaker.
- **Unlocking the Door/Gate:** During a call, tap the 'Unlock' icon on the monitor to remotely open a connected electric door or gate lock. The system supports controlling two separate locks.

**Chiamata bidirezionale e trasferimento chiamata**  
**Sblocco remoto e monitoraggio interno tramite APP**

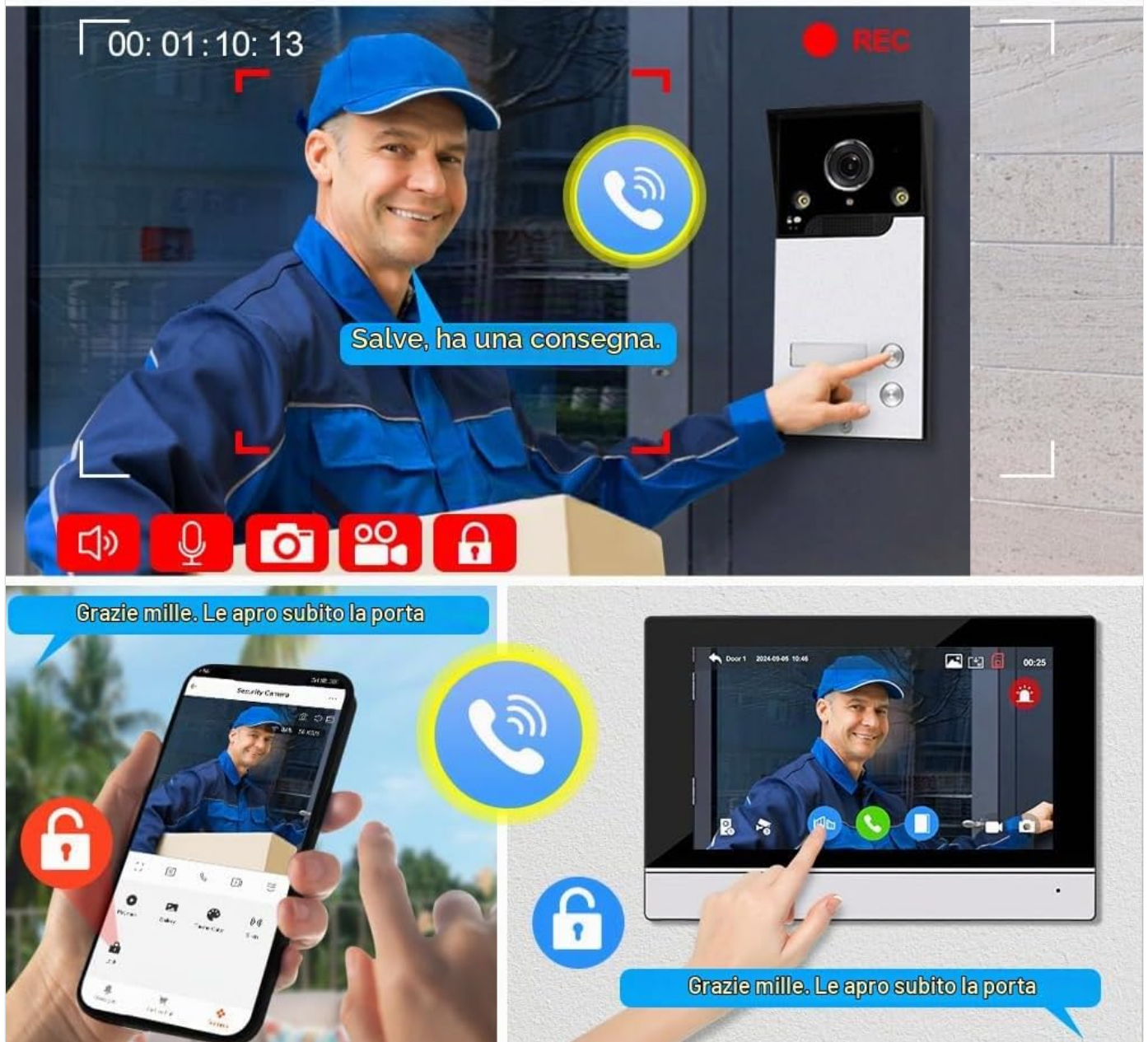


Figure 3.1.1: Two-Way Communication and Remote Unlock. This image demonstrates how to communicate with a visitor and unlock the door using both the indoor monitor and the smartphone application.

# Controlla due serrature da remoto con un tocco



Figure 3.1.2: Controlling Two Locks. This image illustrates the monitor's capability to control two distinct electric locks, such as a gate lock and a door lock, with a single touch.

## 3.2 Night Vision

The outdoor unit automatically switches to IR night vision in low-light conditions, providing clear visibility up to 3 meters even in total darkness.

# Visione notturna IR ad alta definizione 3m

Visione cristallina anche nell'oscurità totale

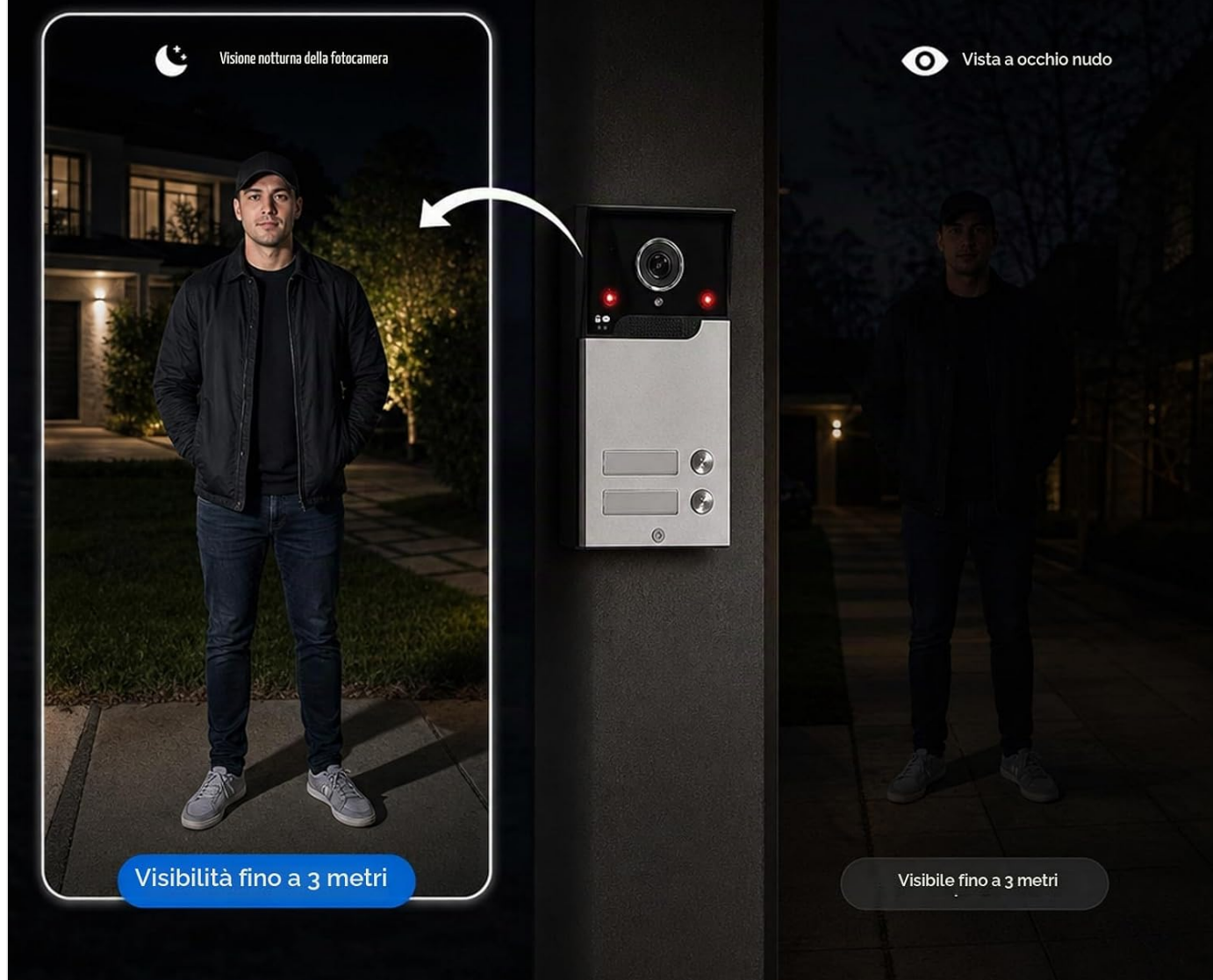


Figure 3.2.1: High-Definition IR Night Vision. This image demonstrates the system's ability to provide clear vision up to 3 meters in complete darkness using infrared technology.

## 3.3 Local Recording and Playback

The system supports automatic or manual recording of visitor interactions. Recordings are stored on the 32GB TF card (expandable to 128GB) in each monitor.

- **Accessing Recordings:** Navigate to the 'Media' or 'Playback' section on the monitor's interface to view recorded videos and visitor photos.
- **Recording Settings:** Adjust automatic recording triggers (e.g., motion detection, doorbell press) and manual recording options in the monitor's settings.

## Registrazione e Riproduzione

Scheda TF da 32GB integrata. Rivedi ogni visitatore, in qualsiasi momento.



Figure 3.3.1: Recording and Playback. This image shows the monitor's interface for reviewing recorded visitor events, highlighting the integrated 32GB TF card for storage.

### 3.4 Tuya App Integration

The Tuya app allows remote control and monitoring of your video intercom system.

- **Connecting to App:** Download the Tuya Smart or Smart Life app. Follow the in-app instructions to add your device, typically by scanning a QR code displayed on the monitor. Ensure your smartphone is connected to a 2.4 GHz WiFi network during setup.
- **Remote Functions:** From the app, you can view live video, communicate with visitors, receive motion alerts, and remotely unlock doors.
- **Scene Modes:** The app offers three intelligent scene modes (At Home, Leave Home, Sleep Home) to customize system behavior based on your presence and preferences.

# 3 modalità scenario intelligenti

Un tocco, sicurezza domestica più intelligente



Figure 3.4.1: Intelligent Scene Modes. This image illustrates the three smart scene modes available on the monitor, providing tailored security and convenience settings for different household situations.



Figure 3.4.2: Easy Tuya App Connection. This image highlights the simplified process of connecting the system to the Tuya app by scanning a QR code.

## 4. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your video intercom system.

- **Cleaning:** Use a soft, damp cloth to clean the monitor screens and the outdoor unit. Avoid abrasive cleaners or solvents that could damage the surfaces.
- **Cable Inspection:** Periodically check all wiring connections for any signs of wear, damage, or loose connections. Ensure outdoor cables are properly secured and protected from environmental elements.
- **Software Updates:** Check the Tuya app or OBO HANDS website for any available firmware updates for your system to ensure you have the latest features and security enhancements.
- **TF Card Management:** Regularly review and manage recordings on the TF card. If the card is full, older recordings may be overwritten. Consider backing up important footage.

## 5. TROUBLESHOOTING

If you encounter issues with your OBO HANDS Video Intercom System, refer to the following troubleshooting guide:

| Problem                                  | Possible Cause                                                                             | Solution                                                                                                                                                                                                            |
|------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No image on monitor / Camera blinking    | Loose wiring connection, power issue, camera fault.                                        | Check all 4-wire connections between the outdoor unit and monitors. Ensure power adapters are securely plugged in. Power cycle the system by unplugging and re-plugging the power adapters.                         |
| Monitor screen is pixelated or distorted | Poor cable quality, excessive cable length, signal interference, monitor issue.            | Ensure you are using high-quality Cat5e/Cat6 cables within the 100m limit. Check for strong electrical interference near the cables. Try power cycling the monitor. If the problem persists, contact support.       |
| No audio or poor audio quality           | Microphone/speaker obstruction, loose wiring, volume settings.                             | Check for any obstructions on the microphone or speaker of both units. Verify wiring connections. Adjust volume settings on the indoor monitor.                                                                     |
| Cannot connect to Tuya App               | Incorrect WiFi network (not 2.4 GHz), incorrect password, network issues, app permissions. | Ensure your smartphone and the intercom system are connected to a 2.4 GHz WiFi network. Double-check the WiFi password. Restart your router. Verify that the Tuya app has necessary permissions on your smartphone. |
| Remote unlock not working                | Electric lock not connected, incorrect wiring, lock malfunction.                           | Verify that the electric lock is correctly wired to the outdoor unit. Check the lock's power supply and functionality independently.                                                                                |

## 6. SPECIFICATIONS

| Feature | Detail    |
|---------|-----------|
| Brand   | OBO HANDS |

| Feature                 | Detail                                                       |
|-------------------------|--------------------------------------------------------------|
| Model Number            | V7024B (Manufacturer Part Number: AHD-V7024B)                |
| Power Source            | AC/DC (12 Volt)                                              |
| Item Dimensions (LxWxH) | 16 x 18 x 10 cm                                              |
| Alert Type              | Motion Only                                                  |
| Control Method          | App, Touch                                                   |
| Maximum Range           | 100 Meters (for wired connection)                            |
| Included Components     | Video Intercom System (2 monitors, 1 outdoor unit)           |
| Outdoor Camera          | 2MP AHD, 1080p video, 120° angle, IR night vision (up to 3m) |
| Indoor Monitor          | 7-inch, 1024 x 600 pixels, Touchscreen                       |
| Storage                 | 32GB TF card included (supports up to 128GB)                 |
| Weather Protection      | Outdoor unit IP65 rated                                      |
| App Compatibility       | Tuya Smart / Smart Life (requires 2.4 GHz WiFi)              |

## 7. WARRANTY AND SUPPORT

### 7.1 Product Quality

OBO HANDS products undergo rigorous quality testing, including FCC, CE, UL, and real-world performance verifications. We are committed to ensuring reliability, durability, and compliance with industry standards.

### 7.2 Customer Support

Our dedicated support team is available to assist you with any questions or concerns regarding your OBO HANDS product.

**WhatsApp Support:** [+86 177 2255 8183](https://wa.me/8617722558183)

**Availability:** Monday - Sunday, 24/7

### ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

**Email**

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

**Question**

Example: How do I reset this device or fix this error?

**Details**

Model number, symptoms, what you tried, or the section of the manual you are using.

**Submit question**