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LILIN PIH-7535DHNL

LILIN PIH-7535DHNL Outdoor PTZ Dome Camera User Manual

Model: PIH-7535DHNL

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of the LILIN PIH-7535DHNL Outdoor PTZ Dome Camera. This high-resolution camera is designed for outdoor surveillance applications, offering advanced pan, tilt, and zoom capabilities.

Key Features:

- **High Resolution Imaging:** Features 520 TV Lines in color and 580 TV Lines in monochrome, ensuring clear image capture.
- **Low Light Performance:** Automatically switches from color to monochrome mode when light levels drop below 3 lux, with sensitivity down to 0.1 lux (color) and 0.01 lux (mono).
- **35X Optical Zoom:** Provides extensive optical zoom for detailed surveillance over long distances.
- **Pan/Tilt/Zoom (PTZ) Functionality:** Offers comprehensive control over camera direction and magnification, including Pan, Tilt, Zoom, Focus, Iris, and ICR.
- **Advanced Control:** Supports RS-485 control interface for integration with control systems, allowing up to 256 dome configurations.
- **Preset Positions & Patrol:** Capable of storing 128 preset positions and executing various panning modes (Manual, Auto, Manual position, Sequential Position).
- **On-Screen Display (OSD) Menu:** Facilitates easy setup and configuration directly on the video output.
- **Multi-Language Support:** OSD menu available in 8 languages including English, French, German, Spanish, Chinese, Portuguese, Russian, and Polish.



Figure 1: LILIN PIH-7535DHNL Outdoor PTZ Dome Camera. This image shows the complete dome camera unit, featuring a light grey housing with the LILIN logo and a clear dome covering the camera lens.

2. SAFETY INFORMATION

Please read all safety instructions carefully before installation and operation. Failure to follow these guidelines may result in injury, damage to the product, or voiding the warranty.

- **Power Supply:** Use only the specified power adapter. Ensure the power source is stable and meets the camera's requirements (AC power).
- **Installation:** Installation should be performed by qualified personnel. Ensure the mounting surface is strong enough to support the camera's weight.
- **Environment:** This camera is designed for outdoor use. Avoid exposing it to extreme temperatures outside its operating range, direct lightning strikes, or corrosive environments.
- **Wiring:** Ensure all wiring is correctly connected and insulated to prevent short circuits or electrical hazards.
- **Cleaning:** Disconnect power before cleaning. Use a soft, dry cloth. Avoid harsh chemicals or abrasive cleaners.

3. PACKAGE CONTENTS

Verify that all items are present in the package before proceeding with installation:

- LILIN PIH-7535DHNL PTZ Dome Camera Unit
- Mounting Bracket/Hardware (specific type may vary)
- Power Adapter (if included)
- Instruction Manual (this document)
- Software CD (if applicable for PC control)

4. SETUP AND INSTALLATION

4.1 Physical Installation

1. **Select Mounting Location:** Choose a suitable outdoor location that provides the desired viewing angle and is protected from direct impact. Ensure the mounting surface can support the camera's weight (approximately 3.63 kg).
2. **Mounting Bracket:** Secure the provided mounting bracket to the chosen surface using appropriate fasteners.
3. **Attach Camera:** Carefully attach the LILIN PIH-7535DHNL dome camera to the installed mounting bracket, ensuring it is firmly secured.

4.2 Wiring Connections

Ensure power is disconnected before making any wiring connections.

- **Power Connection:** Connect the AC power supply to the camera's power input.
- **Video Output:** Connect the video output cable (e.g., BNC) to your monitoring device (DVR, monitor, etc.).
- **RS-485 Control:** Connect the RS-485 control cables (A and B) from your PTZ controller or PC interface to the camera's RS-485 terminals. Ensure correct polarity.
- **Network Connection (if applicable):** If using IP connectivity via RTSP, connect an Ethernet cable to the camera's network port and to your network infrastructure.

4.3 Initial Configuration

1. **Power On:** Apply power to the camera. The camera will perform a self-test and initialization.
2. **Access OSD Menu:** Use your PTZ controller or PC software to access the camera's On-Screen Display (OSD) menu. Refer to your controller's manual for specific instructions on accessing the OSD.
3. **Set Camera ID/Address:** Configure the camera's unique ID or address via the OSD menu, especially important for RS-485 multi-camera setups.

4. **Language Selection:** Navigate to the language settings in the OSD menu and select your preferred language (e.g., English).
5. **Basic Image Settings:** Adjust brightness, contrast, and other image parameters as needed for optimal viewing.

5. OPERATING INSTRUCTIONS

The LILIN PIH-7535DHNL camera offers extensive control options through a compatible PTZ controller or PC software.

5.1 PTZ Control Functions

- **Pan:** Rotate the camera horizontally (left/right).
- **Tilt:** Adjust the camera vertically (up/down).
- **Zoom:** Magnify or de-magnify the image (35X optical zoom).
- **Focus:** Adjust image clarity. Auto-focus is typically enabled, but manual adjustment may be available.
- **Iris:** Control the aperture to regulate the amount of light entering the lens.
- **ICR (Infrared Cut-filter Removal):** Controls the day/night mode. The camera automatically switches based on light levels.

5.2 Preset Positions

The camera supports up to 128 preset positions, allowing you to quickly recall specific viewing angles and zoom levels.

1. Setting a Preset:

- Manually adjust the camera to the desired Pan, Tilt, and Zoom position.
- Access the OSD menu or your controller's interface to "Set Preset" and assign a unique number (1-128).
- Confirm the setting.

2. Recalling a Preset:

- Access the OSD menu or your controller's interface to "Call Preset" and enter the desired preset number.
- The camera will automatically move to the stored position.

5.3 Patrol Function (Tours)

The patrol function allows the camera to automatically cycle through a sequence of preset positions.

1. Configuring a Patrol:

- Access the OSD menu or controller interface for "Patrol" or "Tour" settings.
- Select the preset positions to include in the patrol and define the dwell time for each position.
- Save the patrol sequence.

2. Activating a Patrol:

- Select the desired patrol from the OSD menu or controller.
- The camera will begin its automated tour.

6. MAINTENANCE

6.1 Cleaning

- Regularly clean the camera's dome cover to ensure optimal image clarity.
- Use a soft, lint-free cloth dampened with water or a mild, non-abrasive cleaning solution.
- Do not use strong detergents, solvents, or abrasive materials, as these can damage the dome's surface.
- Ensure power is disconnected before cleaning.

6.2 Environmental Considerations

- While designed for outdoor use, extreme weather conditions (e.g., heavy snow, ice, direct prolonged sunlight) can affect performance. Ensure proper installation to mitigate these factors.
- Periodically check all cable connections for signs of wear or corrosion, especially in outdoor environments.

7. TROUBLESHOOTING

This section addresses common issues you may encounter with the LILIN PIH-7535DHNL camera.

Problem	Possible Cause	Solution
No video output	<ul style="list-style-type: none">No power to cameraLoose video cable connectionIncorrect video format setting	<ul style="list-style-type: none">Check power supply and connections.Ensure video cable is securely connected.Verify video output settings via OSD menu.
PTZ control not responding	<ul style="list-style-type: none">Incorrect RS-485 wiring (polarity)Incorrect camera ID/addressController protocol mismatchLoose RS-485 connections	<ul style="list-style-type: none">Check RS-485 A/B wiring for correct polarity.Verify camera ID/address matches controller settings.Ensure controller uses compatible protocol (e.g., Pelco D/P).Secure all RS-485 connections.
Image is blurry or out of focus	<ul style="list-style-type: none">Auto-focus issueDome cover dirty	<ul style="list-style-type: none">Initiate auto-focus via controller or OSD.Manually adjust focus if auto-focus fails.Clean the dome cover as per maintenance instructions.
Poor image quality in low light	<ul style="list-style-type: none">Insufficient ambient lightICR filter stuck	<ul style="list-style-type: none">Ensure ambient light meets minimum requirements (0.1 lux color, 0.01 lux mono).Check OSD settings for day/night mode.Consider adding external IR illumination if needed.

8. SPECIFICATIONS

Model Number	PIH-7535DHNL
Image Sensor	High Resolution Sensor
Resolution	520 TV Lines (Color); 580 TV Lines (Mono)
Minimum Illumination	0.1 Lux (Color); 0.01 Lux (Mono)
Optical Zoom	35X

PTZ Control Interface	RS-485
Preset Positions	Up to 128
Panning Modes	Manual, Auto, Manual position, Sequential Position
OSD Languages	English, French, German, Spanish, Chinese, Portuguese, Russian, Polish
Connectivity Technology	Wireless (as per product spec, though RS-485 is primary control) / RTSP (for IP streaming)
Power Source	AC
Usage Environment	Outdoor
Product Dimensions (LxWxH)	21 x 16 x 32.6 Centimeters
Item Weight	3.63 kg (3 kg 630 g)

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official LILIN website or contact your authorized LILIN dealer. Keep your purchase receipt as proof of purchase for warranty claims.

Online Resources: [LILIN Official Website](#)