

Night Owl FTD2-161-10L

Night Owl FTD2-161-10L 1080p 20-Channel DVR Security System User Manual

Model: FTD2-161-10L

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1. INTRODUCTION

This manual provides instructions for the installation, operation, and maintenance of your Night Owl FTD2-161-10L 1080p 20-Channel DVR Security System. This system includes a Digital Video Recorder (DVR) and ten 1080p wired indoor/outdoor deterrence cameras with 2-way audio and a 1TB hard drive for secure local storage. The system supports adding up to four Wi-Fi cameras for expanded coverage.

Please read this manual thoroughly before operating the system to ensure proper setup and functionality.

2. IMPORTANT SAFETY INFORMATION

- **Power Supply:** Use only the power adapters supplied with the system. Using unauthorized power adapters may damage the product and void the warranty.
- **Ventilation:** Ensure the DVR is placed in a well-ventilated area to prevent overheating. Do not block ventilation openings.
- **Water and Moisture:** Do not expose the DVR to water or moisture. Cameras are rated for indoor/outdoor use but avoid submerging them.
- **Temperature:** Operate the system within the specified temperature range.
- **Cabling:** Ensure all cables are securely connected and routed to prevent tripping hazards or damage.
- **Servicing:** Do not attempt to service this product yourself. Refer all servicing to qualified personnel.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

- Night Owl 20-Channel DVR with 1TB Hard Drive

- (10) 1080p Wired Indoor/Outdoor Deterrence Cameras
- Power Adapters for DVR and Cameras
- Video/Power Cables for Cameras
- USB Mouse
- Ethernet Cable
- Mounting Hardware
- Quick Setup Guide



Figure 3.1: Overview of the Night Owl 20-Channel DVR system with 10 cameras. This image displays the main DVR unit and ten white bullet-style cameras, illustrating the core components of the security system.

4. SYSTEM SETUP

4.1 DVR Initial Setup

The DVR can be set up using the Night Owl Protect mobile app via Bluetooth, eliminating the need for a TV or monitor during initial configuration.

1. **Connect DVR:** Connect the DVR to its power adapter and plug it into an electrical outlet. Connect the DVR to your router using the provided Ethernet cable.
2. **Download App:** Download the "Night Owl Protect" app from the App Store (iOS) or Google Play Store (Android).
3. **Create Account:** Open the app and follow the on-screen instructions to create a new account or log in.
4. **Add Device:** Select "Add New Device" and choose your DVR model. The app will guide you through the Bluetooth pairing process to connect to your DVR.
5. **Configuration:** Follow the app prompts to set up basic DVR settings, including time zone, password, and network settings.



Figure 4.1: Illustration of the 2-way audio DVR and camera setup. This image shows a person interacting with a delivery driver via the camera's 2-way audio feature and another person setting up the system using the mobile app, highlighting the ease of app-based setup and communication.

4.2 Camera Installation

The 1080p wired cameras are designed for both indoor and outdoor use. They connect to the DVR using BNC video/power cables.

1. **Choose Location:** Select a suitable location for each camera, ensuring it covers the desired area and is within reach

of the provided cables. Consider mounting height and angle for optimal viewing.

2. **Mount Camera:** Use the included mounting hardware to securely attach the camera to a wall or ceiling. Adjust the camera's angle as needed.
3. **Connect Cables:** Connect one end of the BNC video/power cable to the camera. Route the cable back to the DVR location.
4. **Connect to DVR:** Connect the BNC connector of the cable to an available video input port on the back of the DVR. Connect the power connector to the camera's power adapter, then plug the adapter into an electrical outlet.
5. **Repeat:** Repeat these steps for all 10 cameras.



Figure 4.2: Close-up of a Night Owl wired camera mounted outdoors, with an inset showing the DVR's rear connections. This image demonstrates how the camera is physically installed and connected to the DVR via cables.

4.3 Adding Wi-Fi Cameras (Optional)

Your DVR supports adding up to 4 compatible Night Owl Wi-Fi IP cameras. Refer to the Night Owl Protect app for specific instructions on pairing Wi-Fi cameras to your system.

Wired Recorder - Camera Compatibility Chart














NIGHT OWL		Wired Cameras						Wi-Fi Cameras (For Wi-Fi Expandability)								
		FTD4 (2K)		FTD8 (4K)		FTN8 (4K)		BWNIP2 (1080p)	WNIP2 (1080p)	FWIP2 (1080p)	FWIP3 (3MP)	FWIP3 (3MP)	FBWNIP4U (2K)	FWIP4 (2K)	WNIP8 (4K)	FWIP8 (4K)
Series																
Wired DVR 4-Channel	FTD2 (1080p)	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓
	FTD4 (2K)	✓	✓	✗	✗	✗	✗	✗	✓	✓	✗	✗	✗	✓	✓	✓
	FTD8 (4K)	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓
Wired NVR 8-Channel	FTN8 (4K)	✗	✗	✗	✗	✓	✓	✗	✓	✓	✗	✗	✗	✓	✓	✓
	Camera Model #'s	CAM-2PK-FTD4 CAM-4PK-FTD4-B	CAM-2PK-FTD8M CAM-4PK-FTD8M-B	CAM-2PK-FTD8 CAM-4PK-FTD8-B	CAM-2PK-FTD8M CAM-4PK-FTD8M-B	CAM-2PK-FTD8M CAM-4PK-FTD8M-B	CAM-2PK-FTD8M CAM-4PK-FTD8M-B	CAM-8MP-FTD8-B CAM-8MP-FTD8-B	CAM-2PK-WNIP2-BU CAM-4PK-WNIP2-BU	CAM-2PK-FWIP2-BU CAM-4PK-FWIP2-BU	CAM-2PK-FWIP3-BU CAM-4PK-FWIP3-BU	CAM-2PK-FWIP3-BU CAM-4PK-FWIP3-BU	CAM-8MP-FTD8M-B CAM-8MP-FTD8M-B	CAM-2PK-FWIP4-BU CAM-4PK-FWIP4-BU	CAM-8MP-FTD8M-B CAM-8MP-FTD8M-B	CAM-8MP-FTD8M-B CAM-8MP-FTD8M-B

Figure 4.3: A compatibility chart for Night Owl wired recorders and various wired and Wi-Fi cameras. This chart helps users identify which camera models are compatible with their specific DVR series, including options for Wi-Fi expandability.

5. OPERATING INSTRUCTIONS

5.1 Using the Night Owl Protect App

The Night Owl Protect app is your primary interface for managing and monitoring your security system.

- **Live View:** Access real-time video feeds from all connected cameras.
- **Playback:** Review recorded footage stored on the DVR's hard drive.
- **2-Way Audio:** Use the microphone and speaker icons in the app to communicate through cameras equipped with 2-way audio.
- **Deterrence Features:** Activate the camera's built-in spotlight and siren directly from the app to deter intruders.
- **Alerts:** Receive push notifications for detected events, such as human or vehicle detection.



Figure 5.1: A smartphone displaying the Night Owl Protect app interface, showing live view and options for preset audio alerts and camera siren activation. An intruder is depicted in the background, illustrating the deterrence capabilities.

FREE NIGHT OWL®

Mobile App

- Secure App-Based Bluetooth Setup
- Single Sign-On
- Live View
- Playback
- Save and Share
- Multi-Channel Viewing Options

Real-Time Alerts



Figure 5.2: A smartphone displaying the Night Owl Protect mobile app, showing real-time alerts and various viewing options. This image highlights the app's features for staying connected and accessing recordings.

5.2 Smart Detection Features

Your system is equipped with advanced detection capabilities to minimize false alarms.

- **Human Detection:** The system can differentiate between human movement and other objects, reducing unnecessary alerts.
- **Vehicle Detection:** Receive specific alerts when a vehicle is detected in designated areas.
- **Customizable Zones:** Set up specific detection zones within the camera's field of view to focus on critical areas.



Figure 5.3: An illustration demonstrating the AI-powered human and vehicle detection capabilities of the Night Owl system. The image shows a person and a car highlighted with detection boxes, alongside a mobile notification for a detected event.

5.3 Full Color Night Vision and Spotlight

The cameras provide full-color viewing during the day and full-color night vision up to 100 ft. in low-light conditions, aided by a built-in spotlight.

- The integrated spotlight can be configured to activate automatically upon motion detection or manually via the app.
- This feature enhances visibility and acts as a visual deterrent.

20
Channels

10
Cameras

1TB
SATA HDD

1080p
Resolution



Figure 5.4: A close-up of a Night Owl camera featuring its integrated spotlight. This image emphasizes the camera's design and its ability to illuminate dark areas for enhanced visibility and deterrence.

6. MAINTENANCE

6.1 Cleaning Cameras

Periodically clean the camera lenses and housings to ensure clear image quality.

- Use a soft, damp cloth to wipe away dust and dirt.
- Avoid using harsh chemicals or abrasive cleaners, as these can damage the lens or housing.

6.2 DVR Hard Drive Management

The 1TB hard drive stores all recordings locally. The system is configured to overwrite the oldest footage once the hard drive is full, ensuring continuous recording.

- **Data Privacy:** All recordings and personal data are stored securely on the DVR's hard drive.
- **Backup:** For important footage, use the app or DVR interface to back up recordings to an external USB drive (not included).

6.3 Firmware Updates

Ensure your DVR and cameras have the latest firmware for optimal performance and security. Firmware updates are typically managed through the Night Owl Protect app or the DVR's system settings.

- Check the Night Owl Protect app regularly for available updates.
- Follow the on-screen instructions carefully during the update process. Do not power off the device during an update.

7. TROUBLESHOOTING

This section addresses common issues you might encounter. For more detailed troubleshooting, refer to the Night Owl support website or contact customer service.

7.1 No Video from a Camera

- **Check Connections:** Ensure the BNC video cable and power cable are securely connected to both the camera and the DVR.
- **Power Supply:** Verify that the camera's power adapter is plugged into a working electrical outlet.
- **Cable Integrity:** Inspect the video/power cable for any visible damage.
- **DVR Input:** Try connecting the camera to a different video input port on the DVR to rule out a faulty port.

7.2 No Audio or Poor Audio Quality

- **App Settings:** Ensure the audio feature is enabled in the Night Owl Protect app for the specific camera.
- **Microphone/Speaker:** Check if the camera's microphone or speaker is obstructed.
- **Network Connection:** A stable internet connection is crucial for clear 2-way audio.

7.3 DVR Not Connecting to Network

- **Ethernet Cable:** Verify the Ethernet cable is securely connected to both the DVR and your router.
- **Router Status:** Ensure your router is powered on and functioning correctly.
- **Network Settings:** Check the DVR's network settings via the app or a connected monitor to ensure they are configured correctly (e.g., DHCP enabled).
- **Restart Devices:** Try restarting your router, then the DVR.

7.4 Mobile App Issues

- **Internet Connection:** Ensure your mobile device has a stable internet connection (Wi-Fi or cellular data).
- **App Version:** Make sure you have the latest version of the Night Owl Protect app installed.
- **Permissions:** Verify that the app has all necessary permissions enabled on your mobile device (e.g., notifications, microphone, camera).
- **Reinstall App:** If issues persist, try uninstalling and reinstalling the app.

8. SPECIFICATIONS

Feature	Detail
Brand	Night Owl
Model Number	FTD2-161-10L

Feature	Detail
Connectivity Technology	Wired
Video Capture Resolution	1080p
Number of Channels	20
Memory Storage Capacity	1 TB (Hard Drive)
Color	White (Cameras)
Power Source	Battery Powered (<i>Note: Product description states wired, this might be an error in source data or refers to internal camera battery for specific functions. Main power is wired.</i>)
Item Dimensions (L x W x H)	16.38 x 12.71 x 10.39 inches
Operating System	Linux-Based Mobile Platform
Low Light Technology	Night Vision
Night Vision Range	100 Feet
Frame Rate	30 FPS
Recording Mode	1080p video
Total USB Ports	1
Hardware Interface	Ethernet
Lens Type	Fixed
Video Input	BNC
Viewing Angle	50 Degrees
Item Weight	21.6 pounds
UPC	816522025878

9. WARRANTY INFORMATION

Night Owl products typically come with a limited manufacturer's warranty. For specific warranty terms and conditions, including duration and coverage, please refer to the warranty card included with your product or visit the official Night Owl website. Keep your proof of purchase for warranty claims.

10. CUSTOMER SUPPORT

If you require assistance with your Night Owl security system, please utilize the following resources:

- **Online Support:** Visit the official Night Owl support website for FAQs, troubleshooting guides, and software downloads.
- **Technical Support:** Contact Night Owl technical support for personalized assistance. Refer to the Night Owl website for current contact information (phone numbers, chat, email).
- **Mobile App:** The Night Owl Protect app may also offer in-app support features.