

Modern Shepherds eScan H103 SE Livestock Scanner

Technical & Operational Instructions

Thank you for purchasing the **Modern Shepherds eScan H103 SE Livestock Scanner**. This high-performance UHF RFID scanner is designed for agricultural and livestock management applications. It pairs with the **Manger** mobile application to streamline animal identification and flock inventory tracking.

Key Specifications

- **Connectivity:** Wireless connectivity compatible with Android and iOS devices
 - **Battery:** 3.7V / 5000mAh built-in lithium battery
 - **Environmental Rating:** IP54 dust and water resistance, 1.5m drop-resistant
 - **Tag Compatibility:** Optimized for **eFlock Smart Poultry Tags**
 - **Scan Range:** Up to 15 feet with a clear line of sight when scanning **eFlock Smart Poultry Tags**
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First-Time Setup: Initial Charging

IMPORTANT: Your **Modern Shepherds eScan H103 SE** shipping box contains a battery that arrives mostly discharged (down to approximately **20%** capacity). **You should fully charge the scanner before its first use** to ensure maximum battery performance and prevent the scanner from shutting down unexpectedly during operation.

Charging Status Indicators

Connect the scanner to the provided charger using the included Type-C cable. The **Power Indicator Light (Red)** tells you the battery's current state:

- **Flashing Quickly:** Scanner is actively charging
- **Solid / Always On:** Charging is complete and the battery is full
- **Flashing Slowly:** Battery is dangerously low (<10%) and needs immediate recharge

Hardware Interface & Operation

1. Powering On & Off

- **Power On:** Short press the **Power Button**. The red indicator light will turn on. Wait approximately 5 seconds until the internal buzzer sounds a 1-second wake-up tone. The hardware is now ready.
- **Power Off:** Press and hold the **Power Button** for more than 1 second (>1S). The red power indicator will turn off.

2. Status LEDs & Audible Alerts

- **Wireless Connection Indicator (Blue):** Flashes continuously when waiting for a connection from the **Manger** mobile application; remains solid when successfully connected to the **Manger** mobile application.
 - **Read Indicator (Green):** Turns solid when an active scan command is executing and flashes once immediately upon a successful tag read.
 - **Buzzer:** Emits a 200ms reminder tone when entering standby mode, and a 1s tone on power-up.
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Integration with the Manger mobile application

The **Modern Shepherds eScan H103 SE** works with the **Manger** mobile application to quickly identify, count, and catalog animals.

Connecting and Configuring the Scanner

1. Enable Bluetooth on your smartphone or tablet.
2. Power on the **Modern Shepherds eScan H103 SE**.
3. Open the **Manger** mobile application.
4. Locate the **bottom status bar**, which is available from any screen in the app.
5. Tap the “**wrench**” icon in the status bar to open the scanner configuration modal.
6. From this modal, you can:
 - Enable or disable the scanner functionality within the app.
 - Check the hardware’s remaining battery charge level (coming soon).
 - Adjust the **Transmit Power** configuration settings.

Assigning an RFID Tag to an Animal

The **Animals Screen** displays your animals belonging to a specific group. Each animal in the **Manger** mobile application can have exactly one unique RFID tag associated with it.

1. Navigate to the **Animals Screen**.

- *If the animal is already in your system:* Locate the animal, tap the **triple-dot icon** next to the animal's name or identifier, and select edit. This action pulls up a bottom sheet containing the RFID tag input.
 - *If you need to add a new animal:* Pull up the bottom sheet identified by the **caret icon**. This bottom sheet allows you to name the animal or add its identifier and contains the RFID tag input.
2. In the active bottom sheet, locate the **RFID Tag** input box.
 3. Tap inside the **RFID Tag** input box to focus on it.
 4. Aim the scanner at the target tag and press the physical **Trigger** button on the handle.
 5. The scanner will capture the tag ID and populate the field. Press the **Trigger** button again to stop scanning.

Pro-Tip (Managing Transmit Power): When you are assigning a tag in a crowded coop or pen, tap the **bottom status bar** wrench icon to access the configuration modal and lower the **Transmit Power** value. Lowering the power shortens the reader's operational range, preventing you from accidentally picking up adjacent tags from nearby animals in the vicinity.

Bulk Counting & Identifying Animals

1. Navigate to the **Animals Screen**.
2. Press the physical **Trigger** button to initialize a bulk scan sweep.
3. Walk through your flock. The **Modern Shepherds eScan H103 SE** will count and cross-reference unique tags.
4. Once your count is complete, press the **Trigger** button a second time to safely terminate the scanning action.

Support & Limited Warranty

- **Customer Support:** For app integration issues, pairing assistance, or livestock deployment setups, contact support@manger.app or visit www.manger.app.
- **One-Year Limited Warranty:** Modern Shepherds warrants the **Modern Shepherds eScan H103 SE** Livestock Scanner hardware against defects in materials and manufacturing under normal agricultural operations for a period of one (1) year from the date of retail purchase. This warranty explicitly excludes any physical damage, liquid immersion, or the device's internal battery components.