Warranty

Will-Burt warrants its Night Scan Spot to be free from defects in material and workmanship for a period of five (5) years with such time periods running from the date of shipment by Will-Burt. Will-Burt shall not be responsible for any damage resulting to or caused by its products by reason of failure to properly install, maintain or store the product; use of the product in a manner inconsistent with its design; unauthorized service, alteration of products, neglect, abuse, accident, or acts of God. This warranty does not extend to any component parts not manufactured by Will-Burt; provided, however, Will-Burt’s warranty herein shall not limit any warranties by manufacturers of component parts which extend to the buyer.

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, AND NO REPRESENTATIONS, GUARANTEES OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, A WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT ARE MADE BY WILL-BURT IN CONNECTION WITH THE MANUFACTURE OR SALE OF ITS PRODUCTS. NO EMPLOYEE, DISTRIBUTOR, OR REPRESENTATIVE IS AUTHORIZED TO CHANGE THIS WARRANTY IN ANY WAY OR GRANT ANY OTHER WARRANTY ON BEHALF OF WILL-BURT.

Claims for defects in material and workmanship shall be made in writing to Will-Burt within thirty (30) days of the discovery of defect. Failure to provide notice as required hereby shall be conclusive evidence that the product was in conformity with the warranty, and Will-Burt shall be released from any and all liability relating to the product. Will-Burt may either send a service representative or have the product returned to its factory at Buyer’s expense for inspection. If judged by Will-Burt to be defective in material or workmanship, the product will be replaced or repaired at the option of Will-Burt, free from all charges except authorized transportation.

THE REMEDIES OF BUYER SET FORTH HEREIN ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER REMEDIES. THE LIABILITY OF WILL-BURT WHETHER IN CONTRACT, TORT, UNDER ANY WARRANTY, OR OTHERWISE, SHALL NOT EXTEND BEYOND ITS OBLIGATION TO REPAIR OR REPLACE, AT ITS OPTION, ANY PRODUCT OR PART FOUND BY WILL-BURT TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP. WILL-BURT SHALL NOT BE LIABLE FOR COST OF INSTALLATION AND/OR REMOVAL, OR BE RESPONSIBLE FOR DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE.
## Document History

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<td>TP-5590101-00</td>
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Safety Summary

The Night Scan Spot is engineered and manufactured with safety in mind. It is critical that FRC lights are installed, maintained, and operated correctly. Read and understand all instructions before installing, performing maintenance, or operating.

All components, equipment, and installation procedures shall conform to NFPA 1901, Standard for Automotive Fire Apparatus and NFPA 70 National Electrical Code.

General Safety Instructions

Do not stare directly at LEDs when power is on. Ensure power is off prior to connecting or disconnecting wires/cables and plugs to a power source or performing maintenance. Disconnect ground connection from battery marked '-' to avoid accidental short circuits before attempting to connect electrical wires.
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Section 1 Introduction

Review this manual in its entirety. Contact The Will-Burt Company with any questions before performing any procedure outlined in this manual. The views depicted in this manual are provided for clarification and are subject to change without notice. Views are not to scale.

This manual describes installation, operation, and maintenance procedures for the Night Scan Spot. These procedures assume the use of the standard catalog systems. Procedures and characteristics for systems customized to meet customer-specific needs may vary.

This manual is for the Night Scan Spot. This manual is not for pneumatic Night Scan masts or the electro-mechanical Night Scan Lite. See www.willburt.com for information on these and other Will-Burt products.

A typical Night Scan Spot consists of:

- (1) Rotatable Remote Controlled LED Light
- (2) Wireless Remote Controls

1.1 Safety Precaution Notification

Refer to the Safety Summary for precautions to be observed while installing, operating, or maintaining this equipment.

1.2 Manual Organization

This manual is organized into the following sections:

- Section 1 Introduction
- Section 2 Installation
- Section 3 Operation
- Section 4 Remote Control Pairing
- Section 5 Maintenance
- Section 6 Battery Replacement
1.3 Specifications

Table 1 Night Scan Spot Specifications

<table>
<thead>
<tr>
<th>Functional Characteristic</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Voltage Range</td>
<td>10 – 30 VDC</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>80W</td>
</tr>
<tr>
<td>Maximum Distance for Operating Remote Control</td>
<td>Up to 130 ft.</td>
</tr>
<tr>
<td>Approximate Weight</td>
<td>7 lb. (3.2 kg)</td>
</tr>
<tr>
<td>Remote Control Battery</td>
<td>One 23A battery (12V)</td>
</tr>
</tbody>
</table>

1.4 Night Scan Spot Description

The Night Scan Spot (Figure 1):

- Is a rotatable LED light
- Is remotely operated with a wireless remote
- Has a vertical tilt up of 70° and tilt down of 45°
- Has an infinite horizontal rotational range (clockwise and counterclockwise)
- Has 16 LEDs
The Night Scan Spot is equipped with a flashing alert feature which can be used:

- To warn approaching motorists of pedestrians of potential hazards
- To alert that help is needed
- With service vehicles to alert on-coming vehicles that there are people at work

The Stow Feature causes the light to automatically turn to face the forward position when turned off. If power is removed from the Night Scan Spot while it is still on, the light will automatically turn to face the forward position after it is turned back on with power restored.

Section 2 Installation

This section describes the installation of the Mast System and provides general procedures that must be followed to ensure a successful installation. Use care to understand and follow all precautions while installing.

2.1 Installation Safety Precautions

Connect the LED light to a 12 or 24 volt DC power source. Ensure an appropriate sized circuit protection device is installed (circuit breaker or fuse). See Specifications (Section 1.3).

2.2 Installation Procedures

To install the Night Scan Spot:

1. Select a suitable mounting location.
2. Move the Night Scan Spot into place in the mounting location.
3. Ensure the Night Scan Spot is level in all directions. If necessary, shims may be added to correct the alignment.
4. Use the Night Scan Spot as a template to drill four holes in the desired mounting location. Ensure the Night Scan Spot remains level during drilling.
5. Secure the Night Scan Spot in position using all four mounting holes with customer-provided stainless steel hardware. The mounting hardware must include proper means to resist vibration loosening such as thread-locking compound or locking hardware. Torque all hardware as appropriate for its size and grade.
6. Move the Remote Control Holder into place in the mounting location.
7. Use the Remote Control Holder as a template to drill two holes in the desired mounting location.
8. Secure the Remote Control Holder in position using both mounting holes with customer-provided stainless steel hardware. The mounting hardware must include proper means to resist vibration loosening such as thread-locking compound or locking hardware. Torque all hardware as appropriate for its size and grade.

Section 3 Operation

The Remote Control is used to operate the Night Scan Spot as shown in Table 2 and Figure 2.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Function</th>
<th>Symbol</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON/OFF</td>
<td>Press to toggle power the light on and off. Turning the light off disables all other button function.</td>
<td>Warning Signal</td>
<td>Press to toggle the Warning Signal on and off. When on, the light alternates between flashing 3 long flashes and 3 short flashes.</td>
</tr>
<tr>
<td>Up Arrow</td>
<td>Press and hold to raise the light beam. The light will rotate upward to a maximum of 70°.</td>
<td>Down Arrow</td>
<td>Press and hold to lower the light beam. The light will rotate downward to a maximum of 45°.</td>
</tr>
<tr>
<td>Left Arrow</td>
<td>Press and hold to pan left.</td>
<td>Right Arrow</td>
<td>Press and hold to pan right.</td>
</tr>
</tbody>
</table>

Figure 2 Remote Control
Section 4 Remote Control Pairing

The default state for the Night Scan Spot is to be unpaired to any Remote Control. To avoid interference from other Remote Control devices that are within range, it is highly recommended that the light be paired to a Remote Control.

Any Night Scan Spot Remote Control can be paired to Night Scan Spot, however no more than two Remote Controls can be paired to the same Night Scan Spot. If a third Remote Control is paired to the same Night Scan Spot, the first Remote Control will be automatically unpaired.

Note: The pairing or unpairing process will timeout after 1 minute of inactivity.

4.1 Pairing Procedure

To pair a Remote Control:

1. Turn the Night Scan Spot on with the ON/OFF button.
2. Within 1 minute, press and hold the ON/OFF button on the Remote Control for 6 seconds. Once the Remote Control is paired to the light, the light will flash 3 long flashes and then turn off. Pairing is complete.
3. To pair a second Remote Control, repeat steps 1 and 2.

4.2 Unpairing Procedure

The Remote Control(s) can unpaired whether the light is on or off. Unpairing will unpair all Remote Controls, returning the Night Scan Spot to its default state and allowing the Night Scan Spot to be controlled by any unpaired Remote Control within operating distance.

To unpair the Remote Control(s):

1. Turn the Remote Control on or off.
2. Within 1 minute, press and hold the ON/OFF button on the Remote Control for 6 seconds. Once unpaired, the light will flash 3 short flashes and turn off. The light is now unpaired and will reset to the default mode.
Section 5 Maintenance

As needed, use a clean, soft cloth, mild soap, and water to clean the lens.

Note: The Night Scan Spot uses Lexan lenses and cleaning with abrasive materials, solvents, or most chemical cleaners can cause lens surface degradation and reduce performance of the light. Some chemicals will cause the lens to become brittle and prone to cracking.

Section 6 Battery Replacement

To replace the battery in a Remote Control (Figure 3):

1. Turn the Remote Control over to access the back.
2. Remove the screw securing the battery cover.
3. Remove the battery.
4. Replace the battery with 23A (12V) battery.
5. Replace and secure the battery cover.

Figure 3 Battery Compartment