



nightscan spot

NIGHT SCAN SPOT OPERATOR'S MANUAL



(P/N: 5584901)

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Original Instructions

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Document History

Document Numbers	Dates	Remarks
TP-5590101-00	June 17, 2019	Initial Release
TP-5590101-A	July 10, 2019	Added Logo.
TP-5590101-B	October 28, 2019	Corrected Front Cover and updated Section 2.2.
TP-5590101-C	March, 2023	Request from marketing to add CE Certificate

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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.

Specification Compliance

CE Declaration of Conformity

Latest Declaration of Conformity available upon request.

Shenzhen BCTC Testing Co.,Ltd. BCTC Building & 1-2F,East of B Building,Pengzhou Industrial,Fuyuan 1st Road, Qiaotou Community,Fuyong Street,Bao'an District,Shenzhen,China		
<h1>Certificate of Compliance</h1>		
Certificate Number: BCTC-FY190100136C		
Applicant	: GUANGZHOU HANMA ELECTRONICS TECHNOLOGY CO.,LTD No.8 Jianye Middle Road,the First Industrial Zone, Taihe Town, Baiyun District, Guangzhou, China	
Manufacturer	: GUANGZHOU HANMA ELECTRONICS TECHNOLOGY CO.,LTD No.8 Jianye Middle Road,the First Industrial Zone, Taihe Town, Baiyun District, Guangzhou, China	
Product	: LED AUTO LIGHT	
M/N	: HML-5318E HML-5430E, HML-7120, HML-6006A, HML-6018A, HML-6020P, HML-5948PE, HML-62102PE, HML-6730HD, HML-6730LD, HML-7042, HML-6930E, HML-6830D, HML-2745P, HML-62102P, HML-5948P, HML-6342P, HML-7556, HML-7561, HML-6342PE, HML-7627, HML-7640, HML-7645, HML-5180, HML-7210D, HML-5575, HML-73111, HML-74180, HML-70105, HML-7680, HML-1212, HML-8005, HML-R0280HML-76180, HML-5748EJ, HML-5748E, HML-8130, HML-8272, HML-7724, HML-7824, HML-7996, HML-8409, HML-8654, HML-8754, HML-8561, HML-4215, HML-8316, HML-6975, HML-6830S, HML-6830HS	
Test Standard	: EN 55015:2013+A1:2015, EN 61547: 2009	
<p>The EUT described above has been tested according to the listed standards and found in compliance with the council EMC directive 2014/30/EU. The observations and test results referenced from this Certificate are relevant only to the sample tested. This Certificate is for the exclusive use of BCTC's Client and is provided pursuant to the agreement between BCTC and its Client. This Certificate is part of the full test report(s) and should be read in conjunction with report No. : BCTC-FY190100136E.</p>		
		
<p>This certificate of conformity is based on a single evaluation of the submitted sample(s) of the above mentioned product. It does not imply an assessment of the whole product and relevant. Directives have to be observed.</p>		
Tel: 400-788-9558 0755-33207888 Http://www.bctc-lab.com		

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 Specifications

Table 1 Night Scan Spot Specifications

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

1.3 Night Scan Spot Description

The Night Scan Spot (Figure 1-1):

- 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

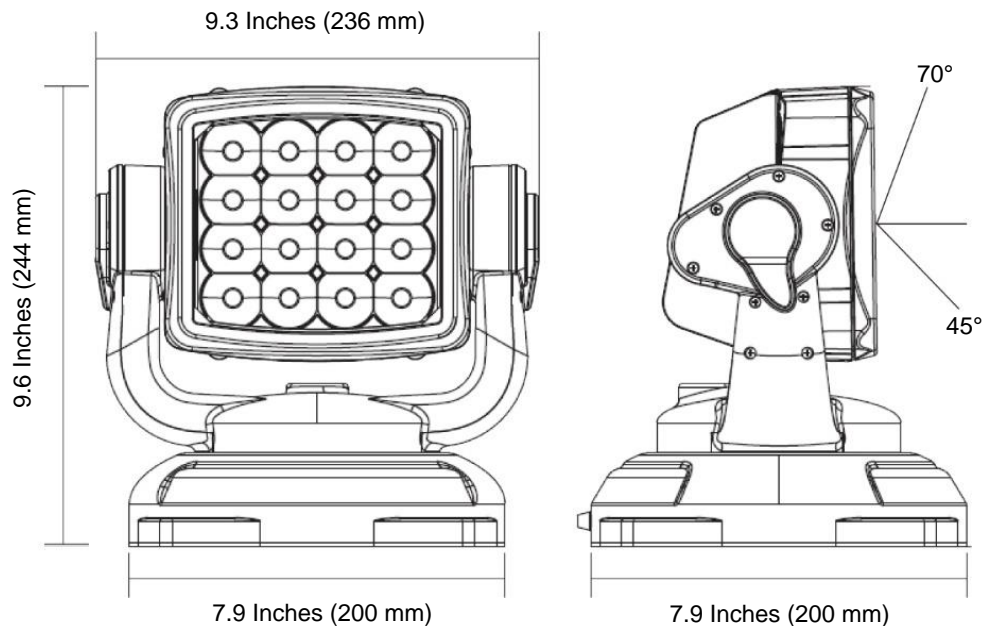


Figure 1-1 Night Scan Spot

The Night Scan Spot is equipped with a flashing alert feature which can be used:

- To warn approaching motorists of pedestrians or 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 appropriately sized circuit protection device is installed (circuit breaker or fuse). See Specifications (Section 1.2).

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 or use the mounting hole pattern (Figure 2-1). Ensure the Night Scan Spot remains level during drilling.

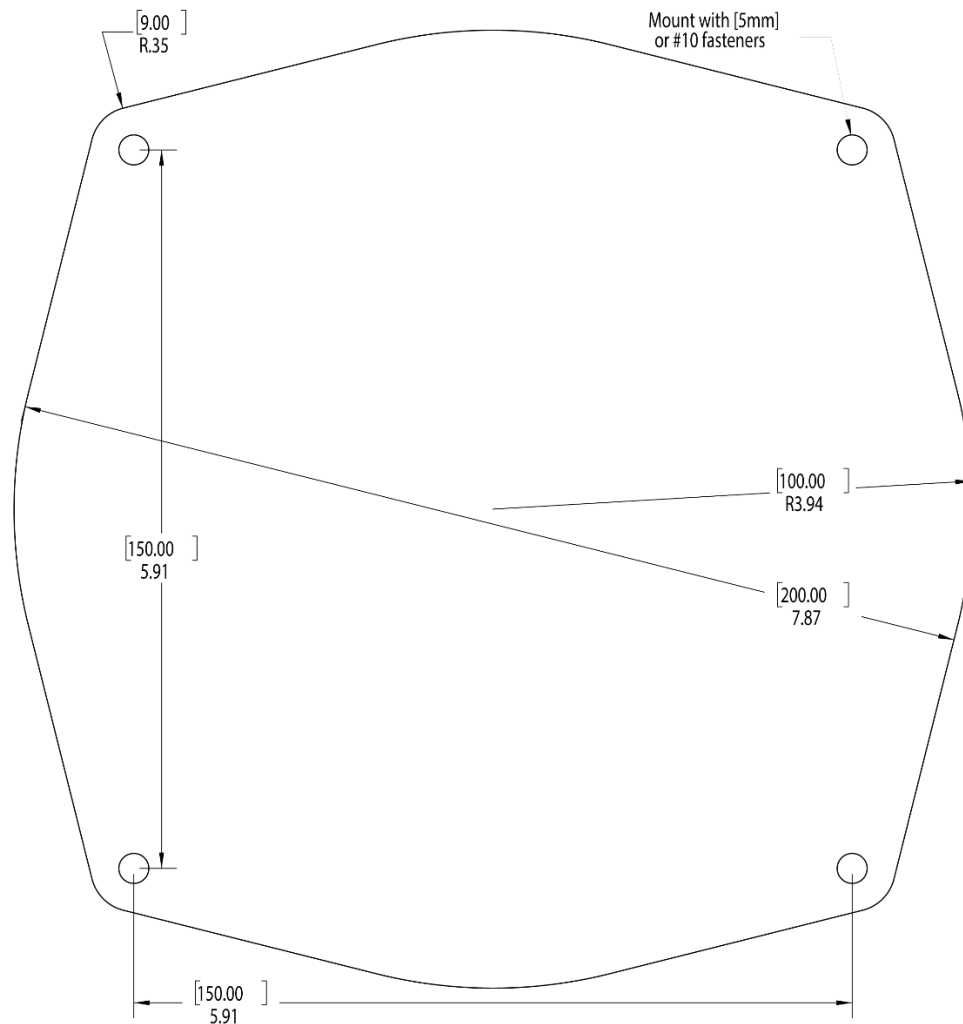








Figure 2-1 Night Scan Spot Mounting Hole Pattern

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 3-1.

Table 2 Button Function

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

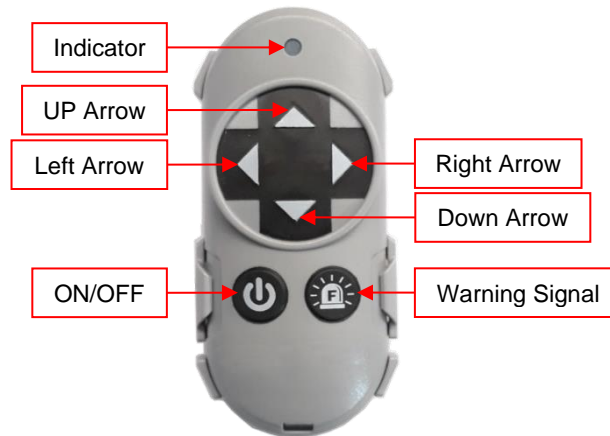


Figure 3-1 Remote Control

3.1 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.

3.1.1 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.

3.1.2 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 4 Maintenance

This section describes maintenance procedures required to keep the mast system operational. Use care to understand and follow all precautions while performing these procedures.

4.1 Cleaning

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.

4.2 Battery Replacement

To replace the battery in a Remote Control (Figure 4-1):

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.

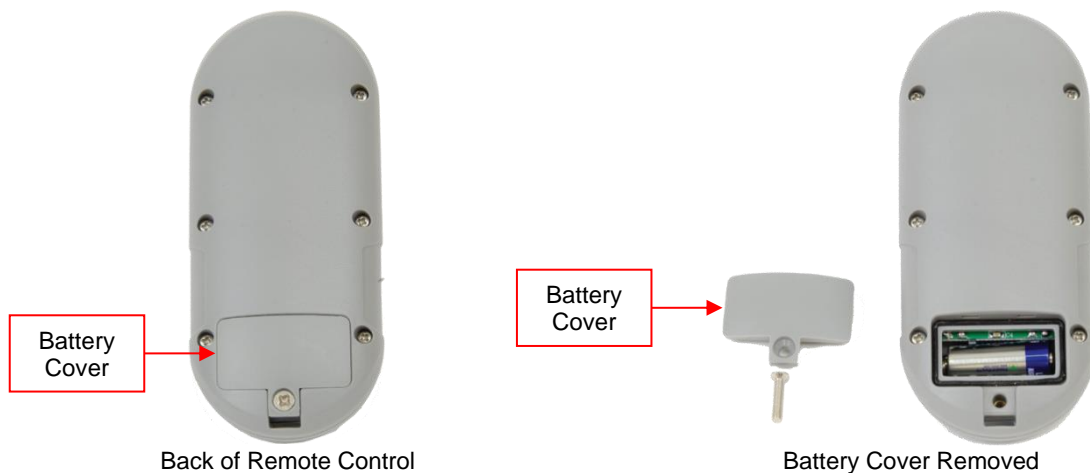


Figure 4-1 Battery Compartment

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