



User Manual

Laser Bird Repeller



SCAN 30



Laser Technical & Safe Information

⚠ WARNING

Laser Safety Hazard Warning

This Hawk-Laser SCAN30 emits laser light. Laser light is very bright and can potentially cause injury to the eyes if not used correctly. Read all operation and safety information prior to use.

NEVER look into laser or at bright reflections.

NEVER aim the laser of SCAN30 or the reflection at an aircraft at any distance! Illumination of aircraft, vehicles, etc. is

DANGEROUS! Do not do it.

DO NOT stare into beam or view directly with optical instrument.

⚠ WARNING

Light from Hawk-Laser SCAN30 is very bright! **DO NOT** aim laser at people or vehicles.

NEVER look into the output of the Hawk-Laser SCAN30! Viewing the laser light or a bright reflection can cause potential eye injury.

DO NOT allow unauthorized people to operate the Hawk-Laser SCAN30.

Laser reflections from flat shiny mirror like surface can be as hazardous as the laser beam itself.

Eye injury is theoretically possible if the laser of Hawk-Laser SCAN30 is aimed at people using telescopes, rifle scopes, spotting scopes, binoculars, cameras or any other optical light gathering instruments.

DO NOT remove or damage any safety labels which are present on Hawk-Laser SCAN30.



DO NOT attempt to disassemble the Hawk-Laser HD30, this can lead to hazardous exposure.

DO NOT attempt any repair or modification.

DO NOT use if lenses of laser is cracked or broken.

Due to the laser beams low divergence, it makes a small bright spot at very long distance. Aiming a laser at aircraft, vehicles, law enforcement officials or other situations where vision and situational awareness are critical can cause disruptions of safe operation of these craft, cause dangerous situations.

This class of laser will not cause skin burns, nor start fires. The only potential hazard is to the eyes if instructions for use are not followed.

1. Product Description

The SCAN30 is a laser that is developed as a safe, silent and effective tool for bird control. It is designed to chase birds in plants, warehouses, loading docks, railroad sidings, tunnels, breezeways, underpasses, stadiums, barns and storage sheds.

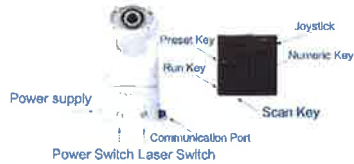
The SCAN30 has a programmable Pan/Tilt device that can steer the laser to project onto the desired position and to prevent the laser to hit on the unwanted position. Use the controller of SCAN30, the desired position can easily be programmed and saved in the Pan/Tilt device.



2. Hardware Feature

The SCAN30 consist of three parts:

1. Power adapter: Provide 12V DC power supply.
2. Laser and Pan/Tilt device: Laser and positioning.
3. Controller: Program the moving routine of laser.



1	Power supply	Connect to 12V DC
2	Communication Port	Connect to Controller
3	Power Switch	Power Supply switch
4	Laser Switch	Switch Laser On and Off
5	Joystick	Steer the Laser Position Manually
6	Preset Key	Preset Laser Running Position
7	Numeric Key	Numeric Key
8	Run Key	Laser Move along the Preset Position
9	Scan Key	Laser Sweep Back and Forth

Power Supply: The power supply of SCAN30 is DC 12V.

Power Switch: Turn on and off the power supply.

Laser Switch: Turn on and off the laser.

Communication Port: This is used to connect the controller to supply power to controller and to exchange data between controller and the Scan30 laser.



3. Technical Specification:

Power	DC 12V
Operating Conditions	-15°C~40°C
Storage Conditions	-20°C~50°C
Protection	IP65
Casing	Aluminum Alloy
Weight	<2Kg

Laser

MODEL NO	Scan30/P30	Scan30/P50	Scan30/P80
Emitted Power	30mW	50mW	80mW
Laser Classification	II a	II b	II b
Laser Type	DPSS		
Wave Length	532nm		
Operating Temperature	-15°C~40°C		
Emission	Continuous		
Divergence	<1mrad		
Range	>350m		

Pan/Tilt device

Pan Range	0° ~350°
Tilt Range	-20° ~90°
Total Preset Position	16
Running Speed	4~10° /S

4. Set Up and Operation

Installation Guide

Read the safety instruction provided in the user manual before activating the device.

- The protection of SCAN30 is IP65, it can be used in indoor or outdoor.
- Mount the Pan/Tilt device on the horizontal and flat surface.
- **DO NOT** Position the Pan/Tilt device on a surface which is subjected to vibration.
- **DO NOT** take the "Tilt" part when carry the Pan/Tilt device.
- **DO NOT** stop the "Pan" or Tilt when they are running.
- **Make Sure** the "pan" and "Tilt" have enough space to rotate, if they are stuck, the transmission part will be damaged.
- The SCAN30 should be mounted and the laser beam should be programmed that people have no chance to stare into the laser beam.
- **DO NOT** let the laser beam cross public roads, pathways, sidewalks or parking spaces.
- **DO NOT** point the laser beam at room entrances.

At start up, the Pan/Tilt device will perform a calibration sequence, the Pan/Tilt will seek the "origin" position, it will take about 30 seconds, at this moment the laser will be turn off to prevent the laser to shot to the sky.

Programming the Preset Position



1. Connect the plug of the controller to the communication port of SCAN30.
2. Use the joystick of the controller to steer the laser to the desired position.
3. Press the numeric key and then [**Preset**] key to save the position. For example:
Press [**1**][**Preset**] to save the No1 position.
Press [**2**][**Preset**] to save the No2 position.
4. Repeat step 2 and step 3 to save more position. Total 16 positions can be saved, from No1 to No16.



5、 After all desired position is saved, press **[Run]** key then the laser will begin to move according to the following sequence: No1...No2...No3...No16...No1...No2... .

6、 If you want to remove all the preset position, press **[1][2][0]** **[Preset]**, the preset position will be delete.

7、 Unplug the controller and tight the cover of the communication port on SCAN30 when programming is finished.

Operation:

After the power supply is turn on, it will take about 30 seconds for the Pan/Tilt device to seek the "Origin" position, In this moment no other operation can be take place.

Once the Pan/Tilt device finish seeking the " Origin" position, the SCAN30 can be started to run the following three operation mode:

1、 Manual mode: Use the Joystick to move the laser.

2、 Run mode: The laser will move according to the sequence of the preset position one by one. Run mode can be started by press the **[Run]** key on the controller.

3、 Scan mode: The laser sweep back and forth without changing in Tilt direction. Scan mode can be started by press the **[Scan]** key on the controller.

When the power is turned off, the working mode of the Pan-Tilt device will be saved, after power is turn on again, the Pan-Tilt device will be back to the mode prior to power been off.



5.MAINTENANCE

DO NOT attempt to disassemble or clean the Hawk-Laser SCAN30 internally. This will invalidate the warranty.

The external surfaces should be occasionally be wiped clean with cloths or a soft quality paper. Remove any external dirt or sand with a soft brush so as to avoid scratching the finish.

DO NOT open, modify or service this product.

No maintenance or service is allowed by the customer.

Troubleshooting

If you experience problems during installation please do or check the following:

- Check the power supply.
- Ensure the temperature is not out of specification, otherwise the diode laser will not work properly.
- Check the connection between Pan/Tilt device and controller, disconnect plug of the controller and then reconnect.
- If the Pan/Tilt device is not working properly, Power off and on and then wait for 30 seconds.

6.Warranty

Should you encounter any problem with your model, please carefully read this manual. If you encounter defects, please contact your local dealer. Should any defect arise as result of production faults, free repair or replacement is guaranteed. The Hawk-Laser SCAN30 has a warranty period of 6 months, starting on the date of purchase. In case of replacement, the warranty period of original will remain valid.