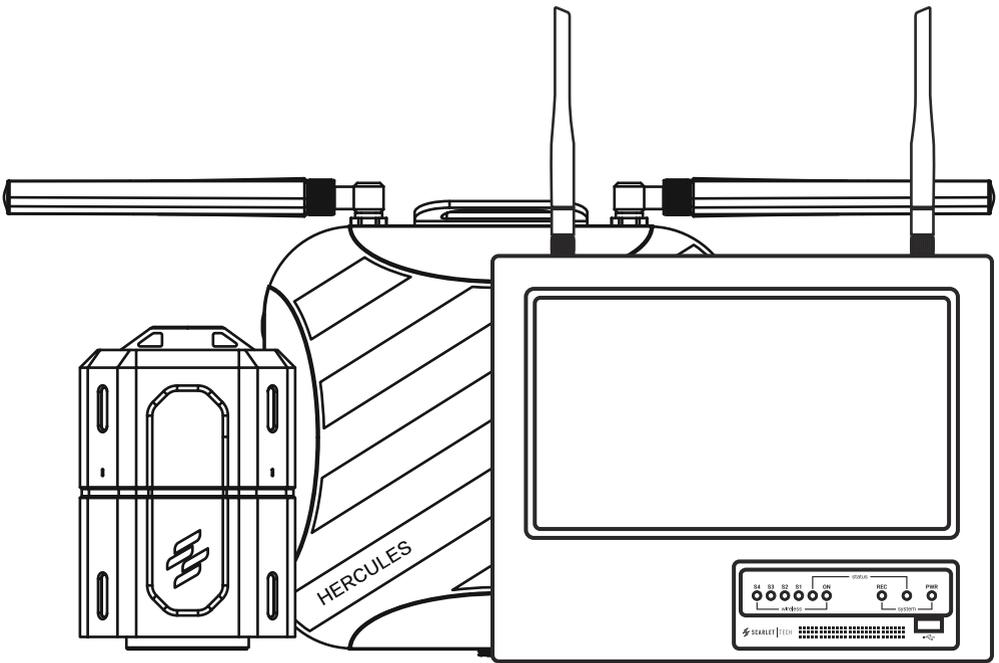




SCARLET | TECH



Hercules Pro

Wireless Crane Camera System

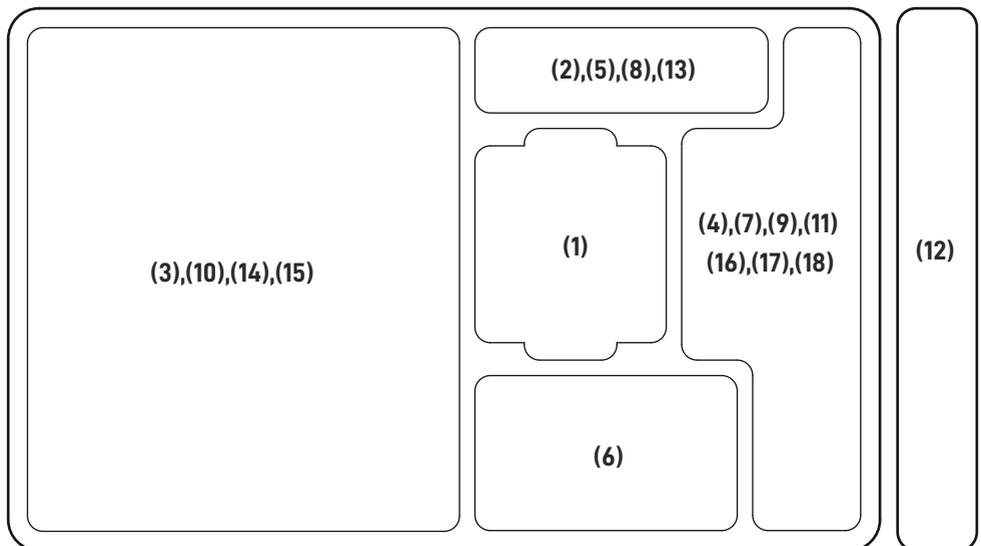
User Guide

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1. Product List

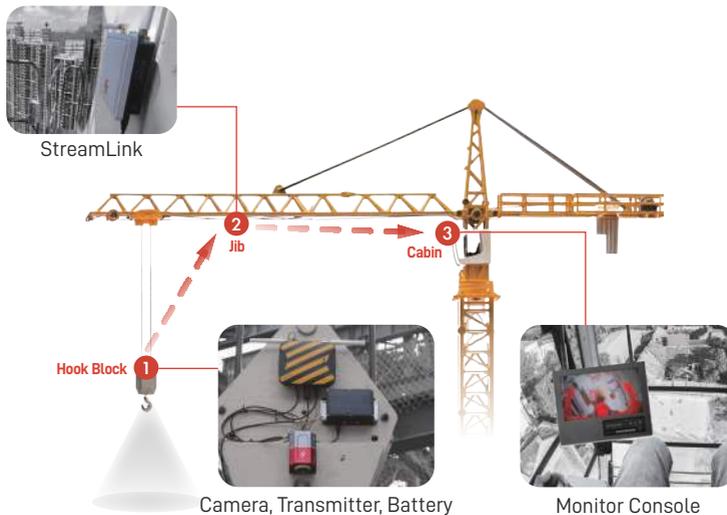
1. Hook Camera (LAN cord attached)
2. Safety Lanyard (with magnetic cable holder)
3. Camera Transmitter
4. Antenna (5GHz omnidirectional, white) x 2pcs
5. Safety Lanyard (with magnetic cable holder)
6. Camera Battery
7. Power Cord (1.2M, Power Pack-Camera Transmitter)
8. Safety Lanyard (with magnetic cable holder)
9. Battery Charger (AC-DC 14.3 or 14.6V)
10. StreamLink
11. Antenna (5GHz omnidirectional, white) x 2pcs
12. Power Cord (50M, three-core)
13. Safety Lanyard (with magnetic cable holder)
14. Monitor Console
15. Antenna (5GHz omnidirectional, black) x 2pcs
16. Power Adapter (1.2M, AC-DC 12V power plug)
17. Monitor Clamp Mount
18. USB Mouse



2. Product Overview

HerculesPro is a wireless crane camera system that enables the operators to visually monitor the load and its surroundings. It provides an unobstructed, real-time view of critical areas, which would typically be inaccessible within blind spots.

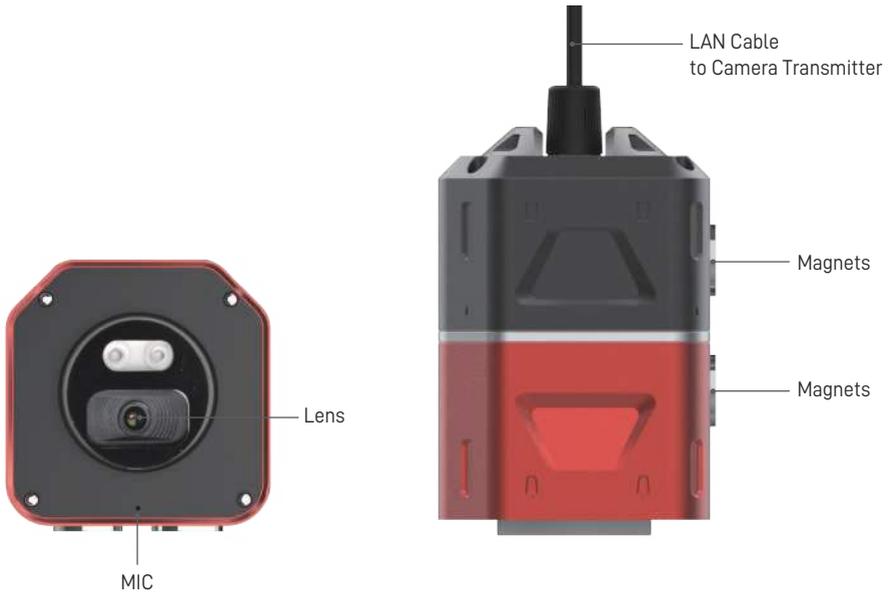
The system comprises five main components connected via a private wireless network and is to be installed across three different sections of the crane. Below is the breakdown of the primary components and where they're installed:



Location	Main Components	Accessories
Block	Hook Camera	LAN cord (attached to the camera's top)
		Safety Lanyard (with magnetic cable holder)
	Camera Transmitter	Antenna (5GHz omnidirectional, white) x2
		Safety Lanyard (with magnetic cable holder)
	Camera Battery	Power Cord (1.2M, Power Pack-Camera Transmitter)
		Battery Charger (DC 14.3-14.6V)
Jib	StreamLink	Antenna (5GHz omnidirectional, white) x2
		Power Cord (50M, three-core)
		Safety Lanyard (with magnetic cable holder)
Cabin	Monitor Console	Antenna (5GHz omnidirectional, black) x2
		Power Adapter (1.2M, AC-DC 12V power plug)
		Monitor Clamp Mount
		USB Mouse (Console setup only)

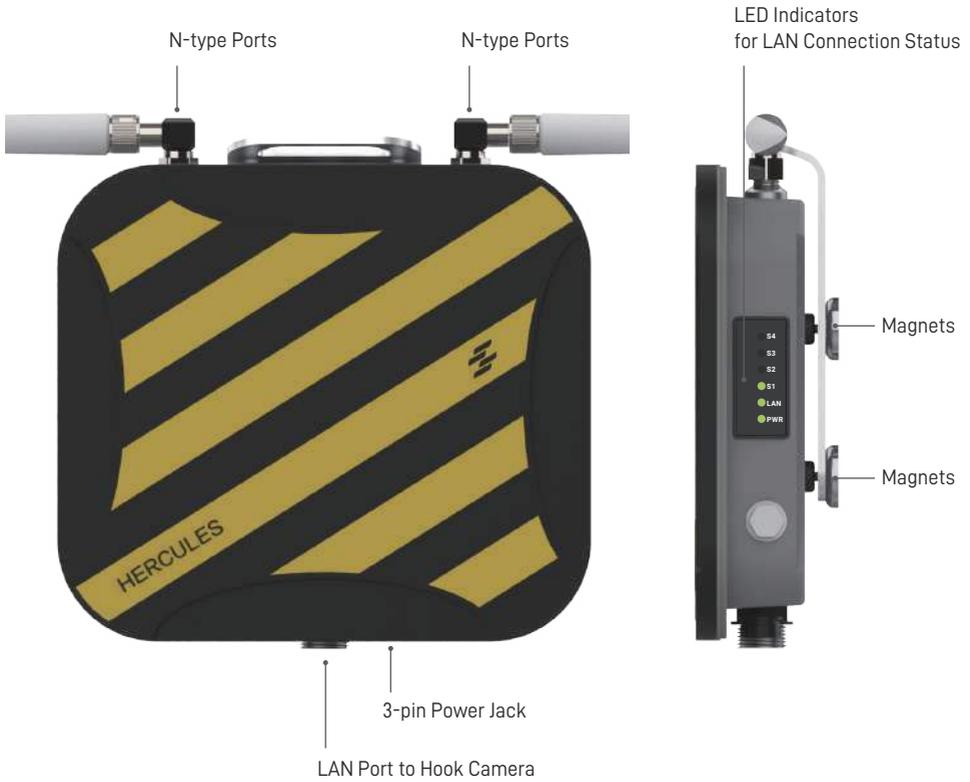
3. Product Specificaiton

3.1 Hook Camera



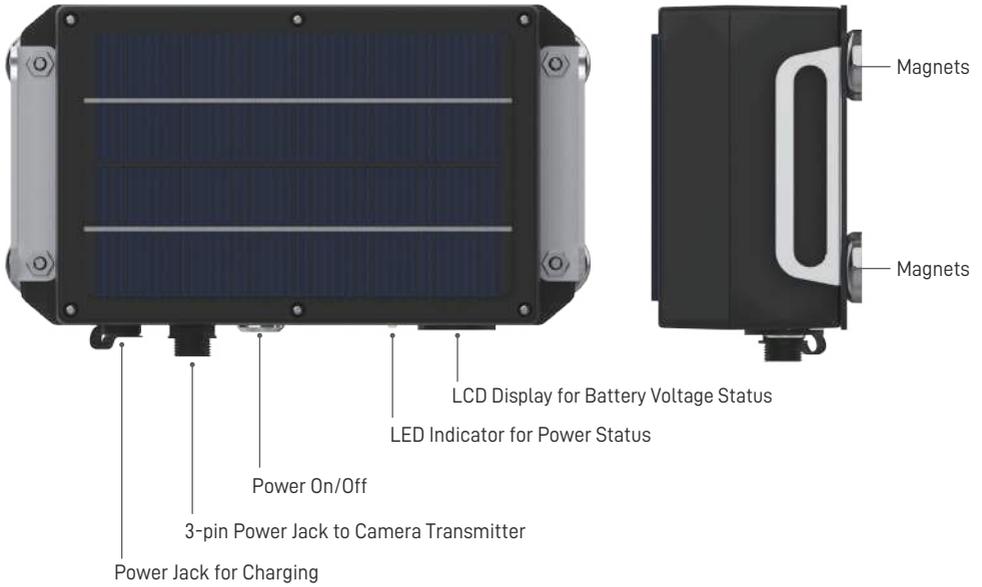
Hook Camera	
Resolution & Pixels	2K QHD 2304 x 1296, 3MP / HD 1280 x 720, 1MP
Image Sensor	1/2.8" CMOS
Electronic Shutter	1/25s - 1/10,000s
Compression Standard	H.265 / H.264 / MJPEG
Angle of View	110° Ultra-wide angle
Night Vision	Starlight Color Night Vision
Defog	Digital Defog
MIC	Yes
Video Storage	96 hours (2K resolution)
API for Integration	ONVIF
Power Supply	DC 12V2A / POE
Waterproof	IP67
Installation	Mounting by magnets
Dimension	180 x 122 x 122mm
Weight	2.5kg

3.2 Camera Transmitter



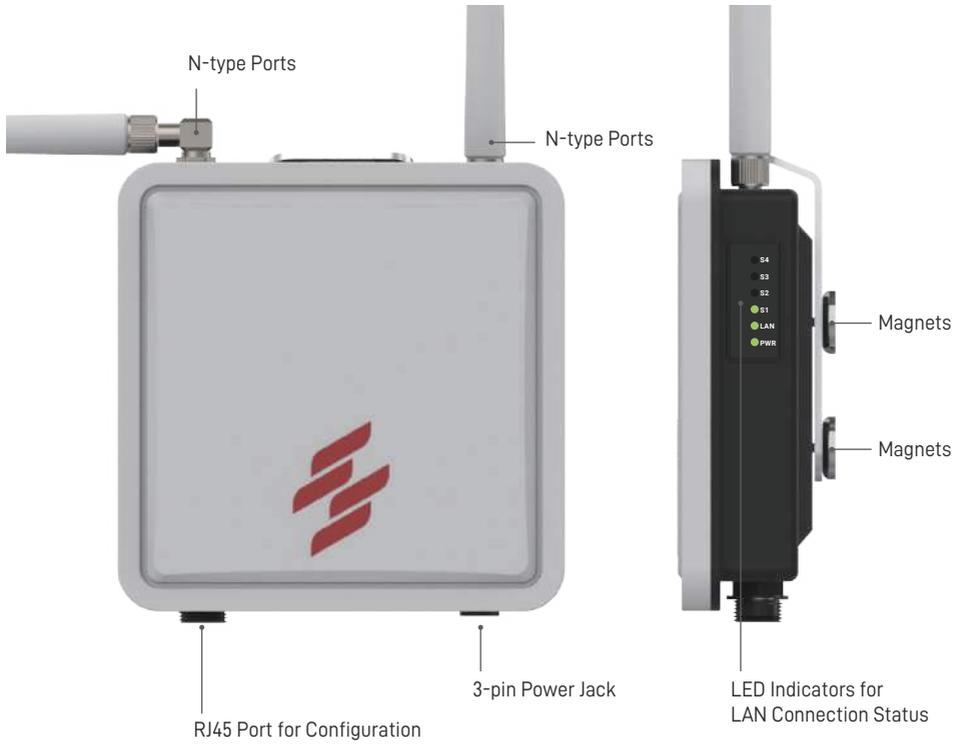
Camera Transmitter	
Wireless Technology	Wi-Fi 5GHz
Power Supply	DC 12V
Waterproof	IP67
Installation	Mounting by magnets
Dimension	265 x 265 x 82mm
Weight	2.2kg

3.3 Camera Battery



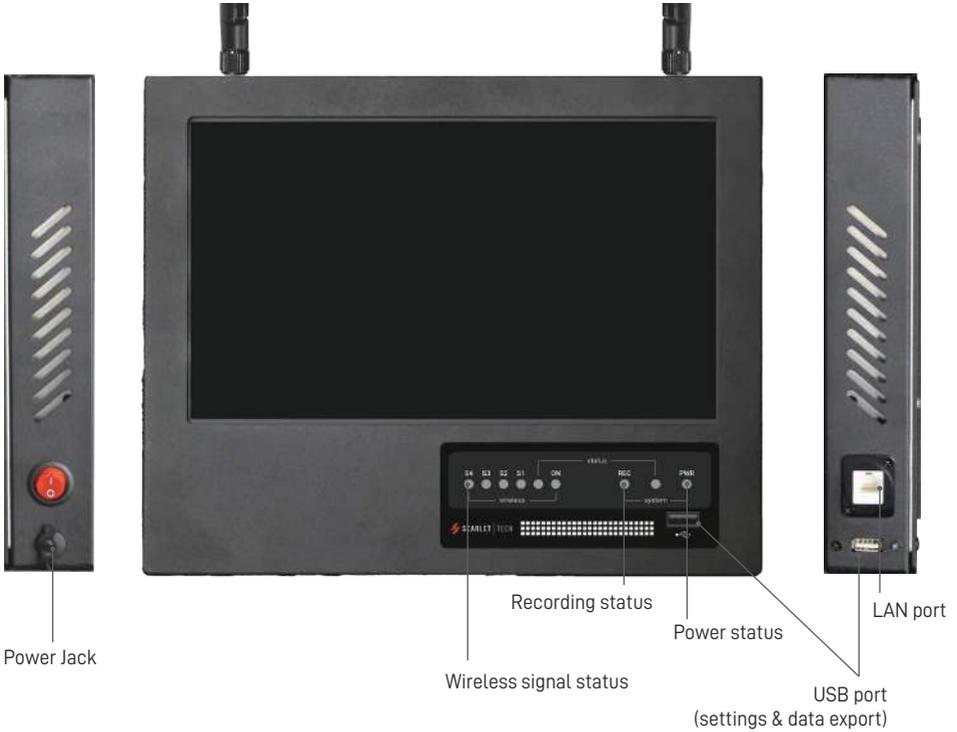
Camera Battery	
Battery Type	Molicel 26700 LiFePO4
Battery Volume	28000mAh
Working Hours	35+ hours
LED Indicator	Power status
Power Input	DC 14.3~14.6V2A (Charging by Battery Charger)
Power Output	12V4A (Max)
Waterproof	IP67
Installation	Mounting by magnets
Dimension	272 x 146 x 91mm
Weight	5kg

3.4 StreamLink



StreamLink Station	
Wireless Technology	Wi-Fi 5GHz
Power Supply	DC 24V
Waterproof	IP67
Installation	Mounting by magnets
Dimension	230 x 230 x 93mm
Weight	1.1kg

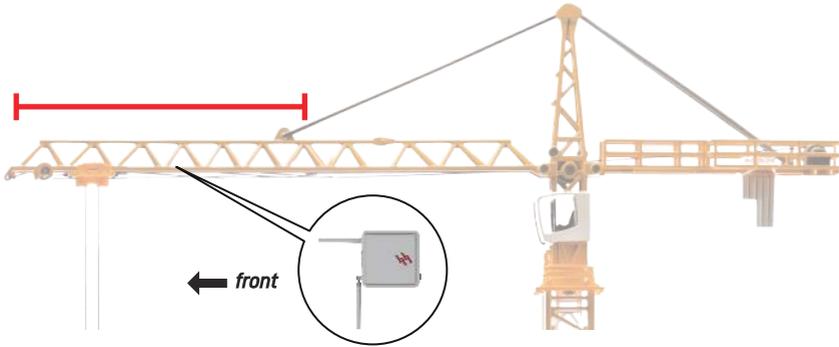
3.5 Monitor Console



Monitor Console	
Video Storage	1TB HDD (30 days in 2K)
Wireless Technology	Wi-Fi 5GHz
Display	11.6" IPS
Resolution	1920 x 1080
Channel	Up to 8 Channels
Power Supply	DC12V
Output	DC Power Jack x1, USB(A) x2 , RJ45 x1
OS	Embedded Linux
Installation	VESA mounting clamp
Dimension	305 x 250 x 45mm (excluding VESA mount base)
Weight	2.4kg

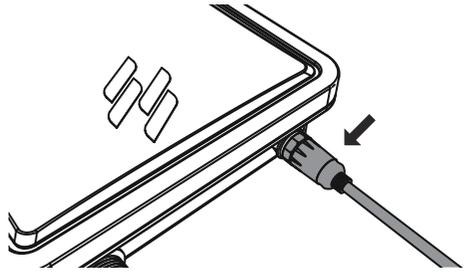
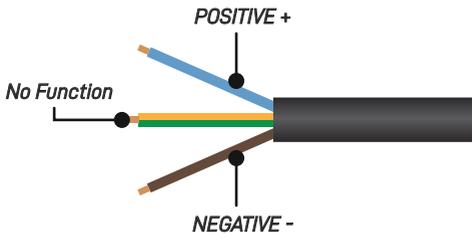
4. Installation

4.1 Jib



StreamLink

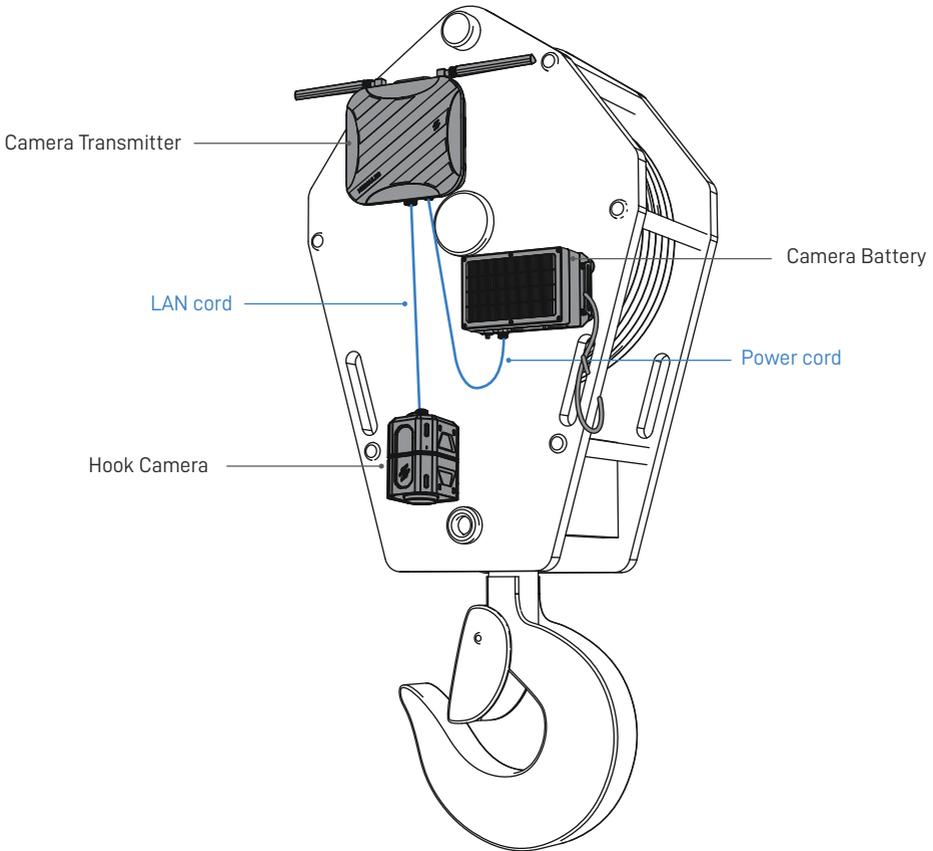
1. Install both white antennas on the N-type ports located on the top of StreamLink and clear from any potential collision. Place one antenna straight up and the other at a 90° angle port.
2. Position the StreamLink directly above the crane hook or within the half of the crane jib towards the tip.
3. Maintain a clear line of sight between Monitor Console and Camera Transmitter.
4. Make sure StreamLink's antennas are point toward to the jibs's tip.
5. Magnetically attached StreamLink on the clean, flat surface of the crane jib, then fasten its anchor to the crane using a safety lanyard.
6. Connect the 3-pin power cord to the StreamLink.
7. Strip the power cord and connect it to your DC 24V power source (e.g. cabin switch-board).
 - BLUE cord is for POSITIVE (+)
 - BROWN cord is for NEGATIVE (-).
 - Yellow & Green cords serve no function in this context.



Checklist

StreamLink LED panel for a steady green PWR light, confirming power source is on and successful boot-up.

4.2 Hook



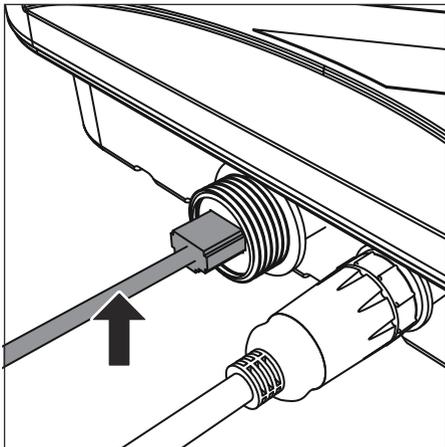
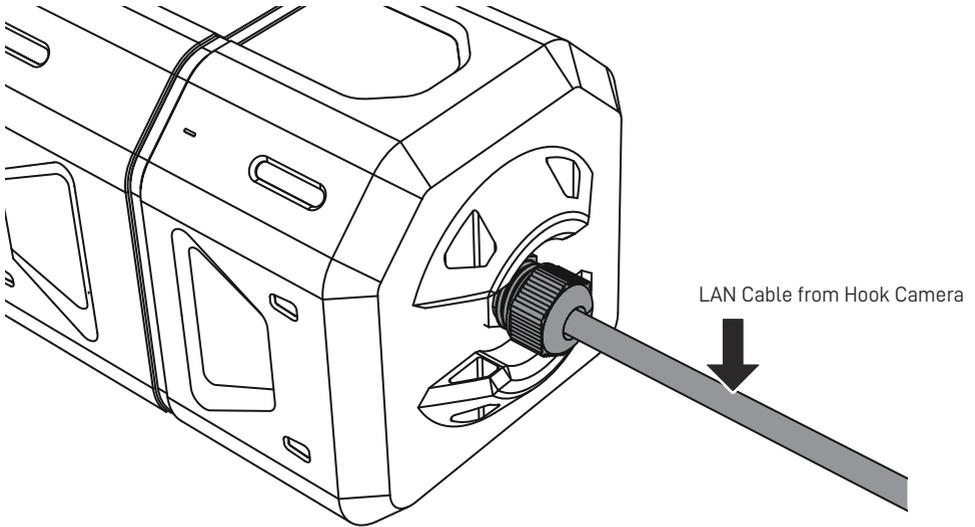
Camera Transmitter

1. Before proceeding with the installation of the Camera set, ensure that StreamLink is installed and operational.
2. Install both white antennas on the angled N-type port on the top of Camera Transmitter, and clear from any potential collision.
3. Position the the antennas on the top and parallel to the ground.
4. Magnetically attached Camera Transmitter on the clean, flat crane hoist surface, then fasten its anchor to the crane using a safety lanyard.

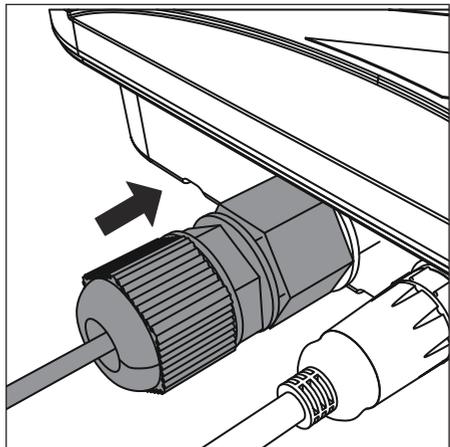
■ Hook Camera

1. Position the Camera's lens vertical to the ground.
2. Magnetically attached Camera on the clean, flat crane hoist surface

- Connect the Camera's LAN Cord to the Camera Transmitter's LAN port, then fasten
3. the waterproof closure.
 4. Fasten its anchor to the crane using a safety lanyard.



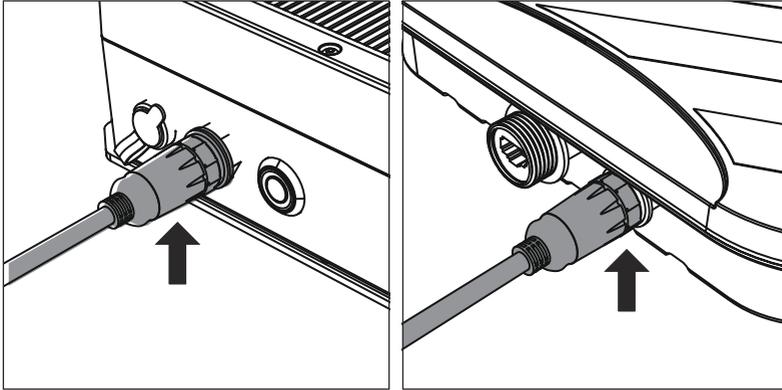
LAN Cable to Camera Transmitter



Fasten the waterproof closure

■ Camera Battery

1. Position the Battery's power indicator on the bottom.
2. Magnetically attached Camera Battery on the clean, flat crane hoist surface.
3. Connect the Camera Battery and Camera Transmitter using the 3-pin Power Cord.



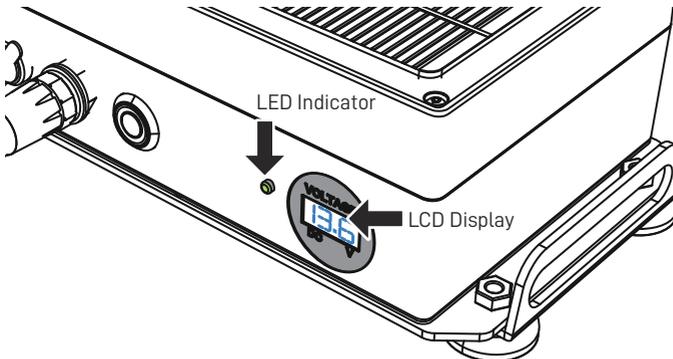
Connect to Camera Battery

Connect to Camera Transmitter

4. Fasten its anchors to the crane using a safety lanyard.
5. Press the power button on Camera Battery to power both the Camera and Camera Transmitter

Checklist

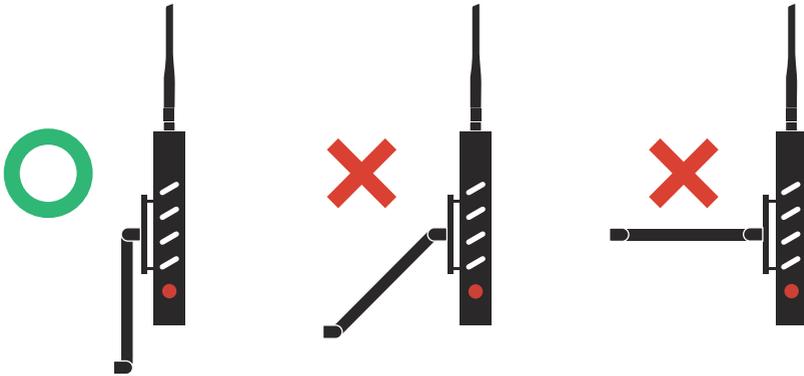
- Camera Battery's LCD displays a voltage higher than 12.8V. for 6 hours of operation
- Camera Transmitter's LED panel for a steady green PWR light
- Camera Transmitter's wireless status lights from S1 to S3/S4, for strong connection with StreamLink.



4.3 Cabin

Monitor Console

1. Before proceeding with the installation of the Monitor Console, ensure that StreamLink and Camera Transmitter are installed and operational.
2. Install both antennas onto the top of the Monitor Console.
3. Affix the Monitor Clamp Mount to the back of the Monitor Console using screws.
4. Adjust the clamp arm vertical to the ground then attach Monitor Console in the cabin's left corner.



5. Ensure that the Monitor Console is positioned within direct line of sight of StreamLink, with no obstructions.
6. Connect power source to Monitor Console using the adapter.
7. Power on Monitor Console by pressing the power button.

Checklist

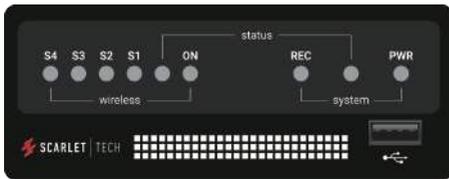
- Monitor Console's LED panel for a steady green PWR light.
- Monitor Console's wireless status lights from S1 to S3/S4, for strong connection with StreamLink.
- Once the system boot-up successfully, live camera footage will appear on the monitor.

5. LED Indicator Panel

Camera Transmitter: left side
StreamLink : left side

LED Indicator	Description	Definition
PWR	Power status	OFF: No power
		Steady Green: Power ON
LAN	Data transmission status	OFF: No data transmission
		Flashing Green: Data transmission is on-going
S1, S2, S3 & S4	Wireless signal strength	OFF: No signal
		S1 Steady Green:Very poor
		S2 Steady Green: Poor
		S3 Steady Green: Normal
		S4 Steady Green: Good

Monitor Console: under the display



LED Indicator	Description	Definition
PWR	Power	OFF: No power
		Steady Red: Power ON
status	Data transmission status	OFF: data transmission stop
		Green: data transmitting
REC	Recording status	OFF: Video Recording OFF
		Flashing Blue: NVR recording ON
ON	Wireless Statue	OFF: No signal
		Green: Wireless fuction ON
S1, S2, S3 & S4	Wireless signal strength	OFF: No signal
		S1 Steady Green:Very poor
		S2 Steady Green: Poor
		S3 Steady Green: Normal
		S4 Steady Green: Good

5.1 Wireless Signal Strength

Improve **Camera Transmitter's** wireless signal strength:

- Camera Transmitter and StreamLink are in a clear line of sight.
- Transmitter's antennas are parallel to the ground.
- One of StreamLink's antenna is facing toward the jib tip.
- Adjust Camera Transmitter's placement and ensure the wireless signal indicators for green lights on **PWR, LAN, S3**.

Improve **Monitor Console's** wireless signal strength:

- Monitor Console and StreamLink are in a clear line of sight.
- Adjust Monitor Console's placement and ensure the wireless signal indicators for lights on **PWR, AN, S3**.

6. Camera Battery

6.1 Battery Status



	Description	Definition
LCD Display	Voltage information	$\geq 13.7V$: Full charged
		$\leq 12V$: Low voltage, camera will shutdown
LED Indicator	Battery life status	OFF: No power
		Steady Red: Battery life is less than 3 hours.
		Steady Green: Battery life is longer than 3 hours.

6.2 Battery Charging

For optimal performance, it is advised to charge the battery on a daily basis or after every 35 hours of continuous usage.

1. Uninstall and disconnect the Camera Battery from the 3-pin Power Cord.
2. Plug the Camera Battery into the Battery Charger and charge it for 8-12 hours.
Charger's LED indication:
 - **Red light** : battery charging
 - **Green light**: battery full charge
3. Before reusing the battery, ensure Battery's LCD panel displays a voltage above 13.7V.

7. Video Settings

7.1 Video Recording

HerculesPro system automatically records footage in both Monitor Console and Hook Camera.

Monitor Console

Monitor Console equipped with a 1TB Network Video Recorder, capable of sustaining 30 days of continuous loop recording for 1 channel at 2K resolution. The recordings can be easy to export and play back.

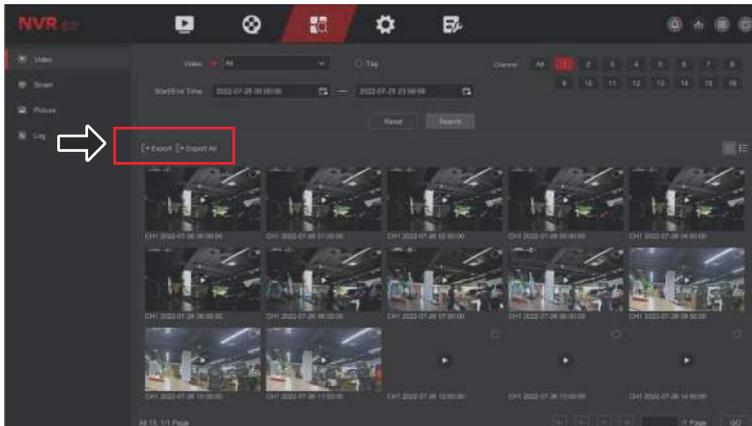
To verify that recording is ongoing, please check the Monitor Console's REC indicator for blue light.

Hook Camera

Hook Camera further provides a continuous loop recording spanning up to 96 hours for backup. For video retrieval, please contact Scarlet Tech.

7.2 Video Export

1. Plug in the USB Mouse and a USB Flash drive into the USB ports on the Monitor Console.
2. Right-clicking and select "Exit Full Screen" to access the main menu.
3. Navigate to the "Search" page, then select "Video".
4. Choose the desired "camera channel" and "time frame", then click "Search".
5. Select the clips you want, then click "Export" to save the video clips to your flash drive



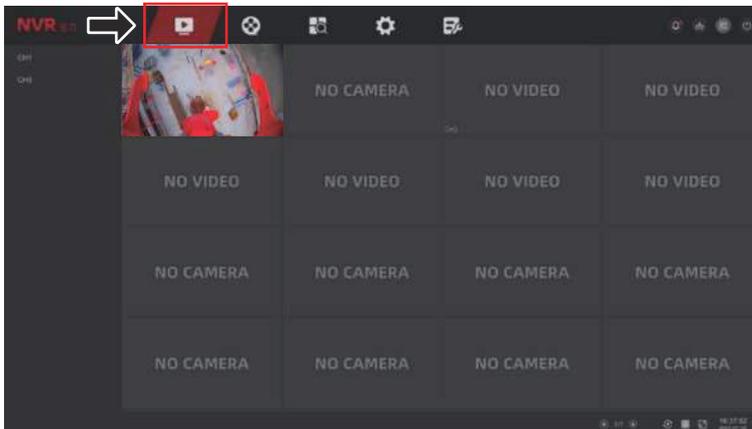
7.3 Video Playback

1. Plug in the USB Mouse to the Monitor Console's USB port.



2. Right-clicking and select "Exit Full Screen" to access the main menu.
3. Navigate to "Playback" page to view all camera channels.
4. Choose the desired channel from the channel list.
5. Select the date from the calendar.
6. Adjust the time bar to the desired playback start time.
7. Click "Play" to start video playback.

7.4 Switch Viewing Channel



1. Plug in the USB Mouse to the Monitor Console's USB port.
2. Right-clicking and select "Exit Full Screen" to access the main menu.
3. Select "Preview" page to show the all camera channels.
4. Double click on the selected camera channel to enter the full screen.

7.5 Rotate Video Angle

The video's angle can be adjusted by manually rotating the camera lens.

1. Unscrew the screws located at the four corners of the lens to remove the front cover.
2. Rotate the camera lens 90° clockwise or counterclockwise. Avoid rotating beyond 90° to prevent cable damage



8. Warranty & Services

Thank you for choosing Scarlet HerculesPro. Our warranty ensures your satisfaction and peace of mind regarding the performance and quality of our products.

Warranty Conditions

Scarlet HerculesPro is guaranteed for one-year warranty against material or production defects, in accordance with our general sales conditions. During the warranty period the manufacturer reserves the right to decide either to repair or replace the product. This warranty is extended to our customers and applies to all Scarlet HerculesPro products or components used for their intended purpose.

Exclusions

This warranty does not apply to:

- Defects resulting from negligence, accident, misuse, abuse
- Damage from acts of nature or highly corrosive environments.
- Failure due to improper usage, storage, electrical power failures, connection to improper voltage supply.
- Damages caused by improper use, incompatible accessories.
- Damages caused by improper transportation and damages in transit.
- Damages from unauthorized repair attempts or modifications of, or to any part of, the unit.
- Any warranty of seller is limited to and only for the benefit of the Buyer and is not transferable or assignable by Buyer without prior written consent of seller.

Warranty Claims

Should you need any reason to return the instrument for repair or replacement, take prior agreements with the local distributor from whom you bought it. To make a warranty claim, customers must contact Scarlet in writing before the expiration of the one-year warranty period. Please enclose a report describing the reasons for returning (detected fault). Upon receipt of the notice, Scarlet will evaluate the claim and, if approved, issue warranty authorization. Please make sure to return the system in original packaging. Any damage occurred in transit due to non-original packaging will be charged anyhow to customer.

Disclaimer

Scarlet disclaims all warranties or implied, beyond those explicitly stated in this policy. Customers acknowledge that the selection and use of equipment are solely their responsibility. Scarlet shall not be liable for any damages arising from the use or inability to use its products.

Please contact Scarlet for further assistance or clarification regarding our warranty policy. We are committed to providing reliable products and excellent customer service.

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