



Arlo Pro 3 Floodlight Camera

Troubleshooting



+ Before completing Arlo Pro 3 Floodlight Training, please attain the Arlo Pro 3 certification.

- The following training builds upon knowledge attained in the Pro 3 Module.
- Arlo Video Doorbell training, while not required, also has useful information for onboarding without a SmartHub.

+ Arlo Pro 3 Floodlight Camera is a wire-free camera/floodlight, sharing many features with Pro 3.

- Features include:
 - Ultra-Bright Wire-Free Floodlight up to 2000/3000 lumens
 - Built-in camera with 2K QHD Video with HDR
 - 160 Degree Field of View
 - Conversational Two-Way Audio
 - Built-in Siren 80 dB
 - Color Night Vision
 - Auto Zoom & Tracking* (Available post-launch)
 - Weather Resistant
 - Arlo Smart AI Features (Subscription required)
 - Long-lasting rechargeable XL Battery



FB1001 – Arlo Pro 3 Floodlight

There are several items for troubleshooting that are specific to the Arlo Pro 3 Floodlight Camera, as well as some known launch firmware and hardware issues.

This training will cover:

- Wi-Fi Troubleshooting
- Onboarding Firmware Issues
- Logging Limitations – AP Mode
- Charging and Battery Life
- Known Launch Feature Issues
- Known Hardware Issues

Arlo Pro 3 Floodlight – Wi-Fi Troubleshooting



For AP Mode on the Arlo Pro 3 Floodlight, there can be several issues that can occur preventing the Floodlight from connecting to the user's Wi-Fi network.

When experiencing difficulty in connecting the Wi-Fi, start with basic troubleshooting:

- Ensure the user is on the correct Wi-Fi network on their mobile device.
- Ensure the Floodlight is powered on, and the blue LED is flashing when attempting to onboard.
- Confirm the Wi-Fi network has internet access.
- Move the Floodlight and mobile device closer to the Wi-Fi router during onboarding.
- Make sure there are no other Wi-Fi or other interfering devices too close to the router or camera.
- Confirm the user has entered the correct Wi-Fi password during the onboarding process. Tap on the eyeball icon to view the password while entering.
- Ensure the user is on a 2.4GHz Wi-Fi network. **The Pro 3 Floodlight works on 2.4GHz only.**

QR Code Scanning

Users may run into issues with scanning the QR Code during AP Mode onboarding. If the user is experiencing difficulty with the QR Code:

- Set the brightness of the mobile device to high. Dim screens can prevent the camera from reading the code
- Ensure the mobile device screen is clean.
- Clean the camera lens with a soft tissue
- Make sure the user is holding the camera 4-6 inches (10-15cm) from the mobile device when scanning the QR Code. If having difficulty, move closer and slowly pull the mobile device away from the camera
- If the user has a mobile device with a small screen
 - Take a screenshot of the QR Code, and open the screenshot on a device with a larger screen.
 - Print the screenshot on a piece of paper and enlarge it.
- Try onboarding in a quiet location. The chime, while audible, may be missed.

802.11ax Routers

What is 802.11ax?

IEEE 802.11ax is the newest Wi-Fi standard for even higher bandwidth for newer devices. Previously we've had 802.11a, *b*, *g*, *n*, and *ac*, and *ax* is the newest standard. Routers capable of this new standard began to appear in 2019.

How is 802.11ax different?

The earliest standards such as *b* or *g* allowed Wi-Fi to work on a single channel at a time. Standards such as *n* and *ac* allowed devices to use multiple channels at the same time to increase bandwidth, but the connected devices had to stay on either 2.4GHz or 5GHz, and could not switch

With 802.11ax, devices can now use both 2.4GHz and 5GHz at the same time, using the same SSID.

802.11ax Routers

How does this affect our devices?

Because 802.11ax uses both 2.4GHz and 5GHz at the same time, device discovery can be difficult if the router attempts to use 5GHz, as the Pro 3 Floodlight is 2.4GHz only.

What can be done?

In theory, this should not present a problem, as 802.11ax should be backwards compatible with b, g, n or ac devices. In reality, the router may not direct the traffic appropriately. To work around this:

1. Try pairing normally first.
2. Ensure the router is on its latest firmware. Router manufacturers are releasing many fixes for these issues.
3. In the router settings, disable 5GHz temporarily while installing. Consult router manufacturer or manual for assistance.

If issues occur with connectivity after installation

Most “ax” routers have settings to force 2.4GHz Wi-Fi, often in MAC Address Filtering, Wi-Fi Advanced Settings or DHCP sections. Consult router manufacturer or manual for assistance.

Mesh Systems

What are mesh systems?

Mesh systems are Wi-Fi networks with multiple access points all running on the same SSID. The Arlo Pro 3 Floodlight should be compatible with mesh systems, however, some users may experience difficulty during onboarding.

How does this affect Pro 3 Floodlight?

Typically, this only affects installation. When going through onboarding, the Floodlight may connect to a mesh access point. In some cases, this can interrupt the normal communication during onboarding.

How do we work around this?

1. Try onboarding normally.
2. When onboarding the Floodlight, perform the Wi-Fi connection portion of the onboarding process within 10 feet/3 meters of the primary access point or router.
3. Temporarily disable the mesh network while onboarding, and re-enable after onboarding is complete. Consult router manufacturer or manual for assistance.

Arlo Pro 3 Floodlight – Known Issues



Onboarding Firmware Issues

There is a possibility that users may encounter difficulty in onboarding their camera in AP Mode out of box in the initial shipment. While the initial firmware should work for onboarding, there may be cases where the user has a router that is incompatible or not yet tested with the Arlo Pro 3 Floodlight.

For those users, there are a few steps we can take:

- Go through normal Wi-Fi, Installation and Onboarding troubleshooting
- Try connecting to a different Wi-Fi network first, allowing firmware updates, then remove and re-install the Floodlight on the desired network. In some cases, firmware updates may help to resolve connection issues.

In those cases where we still cannot onboard, we may need to provide users with a Base Station.

- If necessary, we will provide users with a VMB4500 Base Station.
- A supply of VMB4500 Base Stations will be available on-hand at our distribution centers.
- A Call Handler will be created for this issue.
- We will also monitor this issue heavily in the first few weeks of the product launch.

Arlo Pro 3 Floodlight – Logging Limitations in AP Mode



The Arlo Pro 3 Floodlight in AP Mode has limited logging capabilities. Our current devices that pair directly to Wi-Fi such as Q, Q+, or Video Doorbell all run on wired power, and so constant communication with the Arlo servers does not impact battery life. Because the Floodlight in AP Mode must maintain its own communication with the Arlo servers and also hold a charge, the logging function has been revamped entirely in AP Mode.

Instead of regular device logs, logs are sent to a system called Splunk, which is a cloud-based transactional logging system. The logs are kept on Arlo's side, in the cloud, and not on the device.

How does this affect Customer Support for the Pro 3 Floodlight?

At launch, for devices in AP Mode only, the Logs in the CS Diagnostic Tool will not function.

The L3 team will have access to Splunk to collect logs at launch. For cases where logs are **required**, L2 will escalate the case to L3 for log requests. A Call Handler will be available for this process.

Work is in progress to modify the CS Diag Tool to provide logs from Splunk, as Direct to AP Mode will appear in future devices. Work is also in progress for new dashboards for battery life and statistics.

Arlo Pro 3 Floodlight – Battery Life



The Pro 3 Floodlight’s Battery Life varies depending on the amount of usage, and is affected by the spotlight usage.

The below testing results are from the “worst possible scenario”. The testing involves triggering motion detection every 60 seconds, recording at 2K quality to the Cloud for 30 seconds, then going idle for 30 seconds to ensure the device goes to sleep and has to wake up every time. The tests were done with no Floodlight, Floodlight at full brightness, and Floodlight at half brightness.

The user’s battery life will depend greatly on how often the Floodlight is triggered, and how brightly it the Floodlight is lit.

Expected Results :

	Daymode	Nightmode 100% spotlight	Nightmode 50% spotlight
Stream time	35 hours	3 hours	5.5 hours

How to improve Battery Life:

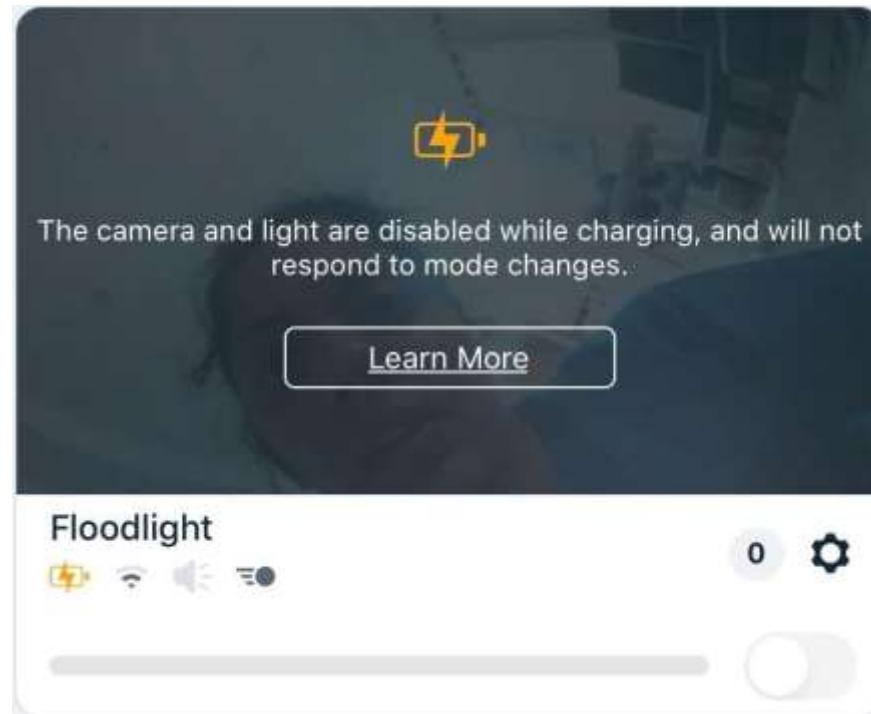
- Reduce the Brightness of the Floodlight
- Keep the Floodlight clean to ensure full brightness
- Ensure the Floodlight has sufficient signal to the Wi-Fi or SH/BS. Low signal will reduce battery life
- Make sure the Dusk to Dawn sensor is set as close to Dark as is reasonable
- Adjust Motion or Audio Sensitivity to make sure the Floodlight is not triggering unnecessarily
- Ensure there are no objects in front of the camera that could trigger unwanted motion detection
- Lower the Duration for the Floodlight
- Advanced users: Increase the DHCP Lease Time on the router. This setting determines how often network devices need to renew their IP Addresses on the network. By increasing the Lease Time, we reduce how often the Floodlight needs to wake up to renew its IP Address. Consult router manufacturer on how to do this.

Arlo Pro 3 Floodlight – Charging Operation



The Arlo 3 Floodlight operates in a limited capacity when the floodlight is being charged using either the included **MicroUSB cable**, or the **Arlo Indoor Magnetic Charging cable**. **The floodlight's camera and spotlight capabilities will be disabled during charging.**

Users will receive an in-app error message indicating that the floodlight is charging and the functionality is limited.



Arlo Pro 3 Floodlight – Charging Operation



Below are the charging options and the function of the Pro 3 Floodlight Camera with each one.

The MicroUSB and Indoor Magnetic Cable only charge the Floodlight. The camera and floodlight will be disabled.

The VMA5600C Outdoor Charging Cable will fully charge and power the Floodlight, and provides additional brightness and CVR support (with SH/BS)

The VMA5600 Solar Panel will maintain charge and allow full operation, but does not support the additional features.

Feature	Function	Additional features
MicroUSB cable (included)	Charging only, no Floodlight or Camera operation	No
Indoor Magnetic cable	Charging only, no Floodlight or Camera operation	No
Outdoor Magnetic Cable VMA5600C	Charging + normal operation, outdoor	1000 lumens extra brightness (2000 → 3000 lumens output) CVR (requires Arlo Smart Hub or Base Station)
Solar Panel VMA5600	Charging + normal operation, outdoor	No

Arlo Pro 3 Floodlight – Launch Feature Issues



The Arlo Pro 3 Floodlight has a couple of features that will be disabled at launch

Auto Zoom and Track will not be available at launch

- A bug has been identified that prevents livestreaming from working properly

- A fast-track fix is planned to resolve this issue quickly after launch

Foresight Mode will be unavailable in AP Mode at launch

Arlo Pro 3 Floodlight – Launch Feature Issues



Two-Way Audio

There have been changes made for the Two-Way Audio for the Pro 3 Floodlight.

In BS Mode, the Two-Way Audio operates as it does with any other camera.

For AP Mode, the Two-Way Audio sends the audio from the Client to the Floodlight using a SIP audio stream, which ensures the audio is sent quickly to the floodlight. The audio from the Floodlight to the Client, however, is paired with the video. This has been done to ensure the audio stays in sync with the video.

As a result of this change, a few different issues may appear as a result.

Two-Way Audio

Low Volume – There is a possibility that the volume between the two devices is too low

- Increase the volume of the client
- Increase the volume of the Speaker in Audio Settings
- Ensure Wi-Fi signal strength
- Try a different client (iOS, Android, Web)
- Post-launch firmware updates are expected to improve volume

Latency – There is the possibility of issues with latency. These issues will typically be present with livestreaming as well.

- Follow normal latency troubleshooting
- Ensure Wi-Fi signal strength
- Try a different client (iOS, Android, Web)
- Post-launch firmware updates are expected to improve latency

Two-Way Audio

Spinning icon when attempting Two-Way Talk – This issue is typically caused by a failed SIP session (audio stream did not set up properly)

- Back out of audio, try starting audio again
- Stop and restart the livestream
- Restart the device through the app
- Ensure Wi-Fi signal strength. Packet loss is particularly important for SIP audio.

Arlo Pro 3 Floodlight – Hardware Issues



There are some known potential issues with the Arlo Pro 3 Floodlight Camera's hardware to review:

- Floodlight LED failures
- Push Until Click/Floodlight falling from housing
- Blue Haze on images
- Diffuser and Housing Yellowing
- Cracked Housing

Arlo Pro 3 Floodlight – Floodlight LED Failures



The Pro 3 Floodlight's LED panel can have a few different LED Failure types

LED Out – When one or more LEDs do not illuminate when the Floodlight is active.

- **Single LED** - May be difficult to see when the Floodlight is at full brightness
- **Row of LEDs** - This happens when one of the on-board circuits stops working
- **Half of Floodlight LEDs**- The design of the Floodlight has two separate components for each half of the Floodlight, and this is for when one half stops working properly.
- **Entire Floodlight Out**- When no LEDs come on at all and other functions still work.

LED Out issues are easiest to see when the Floodlight Brightness is reduced to minimum brightness.

Uneven Brightness

- In some development units, an issue was identified with uneven brightness, where one half of the Floodlight lights at full brightness, and the other half is at low brightness.

Any LED failure for products in warranty should be replaced via RMA.

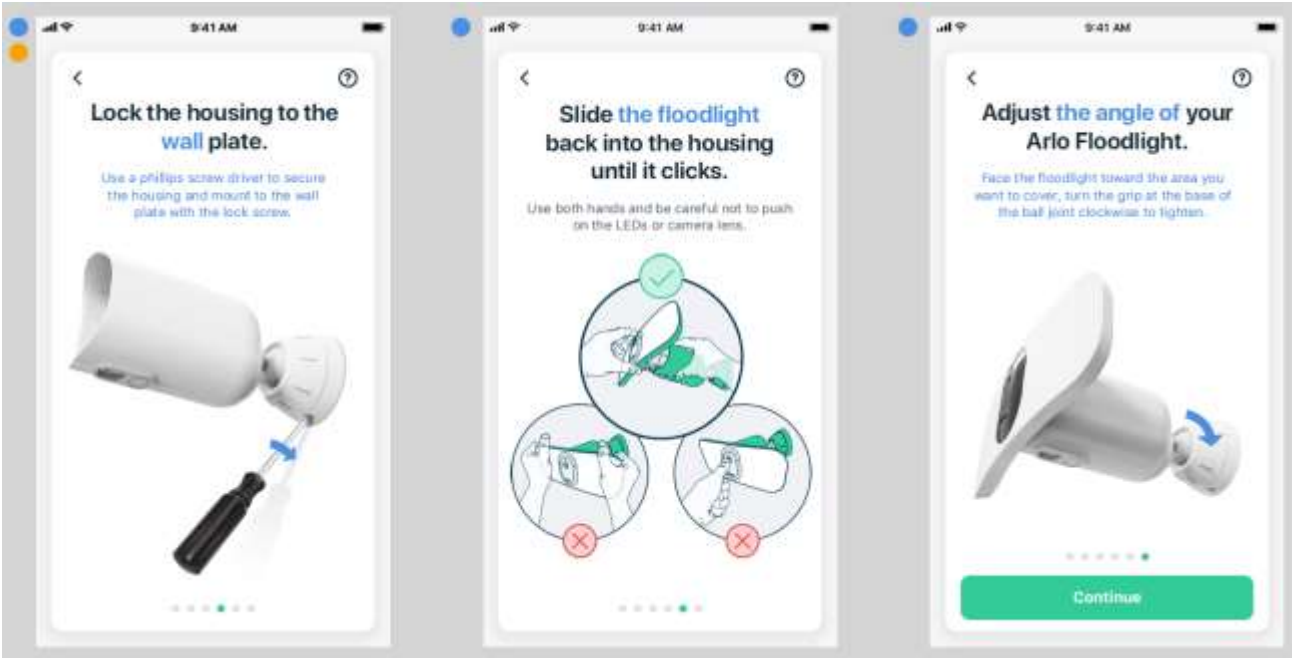
CEP Code Support > Functionality > Hardware > Broken Floodlight - XXXXX

Arlo Pro 3 Floodlight – Push until Click



The Arlo Pro 3 Floodlight is heavier than all of our previous cameras. As a result, there is a higher risk of the camera falling out of the housing when removing for charging. Users are recommended to keep at least one hand on the Floodlight when pressing the release button.

The Pro 3 Floodlight can also appear to be in place when the latch is not fully engaged. Users must ensure to slide the floodlight into the housing until it clicks. When working with customers, make sure to emphasize to ensure it clicks to prevent the floodlight from unexpectedly falling out of the housing.



Arlo Pro 3 Floodlight – Blue Haze/Condensation

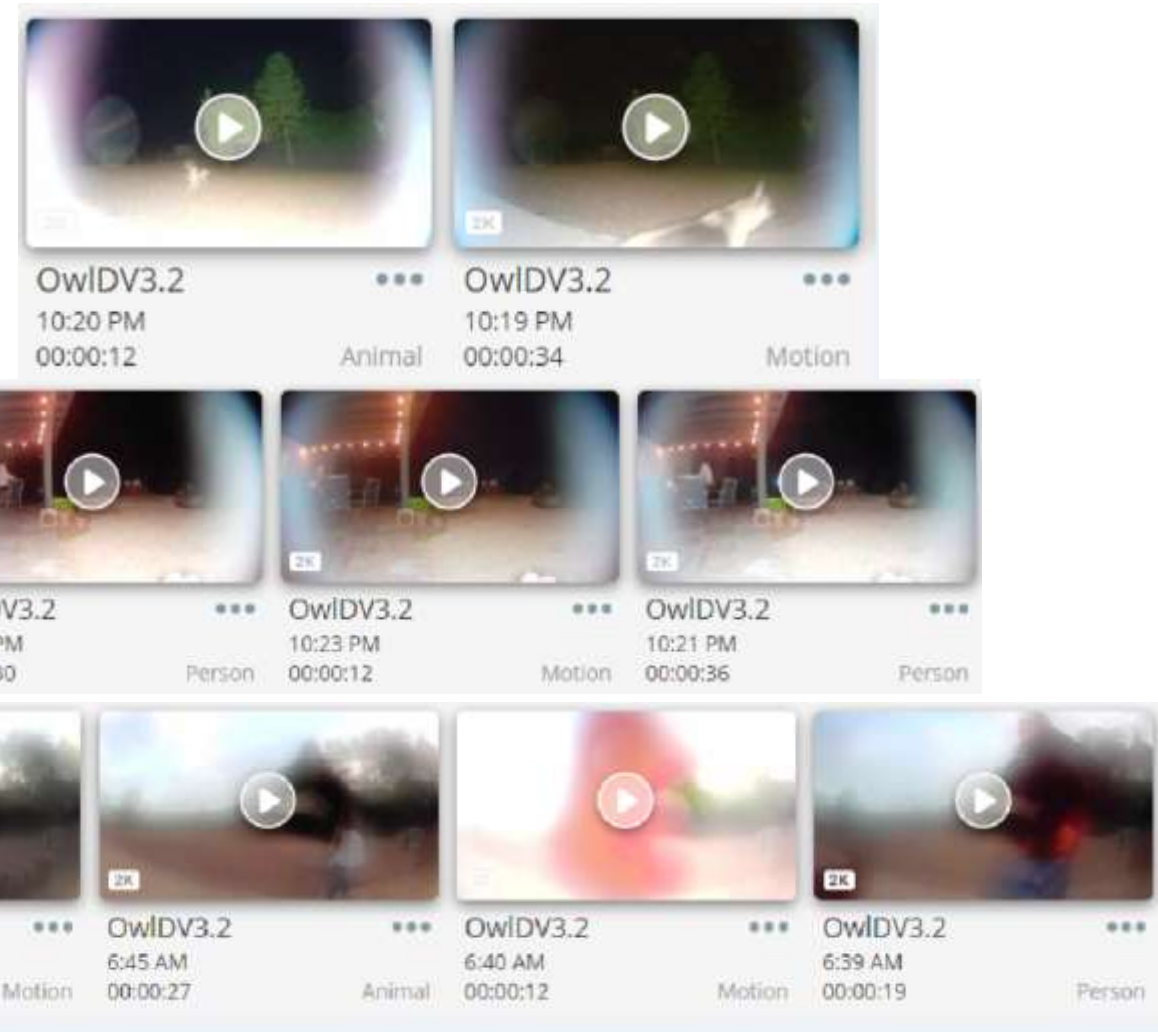


Like any other camera, condensation on the lens can result in blurring or other unwanted effects on the image quality.

With the addition of the ultra-bright floodlight to the camera, there is a possibility of additional effects.

The “Blue Haze” effect occurs when condensation is on or near the lens and the floodlight is active, drawing light into the lens. A blue “halo” or “aura” can occur as a result.

Condensation, in general, will also cause blurring of the picture, as seen in the bottom example pictures.



How can we resolve Blue Haze and Condensation issues?

- When installing the camera, make sure the camera is pointed at least 10 degrees down from horizontal. This helps to allow water to drip off of the camera itself
- Ensure the lens is kept clean. Debris can attract additional condensation
- Install the Floodlight under an eave or overhang to reduce direct effect from rain weather
- Reduce the brightness of the Floodlight
- Install the Floodlight away from exhaust or vents

Future hardware revisions are expected to have adjustments to help reduce the potential for the blue haze effect. Condensation effects, however, cannot be fully resolved, as if there is water on the lens, the image will always be affected.

Arlo Pro 3 Floodlight – Plastic Yellowing

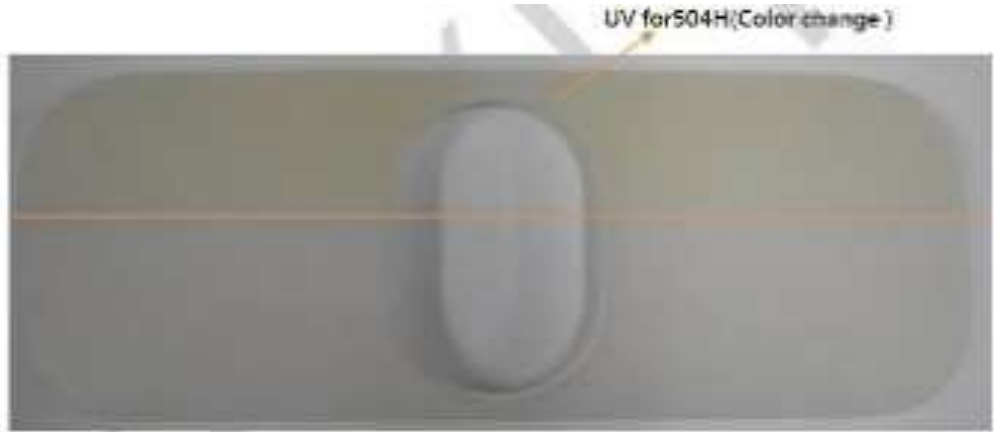


During testing of the hardware, it was found that the plastics of the Pro 3 Floodlight were subject to yellowing when exposed to UV during testing.

The testing found that in the equivalent of one year of sun exposure, the plastic housing and floodlight diffuser can begin to yellow with age.

While the color of the floodlight is slightly affected, the brightness output remains near the same.

Engineering is investigating other possible materials for use.



No.9-1	Pre-test Check	No.9-2	Post-test Check

Arlo Pro 3 Floodlight – Cracked Housing

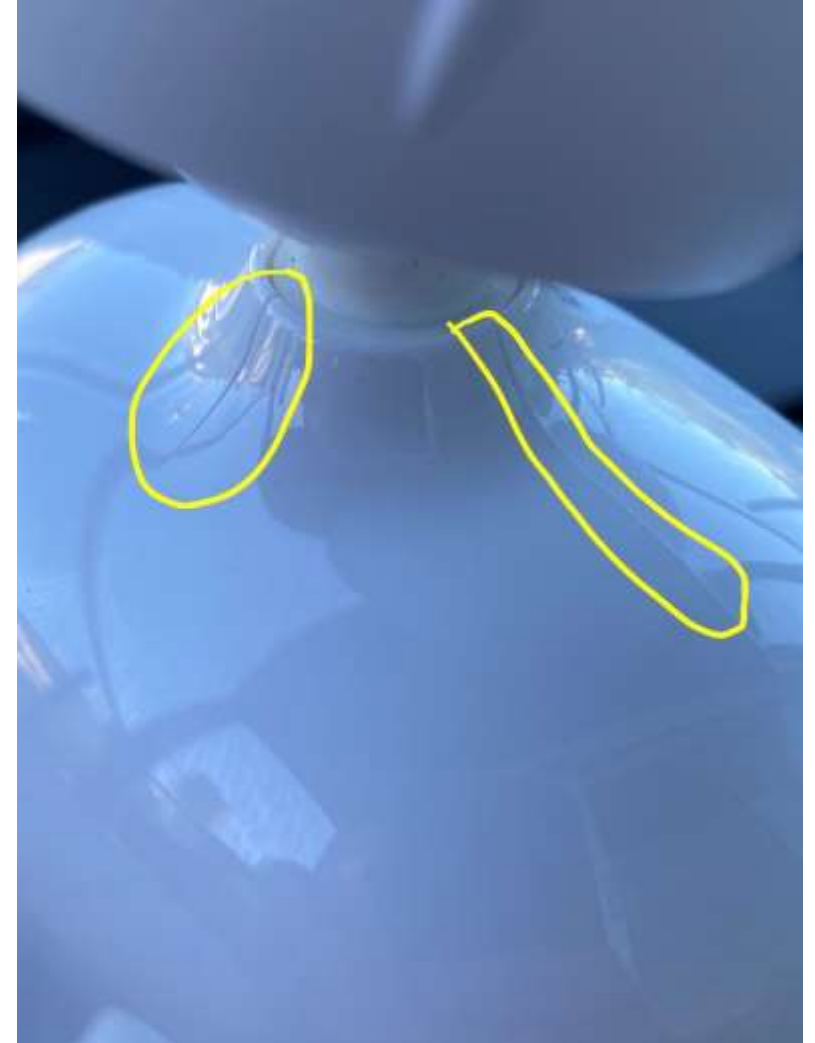


In Beta, we had a couple of cases where users experienced cracks in the housing of their Pro 3 Floodlight Camera.

The cracks were at the interface point where the camera meets the ball joint. One of the users admitted that they used a lot of force that may have caused the cracks. The other was suspected to have been a result of overtightening during assembly.

In the case that users have a cracked housing, the **Pro 3 Floodlight Camera Housing will be available as a separate part for Part Replacement**. Follow the normal Part Replacement process.

If we receive cases, we will request the housing be returned for engineering evaluation



Arlo Pro 3 Floodlight – E-Ring Clamp Pop-out



Inside of the housing, there is an “E” shaped ring clamp that is intended to prevent users from unscrewing the locking screw. This E-ring clamp can fall out when loosening or tightening the screw.

This piece is not essential to the function or locking of the device in any way, it simply helps to prevent users from losing the screw.

If the E-ring clamp pops out, let the customer know that the piece is not essential.

No replacements are to be given for E-ring clamp issues. Do not replace the housing part if the E-ring clamp pops out.

An improved clamp will be used in a future hardware revision.



End

