vista iQ

VISTA iQ

The First Step in Early Cancer Detection

Real-Time Alerts & Aids

In This Guide

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- Post-Marking Quality Check
- Automatic Mass Area Marking
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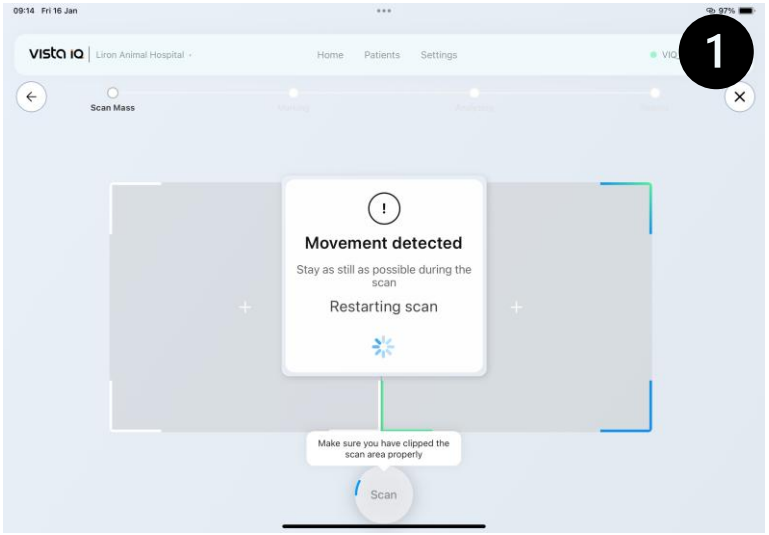
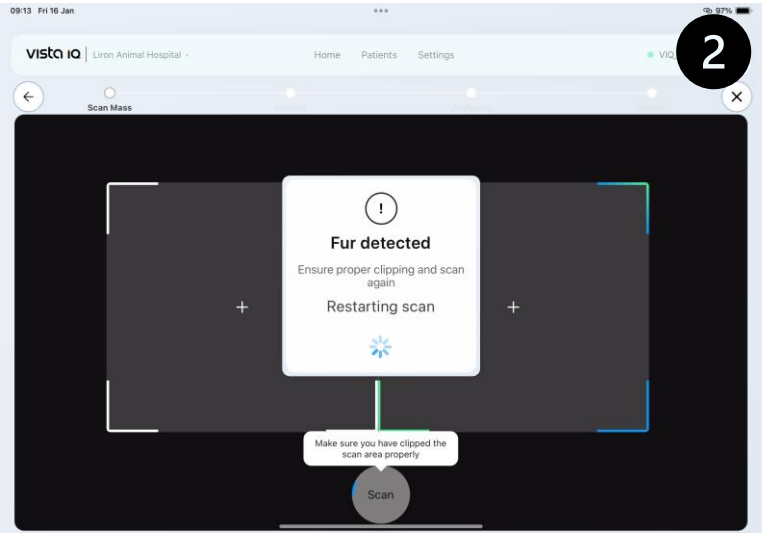
Movement & Fur Detection

Insufficient clipping or sudden patient or scanner movement during the scan may cause the scan to terminate prematurely.

When this occurs, one of the following notifications will appear on the screen:

- Movement Detected
- Fur Detected





Movement & Fur Detection

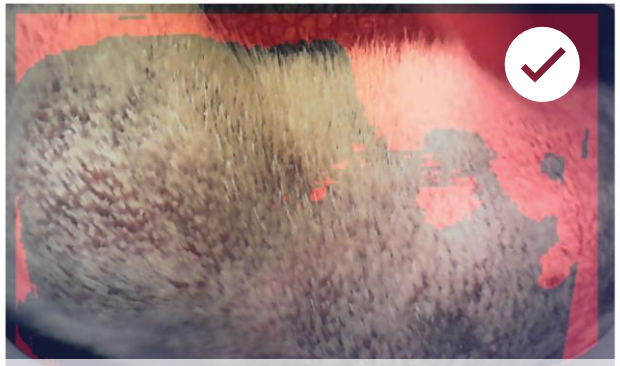
Movement Detected

- The real-time movement detection algorithm automatically stops the scan when movement is detected in the scanned area.
- To prevent movement-related interruptions in future scans, ensure that the scanner is placed in direct contact with the skin and remains stable throughout the entire scan.

Fur Detected

- The real-time fur detection algorithm automatically stops the scan when a substantial amount of fur is detected in the scanned area, including the mass area and the adjacent healthy area.
- To prevent termination due to fur detection in future scans, ensure proper clipping of both the mass and the adjacent healthy area before scanning.

Poor Clipping- Mass (left) is covered with a red zone (see later)



Good Clipping

Ensure that the scanner placement is well aligned with the initial scan.

Post Marking Quality Check

Once the **Upload** button is pressed, the VISTA iQ algorithms evaluate the scan and marking quality before processing the thermal data.

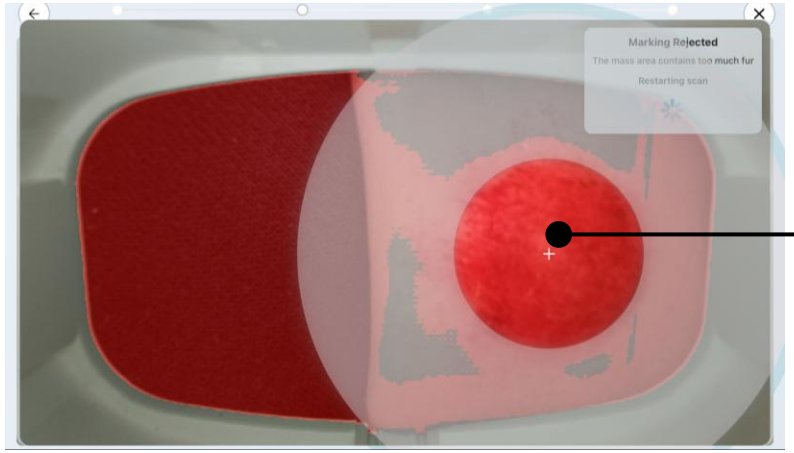
What Is a Red Zone?

A **Red Zone** indicates an area of the scan where no data has been collected and therefore cannot be analyzed.

Red zones are typically caused by unclipped fur or movement, which prevent proper data acquisition.

If the mass area or the healthy area has been insufficiently heated and an inadequate amount of data has been collected, a notification will appear on the screen indicating an error. In addition, an image will be displayed highlighting the affected areas in red to show where data was not collected.

A **red zone** can be used as a visual aid to ensure that clipping and/or placing of the scanner are corrected when re-scanning.



Ensure that the scanner placement is well aligned with the initial scan.

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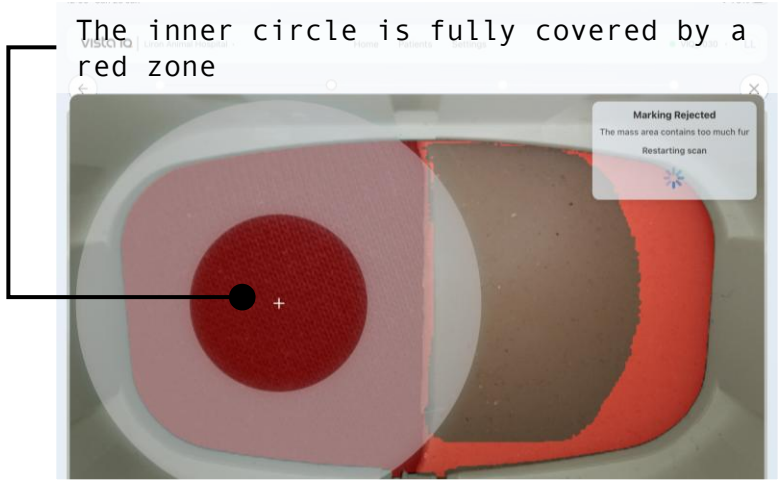
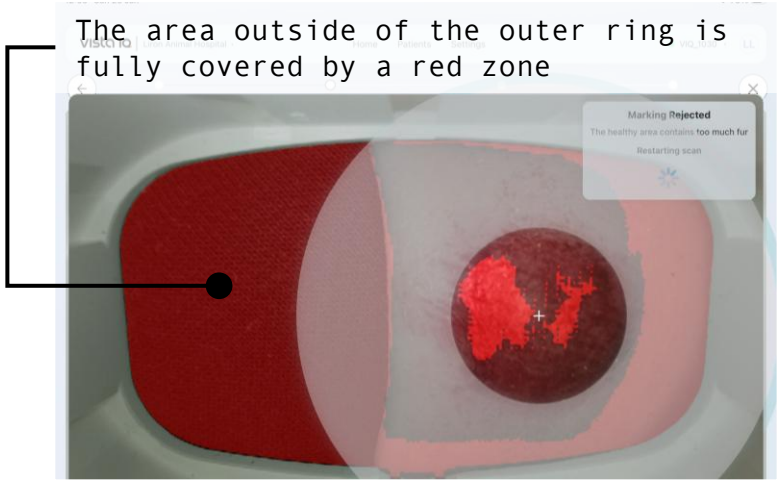
Post Marking Quality Check

The following qualification criteria apply:

- Mass area: High-quality data must be collected from a minimum of 25 pixels.
- Healthy area: High-quality data must be collected from a minimum of 100 pixels.

If either the inner circle (left image) or the area outside the outer ring (right image) becomes fully covered by a red zone, the scan will terminate. The VISTA iQ system will then automatically prepare to re-scan.





Automatic Mass Area Marking

VISTA iQ is equipped with a mass-locator algorithm that predicts the location and size of a mass based on thermal and optical parameters.

When the mass location is predicted, the inner circle marker will appear automatically on the screen.

Once the marker appears:

- Review the size and position of the inner circle.
- If necessary, adjust the size and position so that it covers only the mass area.
- Ensure that the inner circle does not include the mass margins or any surrounding healthy tissue.

If the algorithm cannot confidently assist, **manual marking** is required

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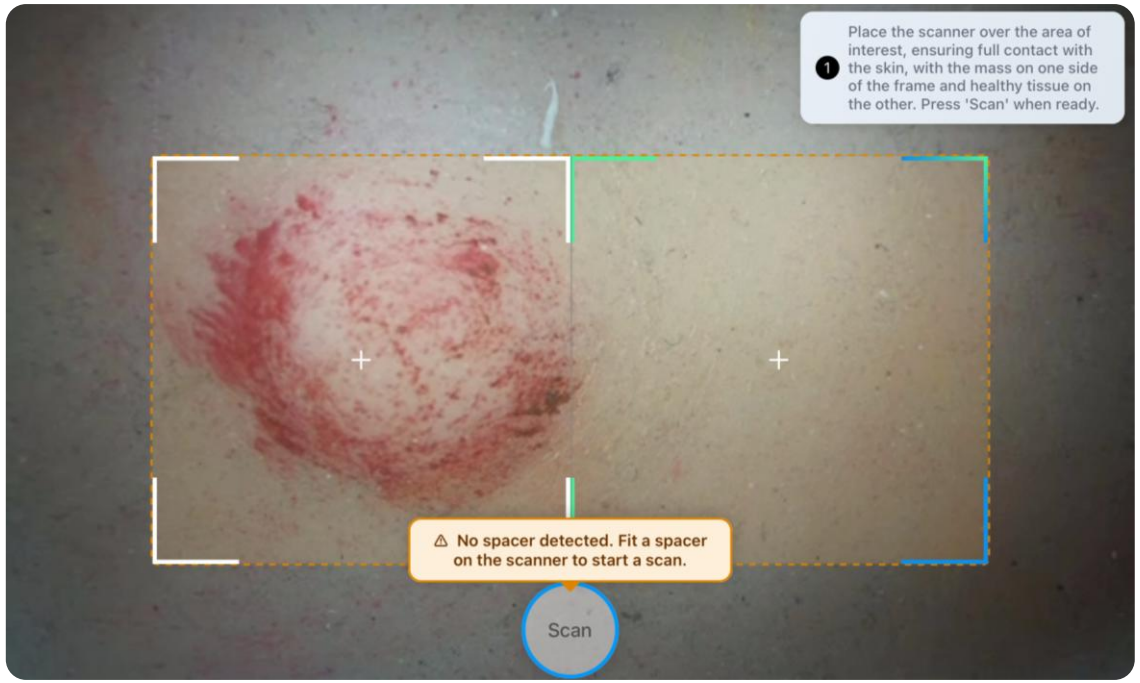
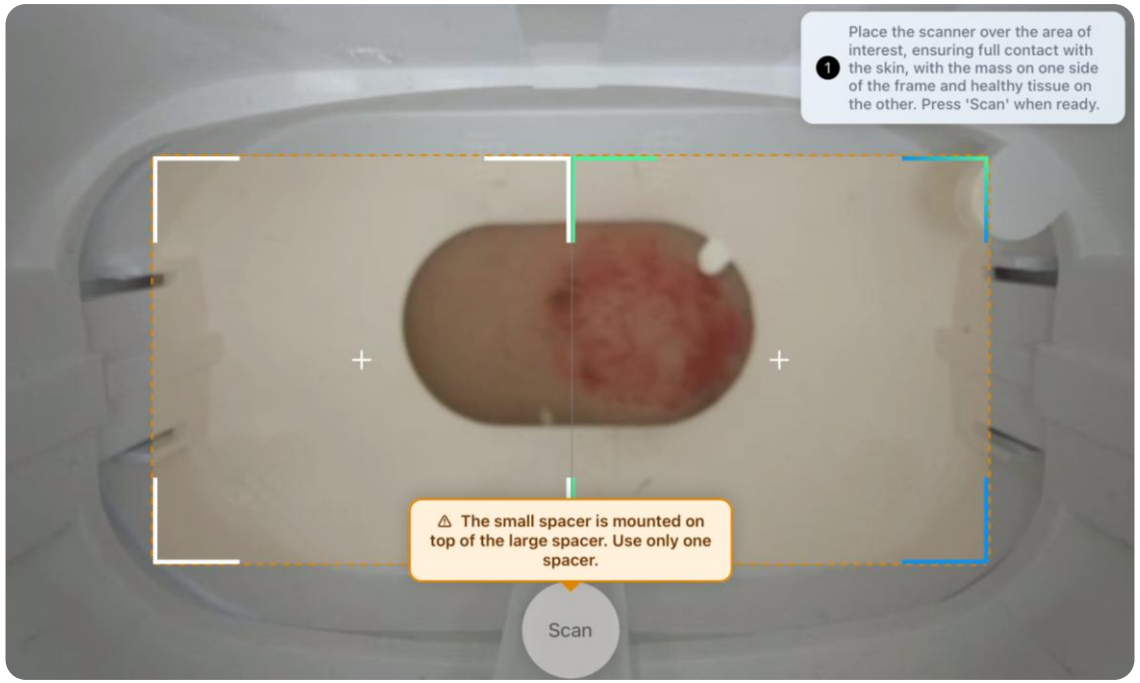
Spacer Head Notifications



A spacer head must be fitted before scanning. This message appears when no spacer is detected on the scanner. Fit one of the spacer heads and the Scan button becomes active.



Only one spacer head can be fitted at a time. This message appears when the small spacer has been mounted on top of the large one. Spacers must never be stacked. Remove the spacer that's fitted and swap it for the one you need, then the scan will be available.

LED and Vibration Indicators Guide

LED Indication	Device Vibration	App Notification	Trigger/Action
— BOOT & UPDATES —			
Cyan pulses	No	No notification	Device booting — GPIO service started, waiting for main service to become ready
Cyan circular (fill/empty)	No	No notification	Update in progress (GPIO service is stopped; updater controls LEDs directly)
— WIFI PROVISIONING —			
Blue flashing	No	No notification	WiFi provisioning mode — AP active, waiting for device connection
Blue solid	No	No notification	WiFi provisioning — client/iPad connected to AP
Blue circular	No	No notification	WiFi provisioning — connecting to WiFi network
Orange flashing	No	No notification	WiFi provisioning — connection failed (indefinite, until retry) and then turns back blue flashing
— CHARGING & BATTERY —			
White pulses	No	Scanner is docked and charging	Scanner docked & charging
White solid	No	Scanner is fully charged	Docked -> Scanner fully charged || Not docked -> Scanner has enough battery to use
— SCAN FLOW —			
Green pulses	No	(No notification — Scan button shows loading/disabled state)	App activation - Prep to scan (ffc)
Green solid	No	(No notification — Scan button becomes active)	Scan preparation completed (after 18s)
White circular	No	(No notification — scan progress shown in scan flow UI)	Scan started
3 white flashes	No	Scan marking phase	Scan completed successfully
3 orange flashes	No	Fur detected / Movement detected / Area not heated properly / Scan Timeout / Scan was canceled by the user	Scan failure (movement/fur)
— BATTERY WARNINGS —			
Orange slow pulses	No	Please dock the scanner	Battery below scan threshold (low battery state — voltage ≤ minimum scan voltage)
Red pulses (fading in and out)	No	Low battery. Please dock the scanner (currently implemented as: "Please charge the device to proceed with the scan" — shown pre-scan, not device-pushed)	Battery <10%
Red rapid flash	No	Battery critically low. Please verify the docking station is properly connected to power.	Critical battery (voltage ≤ critical threshold)
— SYSTEM CHECK —			
White pulses	No	Performing system check	System check initiated
5 orange flashes	No	Warning: System check missed (1/3) Please dock the scanner.	1st missed system check
5 orange flashes	No	Warning: System check missed (2/3) Please dock the scanner.	2nd missed system check
Red solid	No	Critical: Last system check missed – scan disabled. Please dock the scanner.	3rd missed system check (LED method exists in firmware but HTTP route not yet exposed — unreachable via API)
Red solid	No	Error: Scanner locked. Dock to reset.	System lockout due to 3 missed checks and is picked up
Red solid	No	Error: Scanner locked + {failure description}. Please contact support.	System lockout due to critical failed checks
— EXECUTION / CALIBRATION —			
Cyan circular (slow)	No	No notification	Calibration / validation / execution in progress
Purple pulses	No	No notification	Execution paused — waiting for technician action

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HT VET Academy

Harley- Your AI Assistance

Customer Marketing Portal

VISTA iQ Support