
Vicon Active Wand

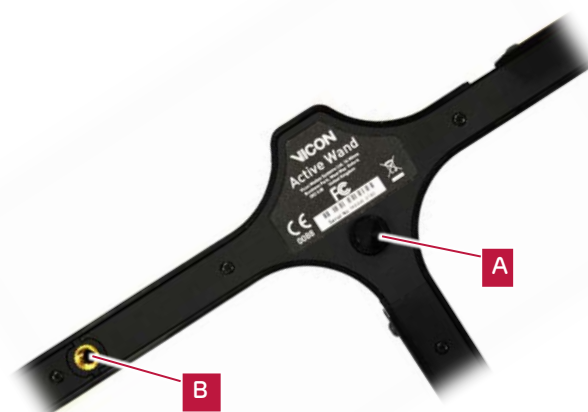
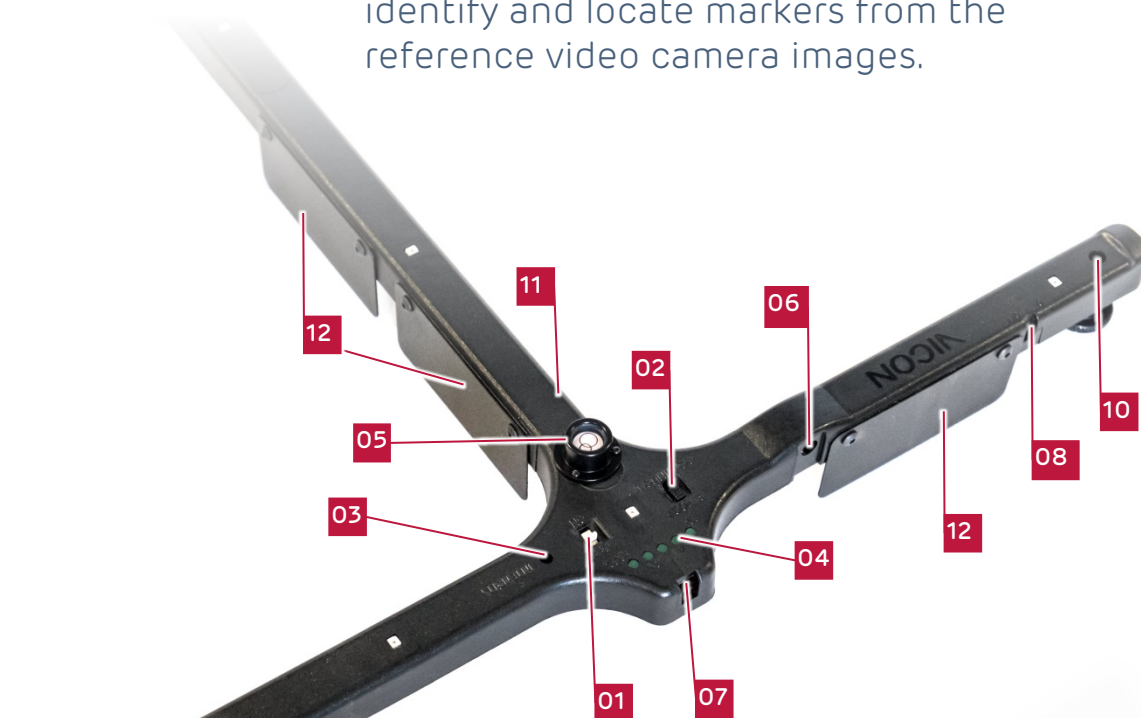
User Guide



Electronic Calibration Device

Introduction

The Vicon Active Wand is an electronic motion capture calibration device that contains five LEDs. The Active Wand is used to calibrate both optical and reference video cameras. As some reference video cameras do not have strobes, the LEDs in the Active Wand make it easier to identify and locate markers from the reference video camera images.





Key Benefits

- Accurate
- Robust
- Easier to calibrate video cameras

Active Wand controls and indicators

- 01** On/Off switch
- 02** LED Mode switch – Strobe/Continuous mode
- 03** Intensity adjustment screw
- 04** Battery charge indicator LEDs
- 05** Bubble level
- 06** Battery charger connection
- 07** Camera strobe sensor
- 08** NIR Mode switch*
- 09** Handle/Battery holder
- 10** Active Wand level screws
- 11** Tripod attachment
- 12** Forceplate alignment fingers

* Not fitted to NIR-only wands.

Note: To ensure quality calibration, the NIR mode switch is factory-configured. If your system has:

- **NIR (Near Infra Red) strobes**, the switch is set to ON.
- **VR (Visible Red) strobes**, the switch is set to OFF.
- **A mixture of NIR and VR strobes**, each camera is fitted with a band pass or interference filter, and the NIR Mode switch is set to ON.

Tip: If the floor is uneven, adjust the level screws **10** and check the bubble level to ensure the wand is level. If you are using a small or sunken force plate, to enable the Active Wand to lie level you may

need to change the position of the pivot screws from the default **A** to the alternative position **B**.

Using the Active Wand

You should use Strobe mode whenever possible. However, in the following cases, Continuous mode may give better results:

- In large volumes, if the camera's strobes are not bright enough to activate the wand's sensor
- In cases of high light pollution, for example, in direct sunlight
- To calibrate camcorders

To prepare the Active Wand for use:

1. Turn on the Active Wand.
2. If necessary, move the LED Mode switch to Strobe mode.

The LEDs begin to flash.

Note: When in Strobe mode, the Active Wand will not sync to camera rates less than 50Hz.

3. Place the Active Wand in the capture volume where it is visible by the Vicon cameras.

When the LEDs appear to stop flashing, the Active Wand is synchronized to the cameras.

For further information on camera calibration, see your software documentation.

Charging the Active Wand battery

When you turn on the Active Wand, the battery charge indicator LEDs illuminate for approximately five seconds to indicate the amount of charge in the battery:

- Five green LEDs: Fully charged
- One green LED: Recharge needed
- No LEDs: Fully depleted (flat)

Warning: Before charging the battery, turn off the Active Wand.

To charge the battery:

1. Plug in the supplied Active Wand battery charger.

Warning: To prevent damage to the Active Wand, use only the supplied charger.

2. Insert the charger connector into the Active Wand and leave it to charge.

Note: A full recharge takes approximately four hours.

3. When the battery is fully charged, indicated by five green LEDs, detach the charger.

The green battery charge indicator LEDs remain illuminated for about 10 seconds.

Replacing the Active Wand battery

Warning: Before replacing the battery, turn off the Active Wand.

To replace the Active Wand battery:

1. Remove the screws from the Active Wand handle.
2. To reveal the battery, detach the back of the handle.
3. Unplug the battery connector **01**.
4. Remove the old battery **02**.
5. Place the new battery into the battery holder.
6. Attach the battery connector.
7. Replace the Active Wand handle and screws.
8. Turn on the Active Wand and run it in Continuous mode until the battery is flat, then fully recharge it (see page 3).

This enables the Active Wand to calculate the battery life.

Note: To order additional batteries, email sales@vicon.com

Warning: This product contains a lithium ion battery.

- Do not incinerate the battery.
- Do not disassemble the battery.
- Do not short the battery terminals.
- Do not expose the product or the battery to high temperatures (140°F/60°C).



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