

## SMART DIG WAND QUICK START

The H106 Smart Dig Wand is a wireless motion-sensing remote control for aiding in the operation of hydrovac wands.

## POWERING ON THE SMART DIG WAND

The H106 Smart Dig Wand unit requires a special sequence to turn on. This sequence verifies that the start and stop buttons are working correctly prior to operation. It also minimizes any accidental powering up of the unit.

To power up the Smart Dig Wand:

1. Press and hold the **red** button.
2. Press and hold the **green** button.
3. Release the **red** button.
4. Release the **green** button.

Regular flashing **green** LED: Unit turned on but no link.

Solid, or quickly flashing **green** LED: Unit is turned on and linked.

## POWERING OFF THE SMART DIG WAND

Pressing the **red** E-stop button will shut down the Smart Dig Wand unit. The display on the Smart Dig Wand will be put into in sleep mode and will not draw any power from the battery.

## MATCHING MODE (H106)

To put the H106 Smart Dig Wand into matching mode:

1. Press and hold the bottom **red** button. The red light should begin to flash.
2. Press and hold the two left **grey** round buttons. The green light will turn on and the red light will begin to flash more quickly.
3. Release all buttons. The screen will display “Match Mode” followed by firmware information.
4. Next, put the receiver into Matching Mode. After attempting to match with a receiver, the screen will either change to “Match Failed” or “Match Passed”.

## MATCHING MODE (RECEIVER)

### FIRST METHOD

1. Apply power to the C220.
2. Momentarily (“blip”) the power off to the C220 six to seven times (i.e. power off for 1/2 second, power on for one second; six times). Leave the power on after the sixth blip.
3. The LED on the C220 will light up **dark blue**.
4. Once matching is complete, the light will change to a light blue/white.

### SECOND METHOD

1. Apply power to the C220.
2. Using a smooth motion, wave the H106 back and forth over the top left corner of the C220 so that the two magnets under the red and green button pass over the surface of the Aarcomm logo.
3. If the C220 successfully detects the magnets on the H106, the C220 LED will light up **dark blue**.
4. Once matching is complete, the light will change to a light blue/white.

## SENSING MODE

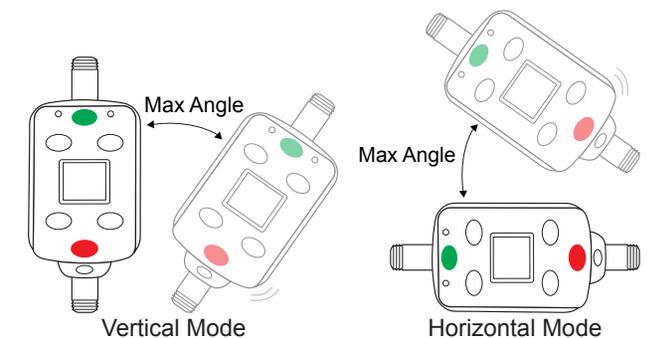
Upon start-up, the screen will show the configured sensing mode (“VERTICAL” or “HORIZONTAL”), the message “Get Ready”, and the configured maximum angle and maximum acceleration.

The message “Get Ready” will display for 5 seconds, during which time the wand is not detecting motion. After 5 seconds, the message will change to “Sensing” – the Smart Dig Wand is now monitoring the angle and acceleration for variations exceeding the configured limits.

## CHANGING SENSING MODE

In Vertical mode, the maximum angle is calculated from vertical/upright. In horizontal mode, the maximum angle is calculated as the angle from horizontal.

To switch between Vertical and Horizontal sensing modes, press the top two **grey** buttons at the same time. When the mode has been changed, the Smart Dig Wand will display “Get Ready” for 5 seconds before resuming the motion sensing.



## DROP DETECTED

If the Smart Dig Wand unit detects that the angle or acceleration parameters have been exceeded (a “drop”), it will send a signal to the receiver to shut off the water pressure. To reset the sensor and re-allow the water pressure to be turned on: hold the bottom two grey buttons for 2 seconds (until the screen has “filled up”). You will have 5 seconds to “Get Ready” before the Smart Dig Wand starts sensing a drop again.



## CHARGING THE BATTERY

The Smart Dig Wand is waterproof and completely sealed to IP67 rating. For improved reliability, it does not have a removable battery and is charged using the wireless charging cradle. The magnets on the back of the Smart Dig Wand are only used for alignment and not for electrical contact.

The **red** LED will begin to flash when the Smart Dig Wand should be charged. Place the Smart Dig Wand on the charging cradle to begin charging. The LCD screen will show the charge status; please allow a minute or two for the charge level to be calculated accurately.

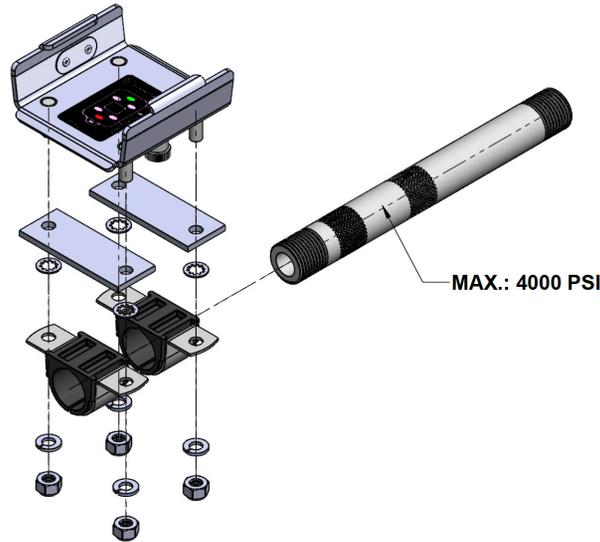
A battery that is completely discharged will take approximately three hours to charge. The battery can be charged at any time even if it is not depleted. A quick 30-minute charge will allow the Smart Dig Wand to operate for eight hours. A full battery will last approximately 50 to 120 hours, depending on the performance setting.

## BRACKET MOUNT

The Smart Dig Wand unit detects if it is properly secured in the wand bracket. To insert the unit into the bracket, pull on the pin at the back of the bracket,

and slide the Smart Dig Wand into the bracket with the **green** button and LED indicators towards the top. Release the safety pin, and verify that it has fully snapped into place. The wand should not be able to slide out without releasing the safety pin.

If the Smart Dig Wand does not detect the bracket, check that the wand has been inserted in the correct orientation. The safety pin should be on the right side of the unit.



# Smart Dig Wand System: Quick Start Guide

**Technical Support:**  
1-604-379-5091  
1-800-604-9218

**Email:**  
support@aarcomm.com  
DSM-20002-00  
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