



T-Wand™ User's Guide

NMT's T-Wand is a rugged Coded Wire Tag (CWT) detector for field use. It is fully waterproof, it floats, and is stable over a wide range of temperatures.

The detection range of the T-Wand is 5.25 cm for a standard length CWT. The T-Wand is quick and easy to use, and mouth wanding is no longer needed.

Operation

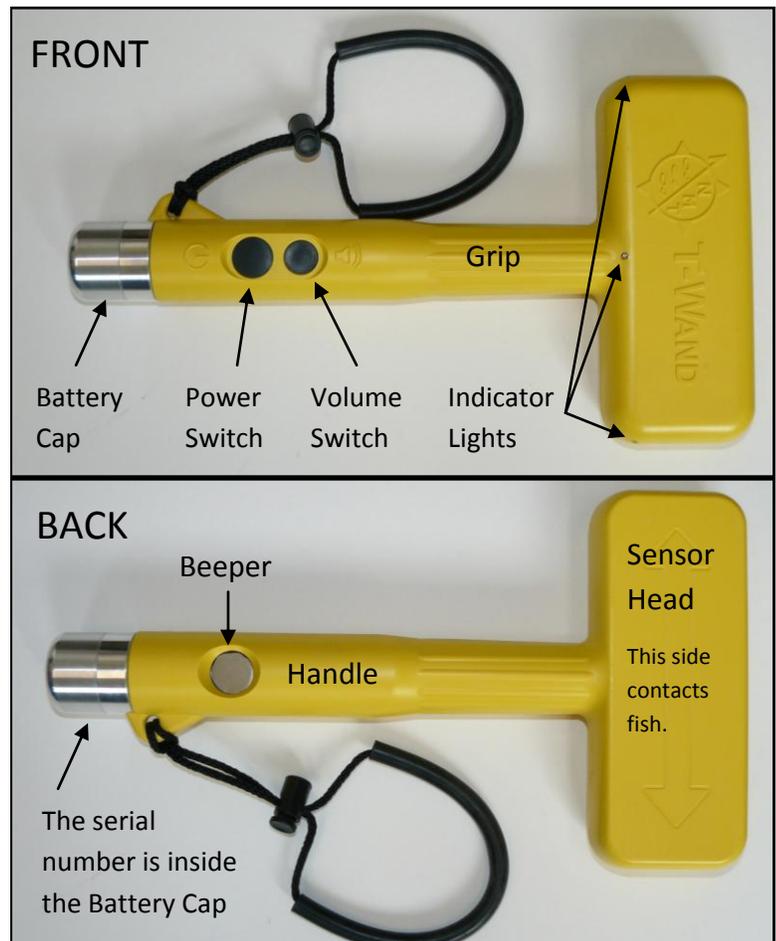
1. Press the power switch to turn the wand on. The wand will beep once and the lights will flash to indicate the wand is ready to use. To turn the wand off, press the power switch again. Two quick beeps indicate shut-down.
2. The smaller button adjusts the sound. The sound settings toggle through low-off-high.

Step 1 - Remove watches and any magnetic jewelry before you begin. Take cell phones, keys, and other metal objects out of your pockets.

Step 2 – Turn on the wand. Hold it by the grip, just under the sensor head, with the front of the wand and the back of your hand facing upwards. Check the wand function using the T-Wand Standard (over).

Step 3 - Use the wand to check that gloves are non-magnetic, and to find snaps and zippers that can interfere with sampling. You will need to hold the wand slightly away from these while you sample.

Step 4 – At your sampling location, simulate the wanding action to ensure you are free of interference from nearby structures, vehicles, boats, processing machinery, etc. Move away from any sources of interference and recheck.



Step 5 – Pick the fish up from the ground, out of a hold, or off of a table. We recommend holding dead fish by the gills to keep them from swinging away from the wand. Sampling live, unanesthetized fish is easiest with a partner who can hold the fish for you.

Step 6 - With the back of the wand (the side with the arrow) in continual contact with the fish, rub the wand along the snout from the front of the mouth to behind the head with a very quick up and down motion so that the entire sensor head passes over the fish in both directions. Keep the long axis of the arrow parallel to the spine. The arrow indicates the direction and minimum length of the pass.

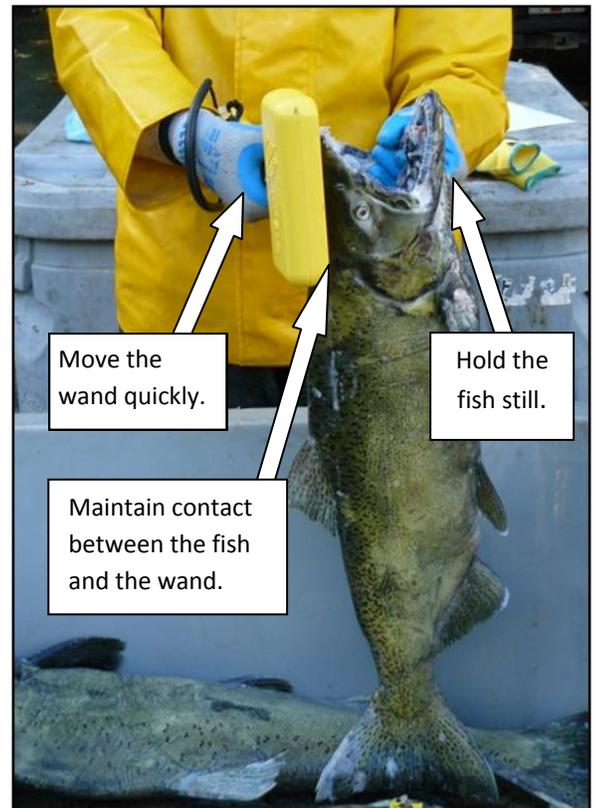
Move the T-Wand quickly! A single up/down pass across the back of the head is all that is required for coho and most Chinook. Wand male Chinook larger than 1 m across the back of the snout and on both sides of the head, over each eye.

If a tag is detected, the T-Wand will beep and the indicator lights will come on.

See video instructions online at www.nmt.us

Using the T-Wand Detection Standard

The Detection Standard is used to test the wand function and to practice the wand technique. Hold the plastic end of the standard against the T-Wand. Move the wand briskly (that is, as fast as striking a match) up and down in the direction of the arrow and for at least the full length of the arrow. The T-Wand should indicate a tag detection. If not, try moving the wand faster, making a longer pass, or holding the standard in your fist with the plastic end against the wand to create a larger contact surface. If you are still unsuccessful, replace the batteries, and if that did not solve the problem, please contact NMT.



Maintenance

- Batteries: The T-Wand uses two high quality alkaline AA batteries that are inserted into the handle. If the batteries need to be replaced, the wand will not power up. There is no indication of when this will occur, so we recommend that you **always carry fresh batteries.**
- Unscrew the battery cap to replace the batteries. Do not over-tighten the cap. The o-ring is designed to provide a waterproof seal with light pressure from the battery cap. Screw it down only until it is finger tight. Further tightening may damage the T-Wand.
- After sampling, use a soft brush or cloth to clean off any dirt and fish tissue.
- When needed, disinfect using standard practices.
- Remove the batteries for long-term storage.



The T-Wand is made in Washington, USA. Each T-Wand is packed in a heavy-duty transit case with a fabric holster, wand standard, and instructions. The T-Wand is guaranteed for one year following the invoice date against failure caused by defective material or workmanship. For questions about using your wand, please contact NMT Biology (biology@nmt.us; 360.596.9400). If your wand is malfunctioning, please contact NMT Technical Support (techsupport@nmt.us; 360.468.3375).