

NH4+ Sensor & T5 Logger Body Notes

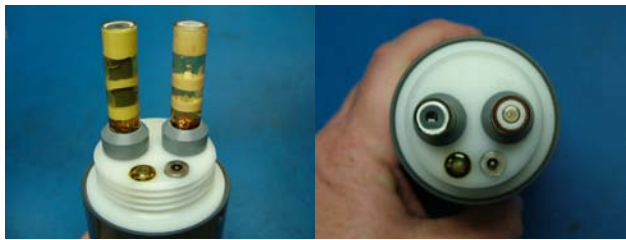


Figure 1

Figure 1 shows the locations of the four sensors. ORP is the front left, Temperature is the front right, NH4+ is the left rear, and pH is the right rear. Figure 2 shows the identification marking for the pH sensor receptacle. Figure 3 shows the membrane end of the NH4+ sensor, with the black plastic center. The sensors are NOT interchangeable, and must be mounted in the correct position. Note that the sensor bodies are clear and the electrolytes may be visually examined for biological contamination. Also note that the sensitive element is slightly recessed on both sensor types to provide impact protection from the weights. However, be sure no air is trapped during calibration!



Figure 2

Figure 3

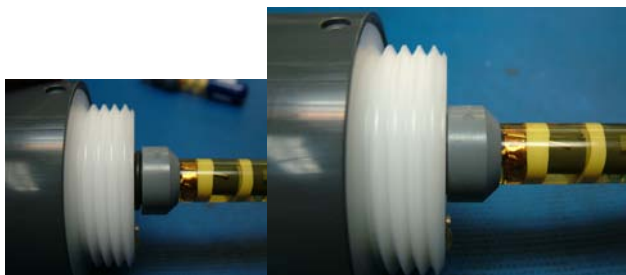


Figure 4

Figure 5

. The O-rings should be lubricated lightly with compatible grease on both sensors. Figure 4 shows one of the sensors started in its receptacle, with the outer O-ring still visible. The connectors are threaded and should be screwed into the receptacle until both O-rings are completely seated as in Figure 5. The gray part of the sensor should just touch the white body. It is possible to misalign the connectors when inserting the sensors. This can damage the mating parts in the receptacle. Never force the insertion of the sensor... If something does not feel right, remove the sensor, and check for damage to the mating connector (compare to Figure 6). If pliers are needed, only grab the gray part of the sensor! (We'll fix this next time around.)



Figure 6

DO NOT OVERTIGHTEN
You WILL damage the logger!

Figure 7 shows the new pH sensor. Note the threaded connector in place of the bayonet lock type, and the usual cap filled with storage solution



Figure 7

Figure 8

Figure 8 shows the NH4+ sensor with protective caps over both ends. The NH4+ sensors are shipped dry in individual plastic baggies with a small piece of wet filter paper to maintain humidity (Figure 8). The clear cap over the connector is mandatory to keep the connector dry. The black cap at the element end (Figures 8 & 9) is open to allow the water vapor to contact the sensor element while protecting it from damage and may be removed or modified for use. The NH4+ must be soaked in water for several hours prior to use in order to hydrate the sensor membrane.

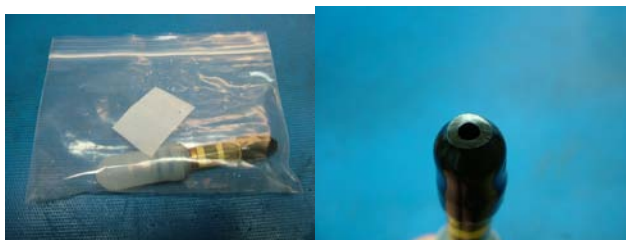


Figure 6

Figure 7

QUESTIONS?
CALL KELLY 1-619-794-7788