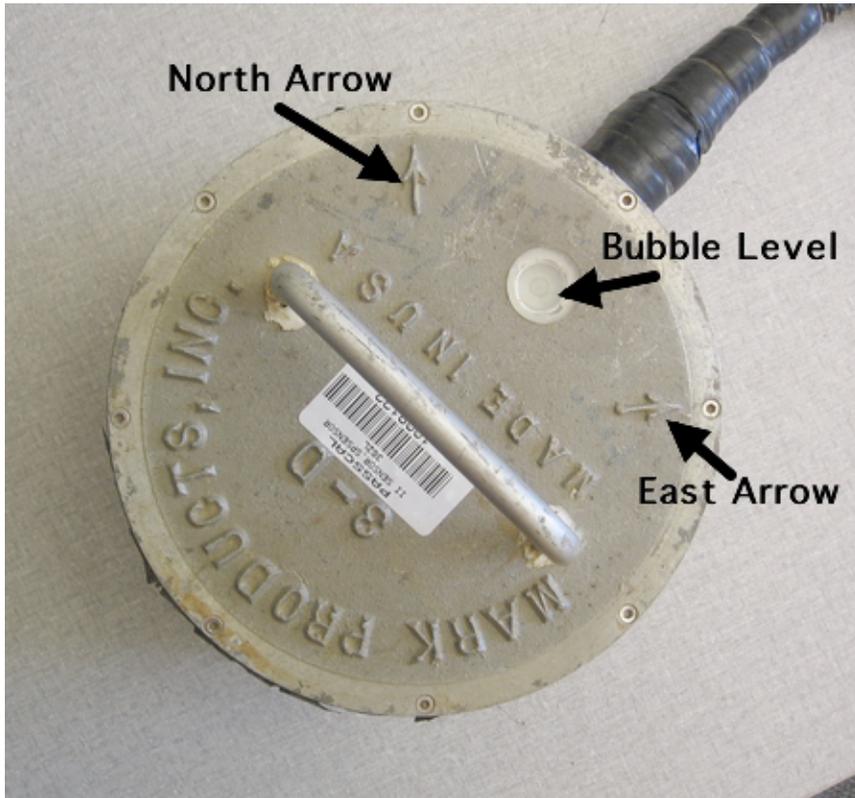


## L-22 Short Period Sensor Installation Tips

Rev. 20090314

**Tip 1** – Correctly orient your sensor. The below pictures show how the arrows must be oriented North and East. Depending on the type of experiment either orient your sensor to Magnetic North or to True North and note your declination.



**Tip 2** – Leveling is very important for the L-22 sensor because if the bubble level is out of the bull's-eye then the response of the instrument can be affected. Also, the bubble level can be difficult to read, so keep a small bubble level in your tool kit for installation.

**Tip 3** – The L-22 should be buried to the depth of competent soils. This varies by location from a few inches. Be sure to clear any large rocks out of the pit before installing the sensor.



**Tip 4** – For a short-term experiment (less than 2 months, and not very wet environment) direct burial of the L-22 is okay. For a long-term experiment (more than 2 months) or in a very wet environment the sensor should be protected from flooding by burying it in a plastic bag. Place the instrument in the bag with the top of the bag open in your pit.



Orient your sensor.



Level the instrument, making sure that you can see the bubble level, and pull the bag up.



Pack dirt or sand along the outside of the bag all the way up the sensor and gently compact to keep the sensor level.



Check the orientation and bubble level one last time, then close the bag and secure with electrical/waterproof tape. Evacuate any air remaining in the bag.



Tape around the cable just beyond the connection into the sensor and seal all open edges of the bag.



Carefully fill in the rest of the dirt around and over the L-22 using your hands.



Tamp down the dirt around the sensor as you fill in the hole.



Mound more dirt over the sensor pit to help drainage away from the sensor. Dig a small trench from the sensor to the digitizer for the sensor cable. Beware! Do not cut the sensor cable with the shovel. Carefully bury the sensor cable to guard against wind noise and animals.