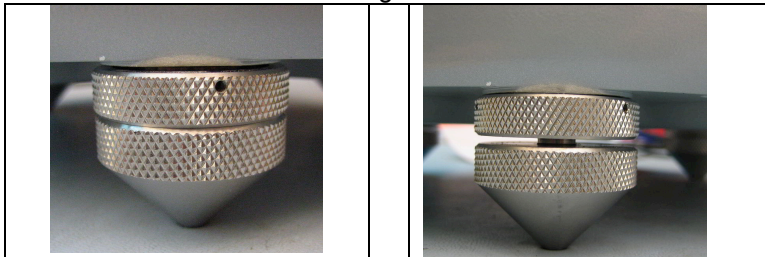


## Nanometrics Trillium-120PA Installation Tips:

(See also Trillium120P-PA\_UserGuide\_15149R6.pdf from Nanometrics)

1. The sensor pad should be within 5° of level, marked with a line oriented North/South and/or East/West. Construction of the sensor enclosure is critical to data quality. The Trillium-120PA (T120) needs adequate thermal insulation. See Field Note on Broadband Vault Construction.
2. Prepare the sensor for installation. All three leveling feet should be screwed into the sensor case.

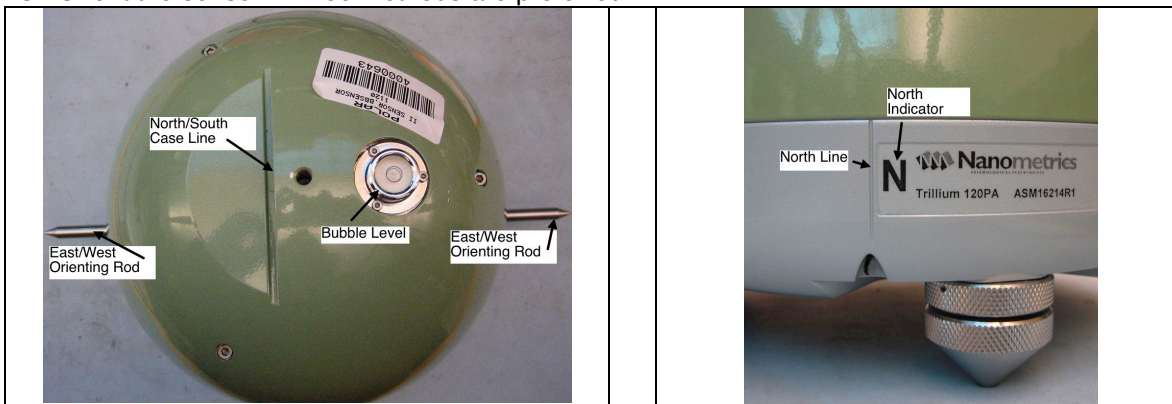


Start Position for Leveling Foot

Leveling Foot in Locked Position

Connect the sensor cable to the T120 (do not connect the digitizer/power end yet). Using self vulcanizing tape start as close to the sensor case as possible and in overlapping turns, cover all of the metal part of the connector to keep water and condensation out of the threads of the connector.

3. Orient the sensor: Three methods are preferred:



- Align the scribe marks at the base of the T120 with the North/South line on the sensor pad. Make sure the bold "N" is oriented toward the north direction.
- If using the north-south case-top guide, place a ruler along the guide and align the instrument to either a staked wire or as a rough guide using a compass and standing over the top of the sensor. Do not put the compass near the sensor case.
- If using the alignment rods, align them with the East/West line on the sensor pad.

4. With the leveling feet in the starting position (screwed into the case), level the sensor by turning the 2 components of the foot as a unit to center the bubble in the spirit level on the top of the case. Twist the top section of the leveling foot firmly (hand tight) against the bottom of the sensor case to lock the foot.

5. Secure the sensor cable to the pad with tape so that tugs on the cable (inadvertent or otherwise) do not budge the sensor and the cable does not touch the sensor or sensor enclosure.

6. Connect the digitizer end of the cable to the digitizer and in the case of the Trillium-120 to Q330 cable, connect the external power to the power box.

7. Cover the sensor with insulation. Insulate the vault and close the vault. Wait until the sensor mass positions have been verified and a stomp test performed before completely sealing the sensor vault.

8. T120 masses do not need to be unlocked. Verify the mass positions using the handheld controller connected to the DAS. Mass positions should be within +/-1 V and the instrument should be issued manual recenters until +/-1V or better is reached after the installation of the sensor is complete. Wait 2 minutes between each attempt to recenter the masses. A manual recenter should be issued if the mass positions are approaching +/-2V as seen during servicing or via telemetry.

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