



Installation Guide

**INFRA**

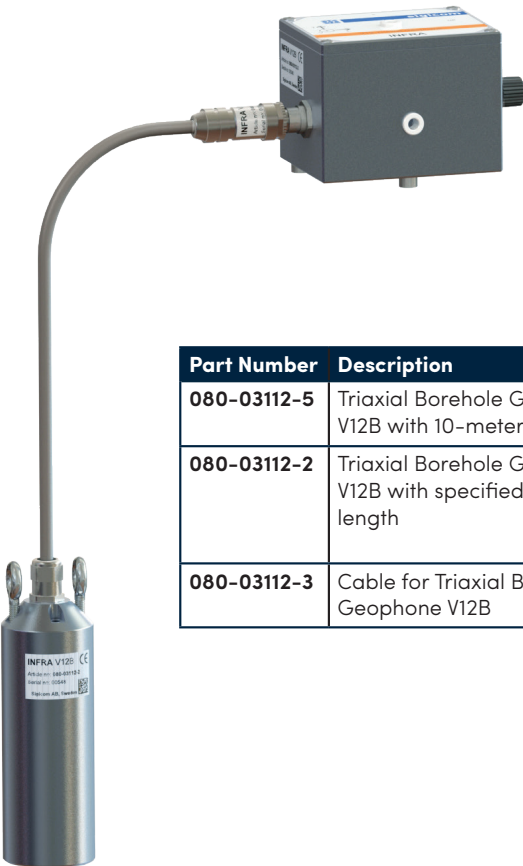
**Triaxial Borehole  
Geophone V12B**

# Installation Guide

## INFRA Triaxial Borehole Geophone V12B

The Digital Triaxial Borehole Geophone V12B has vibration sensing elements sensitive in three directions. The V12B is connected to a Digital Signal Processing box which is included in the delivery.

You can connect the V12B + Sensor Box to an INFRA Data Logger system.



| Part Number        | Description   | Note  |
|--------------------|---|---|
| <b>080-03112-5</b> | Triaxial Borehole Geophone V12B with 10-meter cable         |   |
| <b>080-03112-2</b> | Triaxial Borehole Geophone V12B with specified cable length | Specify required cable length when ordering. Maximum cable length between V12B and Sensor Box is 50 meters. |
| <b>080-03112-3</b> | Cable for Triaxial Borehole Geophone V12B                   | Order per meter   |

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You will need to drill the borehole to the desired depth for the placement of the V12B sensor. The sensor has a diameter of 50 mm & a height of 140 mm.

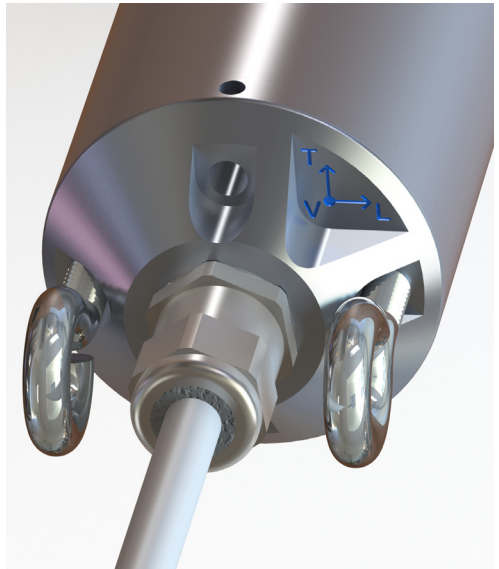
Place the V12B sensor in the clean borehole, raising and lowering, with a wire (not included) attached to the sensor through the eyelet bolts.

Never use the cable to raise or lower the V12B sensor in the borehole.

Using a separate wire attached to each eyelet will allow you to keep track of the sensor orientation with the horizontal channels (L & T).

The V12B sensor must be placed in an upright position  $\pm 2^\circ$  to ensure accurate measuring results.

Fill the hole with concrete or sand. Make sure to get equal distribution of the fill around the V12B sensor in order to get coupling in the borehole.

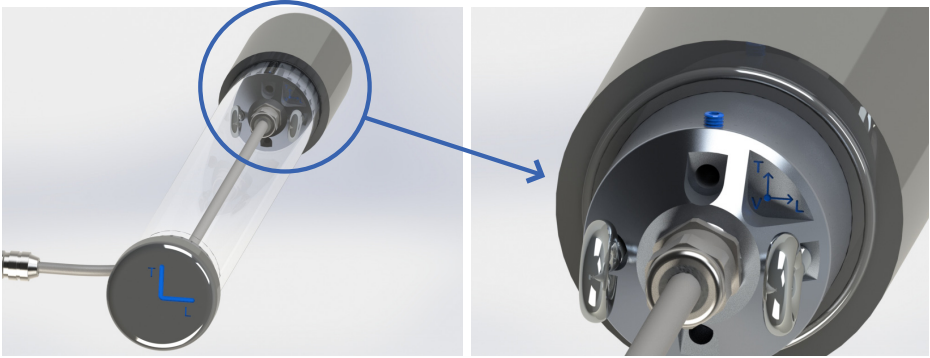




## Installation in Soft Clay

The Quick Clay Tip & Tool is for installation in soft clay. Please refer to standard NS8141-3:2014 if you are performing this installation in Norway.

First, insert the V12B sensor into the Tip and then secure the two screws (included). Make sure to index the horizontal channels (L & T) to achieve the proper sensor orientation.



*Illustration of the indexed sensor orientation.*

| Part Number        | Description     | Note   |
|--------------------|-----------------|--|
| <b>080-01805-0</b> | Quick Clay Tip  | Tip (70 mm diameter, 168 mm height) with O-ring and two screws   |
| <b>080-01806-0</b> | Quick Clay Tool | The Tool consists of two parts: the Aluminum Tube (60 mm diameter, 500 mm height) and Cap (70 mm diameter, 20 mm height) |