

# Seismometer Cable and Box

To connect the 14-pin output of the Titan Accelerometer you would either have to buy the proprietary cable with it's connectors and analyzer from Nanometrics or use the box and cable described here.

## Schematics Used

Titan User Guide

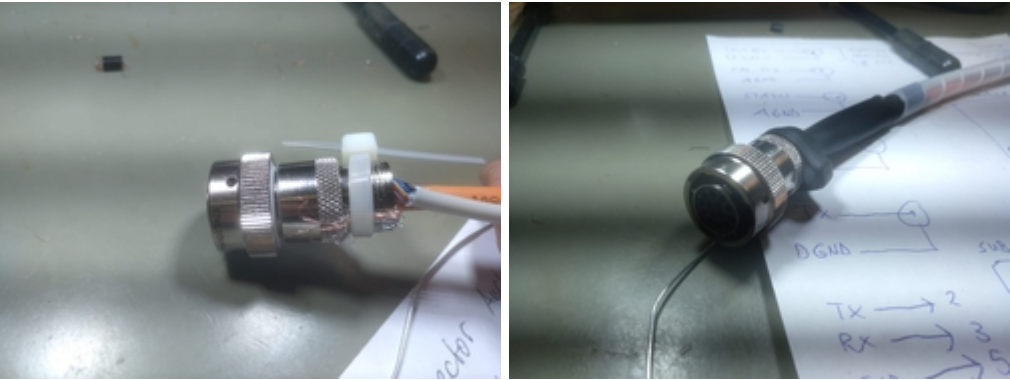
[Page 51 is important]

## Cable

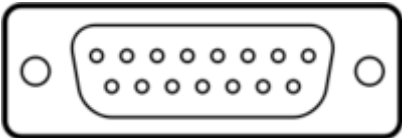
For the connecting cable between the 14-pin connector and the box we used a CAT network-cable (<fc #ffa500>orange</fc>) connected via SubD-15 and a standardized SubD-9 cable (<fc #c0c0c0>grey</fc>) with it's connector. The wires are split up into two different cables to ensure that the X-, Y- and Z-axis signals are completely shielded, hence the CAT network-cable. The analog ground signal is also fed through the shielded network cable. All the other wires go through the SubD-9 cable.

### 14-Pin Side



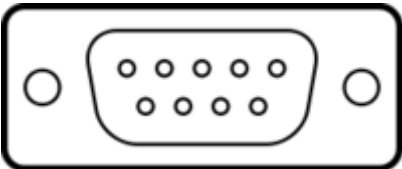


SubD-15 Side - XYZ Connect



| Pin No.  | 1                      | 2    | 3    | 4                       | 5    | 6    | 7                      | 8                      | 9                                       | 10   | 11   | 12                                        | 13   | 14   | 15                                       |
|----------|------------------------|------|------|-------------------------|------|------|------------------------|------------------------|-----------------------------------------|------|------|-------------------------------------------|------|------|------------------------------------------|
| Name     | +X                     | free | free | +Y                      | free | free | +Z                     | AGND                   | -X                                      | free | free | -Y                                        | free | free | -Z                                       |
| Function | positive X axis output | none | none | positive Y axis output  | none | none | positive Z axis output | analog ground          | negative X axis output                  | none | none | negative Y axis output                    | none | none | negative Z axis output                   |
| Color    | <fc #6495ed>blue</fc>  | none | none | <fc #ffa500>orange</fc> | none | none | <fc #008000>green</fc> | <fc #800000>brown</fc> | white with <fc #6495ed>blue stripe</fc> | none | none | white with <fc #ffa500>orange stripe</fc> | none | none | white with <fc #008000>green stripe</fc> |

SubD-9 Side - Signal Connect



| Pin No.  | 1                    | 2                      | 3                           | 4    | 5                       | 6                      | 7                        | 8                       | 9    |
|----------|----------------------|------------------------|-----------------------------|------|-------------------------|------------------------|--------------------------|-------------------------|------|
| Name     | +PWR                 | TX                     | RX                          | free | DGND                    | -PWR                   | CAL_SIG                  | STATUS                  | free |
| Function | positive power input | serial RS-232 transmit | serial RS-232 receive input | none | digital ground          | negative power in      | calibration signal input | state-of-health output  | none |
| Color    | black                | <fc #800000>brown</fc> | <fc #ff0000>red</fc>        | none | <fc #ffff00>yellow</fc> | <fc #008000>green</fc> | <fc #6495ed>blue</fc>    | <fc #9400d3>purple</fc> | none |

Box



From:

<https://iqwiki.iqo.uni-hannover.de/> - IQwiki

Permanent link:

[https://iqwiki.iqo.uni-hannover.de/doku.php?id=groups:mg:private:resonatoren:seismometer\\_kabelverbindung:start&rev=1575644548](https://iqwiki.iqo.uni-hannover.de/doku.php?id=groups:mg:private:resonatoren:seismometer_kabelverbindung:start&rev=1575644548)

Last update: 2019/12/06 15:02

