Adaptor commissioning

Information required:

- the Join Key (as set in the Gateway)
- the Network ID (as set in the Gateway)

Figure 3  HART tree for NHU200 FieldKey Adaptor
Health and Safety

To ensure that our products are safe and without risk to health, the following points must be noted:
1. The relevant sections of these instructions must be read carefully before proceeding.
2. Warning labels on containers and packages must be observed.
3. Installation, operation, maintenance and servicing must only be carried out by suitably trained personnel and in accordance with the information given and site procedures.

Product recycling and disposal (European customers only)
Refer to the User Guide (OI/NHU200-EN) for disposal information.

Installation overview
Ensure the intended field instrument has a tag and message configured – see Adapter commissioning:
1. Remove the FieldKey from the box.
2. Attach the antenna.
3. Attach the FieldKey to the field instrument (remove the antenna to help rotate the housing).
4. Rotate housing for best antenna direction (normally vertical).
5. Lock the FieldKey via the locking nut and set or grub screw.
6. Make electrical connection to the FieldKey (see Adapter commissioning) and then wait at least 3 minutes.
7. Connect HART configuration tool and set Network ID, Join Key and FieldKey Tag.
8. Set the join mode to Join Now.
9. Monitor the join status.

Antenna direction and locking
The antenna can be rotated through almost 360° and fixed in place by rotating the locking nut and tightening the set or grub screw with the Allen key.

The best position for the antenna is often in a vertical direction.

Figure 1  Locking nut location

Electrical connection
Connect the FieldKey in series with the 4 to 20 mA loop.
1. Use the connector on the negative (–ve) wire as shown.
2. Install the AO coupler for use with positioners.

T1 = FieldKey negative (black)
T2 = Loop negative
T3 = Loop positive
T4 = Instrument positive

Push to insert FieldKey wire

Figure 2  Electrical connections

The WirelessHART adapter can be fitted in the following ways:
- via a spare instrument cable gland.
- if no cable gland is available use the T-Piece (option).
- connect the adapter at a junction box located in the 4 to 20 mA signal loop.

Figure 2  Electrical connections