Sometimes during the rush of installing hundreds of devices, the impulse lines of a Differential Pressure (DP) transmitter can be plumbed to the incorrect ports on the transmitter. This error can go unnoticed even during the proof test stage of the project. However, once the process is in operation, the error becomes apparent – causing a delay until the unit installation can be corrected. As a temporary fix, Yokogawa DP transmitters with HART or BRAIN communication have a feature that electronically swaps the low-pressure and high-pressure sides of the sensor - allowing regular operation of the transmitter until the installation error is corrected during the next shutdown.

**CAUTION**

Each transmitter has the Low-pressure side (L), and the High-pressure side (H) permanently marked on the capsule body to assist the installation of the instrument. The markings also serve to inform technicians in the future of the installation layout. If the high/low swap function is used, these markings will no longer reflect the actual operation; presenting an uncertain situation during maintenance or replacement of the instrument as it may mislead the technician. Yokogawa views the high/low swap function as a temporary solution; as soon as possible, the transmitter needs correct plumbing so that the external markings and the operation match.

**PROCEDURE**

○ **HART Protocol**

This function reverses the impulse line orientation. Using FieldMate or a HART HHC, follow this procedure.

**Impulse Line Connection Orientation Setup**

<table>
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<th>HART Version</th>
<th>DD</th>
<th>DTM</th>
<th>Procedure</th>
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</thead>
</table>
| HART 5       | ✔  | ✔  | ☀[Root Menu]→Basic setup→H/L Swap  

② Select "Normal" or "Reverse"

| HART 7       | ✔  | ✔  | ☀[Root Menu]→Basic setup→H/L Swap  

② Select "Normal" or "Reverse"

**Note:** EJX-A Series HART 5 DTM based FDT1.2 uses a different procedure; please refer to Section 3.2.7 of the HART Communication IM for the correct procedure.
BRAIN Protocol

This function reverses the impulse line orientation. Using FieldMate or a BT200, follow this procedure.

Impulse Line Connection Orientation Setup

(D15: H/L SWAP)

1. Use the or key to select LINEAR or ZERO.
2. Press the key twice to enter the setting.
3. Press the (OK) key.

APPLICABLE MODELS

The H/L Swap function is available on the EJA110E, EJA118E, EJA120E, EJA130E, EJX110A, EJX118A, EJX120A, or EJX130A with either HART or BRAIN communication.

RELATED DOCUMENTS

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