## **RESISTOR TRANSDUCER ADAPTER**

# **USER'S GUIDE**





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#### **Calibrating the Resistor Transducer Adapter**

The Vanguard Resistor Transducer Adapter must be calibrated each time a different resistor transducer is connected to the adapter. Follow the steps below to calibrate the adapter:

- a. Connect the resistor transducer to the adapter.
- b. Turn on the circuit breaker timer. The following "RUNNING" screen will be displayed on the resistor transducer adapter's LCD screen:

RUNNING

Res Enc Rev: 1.00

Press either the [▲] or [▼] key to access the Main Menu.

c. The Main Menu will be displayed:

CALIBRATE ENCODER
ADJUST CONTRAST
<DIAGNOSTIC>

Press the [▲] key to select the *CALIBRATE ENCODER* option:

<CALIBRATE ENCODER>
ADJUST CONTRAST
DIAGNOSTIC

Press the [ENTER] key.

d. The following screen will be displayed:

SET ENCODER TO
POSITION 1
"ENTER" WHEN DONE

Move the resistor transducer to one end of its travel and then press the [ENTER] key.

e. The following screen will be displayed:

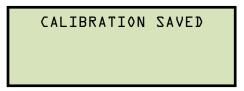
SET ENCODER TO
POSITION 2
"ANOL MAHW" "SETNA"

Move the resistor transducer to the opposite end of its travel and then press the **[ENTER]** key.

f. The following screen will be displayed:

↑/↓ TO SET DISTANCE 5.00 IN 12.70 CM "ENTER" WHEN DONE

Press the  $[\blacktriangle]$  or  $[\blacktriangledown]$  key to set the value to the known traveled distance (distance between the endpoints of the transducer) and then press the [ENTER] key. The following screen will be displayed momentarily:



The following screen will then be displayed:

RUNNING

Res Enc Rev: 1.00

#### **Adjusting the Screen Contrast**

Follow the steps below to adjust the adapter's screen contrast

a. From the "RUNNING" screen, press either the [▲] or [▼] key to access the Main Menu. The following screen will be displayed:

CALIBRATE ENCODER
ADJUST CONTRAST
<DIAGNOSTIC>

Press the [▲] key to select the *ADJUST CONTRAST* option:

CALIBRATE ENCODER <ADJUST CONTRAST>
DIAGNOSTIC

Press the **[ENTER]** key.

b. The following screen will be displayed:

ADJUST CONTRAST

↑/↓ TO ADJUST
"ENTER" WHEN DONE

Press the  $[\blacktriangle]$  or  $[\blacktriangledown]$  key to adjust the screen contrast to the desired level and then press the [ENTER] key. The "RUNNING" screen will be displayed again.

#### **Performing Diagnostics**

Follow the steps below to perform diagnostics and confirm that the adapter is calibrated properly:

- a. Move the resistor transducer to one end of its travel.
- b. From the "RUNNING" screen, press either the [▲] or [▼] key to access the Main Menu. The following screen will be displayed:

```
CALIBRATE ENCODER
ADJUST CONTRAST
<DIAGNOSTIC>
```

The DIAGNOSTIC option should be highlighted. Press the [ENTER] key.

c. The following screen will be displayed:

Move the resistor transducer and observe the distance values on the screen:

```
ENCODER TRAVEL:
2.23 IN 5.66 CM
"ENTER" WHEN DONE
```

Move the resistor transducer to the other end of its travel and observe the screen:

```
ENCODER TRAVEL:
5.00 IN 12.7 CM
"ENTER" WHEN DONE
```

The value should be the distance between the two endpoints of the transducer. If this value is not correct, you should calibrate the adapter.

## **Connection Illustrations**



Figure 1. Typical Connection to ABB AHMB Transducer



Figure 2. Typical Connection to a Resistor Transducer



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