

HITROL CO., LTD.

HEAD OFFICE.FACTORY.R&D INSTITUTE
HITROL CO.,LTD 141, Palhakgol-gil, Jori-eup
Paju-si, Gyeonggi-do, Korea
TEL. : (00)-82-31-950-9700
FAX. : (00)-82-31-950-9796 ~ 9799
www.hitrol.com



INSTRUCTION MANUAL

HHT-2000 Loader

CONTINUOUS LEVEL TRANSMITTER

HHT-2000



Doc. no. : HHT-2000(TC)_Kor_2016, Rev. 0

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1. Model Define

- 1) Connect the communication cable to the main board of the transmitter. "WELCOM TO HITROL" would be displayed on the LCD display.

WELCOME TO HITROL

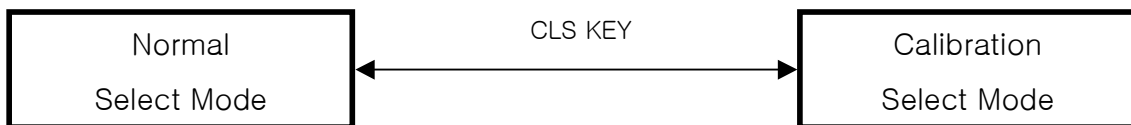
- 2) Then, the model is automatically recognized.
- 3) The following is displayed after the data exchange.

Main Selected
CLTM

- 4) Then, the LOADER and the MAIN would communicate or they would independently operate in accordance with the mode.
-

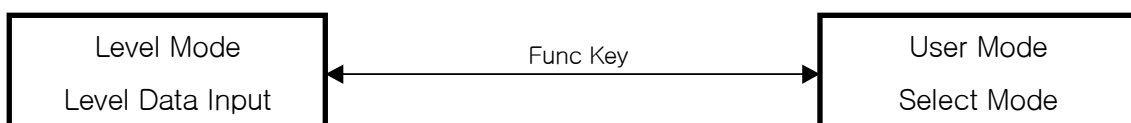
2. Toggling between Normal and Calibration

- 1) NORMAL state is displayed in the first screen if the LOADER after the first communication.
- 2) Press and hold the CLEAR key to toggle between the "Normal Mode" and " Calibration Mode." (Press and hold the CLEAR key for 3 seconds)



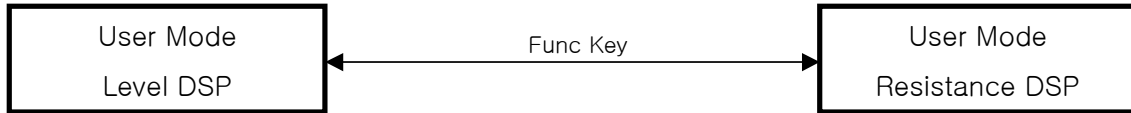
3. Mode Selection in Normal

- 1) Select the Normal mode as shown in No.2. Then, press the MODE key to show the following display and toggle the mode.

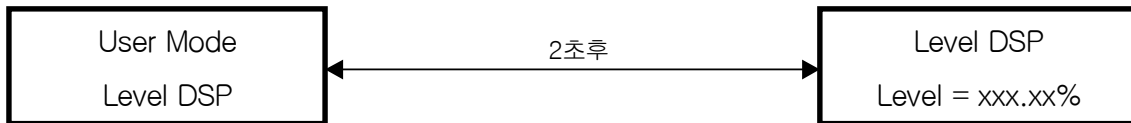


4. User Mode

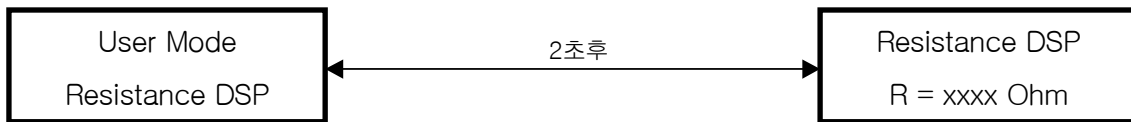
- 1) In the "User Mode" as shown in No.2, press the FUNCTION key to toggle the display, as follows.



- 2) Select the mode using the FUNCTION key to show the Following Within 2 seconds.



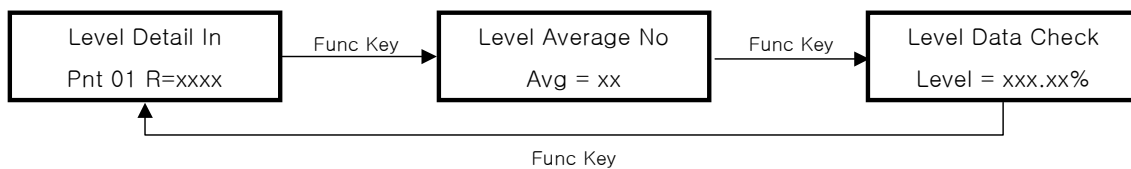
- The LEVEL is displayed in percentage (%).



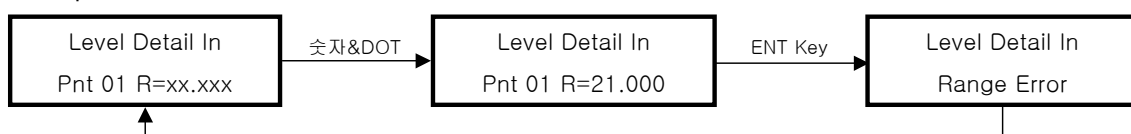
- The DELTA_R value is displayed for the resistance (LEVEL).

5. Calibration Mode

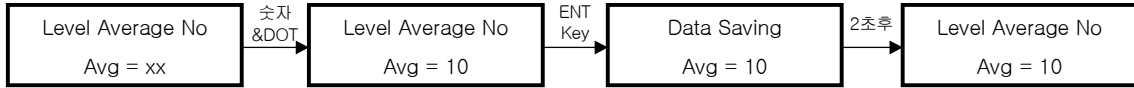
- 1) In the Level Mode, as shown in No.2, press the FUNCTION key to toggle the display as follows.



- 2) When the Level Detail In is selected, the Pnt number and Delta_R value are displayed at the bottom of the display. Use the numeric or DOT KEYS to enter the Delta_R value. The Delta_R value ranges from "0 to 500" and if it is out put input range, the "Range Error" message would be displayed for about 3 seconds and the initial state would then be displayed. Enter 4mA, 8mA, 12mA, 16mA or 20mA for the Delta_R respectively. Then, press the SET KEY.

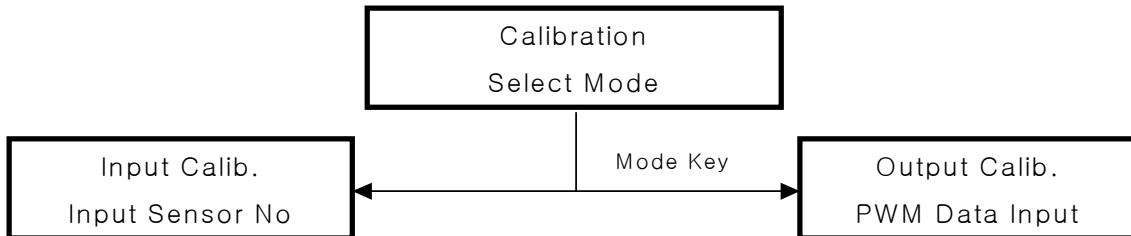


- 3) The Level Average Range ranges from 1 to 9, and the default value is "3". If it output the input range, the " Range Error" message is displayed for about 3 seconds, and the initial state would be displayed.



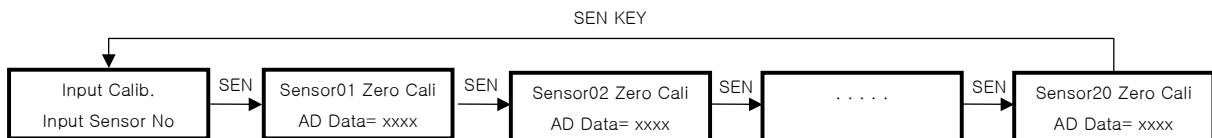
6. Mode Selection in Calibration

- 1) Select the Calibration Mode as shown in No.2 and then press the MODE key to toggle the Input and Output Modes while the following are displayed on the LCD.

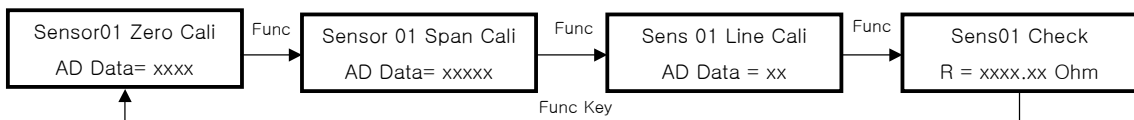


7. Input Calib Mode

- 1) With the "Input Calib, Input Sensor No." Selected as shown in No.6 above, press the Sensor key to toggle the sensors.



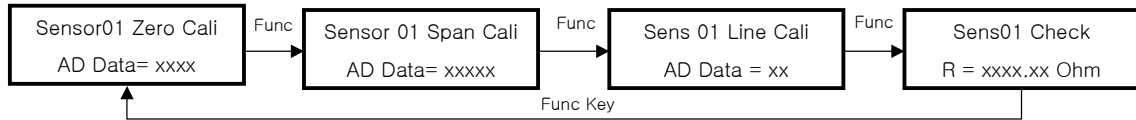
- 2) Select Sensor No using the Sensor key, and then enter the FUNCTION key to toggle the function as follows.



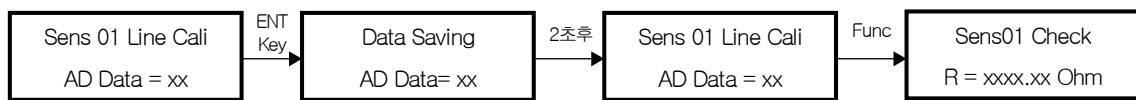
- 3) If the calibration function is selected with the FUNCTION KEY, the sensor value is transferred by the MAIN with the average value displayed. Adjust the resistance value before selection the function, because the value is the cumulative average of the data received after the key is entered.

4) With the DATA value displayed press the SET key to transfer average value to the MAIN, which saves the value. The ZERO and SPAN range is from 1000Ω to 1500Ω 이다.

5) For the ZERO Calibration, enter 1000Ω and then execute it.



6) For the SPAN Calibration, enter 1500Ω and then execute it.

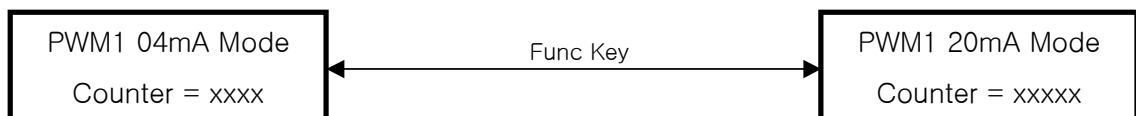


7) For the Line Calibration, the Line Resistor value is read and averaged.

8) After finishing the calibration, select the R Check to display the curren R value calculated through the calibration.

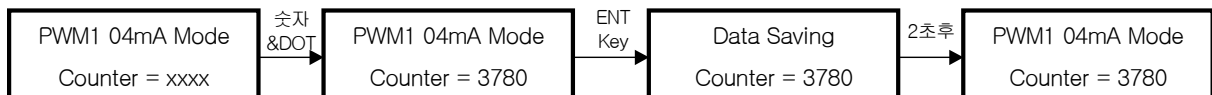
8. Output Calib Mode

1) With the "OUT Calib Data Input" Selected as shown in No.6 press the FUNCTION key to toggle the display as follows.



2) For PWM1 4mA MODE

- Adjust the Counter value to output 4mA.



3) For PWM1 20mA MODE

- Adjust the Counter value to output 20mA.

