# DAEHAN SENSOR



Digital Liquid Indicate with level controller

DFIC - Series
Level Indicator with analog output

Product Name
DFIC - 4P





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### Introduction

This DFIC-4U Series Level Controller gets 4-20mA current signal output from the sensor installed in the tank and displays the level of the liquid in the tank as percentage (0~100%) at 0.5 unit.

It is very much easy to install and adjust freely on-off switch of the pump at site.

Also, it is able to monitor the status at site without using meter.

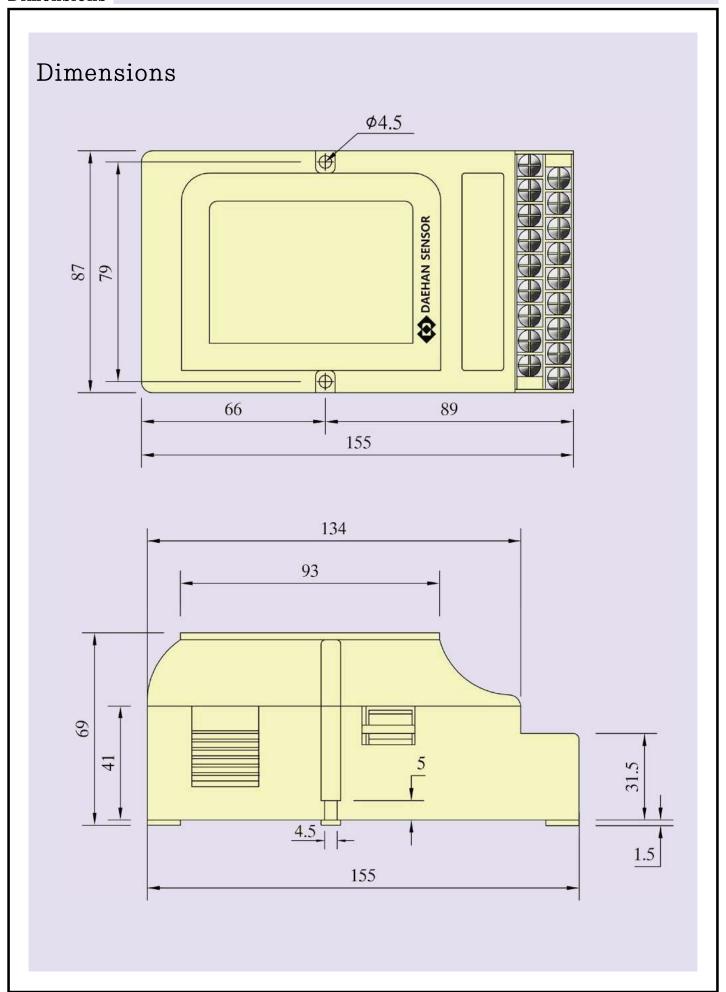
User can select one  $4\sim20\text{mA}$  Analog Output (Meter), four Control Relay as per user's purpose and circumstance.

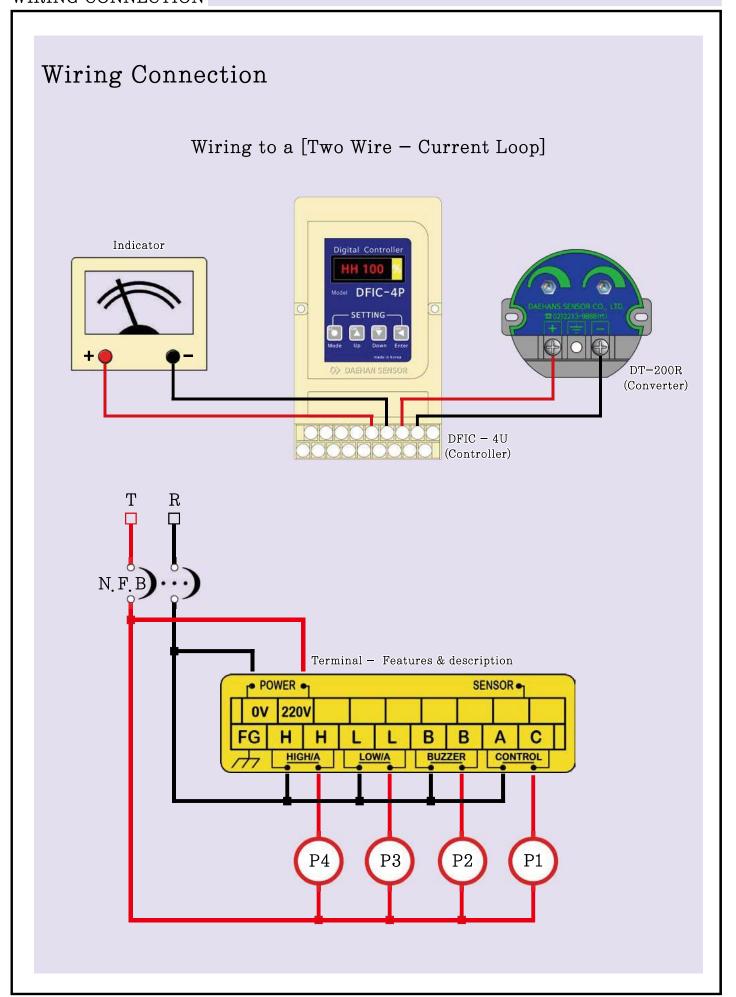
You can change the alarm setting value by using the four keys on the front panel.

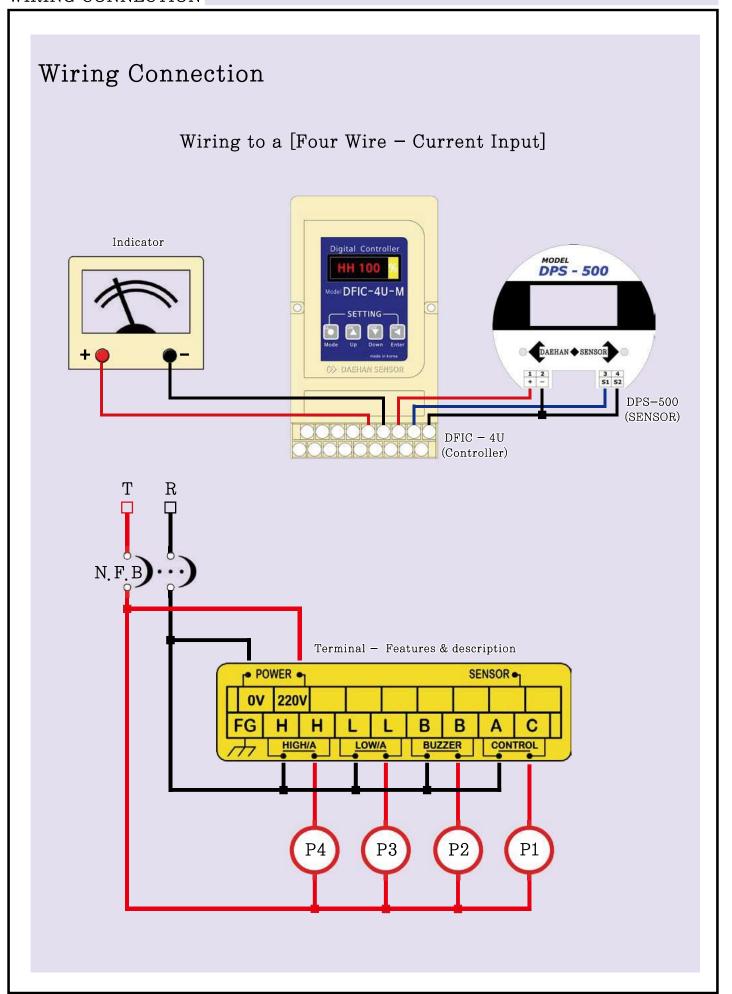
It is easy to read the values even in dark place or long distance for a 5-digit 7-segment LED is installed on the front panel.

# Specification

▶ Display 5-	Digit 8.0mm(0.315-inch) High 7-segment L.E.D
▶ Display update Rate	0.25 seconds
► Transducer Supply	· 24VDC 250m
▶ Operating Temperature ·	0°C ~ 60°C
▶ Dimensions ·	87mm (Wide) x 155mm (High) x 69mm (Deep)
▶ Material ·	Polycabonate & A.B.S
▶ Input Impedance ·	
► Accuracy ·····	8bit 0.5%
▶ Isolation ·	Non - isolated
▶ Max. Switching Current Capacitor	· 1250VA / 150W
► Max. Switching Voltage ·	250VDC / 30VDC
► Max. Switching Current	5A
▶ Resolution ·	8bit
► Maximum Load ·	$500\Omega$ insternally powered
▶ Isolation ·	Non - isolated







# 조작방법 (Operation)

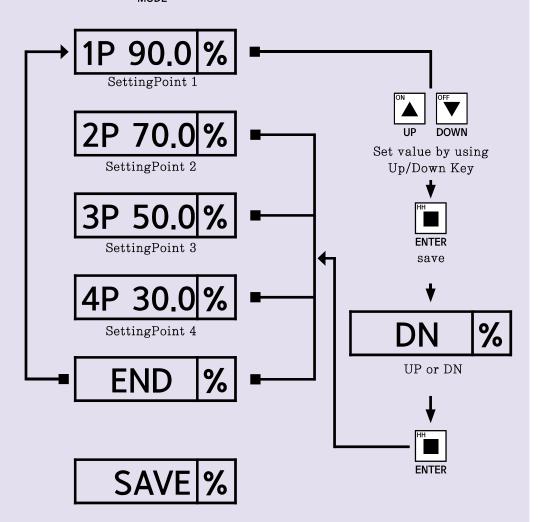
This mode is to set the position of control contact point and alarm contact point. 4 outputs of Point1 to Point 4 are individual control mode which operates regarless of interrelation.

HH 100 %

Displays liquid level as % unit. Works relay control and current retransmission. We call it as Basic Operation Mode



Moves to Alarm setting mode



▶ The default setting of supply is as 90.00%(1P-P), 70.00%(2P-P), 50.00%(3P-P), 30.00%(4P-P).

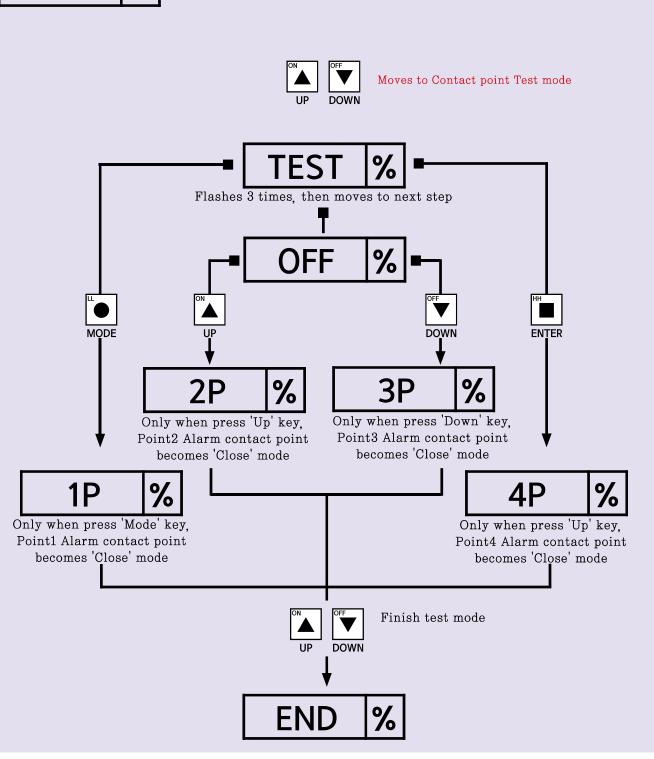
[UP]: When more than setting [Control - On][DN]: When the setting is less than [Control - On]

## Relay Test

This mode is to test control / alarm contact point of the controller.

HH 100 %

Displays liquid level as % unit. Works relay control and current retransmission. We call it as Basic Operation Mode



# Display Operation

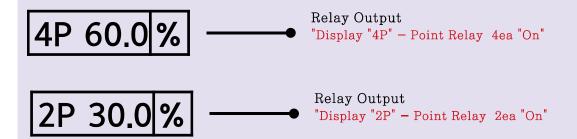
1. If the setting is not correct or in case of malfuction, 'Error' message displays. And the message is as below.

SHORT %

Input Error
This message displays when the output from the sensor does not input to the controller.

Input Error
This message displays when the output from the sensor does not input to the controller.

2. Relay Output Operation



#### 3. Analog Output Operation

This function is to re-transmit the value of current level to other equipment. When you want to change the output for the setting is not correct, please refer to an extra calibratin manual.

The current output include self power, there is no need of extra power supply.

## Check & A/S

If you find any abnormal system during operation, please try to check below points.

- 1. Is the power connected to AC110V or AC220V correctly?
- 2. Is the wiring to the sensor made correctly?
- 3. Is the contact with the relay built up through correct sequence?
- 4. Is the current input from the sensor correct?
- 5. Is there any malfuction around the unit?

If the trouble still exists, please kindly contact below.

\* Installation and operation manual is subject to change without prior notice for quality improvement.

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