

# DIGIPRESSURE®

Digital multi pressure Gauge&Switch



**MODEL : LPC-DIFF-100**  
(Differential pressure switch)



20130319(REV : 01)

Specifications		Model selection & Option			
<ul style="list-style-type: none"> <li>Item : <b>DIGIPRESSURE®</b></li> <li>Supply Voltage:100-240V 10% 50-60HZ</li> <li>Consumption Current: 200mA</li> <li>Display: 3 Digit FND x 2</li> <li>Pressure Ranges: -100 ~ 100mmAq</li> <li>Output contact rating: SPDT 250V/ 3A</li> <li>Operating temperature: -10~60℃ RH 60%</li> <li>Accuracy: 0.5%</li> <li>The method of communication : RS-485 (Option) CURRENT OUTPUT 4-20mA (Option)</li> <li>Use Fluid : Air. Non-corrosive gases. Non-flammable gas, etc..</li> </ul>		<b>LPC-</b>	<b>DIFF -</b>	<b>CM-</b>	<b>AL</b>
		<p>C : Communication OPTION (RS-485) CM : Modbus</p> <p>A : Current OPTION (4~20mA)</p> <p>Precision pressure differential pressure sensor built</p> <p>- Output relay 3 points - Low pressure ON-delay timer built</p>			
Configuration		MODEL : LPC-SERIES			
<ul style="list-style-type: none"> <li>LPC-DIFF Body - 1set</li> <li>Cable Ass'y - 1set</li> <li>Bracket / Fixing Bolt - 1set</li> <li>User's Guide</li> </ul>		<ul style="list-style-type: none"> <li>- Input and control of 0.01 mmAq pressure</li> <li>- Application of very bright red FND</li> <li>- Input specifications : Possible identification of vacuum-level pressure in the range of -100.0-100mmAq</li> </ul>			

Caution for usage	Caution for safety ⚠	External Dimension
<ol style="list-style-type: none"> <li>1 Apply fluid using a moisture-free fluid.</li> <li>2 Input power is applied when the circuit breakers and circuit protection fuses, etc. Please install the</li> <li>3 Pressure when using a Pitot tube, or tubes, etc. Please (High-pressure gas using the moment of pressurizing the sensor can be destroyed Decompression devices have as pilhi.)</li> <li>4 Excessive load on the output contact connections faithfulness to the cause of the failure of the secondary Control connection using a relay or magnet. (Rated 3A or less)</li> <li>5 Waterfall fountains, rain or during cleaning causes of burnout How to install, place, etc., so be sure to consider that.</li> <li>6 The place of installation of high temperature, high humidity, condensation occurs, place in direct sunlight. Radiant heat. Fixtures to avoid vibration and shock, and tremors and to avoid Should be solidly constructed. (Parts of semiconductor pressure sensor and vibration Attention to the weakness of the external influences)</li> <li>7 Damage to the ABS plastic casing and install the Please. In particular display device to weaken the shock can be damaged, so Working tools to shock drivers, pliers, etc., do not apply.</li> <li>8 Within the unit, or on the outside of the penetration of the oil contamination when the cause of failure and Concerns the case of damage, so be sure to remove oil Please</li> </ol> <p>The features described in this manual Specifications</p>	<p><b>Caution</b></p> <p>If you use this goods with equipment such as control of nuclear power and safety devices of medical treatment and means of transport which are able to affect on people's lives and to have effect on the losses of property, please should use it after installing of dual safety devices to prevent the damages of property from a fire and an accident.</p> <p><b>Attention</b></p> <ol style="list-style-type: none"> <li>1. Please install and use it according to the instruction in manual.</li> <li>2. Please finish the connection, inspection and repair of electric wires before connecting to power source.</li> <li>3. Only, our authorized engineers modify and improve the goods.</li> <li>4. Please use it in the range of performance.</li> <li>5. Please use terminals of In/Out power without insulation covers carefully.</li> <li>6. Please connect wires and terminals each according to their colors.</li> <li>7. Please do the cleaning with a dry towel, but no use any industrial cleanser.</li> <li>8. Please consider the location for installing the goods as follows, the place to be accumulated inflammable and explosive cases, high temperature with much moistures and sunny place</li> <li>9. Please install it carefully to prevent dusts and another things from entering into the goods.</li> <li>10. Please make a cover for outdoors.</li> <li>11. After building the screen and adding a noise filter, use it on the place as below; the place occurred inductive noise, the place set up inverter or SCR, the place passed by high voltage wires</li> </ol>	

## Character Description

### SP1.2.3:

Switch Set value.

\* Alternating control standards do meuro use of SP1 relay set at Please reset the power.

### Sd1.2.3:

Switch deviation values

\* Set the value of the lower limit deviation value deviation is controlled.

### dt1.2.3:

Delay time of the output relay set (0-200 seconds)

### dL1.2.3:

ON or OFF delay Description

### END: set exit mode

(In shutdown mode, press the ▲ button and the setting is completed.)

### A00: Pressure calibration function

How to set ☉ ▲ button is pressed for 3 seconds to "A00" mode entry Calibrated way: "Zero-pressure atmospheric pressure using only"

\* (1) A00 LP mode ▲ UP button to select the appropriate sensor ▼ DOWN button for 3 seconds to enter Calibration.

Each pressure sensor-specific settings and full calibration function (ALL).

For example, LP low pressure sensor calibration ▲ UP button sensor selection and END --- displayed Press the ▼ DOWN button for 3 seconds and the pressure Appears. However, if the mark appears Err Our services Should seek

### rot: OFF. st2. st3. Alternating control mode (sensitive)

oFF: No alternation control

st2: P1, P2 alternating control,

st3: P1, P2, P3 alternating control

### Add: setting serial communication bungee RS-485 (ordering optional)

RS-485 communication port, if you want to use this mode Can be used.

ModBUS you can choose a range of 1-255.

(Communication function is the order specification.)

### END: set exit mode

(In shutdown mode, press the ▲ button and the setting is completed.)

### System alarm functions

Ler: Pressure Sensor Range (-100.0 ~ 100.0 mmAq)

Grange-over-function of the pressure sensor error or abnormal pressure measurement For equipment protection feature to prevent the damage caused by the malfunction.

\* Pressure sensor breakage or shorted sensor bad when the alarm output. ● reset button this time.

## The Method for SET Mode



Press these 2 buttons at the same time for 2 seconds, to enter into Setting Mode.

MODE	FUNCTION	RANGE	VALUE	DP	point of contact.
SP 1	P1-switch setting (auto reset)	(-)99.9~99.9	20.0	P1	P1 : A,C
Sd 1	P1 switches deviation values	0.0~50	2.0		
ot 1	on delay timer	0~200(sec)	0		
Ft 1	off delay timer	0~200(sec)	0		
SP 2	P2-switch setting (auto reset)	(-)99.9~99.9	30.0	P2	P2 : A,B,C
Sd 2	P2 switches deviation values	0.0~50	2.0		
ot 2	on delay timer	0~200(sec)	0		
Ft 2	off delay timer	0~200(sec)	0		
SP 3	P3-switch setting (auto reset)	(-)99.9~99.9	40.0	P3	P3 : A,B,C
Sd 3	P3 switches deviation values	0.0~50	2.0		
ot 3	on delay timer	0~200(sec)	0		
Ft 3	off delay timer	0~200(sec)	0		
End	press the arrow button to exit.				

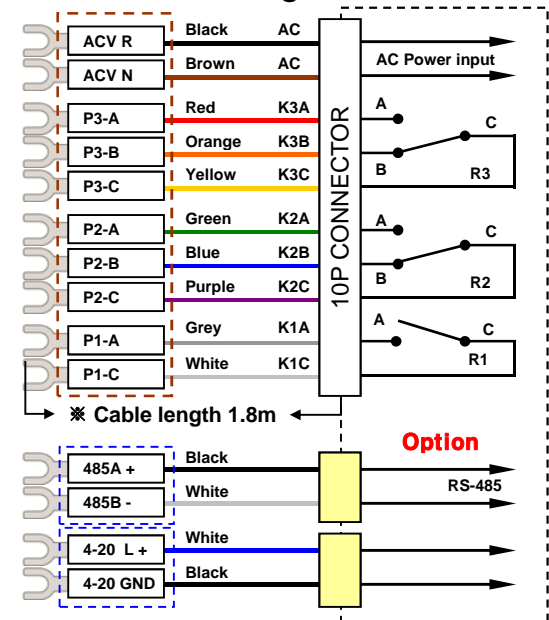


Press these 2 buttons at the same time for 2 seconds, to enter into Setting Mode.

A00	SENSOR "0" Setting mode	LP	LP		
SAt	Pressure sampling period	0.1~2.0 (sec)	0.2		
rot	Set the rotation mode. (Alternately control the compressor capacity control and use)	oFF, st 2(P1,P2), st3(P1,P2,P3)	oFF	St 2:1-2, 2-1 St 3:1-2,2-3,1,3-1-2 OFF:1-2-3,1-2-3,1-2-3	
Add	Communication Address	0 ~ 255	1	OPTION	
Lco	Value of the current output calibrati	(-)45~45	0	OPTION	
End	No touch Press the arrow button to exit (2 sec.)				

## MODEL : LPC-DIFF-100

### Connection diagram of cables



#### NO2 Pressure

P2 output relay  
Depending on the type of delay ON or Display OFF  
(LED in conjunction with the relay)

#### NO1 Pressure

P1 output relay, No.1 Standard relay  
Depending on the type of delay ON or Display OFF  
(LED in conjunction with the relay)

#### Alternating operation mode display

Alternating operation mode by pressing the button ▲ rise.

#### Rotation control

Alternating display control sequence

#### Display Pressure

Current pressure display

#### NO3 Pressure

P3 output relay  
Depending on the type of delay ON or Display OFF  
(LED in conjunction with the relay)

#### Alternating lamp

Lamp ON control mode when running alternately

#### Select the print unit (option)

kpa, mmAq

#### Setting Mode to input values

▼+● Press 2 buttons for 3 seconds ultaneously, and then the setting mode will be shown.

