



# ADT680A/680P Digital Pressure Gauges ADT680AEx/680PEx/601Ex Digital Pressure Gauges

## Quick Start Guide



[Version: 2403V01]

## Safety Instructions

**Warning** indicates conditions which may cause injury to operator;

**Note** indicates conditions which may damage the pressure gauge or impact the calibration result.

### Warning:

To prevent the user from injury, please follow this user manual for use.

To prevent fire, electric shock, or personal injury, please do as follows:

#### 1. General:

The pressure medium should be verified before use. Please adhere to the following

#### instructions:

- ◆ Please read the user manual before using the product, especially the "Safety Instructions".
- ◆ Before using the product, please check the appearance of the product to ensure there is no damage.
- ◆ Please refer to the operation steps in the manual when using the product.
- ◆ Please be sure to store, transport and use this product in the correct direction.
- ◆ If the product is damaged or malfunctions, please do not use it and contact Additel.
- ◆ Never use the non-Ex product in an explosive, steam, or dust environment.

#### 2. Electrical:

- ◆ Before using the product, please make sure that the power supply is properly connected.

### Attention:

To prevent injury, please carefully follow the instruction manual for use.

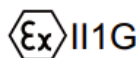
To prevent damage, please do as follows:

- ◆ Do not use the instrument in a high vibration environment.
- ◆ If the gauge is behaving abnormally, please stop using it and contact Additel.

## Intrinsically Safe Information

ADT680AEx/680PEx/601Ex have intrinsically safe certification:

#### 1.IECEx&ATEx:



Ex ia IIC T4 Ga

Ta=-20°Cto+50°C

IECEX CSA 23.0046X

CSANe 23ATEX1214X

2.CSA:

Class I, Division 1, Groups A, B, C and D, T4

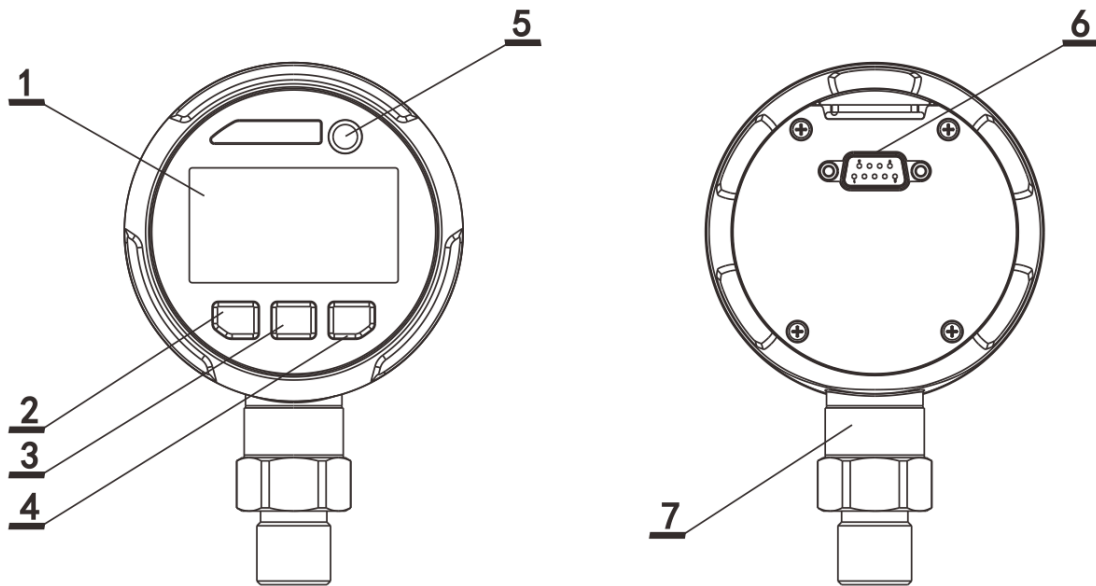
Class I, Zone 0, AEx ia IIC T4 Ga

CSA 24CA 80172346X

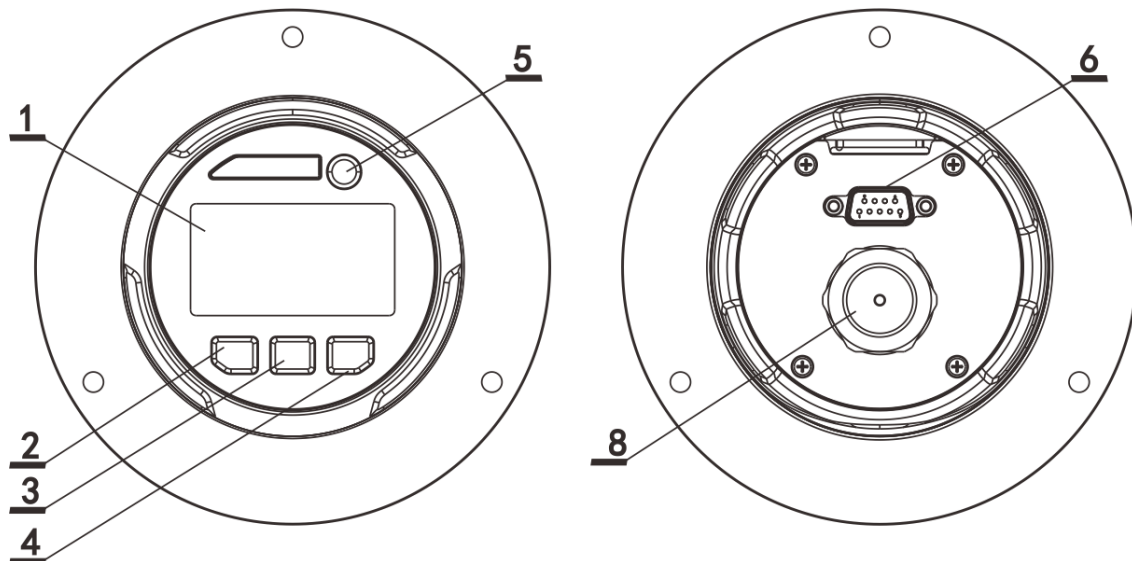
Ex ia IIC T4 Ga

Ta=-20°C to +50°C

## Basic Structure







Basic structure of ADT680A/680AEx/601Ex



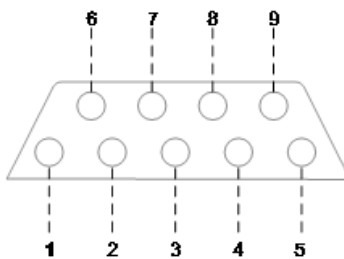
Basic structure of ADT680P/680PEX

### Basic structure list

No.	Name	Description
1	Display	Show pressure, menu...
2	Units button 	Short press: switch units in main display, move to right, "return" Long press: go to Settings in main display
3	Backlight button 	Short press: backlight on/off in main display or move downward. Long press: view peak values in main display
4	Zero button 	Short press: pressure zero in main display, or "Confirm." Long press: Bluetooth on/off in main display
5	Power button 	Short press: Unlock, functions as "return" when in number input or menus. Long press: to power on/off
6	Communication	RS232 or empty
7	Pressure sensor	Integrated with the gauge
8	Pressure module	Digital pressure module, removable

### RS232 DB9 Female pins description

Pins	Description
1, 4, 6, 7, 8, 9	Reserved
2	TXD
3	RXD
5	GND



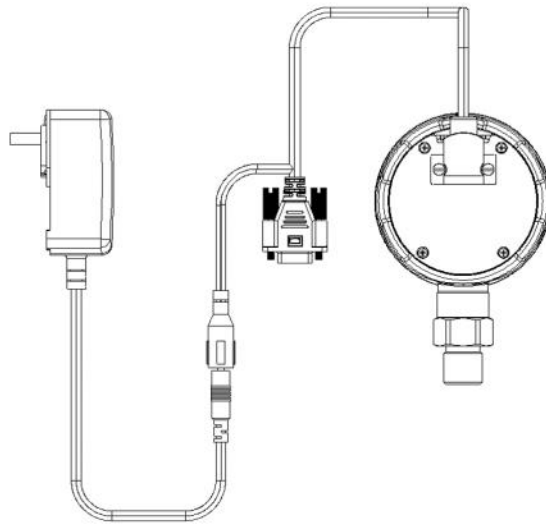
RS232 DB9 Female pins description diagram

### Warning:

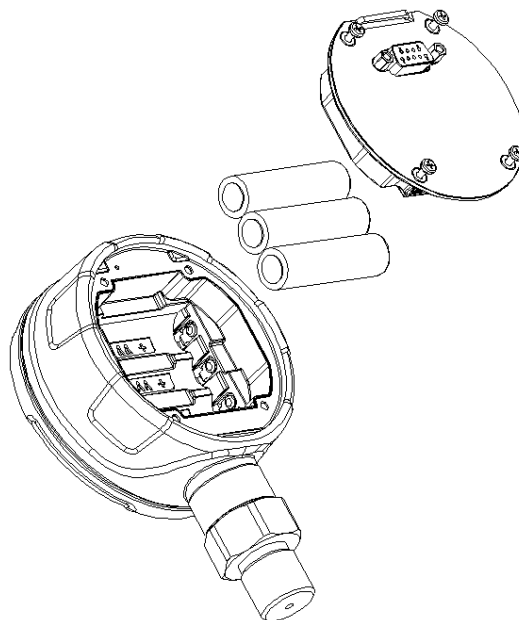
Any data communication devices connected to the ADT680AEx/680PEX/601Ex shall be approved SELV or Class 2 equipment against IEC 60950 or an equivalent IEC standard. The maximum voltage  $U_m$  from the device shall not exceed 16 Vdc for RS232 port.

## Power Supply

1. **ADT680A/680P**: Power can be supplied by 3\*AA(LR6) battery or 9814 RS232 power supply communication kit (Optional).



ADT680A/680P adapter diagram



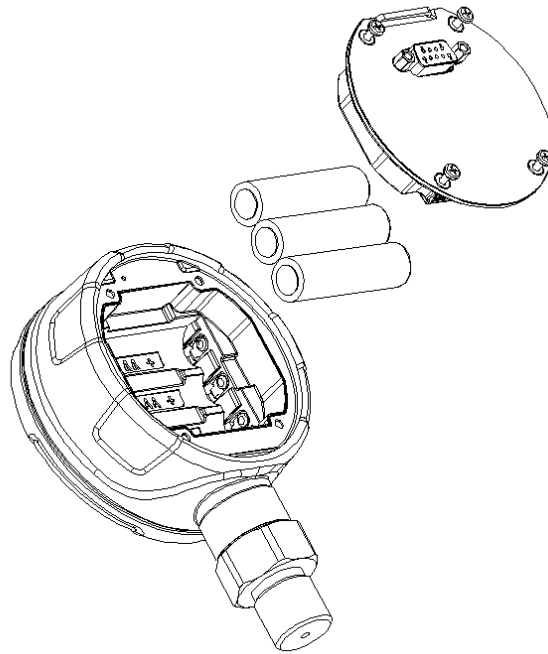
ADT680A/680P battery installation

### Warning:

- ◆ When using battery as power supply, please replace batteries if a low battery is indicated.
- ◆ When replacing the battery, please note the direction of battery electrodes.

## 2. ADT680AEx/680PEx/601Ex: Only use approved battery models (see below)

### ADT680AEx/680PEx/601Ex battery installation



Approved battery models:

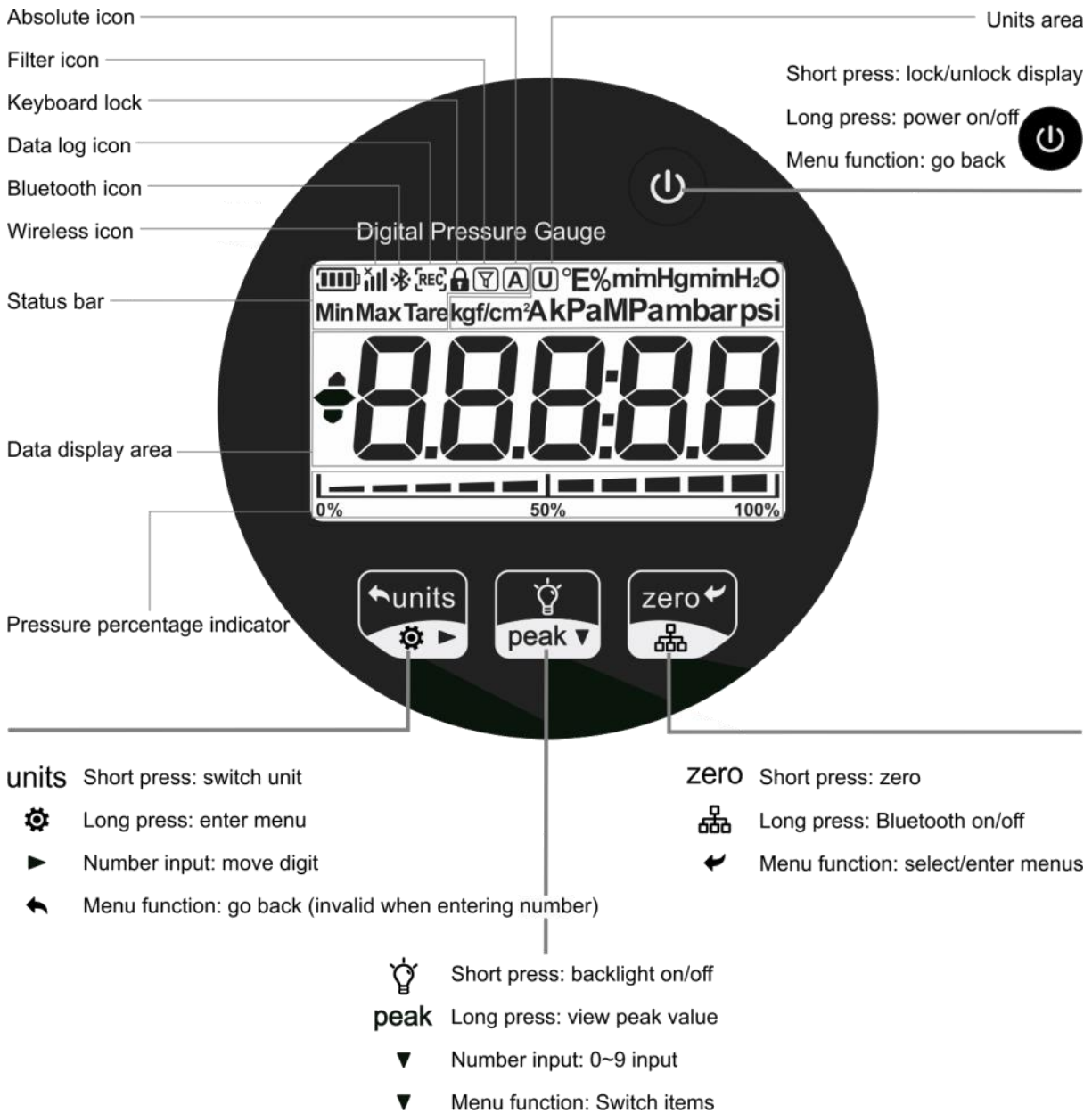
Manufacturer	Type	Ta
ENERGIZER	E91	(-18~45)°C
Maxell	LR6	(-20~60)°C
Rayovac	815	(-30~55)°C

#### Warning:

- ◆ When using battery as power supply, please replace batteries if a low battery is indicated.
- ◆ When replacing the battery, please note the direction of battery electrodes.
- ◆ Never replace the battery in hazardous area.
- ◆ Use only the approved battery models.

# Display and Buttons


## 1. Display and buttons description:

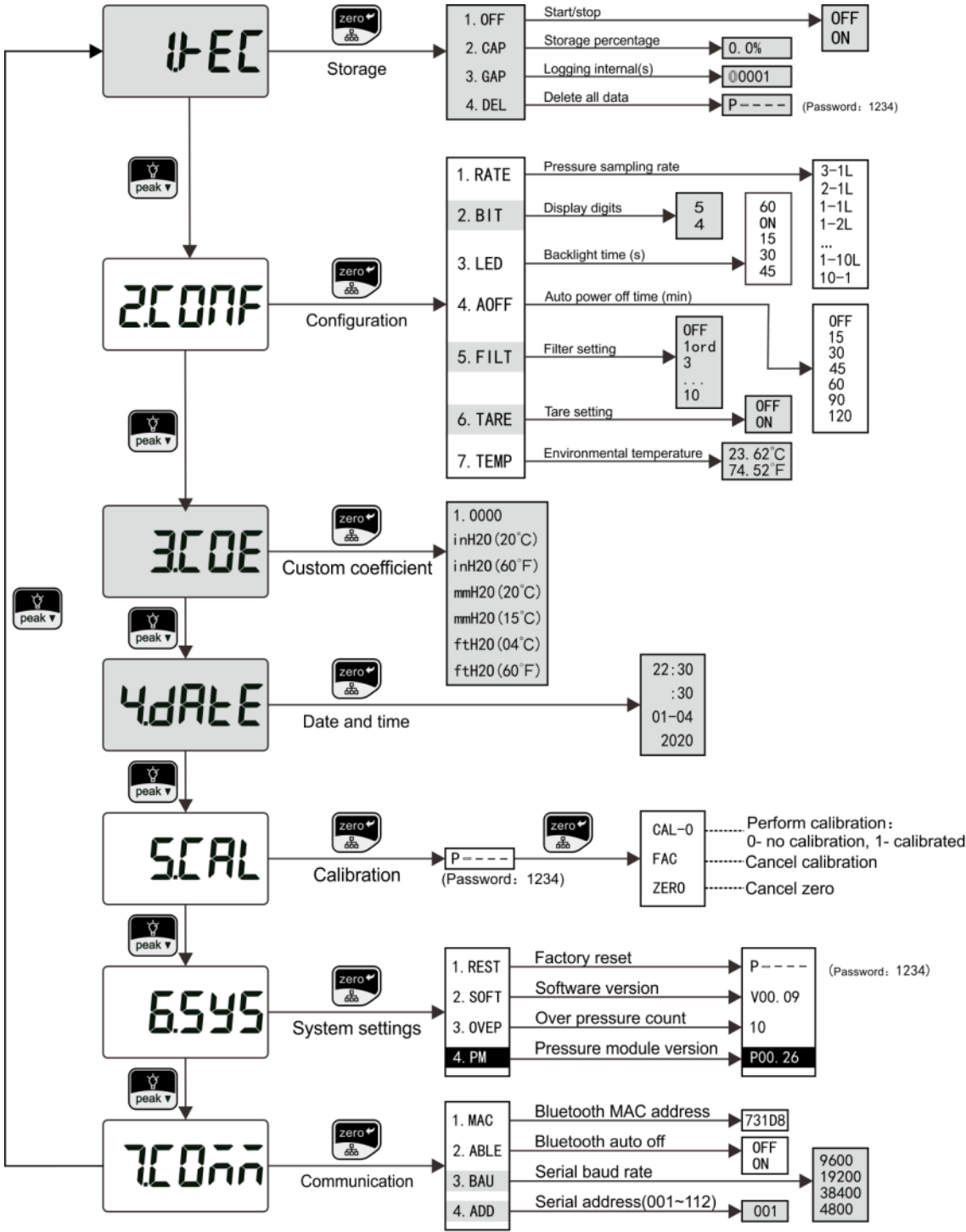


Display and buttons description

# Menu Structure and Operation

## 1. Menu structure

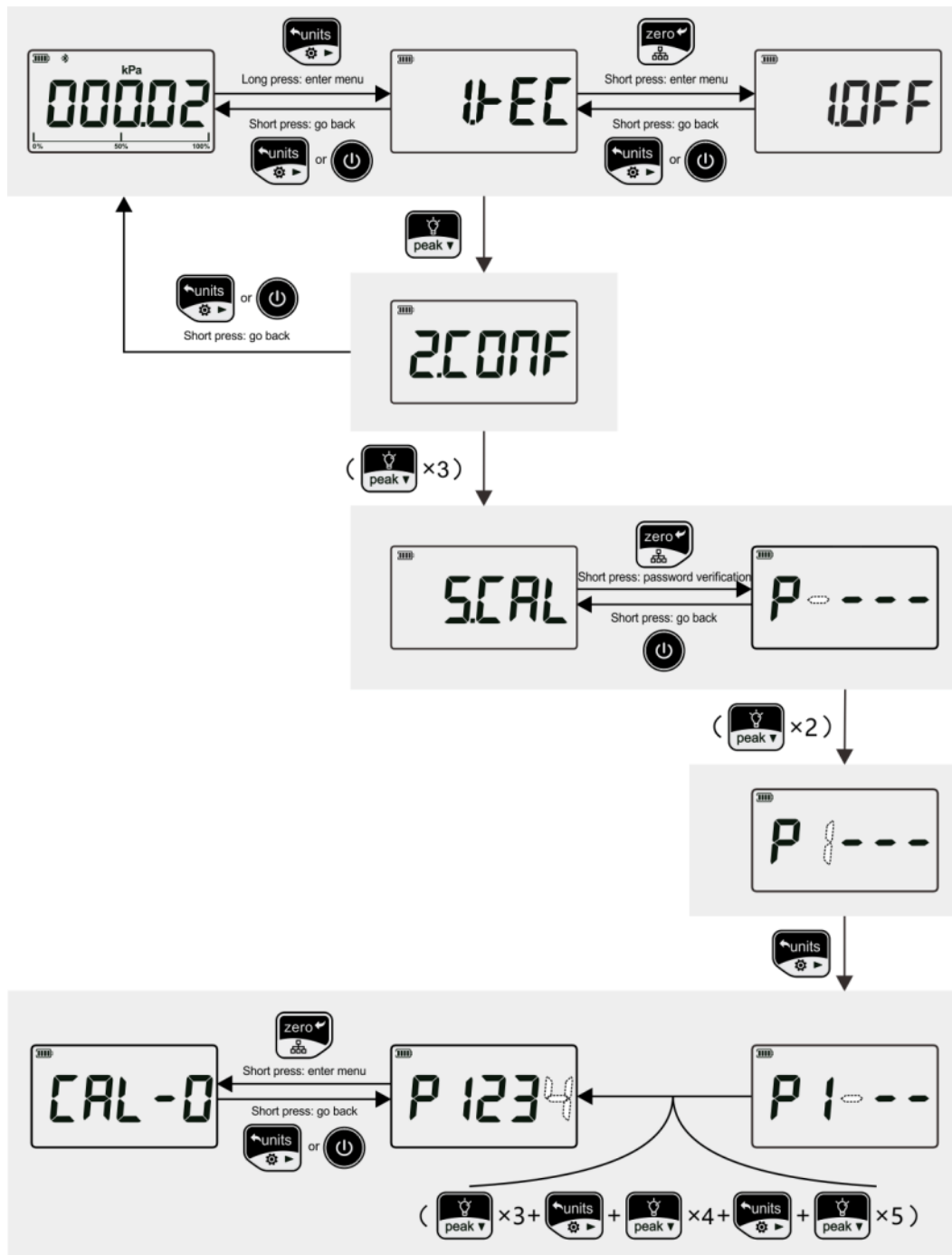
Long press  to enter menu and start, please also refer to display and buttons description diagram.



 For 680A/680P only       For 680P only

Menu structure

## 2. Basic menu operation



Basic menu operation

## Error Code

Code	Description	Solutions
001	Wrong password	Check the password
002	Parameter over range	The entered value exceeds the range allowed by the pressure gauge, please enter a new value
003	Operation failed	Try again

# Link App Connection

## 1. Scan the QR Code to Download Link App

Additel Link is a mobile app available on Android and iOS system. It can connect to pressure gauges through Bluetooth, display real-time pressure reading and status, configure gauge parameters, switch pressure units, pressure zero, start/stop data log, download and view data from the gauge, calibrate pressure gauges and export CSV data for sharing.

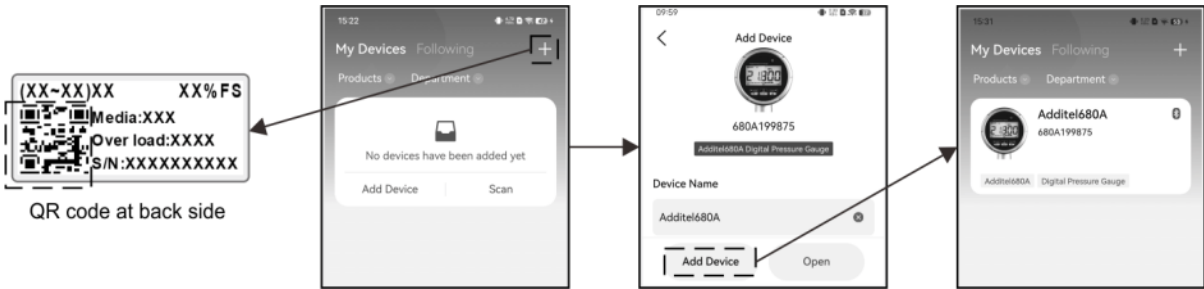


## 2. Enable the Bluetooth

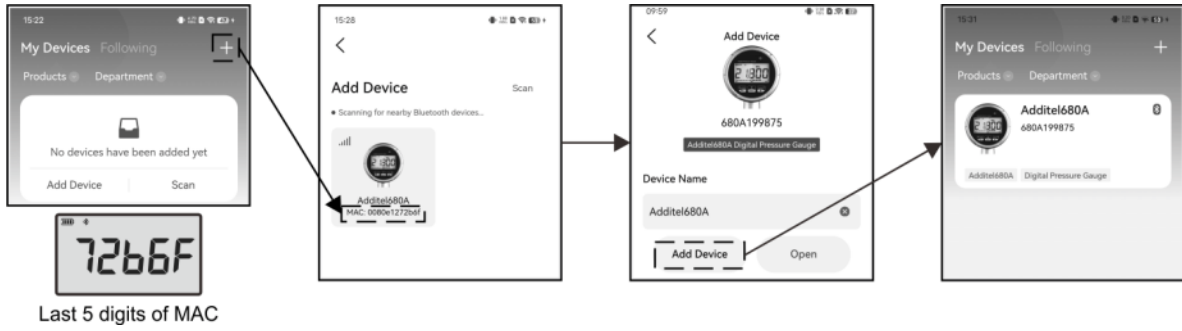
Check and make sure the Bluetooth of the cell phone is enabled, then go to the gauge main display and long press Zero button to turn on/off the Bluetooth.

## 3. Connect to the Gauge

### 3.1 Scan the Code

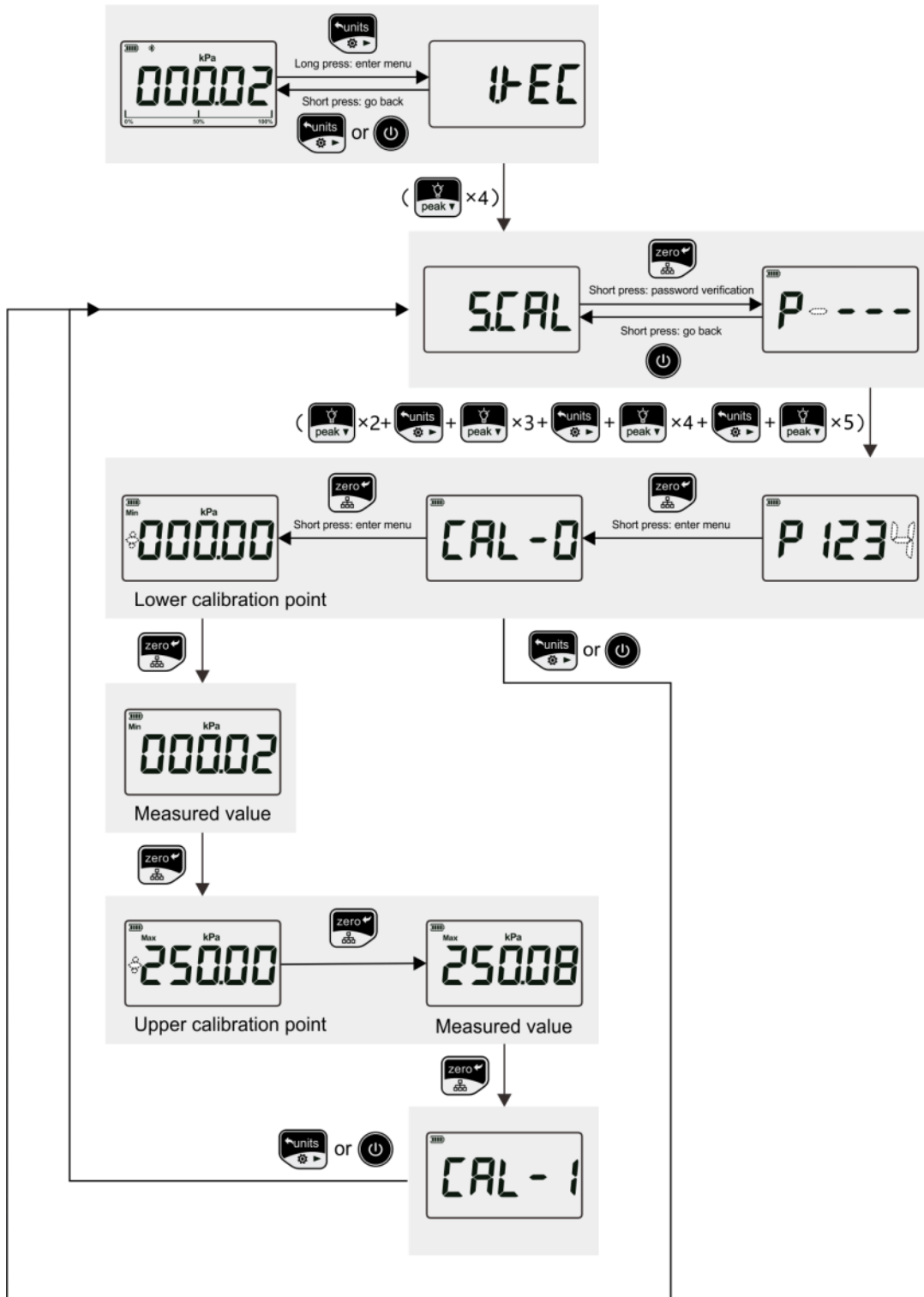


### 3.2 Manual Connection by Searching MAC Address



# Calibration Example

Enter password "1234" to calibrate, complete the calibration by go to: lower limit calibration point -> show lower limit measured value -> upper limit calibration point -> show upper limit measured value.



Calibration example

# Metrology Made Simple

## **Statement**

The product technical specifications, accessories and other related information in this manual are subject to change without prior notice. Please contact Additel Corporation if you have any questions.