



(1) N70/N80/N90 description

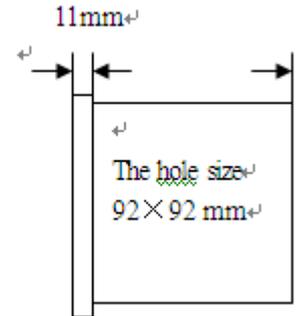
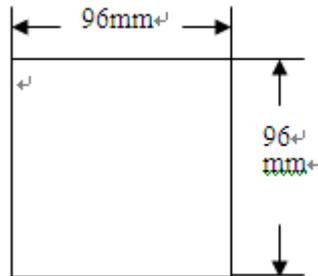
N70/N80/N90 pressure indicator is a 1/8 DIN or ¼ DIN, panel-mount, dual 4-digit indicator, which takes the advantage of latest state-of-art technology and comes in small-size, light-weight and in low-power. This pressure indicator has been specifically designed for use with mv/Volt output transducers from different famous manufacturers such as Dynisco, Gefran, ONEhalf20 and so on. This series indicator can match ZHYQ's melt pressure transducer also.

(2) N70/N80/N90 Indicator Specification

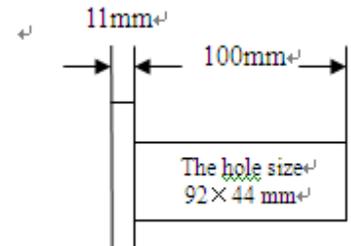
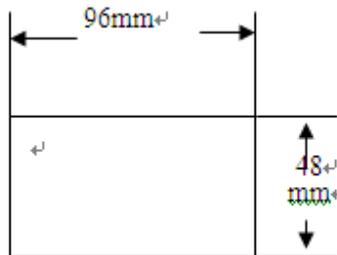
(1)	Display	Dual 4-digit Green and Red LEDs
(2)	Resolution	0.2% FSO ± 1
(3)	LEDs	Out, Alarm-1, Alarm-2, CALibration
(4)	Input Sensibility	2.5mv/V or 3.3 mv/V (automatic selection)
(5)	Sampling Speed	20 per second
(6)	Excitation Voltage	+9 VDC (output to transducer)
(7)	All Output Relays	Relay 220V 1A
(8)	Retransmission	4~20 mA standard current loop
(9)	Communication	RS-485 MODBUS(PY500 Only)
(10)	Alarm Range	0001 – 9999 PSI or Bar (configurable)
(11)	Temperature	0 - 55°C
(12)	Humidity	<= 80% RH
(13)	Calibration	80% FSO (Full Scale Output)
(14)	Power Supply	110/220VAC or +24VDC (designated while purchasing)
(15)	Size	N70: 96mm x 96mm x 100 mm (W x H x D) N80: 96mmx48mmx100 mm (W x H x D) N90: 48mmx96mmx100 mm (W x H x D)
(16)	Panel Cutout	N70: 92mm x 92mm N80: 92mmx44mm N90: 44mmx92mm
(17)	Weight	400(Maximum) grams

(3) N70/N80/N90 Indicator Panel description

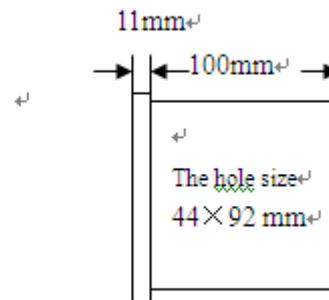
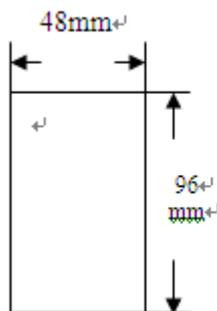
N70



N80



N90



(4) N70/N80/N90 Pressure Indicator Manual

- (1) “OUT” LED turns on when the pressure is not less than the OUT setting value.
 “AL-1” LED turns on when the pressure is not less than the AL-1 setting value.
 “AL-2” LED keeps reserved.
- (2) “CAE” LED truns on when the <CAE> is pressed for checking the calibration.
- (3) PV window displays the actual pressure value.
- (4) SV windows displays the OUT setting value.
- (5) <AC> key: to clear the pressure value when it is under setting and no load is on
- (6) <CAE> key: to check the calibration value (80% of Full Scale Output).
- (7) <SET> key: to enter the setting mode and to exit the setting mode.
 <SET> key has longer-time(more than 3 Second) press and shot-time press.
- (8) “>” key: shift the digit to be edited
- (9)“^” key: to edit and increase the value

(5) Wiring Diagram (EXC=Excitation , CAL=Calibration)

N80 Wiring Diagram

9	10	11	12	13	14	15	16
Alarm1 N/O	Alarm 1 Common	MainOUT N/C	MainOUT Common	MainOUT N/O	VAC 100 / 240	LN	Ground
Signal+ (Blue)	EXC + (Red)	Signal – (Green)	EXC–&CAL1 (Yellow & Brown)	CAL2 (Black)	No connection	Input + AL-2	Input - AL-2
1	2	3	4	5	6	7	8

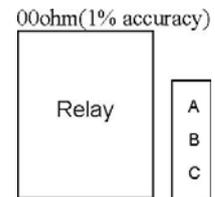
N70/N90 Wiring Diagram

1	Signal +	Blue	9	Alarm 1 N/O
2	EXC +	Red	10	Alarm 1 Common
3	Signal –	Green	11	Main OUT N/C
4	EXC –& CAL1	Yellow & Brown	12	Main OUT Common
5	CAL2	Black	13	Main OUT N/O
6	No connection		14	VAC 110 / 260
7	output + AL-2		15	LN
8	output – AL-2		16	Ground

(6) N70/N80/N90 Indicator Module description

There are three kinds of Modules:

1. Relay output module
2. Current output module (4-20mA) , configurable into (0-20mA), (0-10V) with 500ohm(1% accuracy) resistor in the current loop.
3. Communication module (RS-485).



1. Relay Output Module

One main OUT relay has 3 connection terminals with SPDT NC/NO.

Alarm-1 output relay is either NO or NC, determined by the Jumper selection on the CON1 beside the relay inside. NO State when having the short circuit piece between B,C(Factory default).NC State when having the short circuit piece between A, B.

Alarm -4 output relay has 3 connection terminals with SPDT NC/NO.

2.Current output module (Retransmission)

The indicator exports the corresponding pressure value on 4—20mA(refer to Alarm-2 setting) currentloop.It gives out 4mA(setting -dL-=4mA) when the Pressure Value<=0; The current loop output exports 20mA (setting -dH-=20mA) when the pressure value>=full Scale Output. Please refer to the explain of operation in this manual to know how to set -dL- and -dH- setting values.

The (0—20mA) current output is obtained by setting -dL-=0mA; -dH-=20mA.

The voltage output(0-10V) is obtained on the resistor of 500ohm in the 0—20mA current output loop (DL=0mA;DH=20mA).

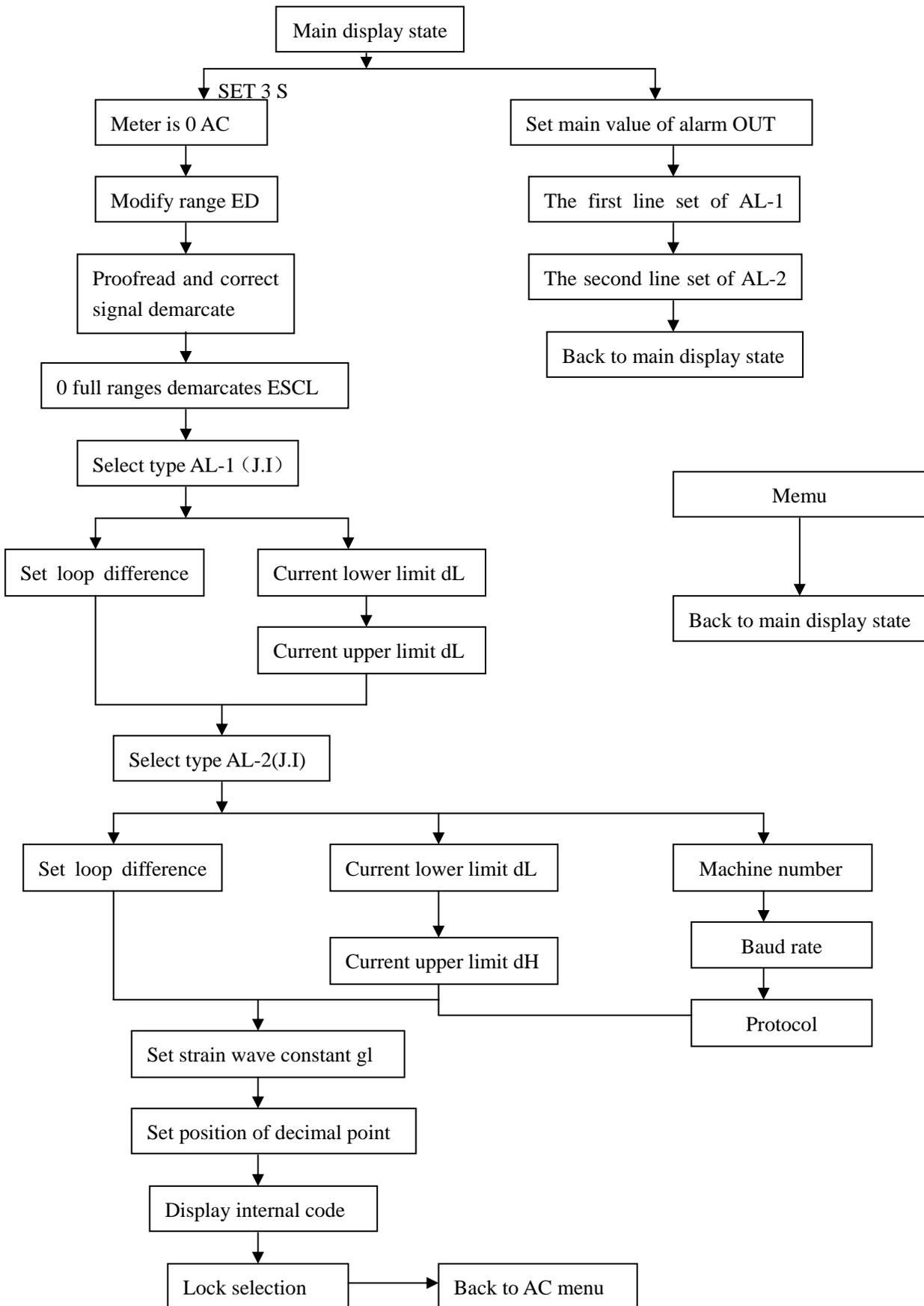
Setting of Alarm -2 is used for this retransmission current output setting.

The retransmission module is exclusive to RS-485 Communication Module.

3. Communication Module

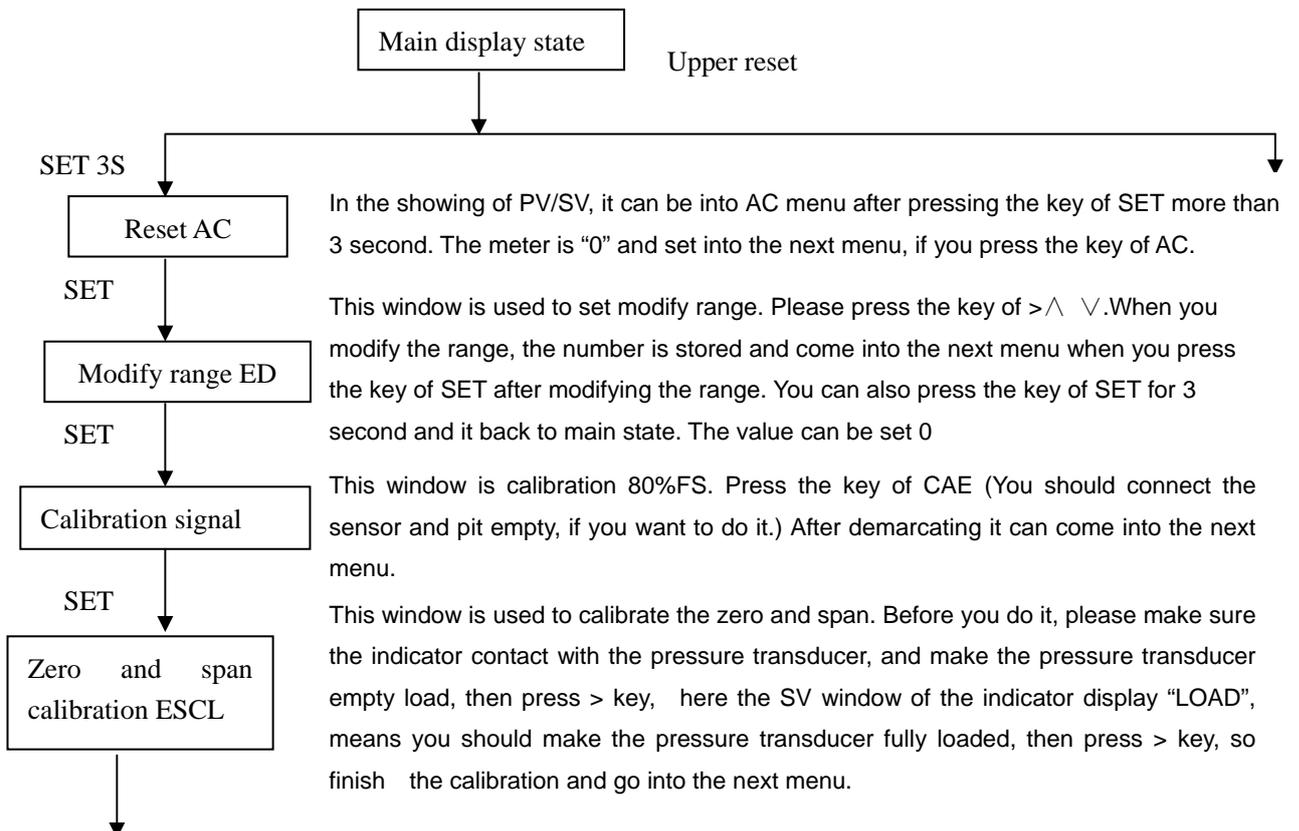
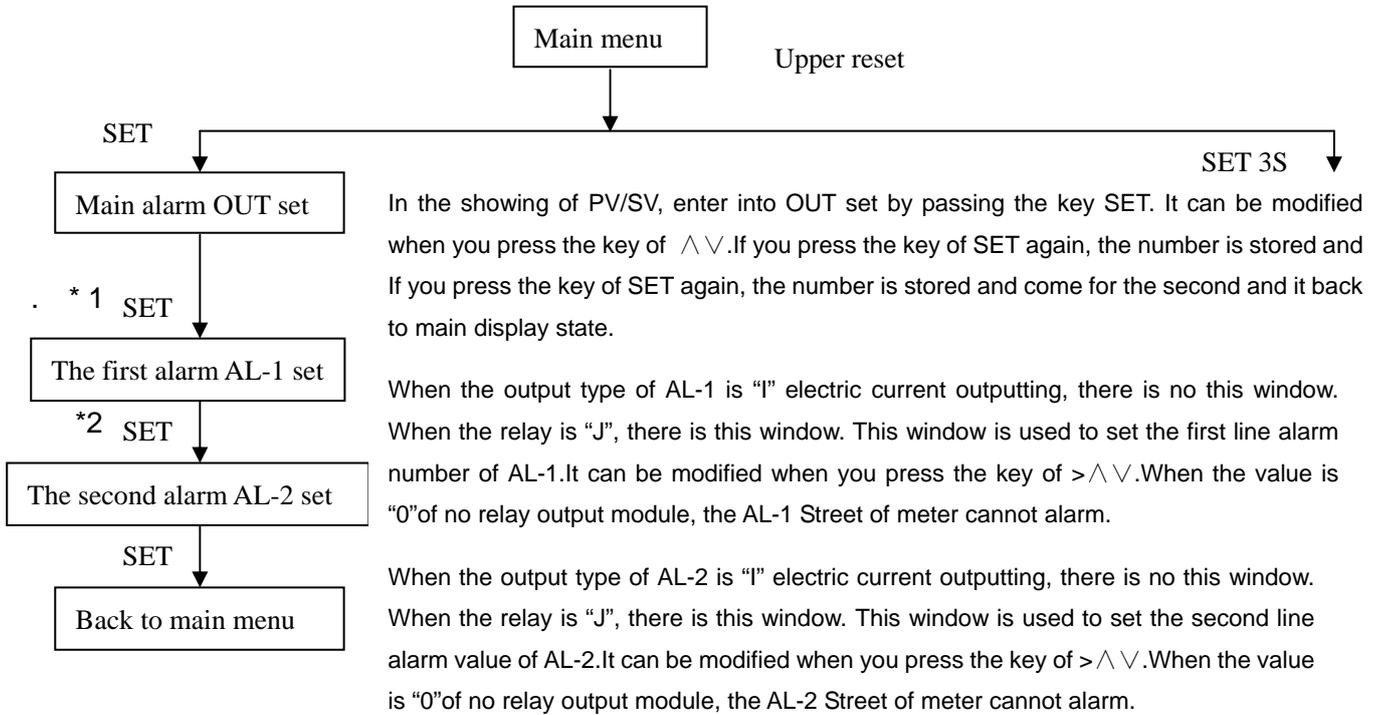
RS-485 MODBUS Communication Module is optional in PY500 pressure indicator. Baud rate, Parity check as well as other parameters can be configured in the setting of Alarm -3. RS-485 MODBUS communication protocol.

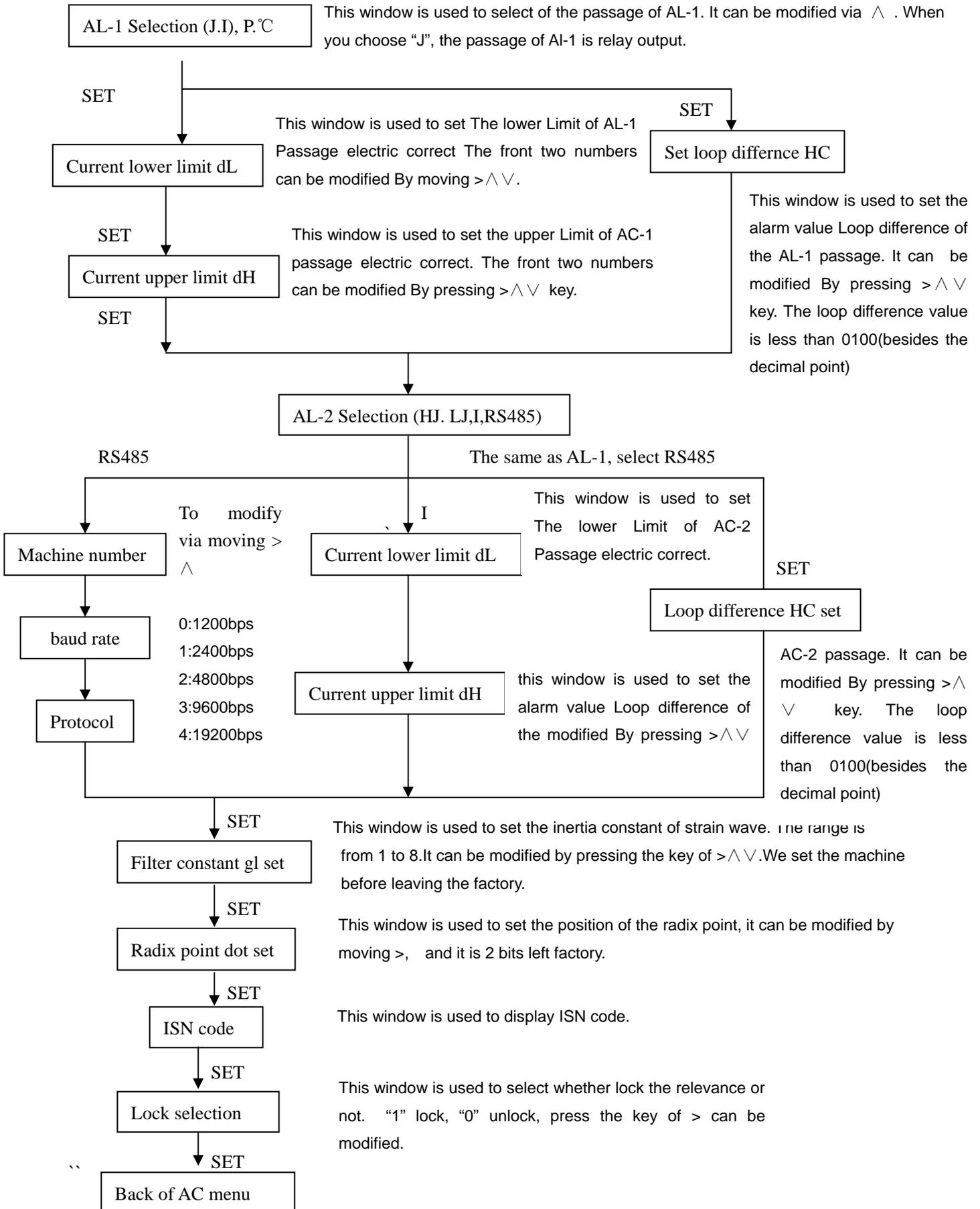
(7) N70/N80/N90 DIGITAL INDICATOR OPERATION FLOW CHART



Remarks:

1. In this flow chart. If you press set for 3 second at anytime, it can be back to main display state.
2. *1menu when the selection "I" for AL-1 type, it does not exist . *2menu when the selection "I" for AL-1 type it dees not exist
- 3 The main siaplay state is the PV/SV display state for the meter after electric correct discocation.





(8) MAINTENANCE

The operating temperature is 0-55°C ,the relative humidity is no more than 80%RH , it can be used in the conditions without dirt or corrosive gas . it can be free repaired within 12 months since leaving our factory . if there is something wrong with the use of customer or the beyond the maintenance , we should charge for the service of repair .

(9) Indicator Model Ordering guide

Panel Cutout Size	
N70	96*96
N80	96*48
N90	48*96
4	Number of Display Digits
Alarms	
1	1 Alarm relay
2	2 Alarm relay
3	3 Alarm relay
Retransmission	
R	Retransmission
N	No Retransmission
Communication	
C	Communication RS-485
Power supply	
D	+24VDC
A	+220VAC