ISI-799

Service Manual

Contents

1.0 Configuration and Calibration

The ISI-99 Indicator can be configured using a series of menus through the indicator front panel when the indicator in setup mode.

1.1 Enter Configuration and Calibration

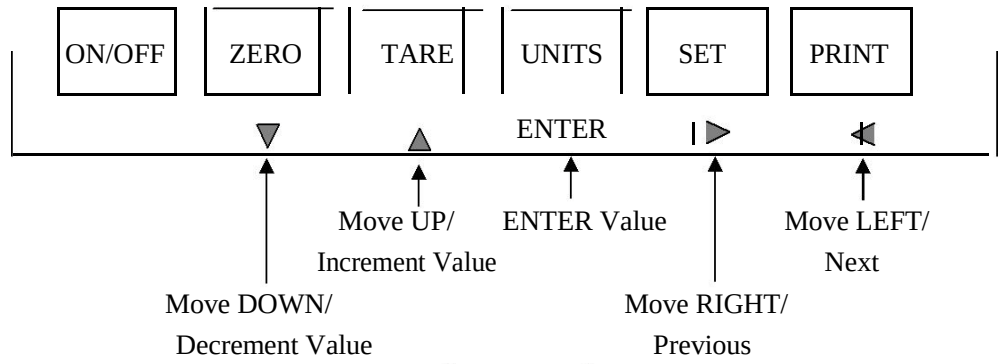
Method 1: Hold “PRINT” key when press “ON/OFF” key to turn on indicator. Display shows “PW0000”, then using front panel key edit display showing “PW0099” when press “ENTER” key.
Method 2: Open back cover of indicator, then press “K1” located bottom right side of PCB board.

1.2 Exit Configuration and Calibration

When span calibration is done, indicator is returned to weigh mode automatically. On the other way, the “ ▲ “is pressed at “CONFIG” menu.

1.3 Menu Structures and Parameter Descriptions

1.3.1 Key Functions In Setup Mode



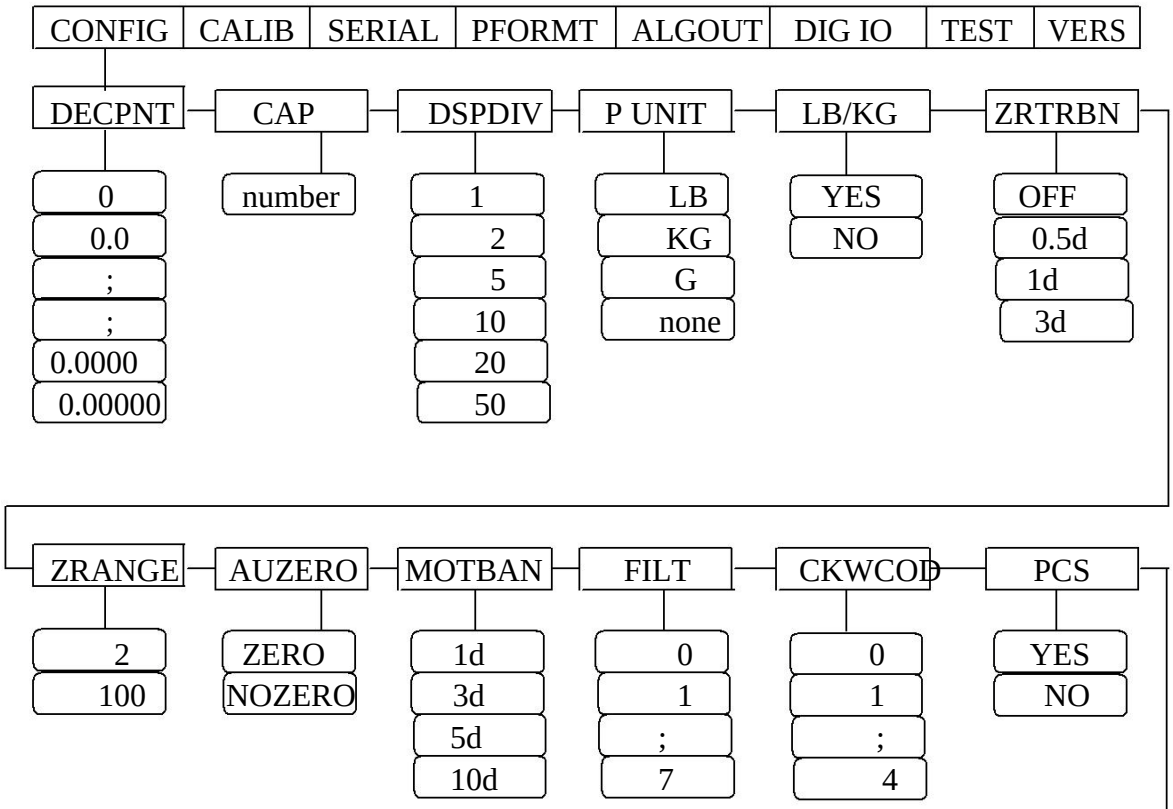
Note: To select parameter, use “ ▶ ” or “ ◀ ” key

1.3.2 Main Menu

CONFIG	CALIB	SERIAL	PFORMT	ALGOUT	DIG IO	TEST	VERS

Main Menus

1.3.3 Configuration Menu



Parameter Descriptions:

1. DECPNT (Decimal Point)

Decimal point location in the primary unit display.

2. CAP (Capacity)

Weigh capacity up to 999999 can be entered.

3. DSPDIV (Display Division)

Selects the minimum increment weigh value for primary unit. The value is from 1 to 50.

4. P NUIT (Primary Unit)

Selects primary unit.

5. LB/KG (LB and KG Switch)

Enable or disable LB and KG switching.

6. ZRTRBN (Zero tracking band)

OFF, 0.5d, 1d, or 3d can be entered.

7. ZRANGE (Zero range)

2% or 100% can be entered.

8. AUZERO (Auto zero)

If ZERO is selected means automatically zero the indicator when power on. If NOZERO is selected means return to the zero position of ZERO CALIBRATION.

9. MOTBAN (Motion band)

If motion value is within motion band, STABLE lights.

10. FILT (Digital filter)

The bigger number, the stronger filter.

11. CKWCOD(Check weight condition)

0: Check on Counting mode and unstable.

1: Check on Counting mode and stable.

2: Check on Weighing mode and unstable.

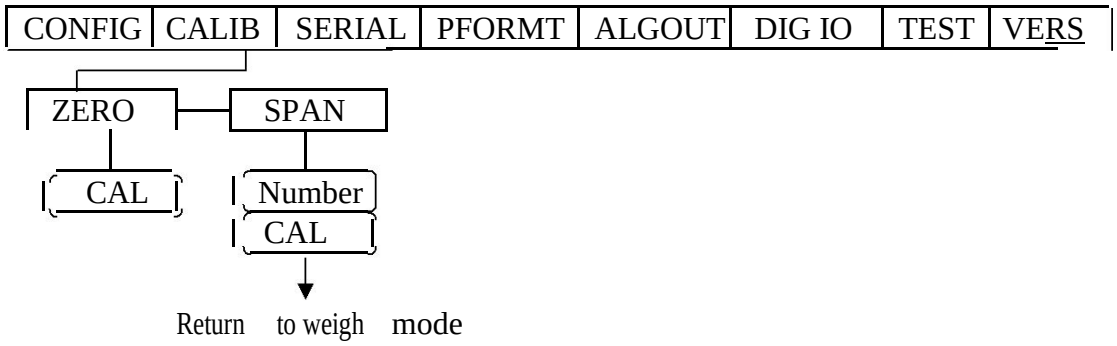
3: Check on Weighing mode and stable.

4: Disable check function.

12. PCS(Counting mode)

Enable Counting mode or not.

1.3.4 Calibration menu



Parameter Descriptions:

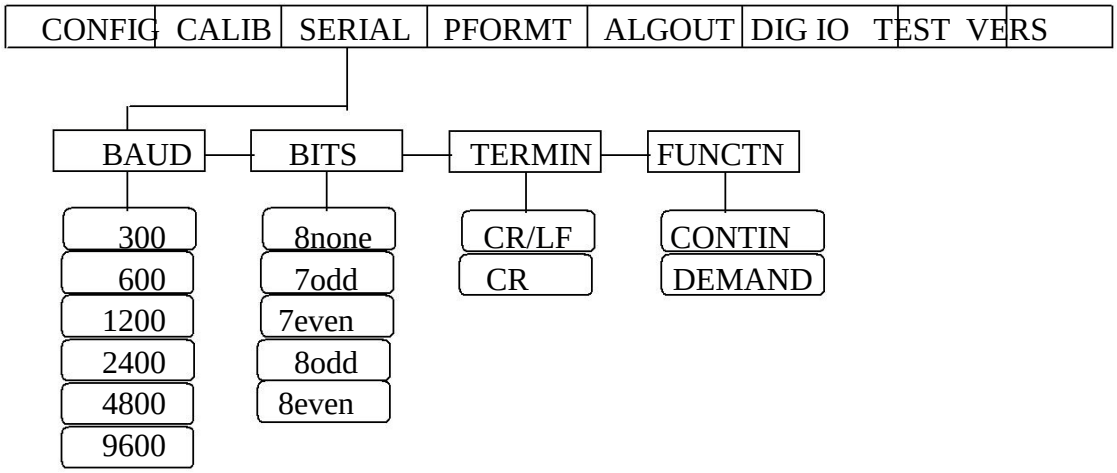
1. ZERO (Zero Calibration)

Zero calibrates A/D count value.

2. SPAN (Span Calibration)

Edit the test weigh value, then press “ENTER” key.

1.3.5 Serial Communication menu



Parameter Descriptions:

1. BAUD (Baud rate)

The transmission speed for serial RS-232 port.

2. BITS (Bits)

The number of data bits and parity of data are transmitted.

3. TERMIN (Termination)

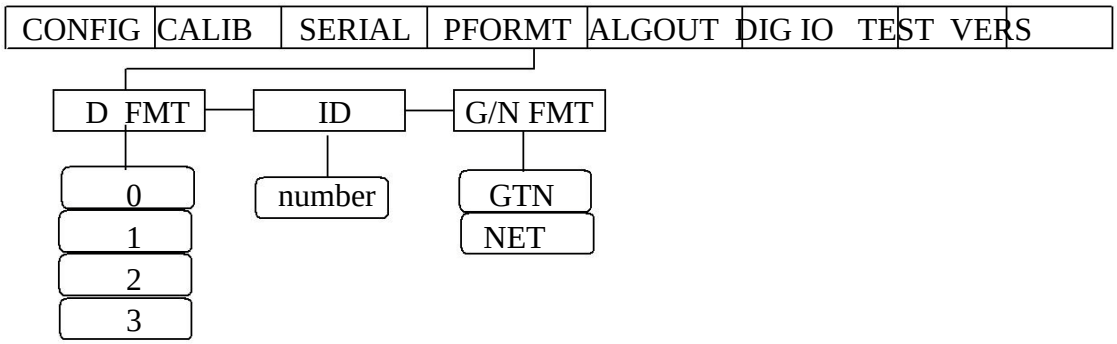
Termination character.

4. FUNCTN (Functions of Transmission)

Select **CONTIN**, the RS-232 port is for data continue transmission.

Select **DEMAND**, the RS-232 port is for data transmission when the PRINT key is pressed or the "?" is received.

1.3.6 Print Format menu



Parameter Descriptions:

1. D FMT (Data format)

If select **0**, the print format does not include ID number and consecutive number. If select **1**, the print format include ID number.

If select **2**, the print format include consecutive number.

If select **3**, the print format include ID number and consecutive number.

2. ID (ID number)

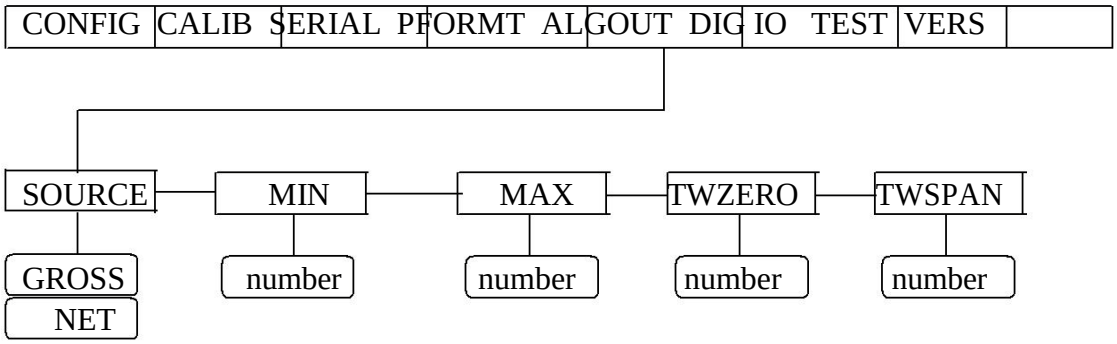
Edit and Enter ID number.

3. W FMT (Weigh format)

If select **GTN**, the gross, tare, and net weigh are printed in print format.

If select **NET**, The net weigh is printed in print format.

1.3.7 Analogue output menu



Parameter Descriptions:

1. SOUCE (Source)

Specifies the source tracked by analog output.

2. MIN (Minimum)

Specifies the minimum weigh value tracked by analog output.

3. MAX (Maximum)

Specifies the maximum weigh value tracked by analog output.

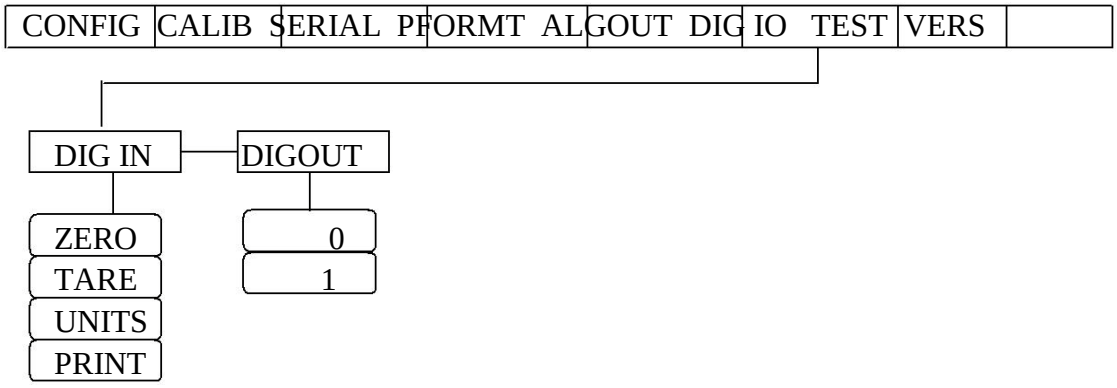
4. TWZERO (Tweak zero)

Adjust the analog output zero calibration. Use a multimeter to monitor the analog output value, 0VDC for 0-10VDC, 4mADC for 4-20mADC. Edit the number, press “ENTER” to save new value.

5. TWSPAN (Tweak span)

Adjust the analog output span calibration. Use a multimeter to monitor analog output value, 10VDC for 0-10VDC, 20mADC for 4-20mADC. Edit the number, press “ENTER” to save new value.

1.3.8 Digital Input Output Menu



Parameter Descriptions:

1. DIG IN (Digital Input)

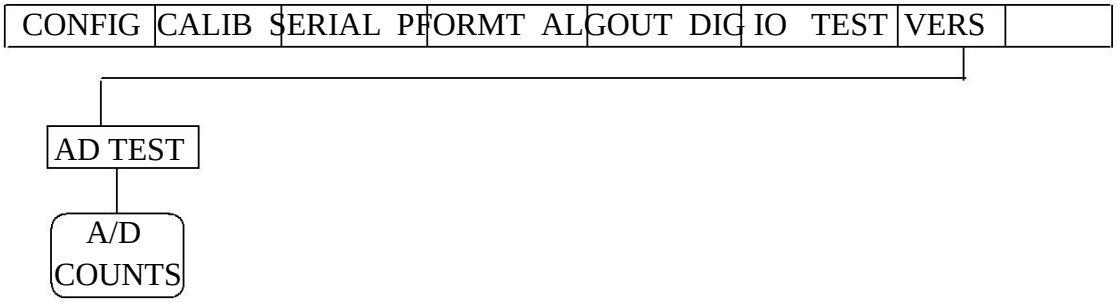
Selects the keypad functions for digital input.

2. DIGOUT (Digital output)

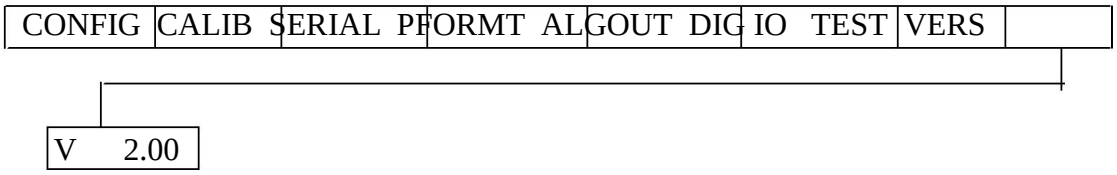
If select **0**, DO1 = under weight, DO2 = accept weight, DO3 = over weight

If select **1**, DO1 = under and over weight, DO2 = accept, DO3 = over weight

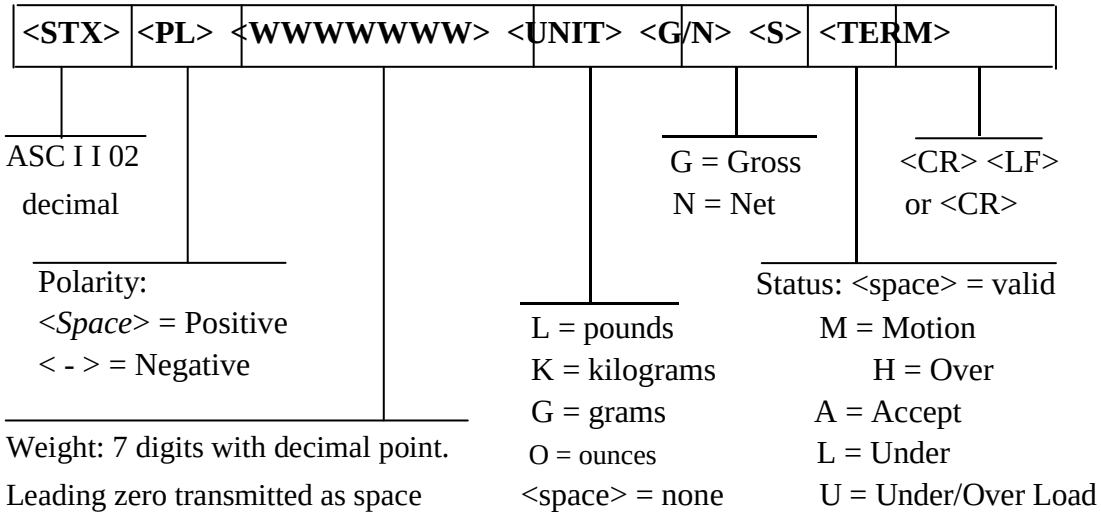
1.3.9 Test menu



1.3.10 Version menu



2.0 Serial Communication Format



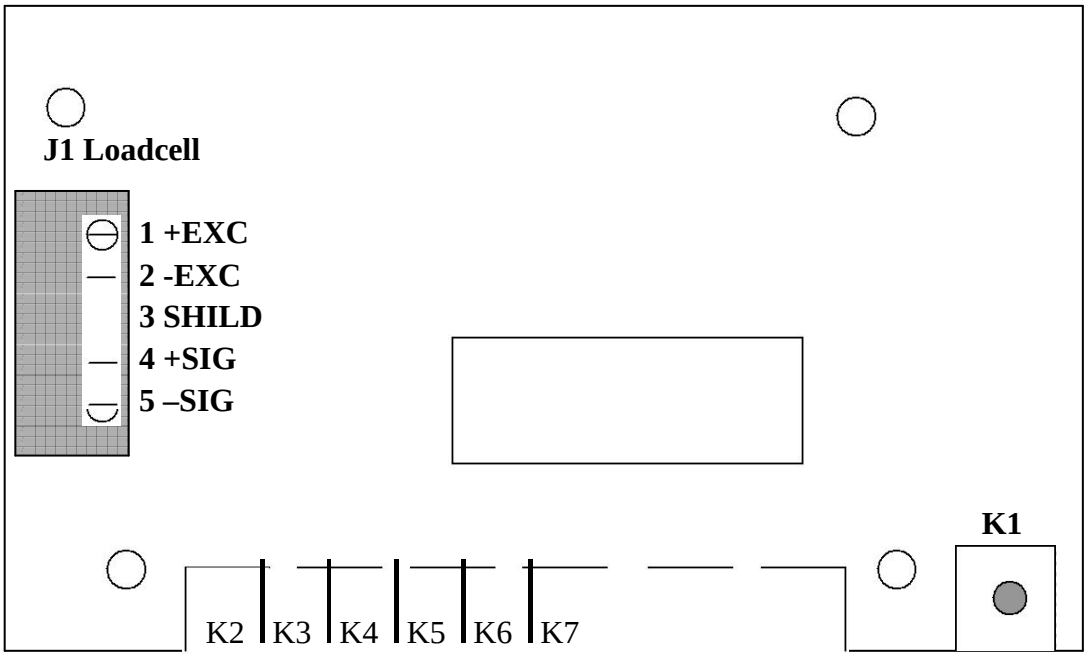
Continuous Output Data Format

3.0 Error Messages

Un---Under load.
OL---Over load.
Error 1---Span calibration error.
Error 2---Analog out span calibration error

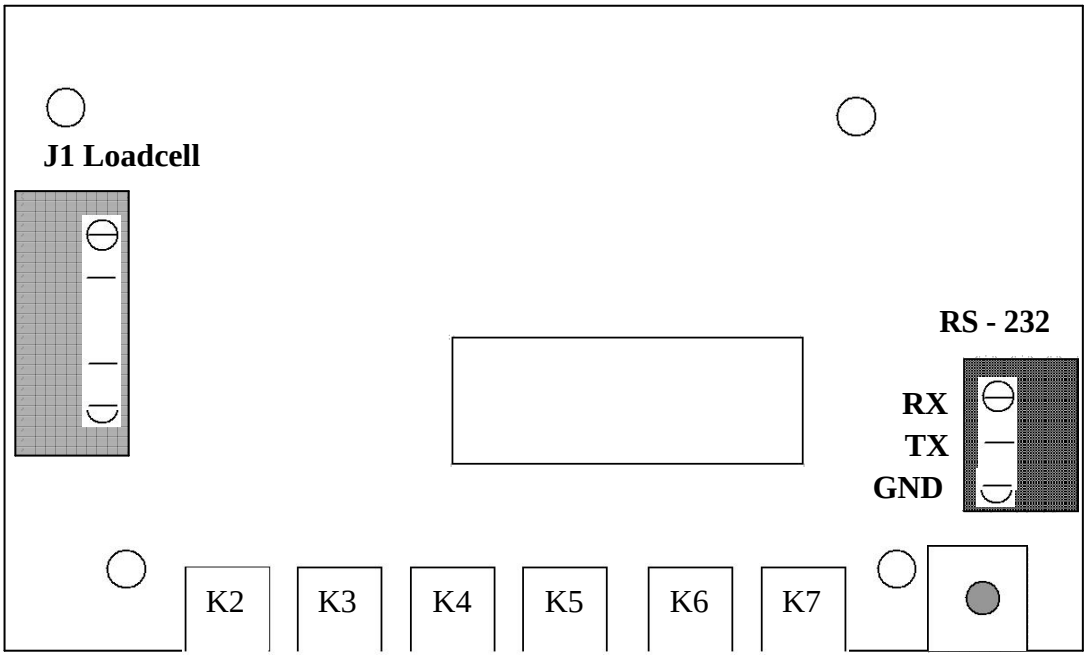
4.0 Appendix

4.1 Load Cell Wiring



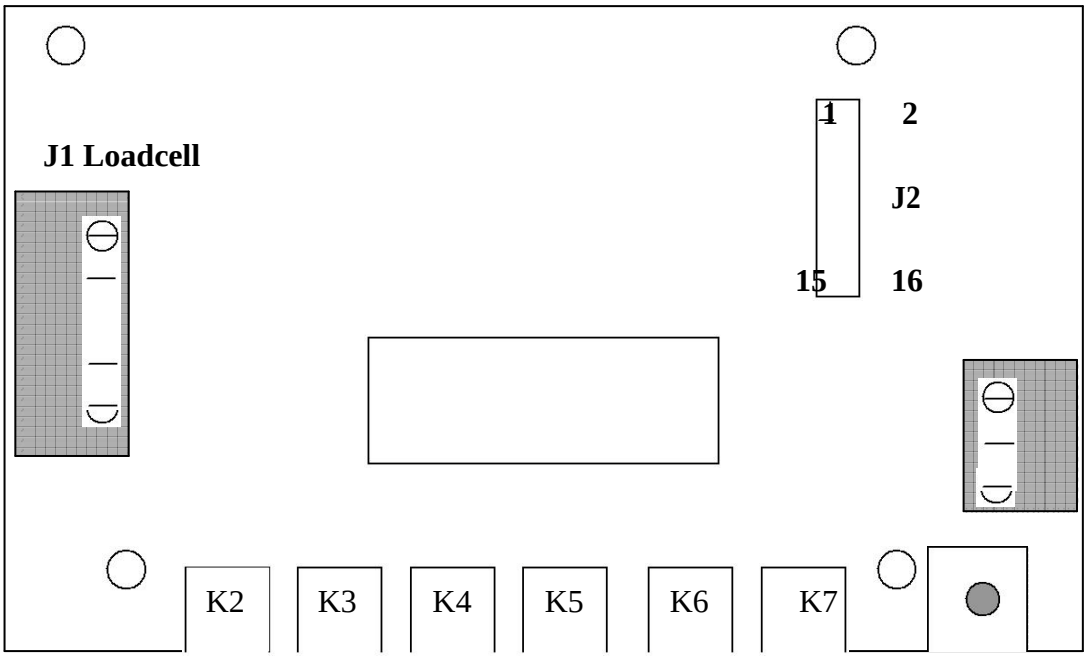
Load Cell Wiring

4.2 RS-232 Wiring



RS-232 Wiring

4.3 Digital Output and Input(J2 Connector)

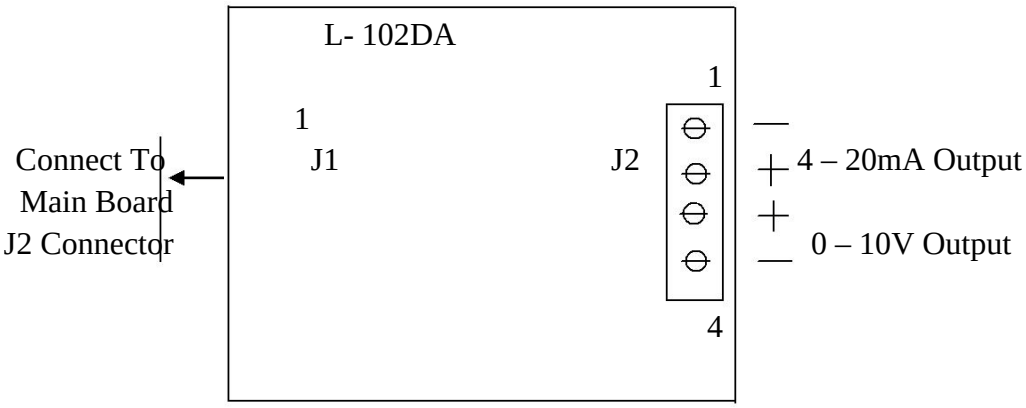


Digital Output and Input(J2 Connector)

J2 Pin	Label	Function
10	GND	GND
11	DIN	Digital Input
13	DO1	Digital Output 1.
14	DO2	Digital Output 2.
15	DO3	Digital Output 3.
16	+5	+5VDC

J2 Connector Assignment

4.4 Analog Output Wiring



Analog Output Board

TOTAL METER SERVICES

CONFIGURATION DEFAULT SETTINGS FOR ISI 99 INDICATOR

DEC. POINT:	**0.0**
CAPACITY:	**200.0**
DSPDIV:	**1**
P UNIT:	**LB**
LB/KG:	**YES**
ZRTBN:	**1d**
ZRANGE:	**100**
AUZERO:	**ZERO**
MOTBAN:	**Id**
FILT:	**2**
CKWCOD:	**4**
PCS:	**NO**

SERIAL COMMUNICATION SETTINGS UNDER "SERIAL"

BAUD:	**9600**
BITS:	**8 NONE**
TERMIN:	**CR/LF**
FUNCTN:	**CONTIN**