



**MS-2500**  
Dual Slope type  
**SERVICE MANUAL**

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## PRECAUTIONS

**READ** the service manual **BEFORE** operating or servicing this equipment.

**FOLLOW** the instructions carefully.

**Keep** this manual for future reference.

**Don't** allow untrained personnel to operate, clean, inspect, maintain, service or tamper with this equipment.

**ALWAYS DISCONNECT** this equipment from the power source before cleaning or performing maintenance.

**Note:** If the unit has been stored or transported to below freezing temperature, let the unit to warm up to room temperature before turning on power.

### PAY SPECIAL ATTENTION TO ALL “WARNING” SYMBOLS



IMPORTANT



ELECTRICAL WARNING

## GENERAL INFORMATION

Before connecting or disconnecting any internal electronic components or interconnecting wiring between electronic components, always remove power and wait at least 30 seconds. Ignoring any of these precautions could damage or cause destruction to the equipments.

## GENERAL INSPECTION

Inspect the scale assembly by checking the following:

- Are there any unusual wear points, paths, or marks on the weighing Surface?
- Is the instrument cable damaged or binding the scale?
- Has any debris or material built up under or around the platform that could inhibit movement?
- Visually inspect the load cells and levelling feet for signs of unusual wear.

## TROUBLESHOOTING

### GENERAL:

If the scale does not operate properly, find out as much as possible about the problem.

Determine whether the problem is constant or intermittent. Be aware that problems can be caused by mechanical or electrical influences.

While troubleshooting MS 2500 scale, check for the following:

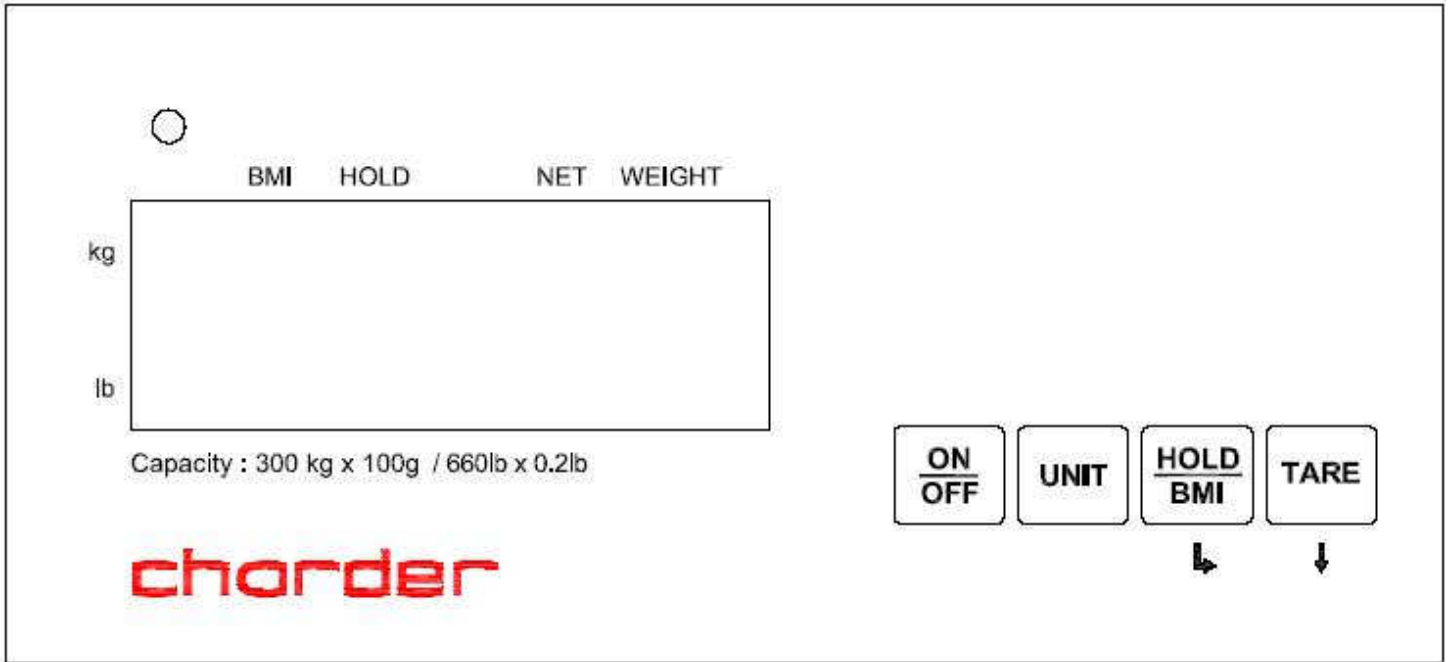
- Water
- Corrosive materials
- Uneven floor
- Strong vibrations or wind currents
- Physical damage to the scale platform or housing.

## SPECIFICATION





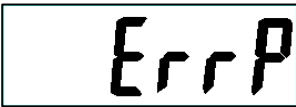
<b>Model</b>	MS 2500
<b>Capacity</b>	300kg x 0.1kg/ 660lb x 0.2lb
<b>Weight Unit</b>	Kg / lb
<b>LCD Display</b>	1.0 inch LCD display with 5 and 1/2 digits
<b>Dimensions</b>	Platform size: 550(L) x 550(W) x 50(W) mm
<b>Key Functions</b>	ON/OFF, UNIT , HOLD/BMI , TARE
<b>Zero count</b>	2000~9000
<b>Span count</b>	10000~13000 (200kg)
<b>Power Supply</b>	AAA Battery x 6 / AC adapter 15V 300mA
<b>Operation Temperature</b>	5°C / 35°C




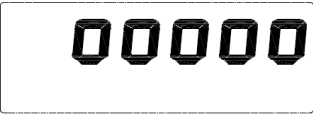
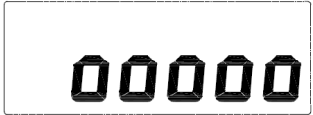
# PANEL / OVERLAY

## 1. NP 4444



## ERROR MESSAGE

<u>Error Message</u>	<u>Description</u>	<u>Solution</u>
	Nothing appears on the display after pushing ON/OFF key.	<ol style="list-style-type: none"> <li>1. Check display.</li> <li>2. Disassemble indicator.</li> <li>3. Check wires and control panel. (refer P.7 &amp; P.9)</li> </ol>
	Can't switch on scale using AAA battery.	Battery housing wires are disconnected or broken. (refer P.7)
	Can't switch on scale using AC adaptor.	<ol style="list-style-type: none"> <li>1. AC adaptor damaged. → Replace adaptor.</li> <li>2. AC jack wires are disconnected. (refer P.7)</li> </ol>
	Low battery indication.	<ol style="list-style-type: none"> <li>1. Check battery voltage (&gt;6V) and if needed replace new battery for operation.</li> <li>2. If the problem still persists inspect soldering of controller PCB or replace the controller PCB.</li> </ol>
	Scale zeroed under its initial balance.	<ol style="list-style-type: none"> <li>1. Check the load cell and its wiring (refer P.7).</li> <li>2. Replace load cell, then re-calibrate the scale. (for re-calibrating refer P.17)</li> </ol>
	Scales zeroed exceed its initial balance.	<ol style="list-style-type: none"> <li>1. Remove the weight from scale.</li> <li>2. Check the load cell's resistance. (See P.11)</li> <li>3. If you change the load cell, please re-calibrate the scale. (refer P.17)</li> </ol>
	Overload	<ol style="list-style-type: none"> <li>1. Remove the weight from scale. Overload: Maximum capacity + 9d</li> </ol>
	EEPROM data incorrect.	<ol style="list-style-type: none"> <li>1. Check IC3 is soldered or not. (Refer P.26 Bottom overlay)</li> <li>2. Replace controller PCB.</li> <li>3. Re-calibrate the scale. (refer P.17)</li> </ol>

<b><u>Error Message</u></b>	<b><u>Description</u></b>	<b><u>Solution</u></b>
	No weighing.	<ol style="list-style-type: none"> <li>1. Check the load cell wires are well and connected to the correct points. (refer P.7)</li> <li>2. Check resistances of load cell. (refer P.11)</li> <li>3. If you change the load cell, please re-calibrate the scale. (refer P.17)</li> </ol>
	The scale shows non-complete segments when power on.	Check LCD pin. (refer P.8)
	No Current.	<ol style="list-style-type: none"> <li>1. Check parameters of RS232 interface and pin out. (refer P.19)</li> <li>2. RS232 wire is disconnected. (refer P.7)</li> </ol>
	Count error (too high)	<ol style="list-style-type: none"> <li>1. Check the load cell wires are well and connected to the correct points. (refer P.7)</li> <li>2. Check load cell for proper bridge resistances. (refer P.11)</li> <li>3. Replace load cell, then re-calibration the scale. (refer P.17)</li> </ol>
	Zero count is more than calibration range (i.e. 10%) while power on.	<ol style="list-style-type: none"> <li>1. Make sure that the scale platform doesn't have any kind of weight on it.</li> <li>2. Check the load cell wires are well connected to the correct points. (refer P.7) Re-calibrate the scale. (refer P.17)</li> </ol>
	Zero count is less than calibration range (i.e. 10%) while power on.	<ol style="list-style-type: none"> <li>1. Make sure that there is no blocking object (like paper/plastic sheet or heavy layer of dirt/dust) between upper platform of the scale and the platform on which load cell is fitted.</li> <li>2. Check the load cell wires are well connected to the correct points. (refer P.7)</li> <li>3. Re-calibrate the scale. (refer P.17)</li> </ol>

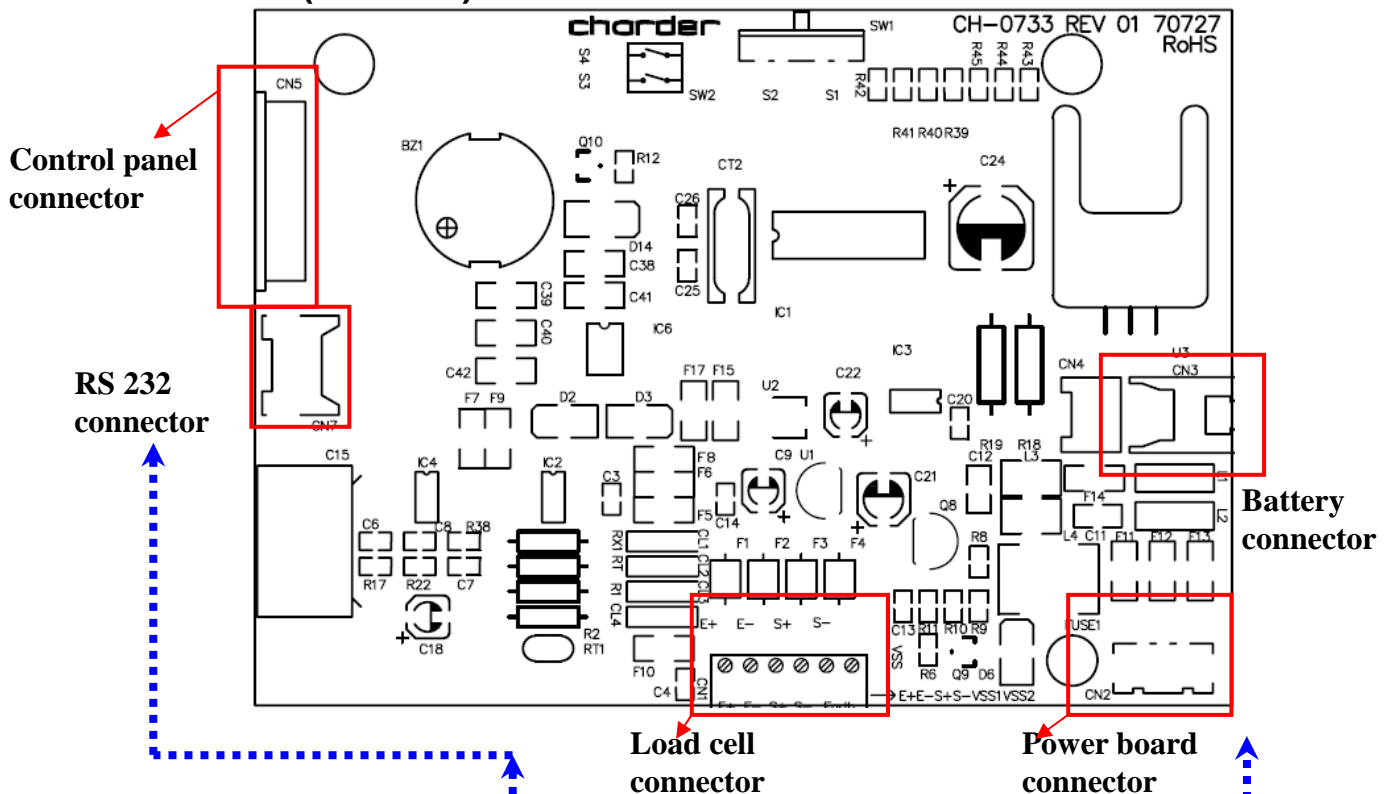
# WIRING

## ACTION:

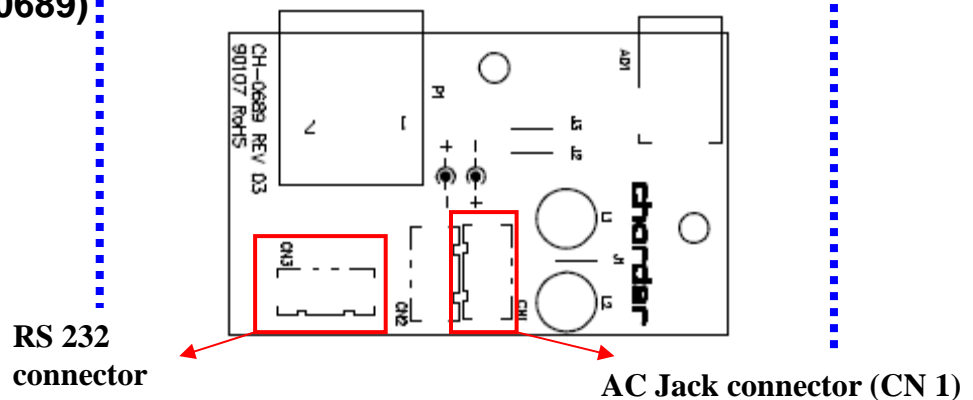
1. Remove battery from the scale.
2. Un-screw the lower housing.
3. Remove upper housing.
4. Make sure that all wire connectors are well and that no insulation material is touching the soldering contacts.
5. Make sure that all wires are connected to the correct points.

Wiring	Connector
Load cell wiring (from junction board to main board)	RED (solder pad "E+")
	WHITE (solder pad "S+")
	YELLOW (solder pad "S-")
	BLACK (solder pad "E-")
Battery Wiring	CN 3
Power Wiring	CN 2

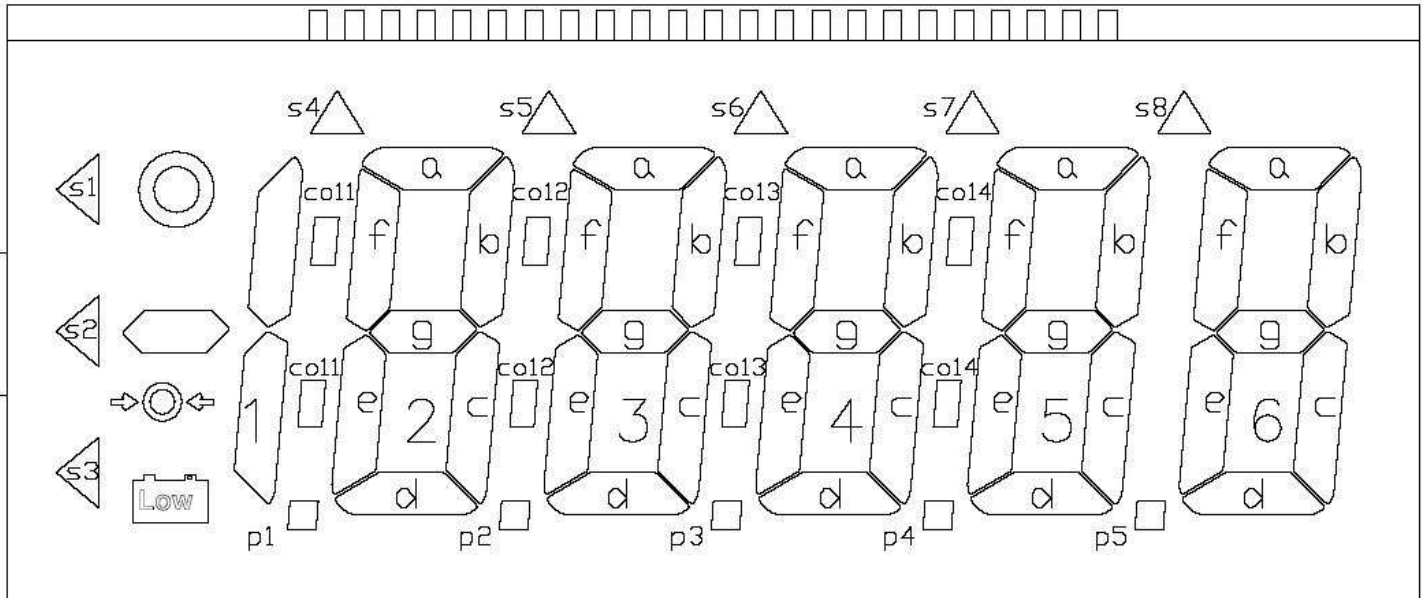
### ■ Main Board (CH-0733)



### ■ Power Board (CH-0689)



# LCD FORMAT



PIN NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
COM1	C1	/	/	s1	⊙	☒	p1	2e	2d	p2	3e	3d	s4	s7	p3	4e	4d	p4	5e	5d	p5	6e	6d
COM2	/	C2	/	s2	1c	2f	2g	2c	3f	3g	3c	s5	s8	4f	4g	4c	5f	5g	5c	6f	6g	6c	
COM3	/	/	C3	s3	→•	1b	col1	2a	2b	col2	3a	3b	s6	/	col3	4a	4b	col4	5a	5b	/	6a	6b

## ACTION:

**Problem-** The scale shows non-complete segments when power on.

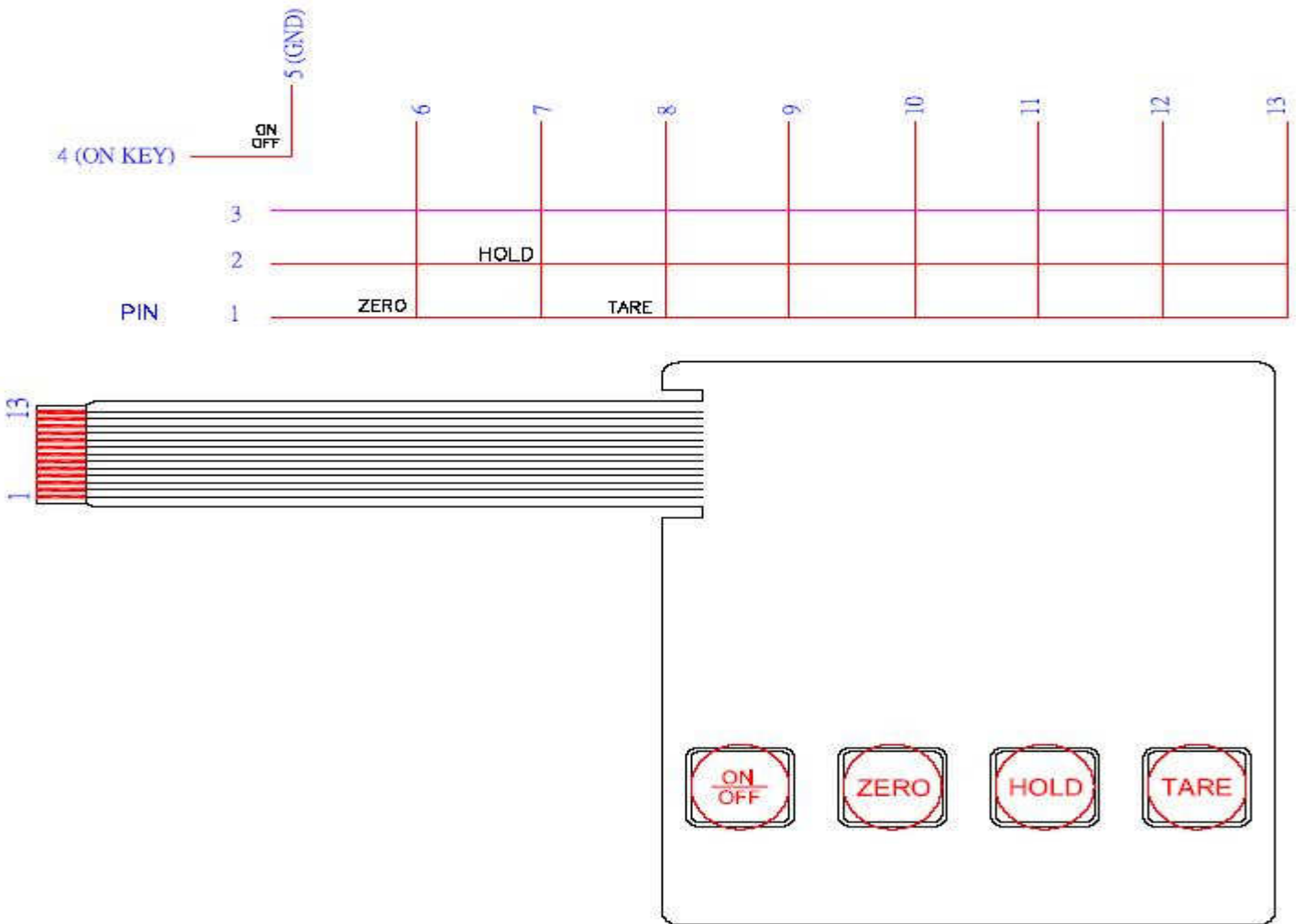
## Solution:

- Turn off the scale and take out the batteries from the scale.
- Check LCD pin. (Please refer to above LCD FORMAT)  
For instance, if the top left arrow (S1) disappears, then check pin 1 and pin 4.
- Check whether LCD pins are soldered properly or not.

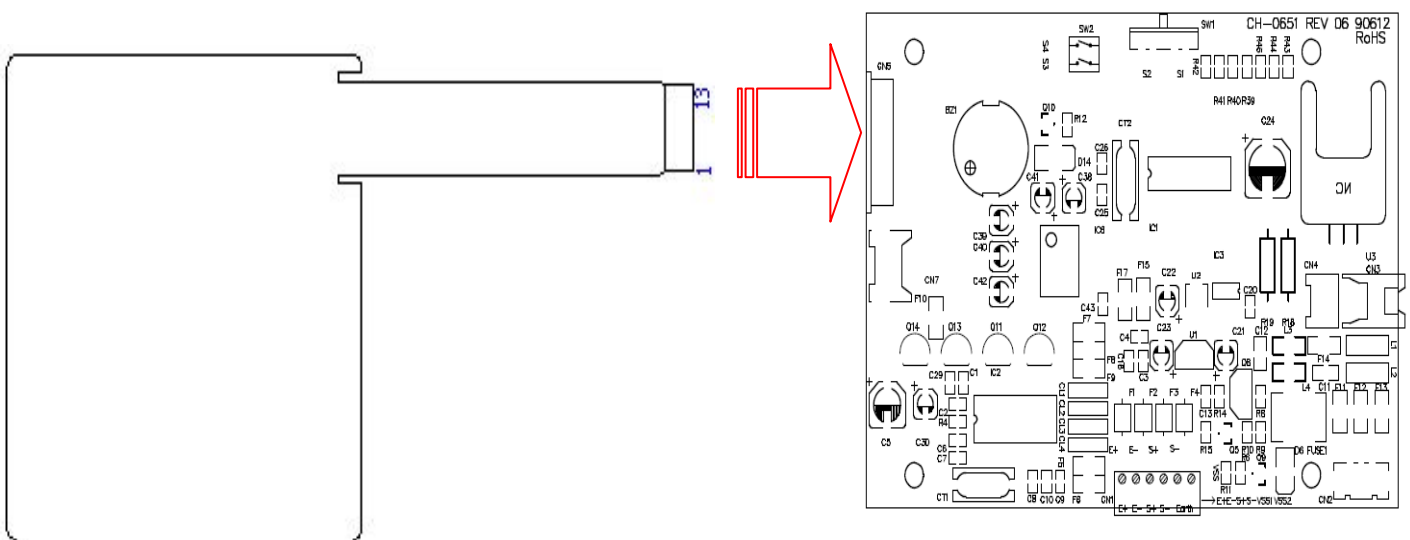


# CONTROL PANEL

## 1. NP4381 (300kg Capacity)



Bottom Overlay



1. Control panel switch damaged.
2. Use multi-meter to measure voltage current of control panel.
3. Reconnect control panel switch.  
Make sure that control panel is connected to the correct housing (CN5).
4. If problem persists, replace a new control panel.

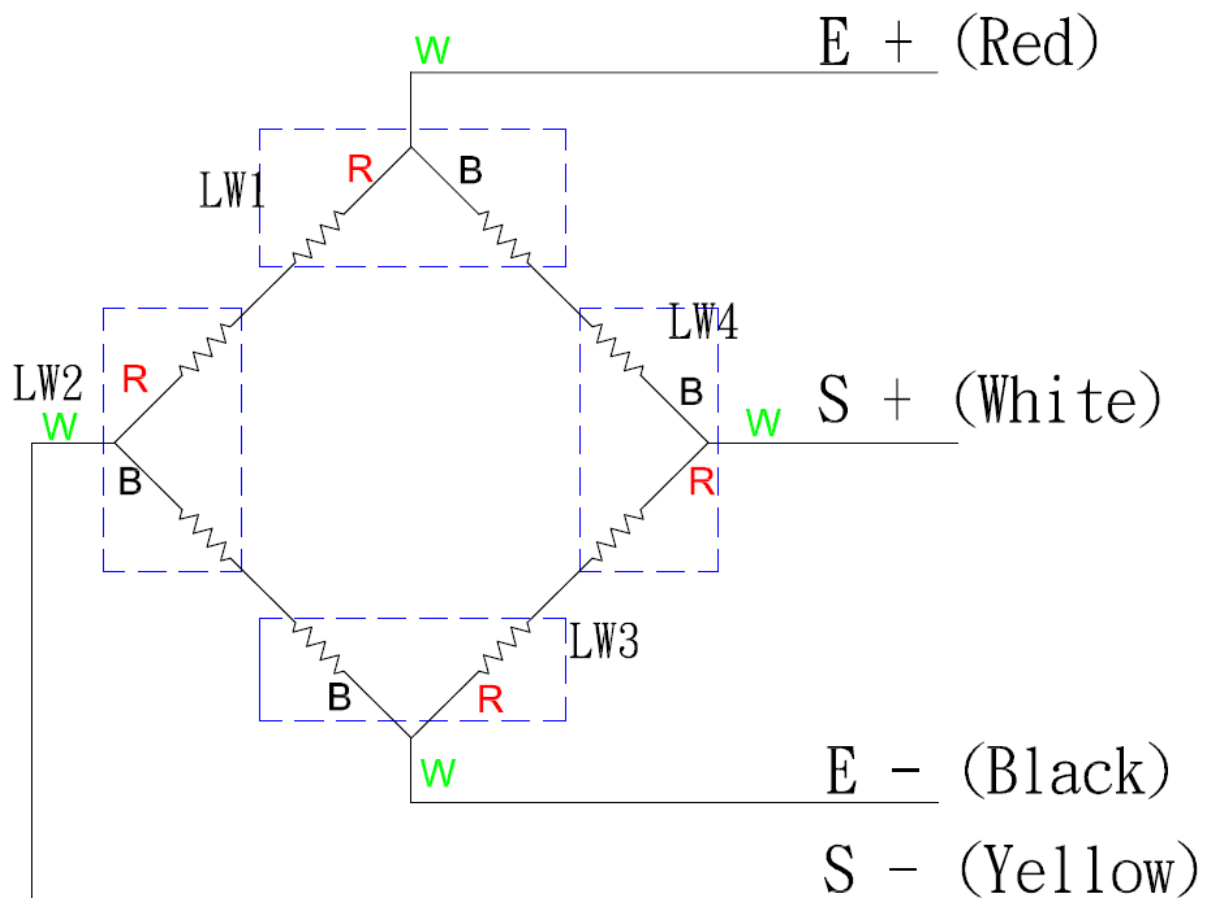
## LOAD CELL

Check load cell for proper bridge resistances as below.

MODEL	MEASURING POINTS	RESISTANCE	REMARK
AL1420A	+E (Red) to -E (Black)	690 ohms minimum	Each resistants on load cell should be same and the tolerance < 1000 ohms.
	+E (Red) to +S (White)	345 ohms minimum	
	- E (Black) to +S (White)	345 ohms minimum	

### ACTION:

1. Remove power (adaptor pin) from the system, check load cell for proper resistances.
2. If load cell fails the above tests, replace load cell.
3. If load cell passes the above tests and has no visible damage, please re-calibrate the scale.



If any of the 4 load cells is broken or damaged, the complete set (all 4 load cells) of load cells need to be changed.

## ZERO COUNT ADJUSTMENT (Dual slope model)

- **Why should I adjust ZERO count?**

*Situations in which ZERO count need to get adjusted*

- Load cell damaged because of over load; beyond scale's capacity.
- Main board has been replaced.
- Because of rough handling of scale, the ZERO count move out of range.
- Load cell has been replaced.

-  message displays on the display.

-  message displays on the display.

- **How to quick check ZERO Count?**

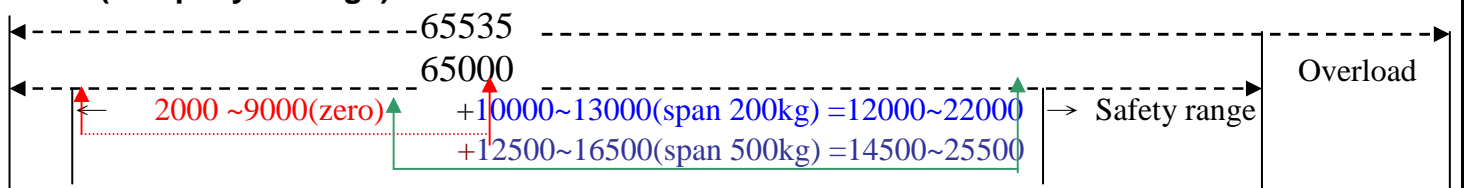
*Please refer to Calibration procedure on P.17*

\*Only Non-Approved models need to adjust Zero Count. Approved Models don't need any such adjustment.

**Range Chart: ZERO count must be within the range (6000~12000), if it's out of this range it need to be adjusted.**

MODEL	ZERO Count Range	SPAN Count Range		ZERO control (R2)	PCB Board
		200kg	500kg		
MS 2500	2000~9000	10000~13000	12500~16500	200K	CH-0733

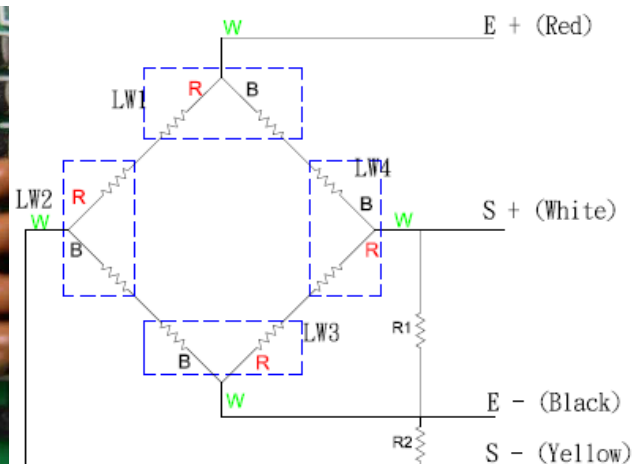
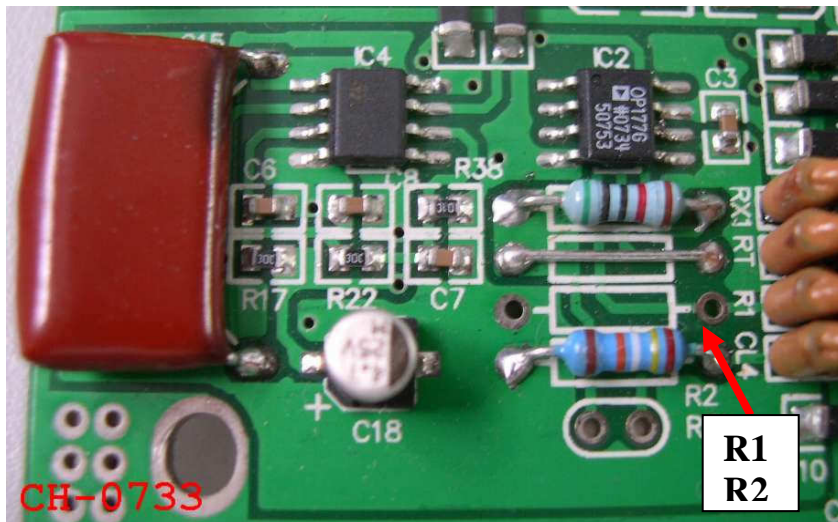
**Total Internal count of MS3800 (Dual slope) is 65535, but the overload is been set at 65000(company settings).**



**When ZERO count is out of range, there can be two possibilities:**

1. ZERO count value is below the lower limit i.e. 2000
2. ZERO Count value is above the upper limit i.e. 9000.

**Please adjust R1/R2 on the main board, to bring the ZERO count value in the range limit.**



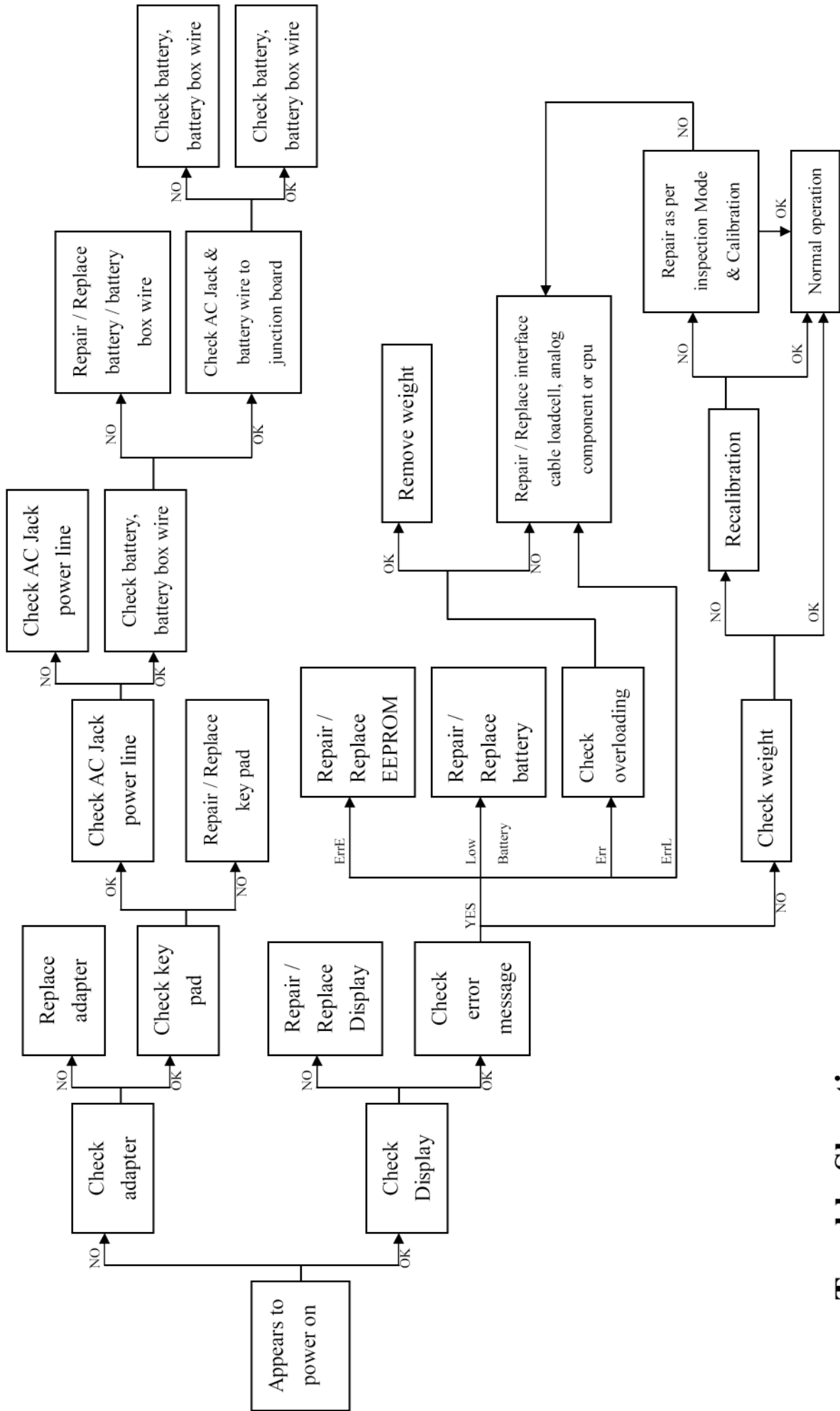
*R1-If ZERO count is less than 2000, put resistor at R1 to increase the ZERO count value.  
R2- If ZERO count is more than 9000, put resistor on R2 to decrease the ZERO count value.*

**ZERO Count Adjustment Procedure:**

1. ZERO count value is **below** the lower limit i.e. **2000**.
  - If there is any resistor at R2, please remove it.
  - Check the zero count. If the ZERO Count value is between (2000~9000), stop the procedure, ZERO Count value is successfully adjusted.
  - If the count is still below 2000, use metal resistor 100K on the **R1**, then check the ZERO count, if the count moves over 9000, change the resistor to 50K or below, until the zero count comes under the ZERO Count range.
2. ZERO Count value is **above** the upper limit i.e. **9000**.
  - If the ZERO count is above 9000, use metal resistor 100K on the **R2**, then check the zero count, if the count is still over 9000, change the resistor to 150K or above, until the ZERO count comes under 9000 and between ZERO count range.

*\*After determining the required resistor, solder it.*

# TROUBLESHOOTING TREE



## Trouble Shooting

# MS2500 SERVICE MENU CONFIGURATION

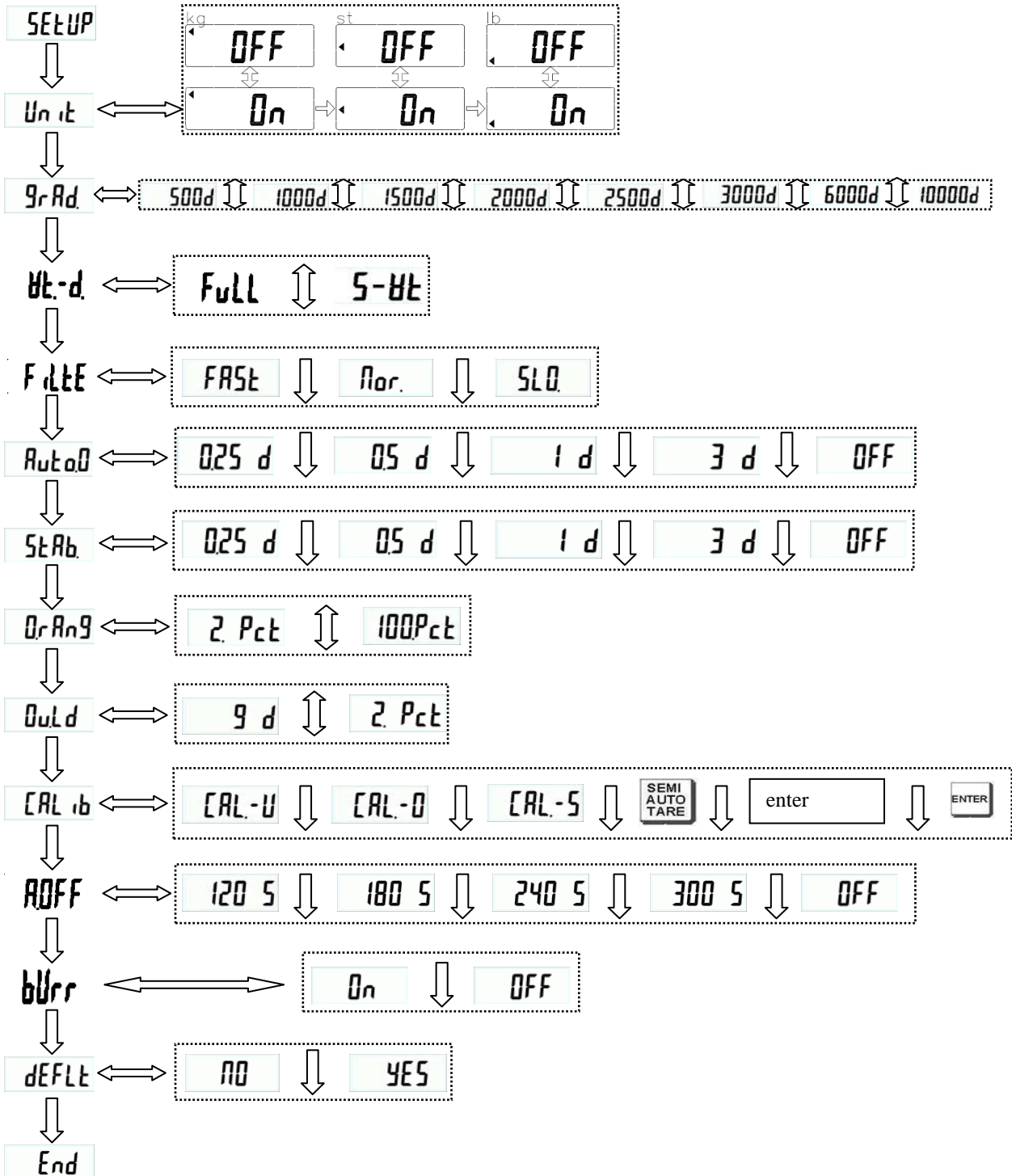
Press [UNIT 4key display] for 3 seconds without release to enter program setting mode. First SETUP will appear, and then it will change to "UNIT" automatically.

Press [TARE 4key display] to switch to next function. Program flow is like ↓

Press [HOLD/BMI 4key display] to enter function flow. Program flow is like ⇨

To confirm desired setting press [TARE 4key display] to go back to main menu.

To save all changed setting, please switch to END and press [HOLD/BMI 4key display] to save and then scale will restart.




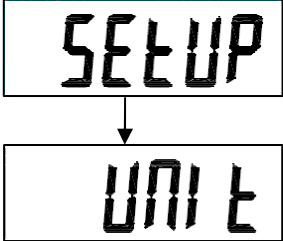


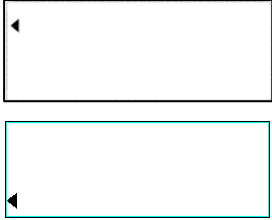
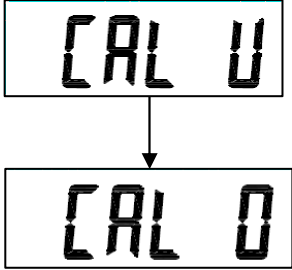



Example- Press SEMI AUTO TARE key 3 times when display shows **F I L T E** press HOLD key to enter into the **F I L T E** feature settings, and then press HOLD key to move between **F A S T** ↓ **N o r .** ↓ **S L O** and if you want to select **N o r .**, Press SEMI AUTO TARE key again, after the selection is made **F I L T E** will display back automatically. \*Please press SEMI AUTO TARE key until **E n d** displays on the screen, and then press HOLD key, to apply the changes. Display will show **00**; means changes has been applied successfully.

## DEFAULT COMPANY SETTINGS




Function	Description	Default
Unit	(Units): Kg , st , lb	Kg/lb
GrAd	(Graduations): Setting division, max capacity and graduation.	300Kg      600kg
		3000 d      3000d
		300.1      600.2
Wt-d	(Weight Section Division): Setting weight section division	FULL
FILTE	(Filter): Fast/ Normal/ Slow	FAST
Auto0	(Auto Zero Tracking): 0.25d/ 0.5d/ 1d/ 3d/ OFF	0.25 d
StAb	(Stable Range): 0.25d/ 0.5d/ 1d/ 3d/ OFF	0.25 d
OrAng	(Zero Range): 2% (or 100%)	2 Pct
Overd	(Overload Range): 9d (or 2%)	9 d
CALib	(Calibration Set): The method of calibration setting	
AOFF	(Auto off Time): 120 sec/ 180 sec/ 240 sec/ 300 sec/ OFF	180 S
bUrr	(Buzzer): ON/OFF	On
dEFLt	(Default Setup)	NO
End	(Save setting)	

## CALIBRATION PROCEDURE

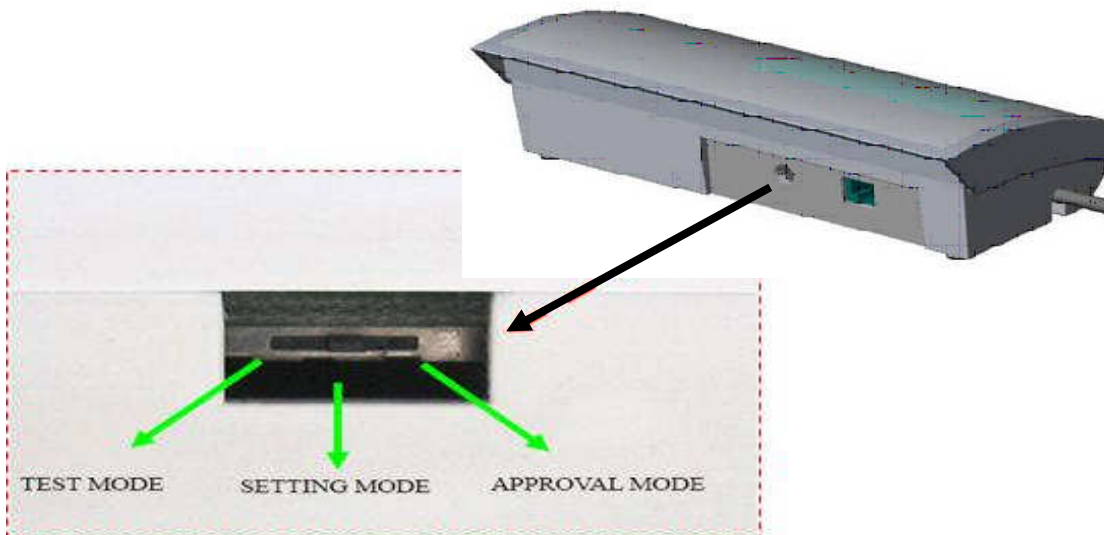
To calibrate the scale, please turn off the scale and move Calibration pin to center (refer P.14).

Operation	Display
Turn the scale on using the ON/OFF key.	
Press <b>UNIT</b> key for 3 seconds and SETUP will show shortly. UNIT will appear on the display.	
Press the TARE key repeatedly until the "CAL lb" symbol is displayed.	
Press the HOLD/BMI key.	
Press the TARE key. The triangle [◀] will display in the upper left corner (for "kg" calibration weight). (If the calibration weight is "lb", please press TARE key again and the triangle [◀] will display in the lower left corner.)	
Press the HOLD/BMI key repeatedly until the "CAL 0" symbol is displayed.	
Press the TARE key, the display will show the present ZERO Count value (6000~12000). Then press the UNIT key.	
Press the HOLD/BMI key.	
Press the TARE key. Enter the calibration weight (ex: 200kg). Press TARE key and HOLD/BMI key to set your weight.	

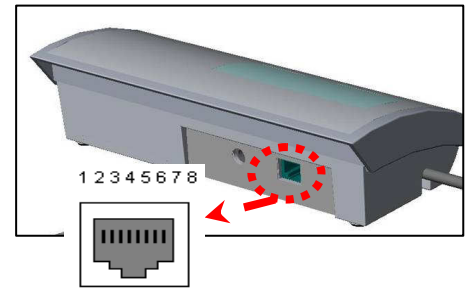


<p>Confirm by pressing the UNIT key and the number on the display will be 000.0</p>	
<p>Place calibration weight on the centre of the scale plate, and the display will show SPAN Count value (15000~20000). Press the HOLD/BMI key. The adjustment process is started.</p>	
<p>When the adjustment is finished successfully, the scale is automatically switched over to the weighing mode again and the calibration weight will be displayed. Remove the calibration weight from the scale.</p>	
<p><i>Turn off the scale and then start the scale again.</i></p>	

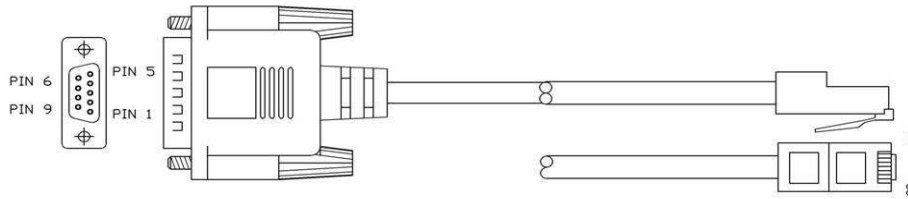
**Calibration pin is at the back of indicator.**



# PRINT FUNCTION INSTRUCTION



**PIN 2--TXD**  
**PIN 3--RXD**  
**PIN 5--GND**



**PIN 2--TXD**  
**PIN 3--RXD**  
**PIN 5--GND**

## PARAMETERS OF RS232 INTERFACE

Set parameters of the scale interface on the connected device. It is not possible to change the scale parameters.

- BAUD RATE: 9600 bps
- PARITY CHECK: no
- DATA LENGTH: 8 bits
- STOP BIT: 1 bit
- HANDSHAKE: no or Xon/Xoff
- DATA CODE: ASCII



## ACTION:

1. Make sure that all wires are connected to the correct points.
2. Check parameters of RS 232 transfer cable interface.
3. Use your PC to output the data to check whether RS 232 transfer cable is okay or not.

# USING PRINT FUNCTION

Print function is only available for some specific models, please make sure whether the model has print function or not.

## A. Using Printer to print out the results.

You can print through PC simply press P on keyboard after weighing and taking BMI.

## B. Using Computer to print out the results.

After taking the weight and BMI, please follow instruction below to print the results:

### 1. Start Hyper Terminal

Step.1- Click on **Start Button**.

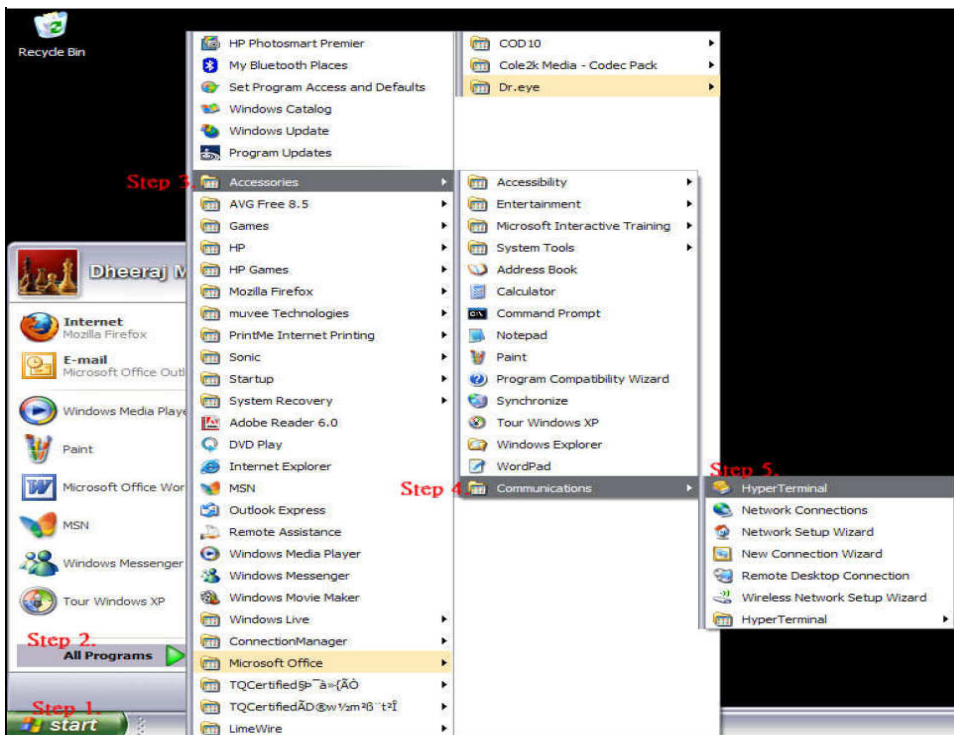
Step.2- Go to **All Programs**.

Step.3- Select **Accessories**.

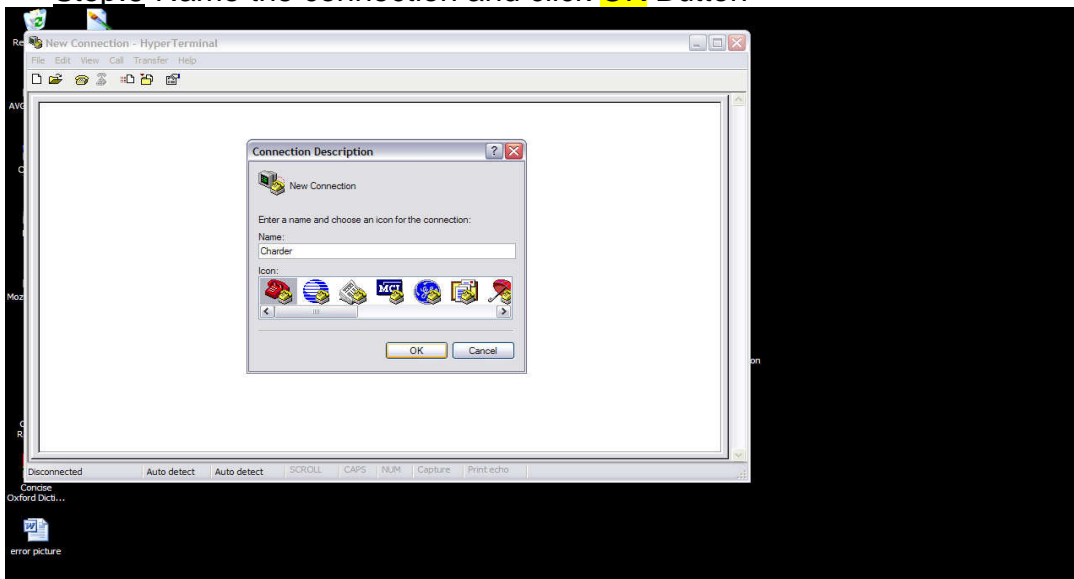
Step.4- Find **Communications**.

Step.5- In Communications section click on **HyperTerminal**.

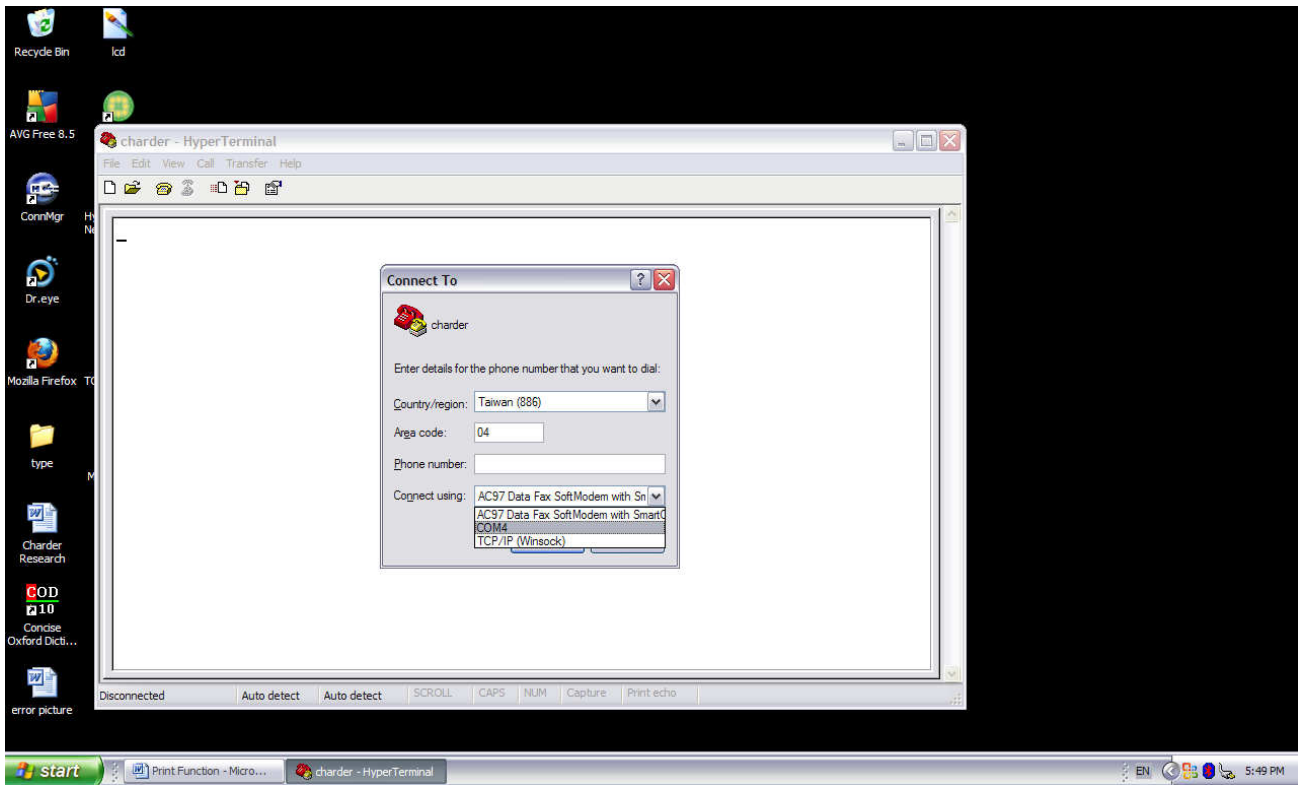
### Step1~5



### Step.6-Name the connection and click **OK** Button

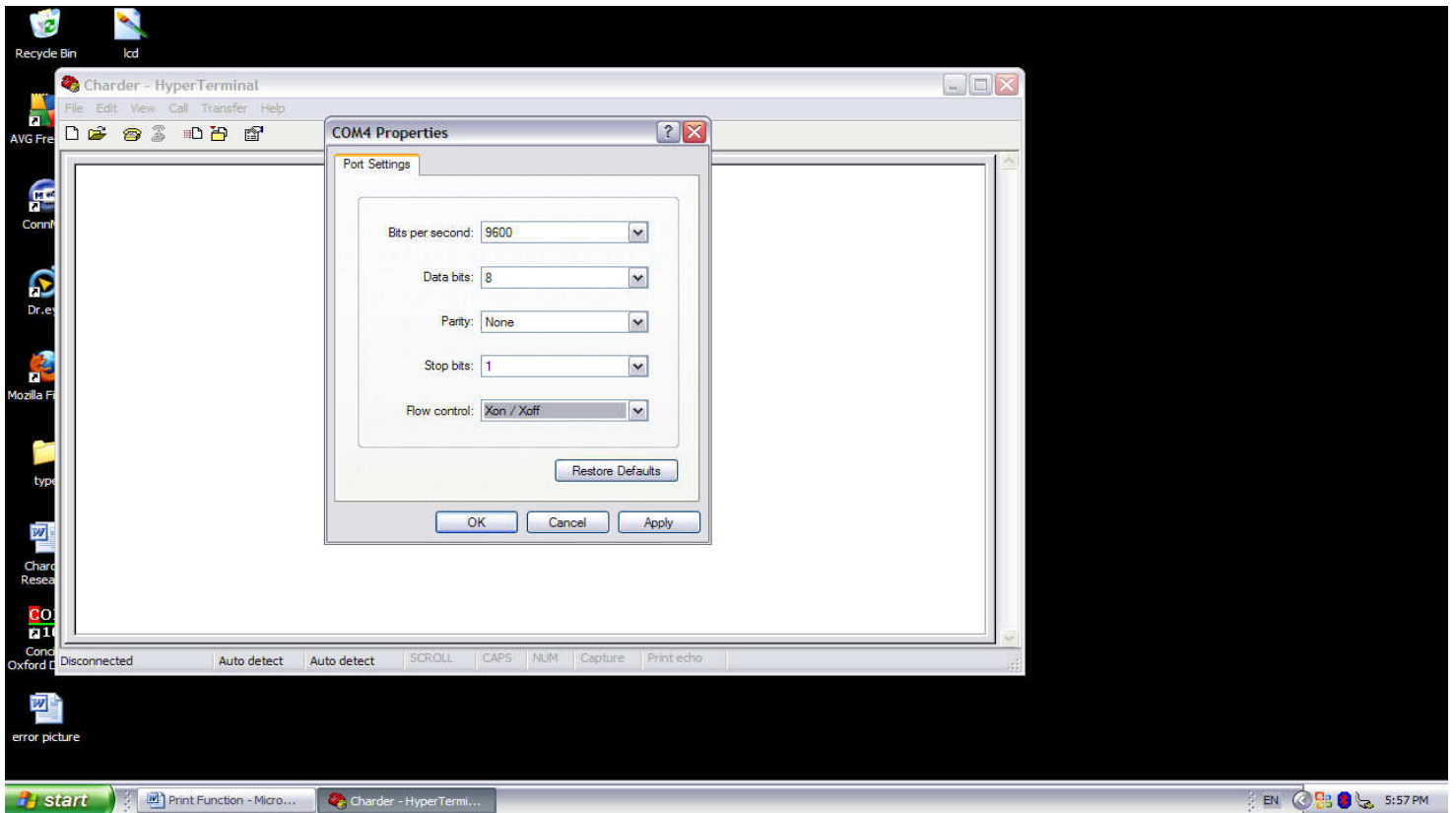


### Step.7- Select **COM** (1, 2, 3...4) under **Connect Using** Section and press **OK**.



### Step.8- Set Port Settings

- Set up as below:
  - BAUD RATE: 9600 bps
  - DATA BITS: 8 bits
  - PARITY : None
  - STOP BITS: 1 bit
  - FLOW CONTROL: NONE or Xon/Xoff



- Click **OK** button to complete the setting.

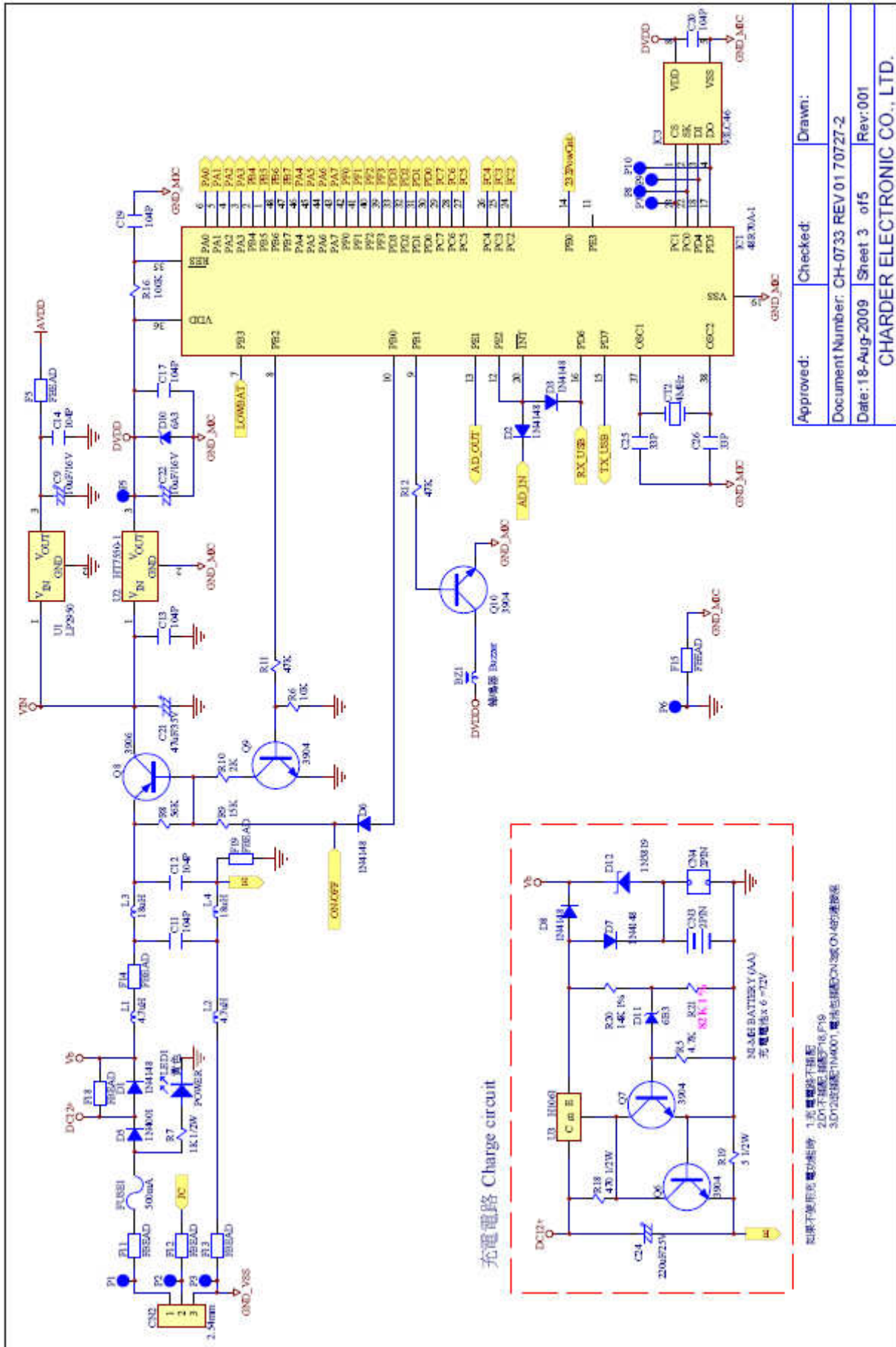
Step.9- Print out the results

- After weighing and calculating BMI of the patient, press the print button on the control panel of MS2500. The results will appear on the computer screen in the below format.

Gross Weight:	75.0 kg
Tare Weight:	0.0 kg
Net Weight:	0.0 kg
Patient Height:	175.0 cm
Patient BMI	24

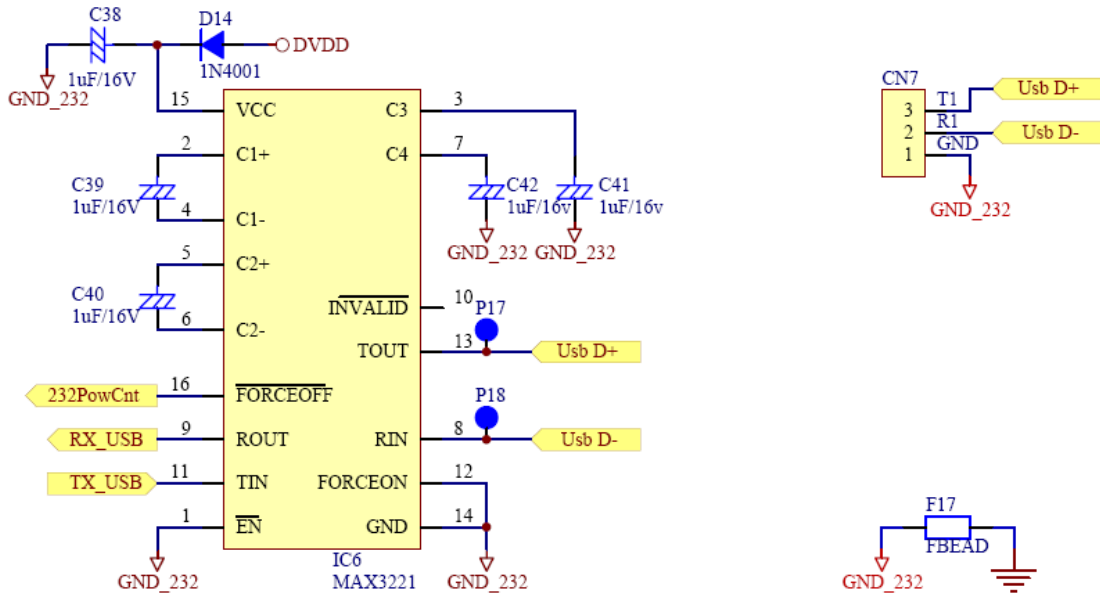
# SCHEMATICS—MAIN BOARD CH-0733

## Main Board CH-0733 (P.1/3)



# Main Board CH-0733 (P.2/3)

## RS 232



## OPTION

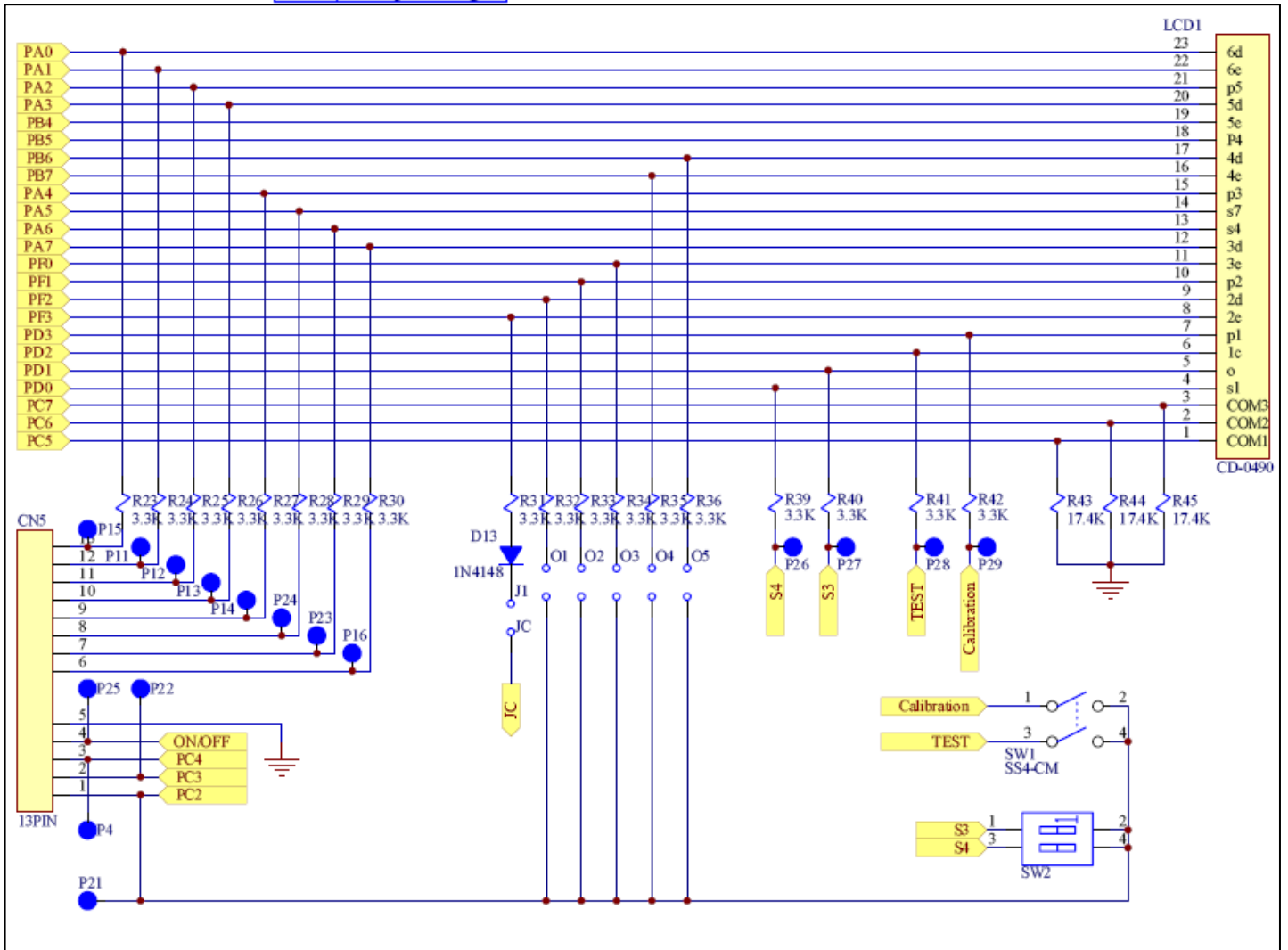
0 : SW ON

S3S4	Key PAD
0 0	None
0 1	None
1 0	4 key
1 1	Complex 20kg

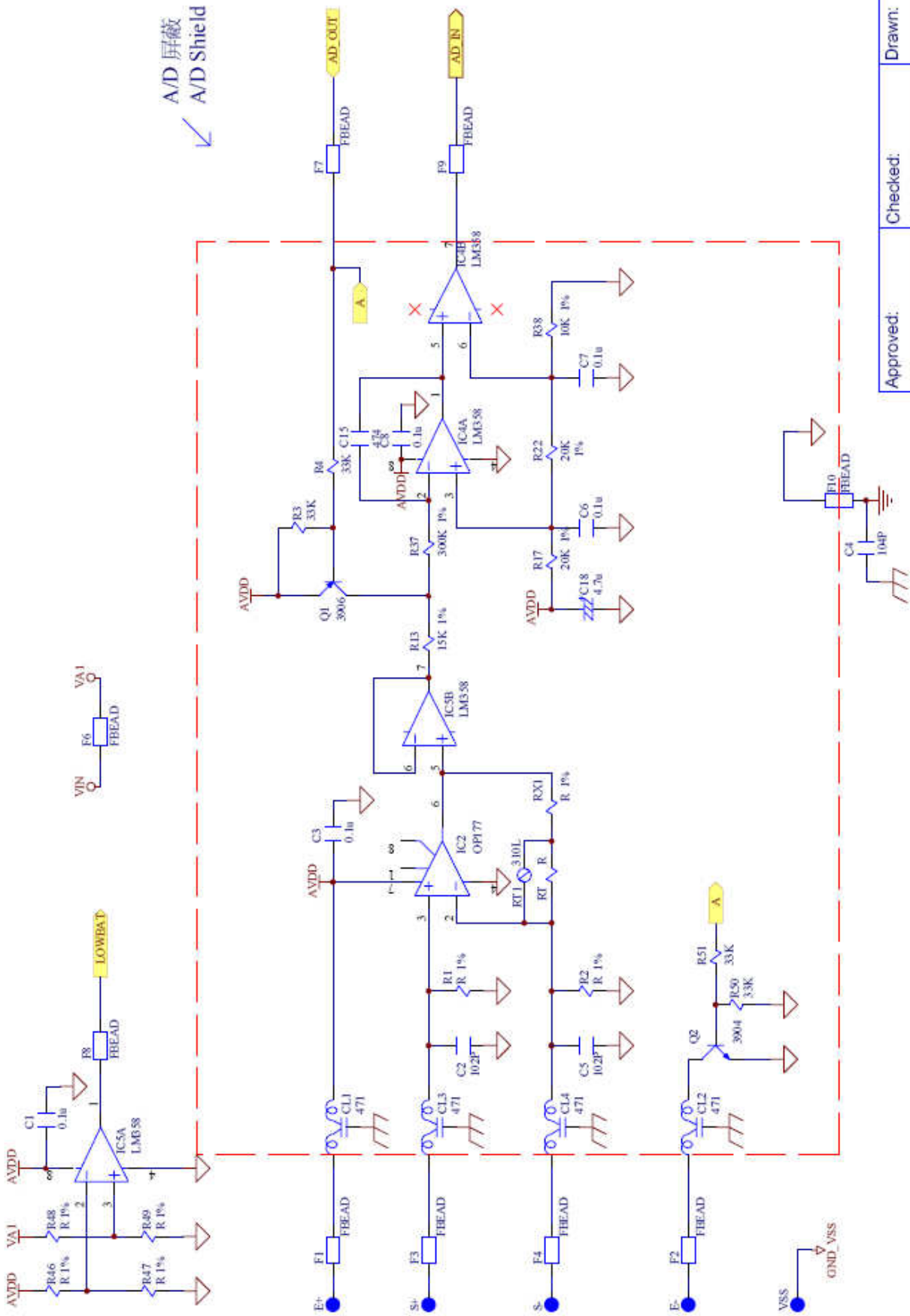
SW1	Calibration
0	Enable
1	Disable

S1	Trad
0	ON
1	Off

S2	Test
0	Enable
1	Disable



# Main Board CH-0733 (P.3/3)



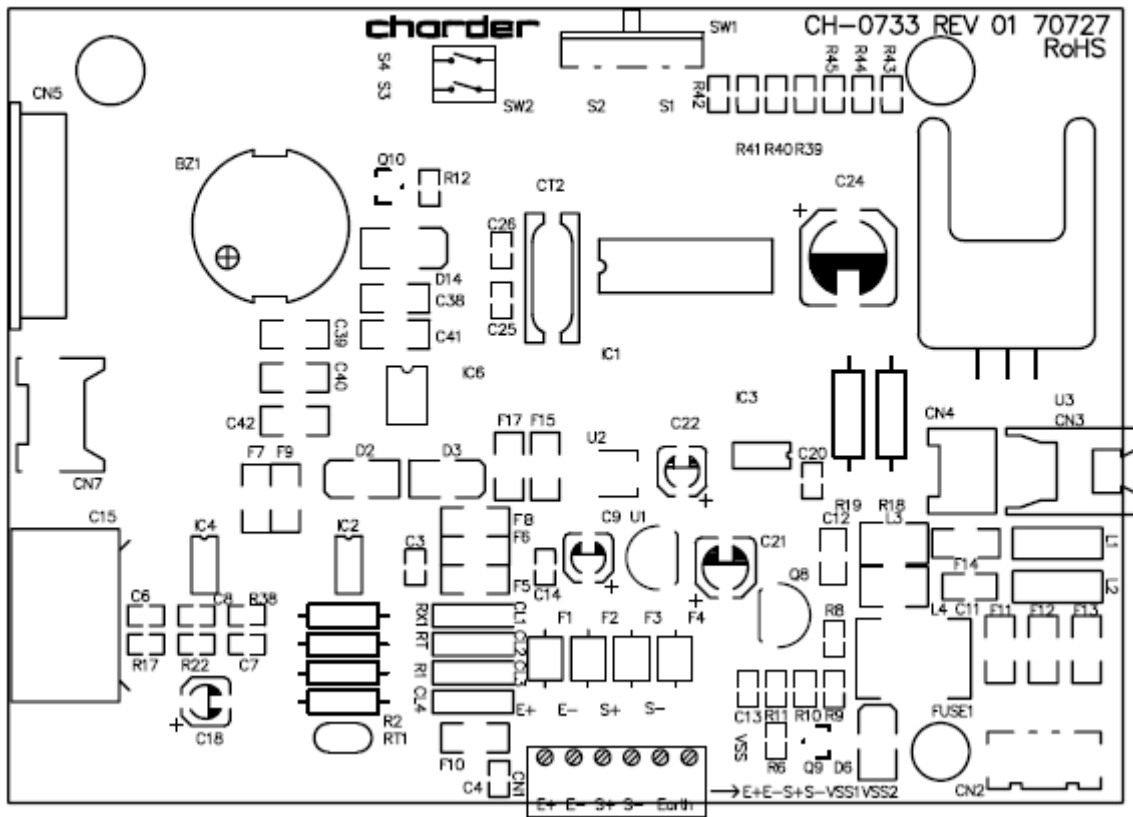
Approved:	Checked:	Drawn:
Document Number: CH-0733 REV 01 70727-1		
Date: 18-Aug-2009	Sheet 2 of 5	Rev:001
CHARDER ELECTRONIC CO., LTD.		



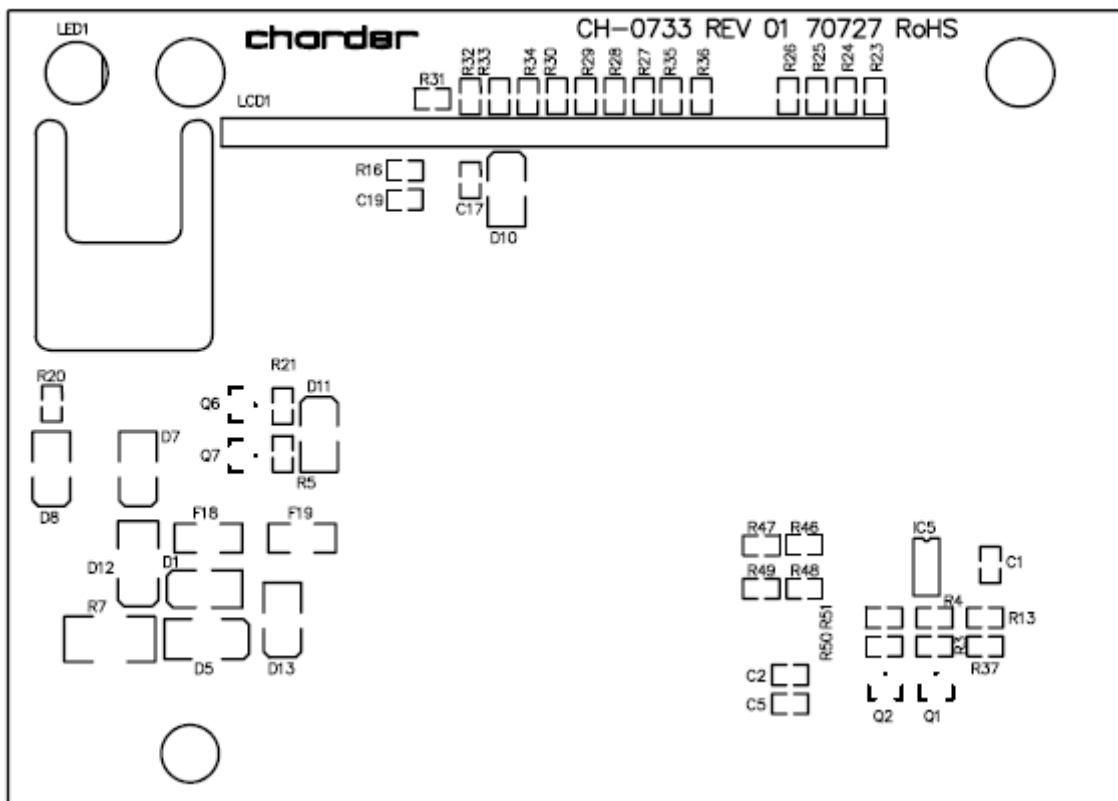
# LAYOUT—MAIN BOARD CH-0733

## PRIMARY SIDE OF MAIN BOARD CH-0733

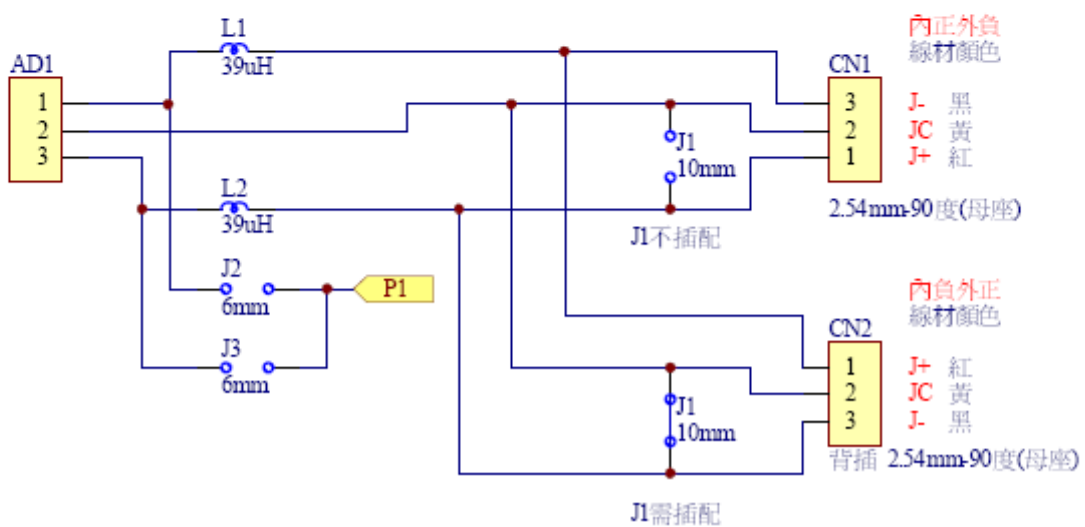
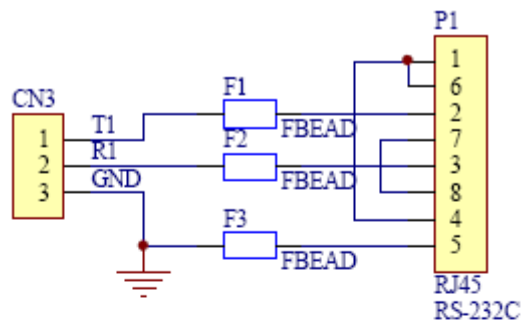
Bottom Overlay



Top Overlay



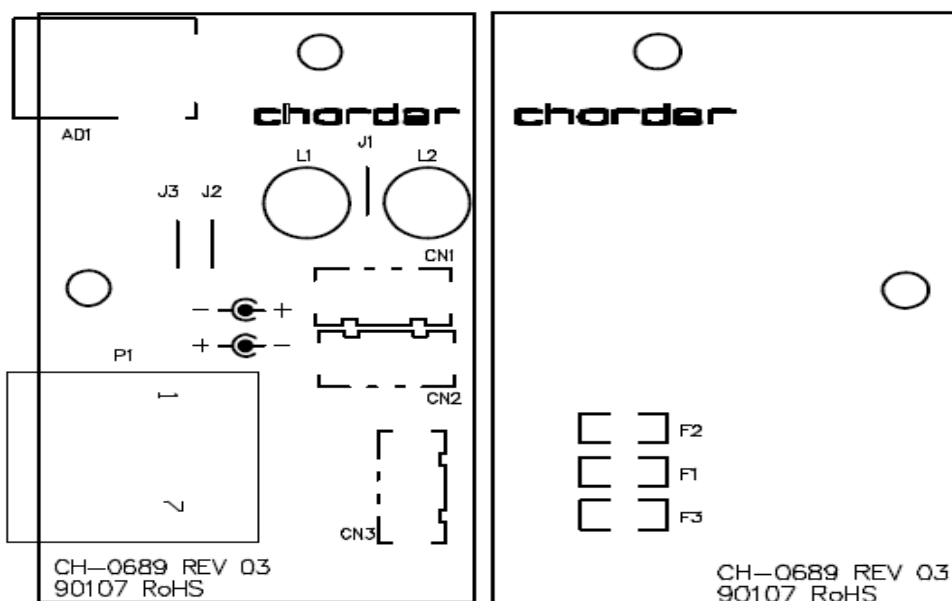
# SCHEMATICS-POWER BOARD CH-0689



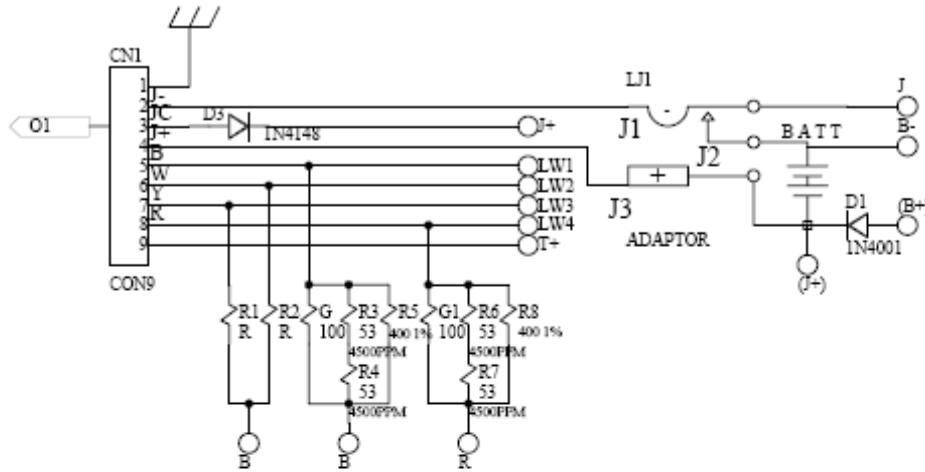
# LAYOUT—POWER BOARD CH-0689

Top Overlay

Bottom Overlay



# SCHEMATICS- JUNCTION BOARD (CH-0525)



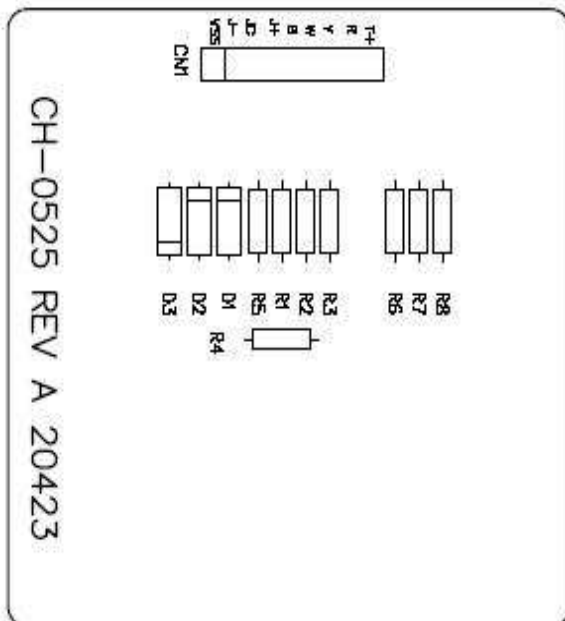
ADAPTOR



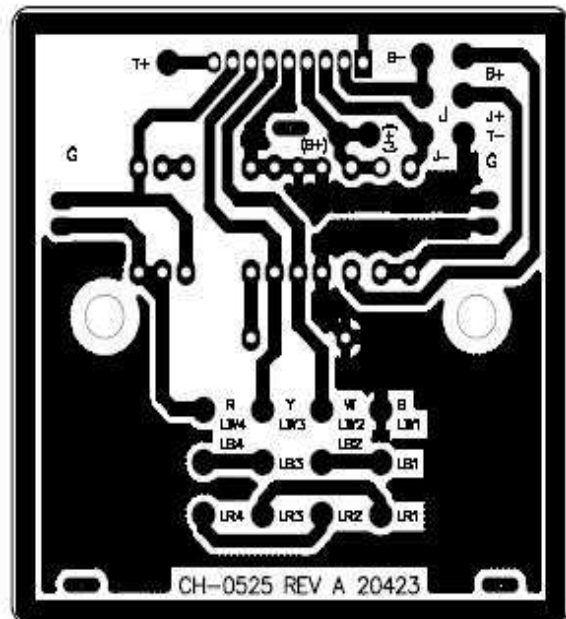
D1	↔	W/O D1
D2	↔	W/O D2
D3	↔	W/O D3
(B+)	↔	BATTERY +
J2	↔	BATTERY -
J1	↔	J
J2	↔	J-
J3	↔	(J+)

# LAYOUT—JUNCTION BOARD (CH-0525)

Top Overlay

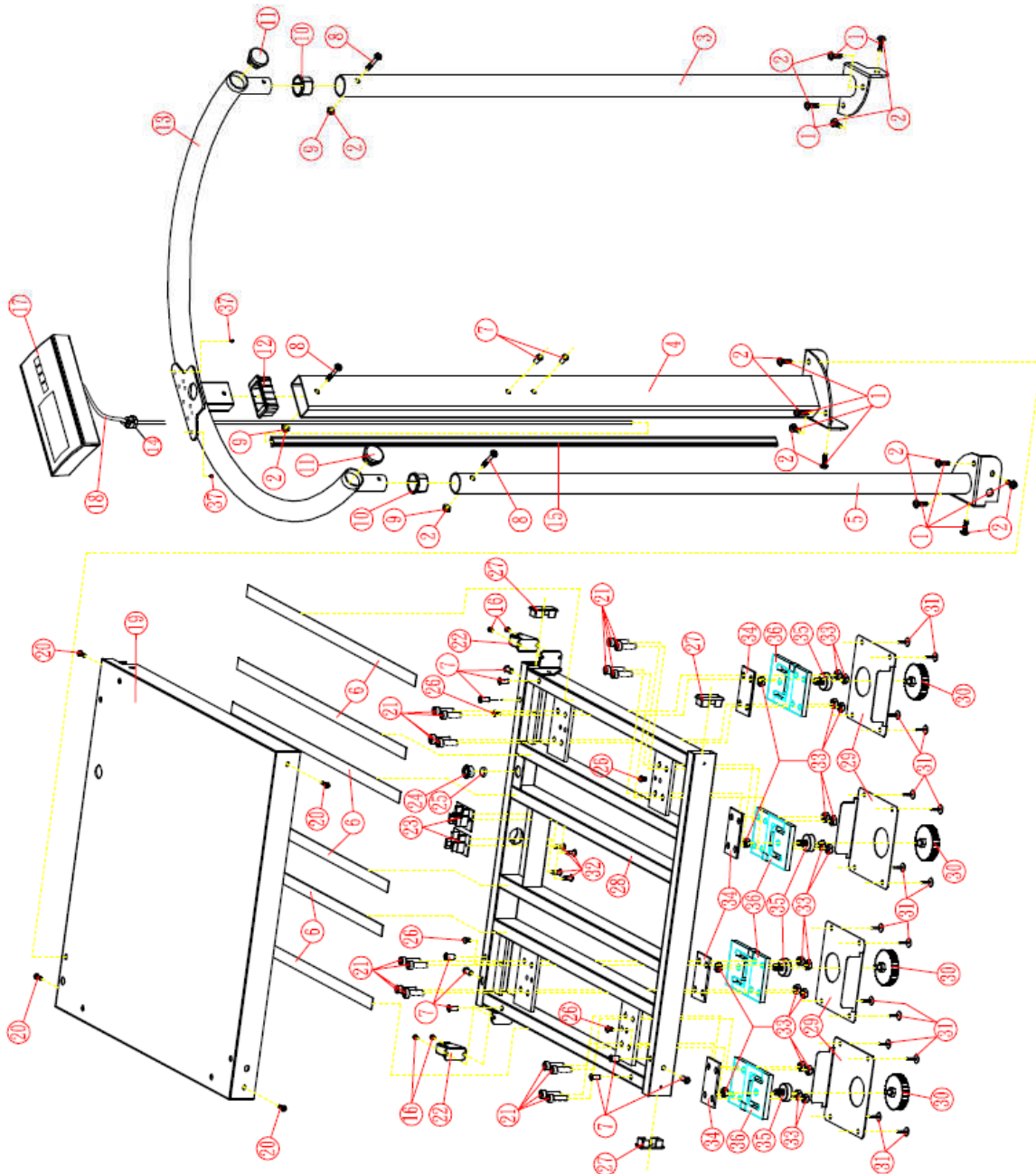


Bottom Layer



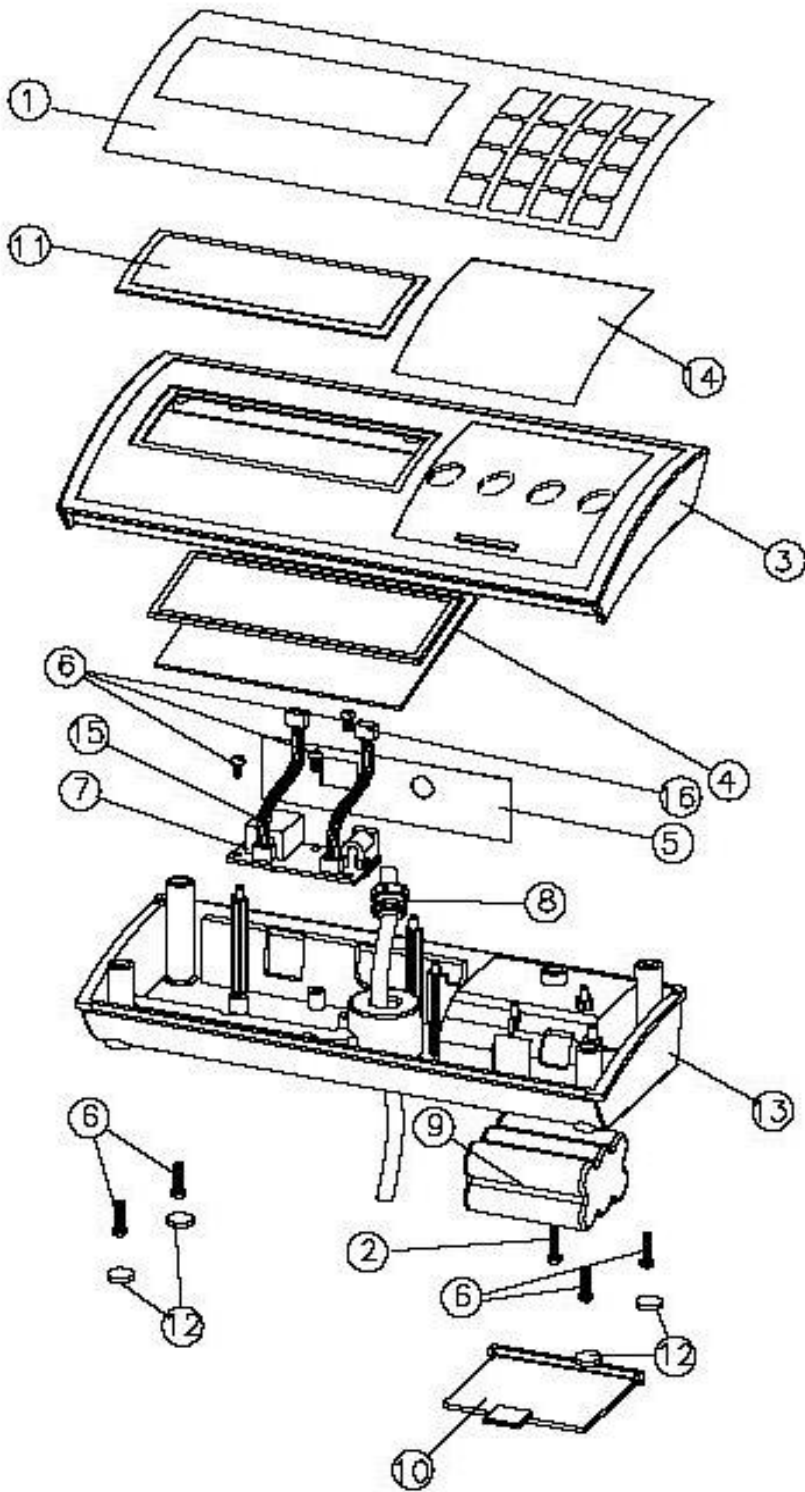
# MS 2500 PARTS & ASSEMBLY

No.	Item	Spec.	Q'TY
1	Screw	M5*0.8*18	12
2	Washer	M5*12*1	15
3	Long Tube	SS-8139	1
4	Square Tube	SS-8138	1
5	Long Tube (A)	SS-8139A	1
6	Foam	2.0*15*530mm	6
7	Blind Rivet	M5	11
8	Washer Head Screw	M5*0.8*38	3
9	Nut	M5 T-6.2	3
10	Sleeve	ST-8213	2
11	Cap	ST-2301	1
12	Sleeve	ST-8214	1
13	Curve Tube	SS-814A	1
14	Strain Relief	SB-5M-2	1
15	Batten	TC-1AWP(white)	1
16	Screw	M4*0.7*8	7
17	Indicator	SM-2861	1
18	Cable	WR-8137	1
19	Metal-Steel	CR-8126	1
20	Screw	M4*16	4
21	Hexagen Screw	M8*25	16
22	Wheel	SS-2040	2
23	Junction Board	CH-0926-CB-1201-ME8326W	2
24	Bubble Set	ST-057A	1
25	Bubble Level	φ 14*8mm	1
26	Screw	M5*0.8*8	4
27	Cap	ST-0770	3
28	Frame	AM-8067	1
29	Protecting Cover	SS-416C	4
30	Adjust Feet	SW-1001A	4
31	Hook Up Knob	*MB-17	16
32	PCB spacer	RBS-8	4
33	Nut	M8*1.25	20
34	Washer	WH-0821	4
35	Anchor Block	SS-8059	4
36	LOAD CELL	PB-150-RM	4
37	Screw	M2.8*10	2



Please refer to P.30 for the list of spare parts.

# DP2701, NP- 4444 INDICATOR PARTS & ASSEMBLY



NO	ITEM	SPEC.	Q'TY
1	OVERLAY (PANEL)	NP-4444 (4key)	1
2	SCREW	M3*6	1
3	TOP COVER	AM-D761	1
4	PCB	CH-0651	1
5	PANEL(AC JACK & USB)	NP-3431	1
6	SCREW	M3*10	8
7	POWER BOARD	CH-D689	1
8	STRAIN RELIEF	SB-5M-2	1
9	BATTERY BOX	AE-1301	1
10	BATTERY COVER	BT-0611	1
11	LENS	LS-0911	1
12	RUBBER FEET	SW-0170	4
13	BASE COVER	BM-1071	1
14	CONTROL PANEL	NP-4381 (4key)	1
15	WIRE	WR-2421	1
16	WIRE	WR-2422	1

Please refer to P.29 for spare parts list.

## MS2500- SPARE PART LIST

DESCRIPTION	CEC P/N	DRAWING NR.
MAIN BOARD	090016001926	ZLC04478KG(CH-0733) w/t RS232 300kg
POWER BOARD	090016001722	ZLC04359KG(CH-0689) w/t RS232
JUNCTION BOARD	090016001774	ZLC04389KG(CH-0525)
OVERLAY	060014000524	NP-4444 REV 004 (300kg)
RECHARGEABLE BATTERY	020015000020	1.2Vx6,1200mA
CONTROL PANEL	020009000076	NP-4381 REV 003 (4key)
ADAPTOR	020018000072	AD-0482 REV 003 (Aus. 15V 300mA)
LOAD CELL	100001000591	AL-1420A
BATTERY HOLDER	060006000098	AE-1301 REV 002
BATTERY COVER	060006000096	BT-0811 REV 002
ADJUSTABLE FEET	060004000689	SW-8076 REV 001

## Common Spare Parts(Used in all models of MS2500)

DESC.	P/N	DRAWING. NR	
LENS	060007000100	LS-0911 REV 002	
WIRE	020037000109	WR-8117 REV 001	
WHEEL	050007000239	SS-2040 REV 001	
RUBBER FEET	060004000486	SW-1121 REV 001	Fixed bracket

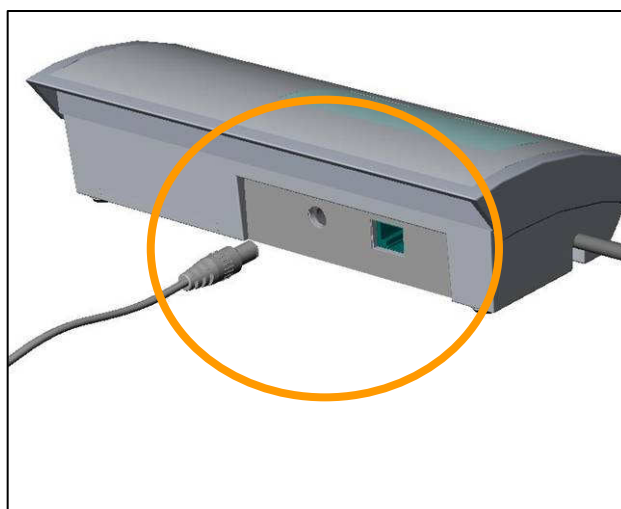
### INSTRUCTION FOR CHARGING AND CONNECTING

If LCD displays **.Lo**, it need to be charged, please use MS 2500 exclusive adaptor to re-charge.

**Find adaptor plug in on back side of control panel.**

#### CAUTION:

Always connect the AC adaptor pin to the adaptor plug in slot before connecting to the main power supply. Please disconnect the adaptor from main power supply first.



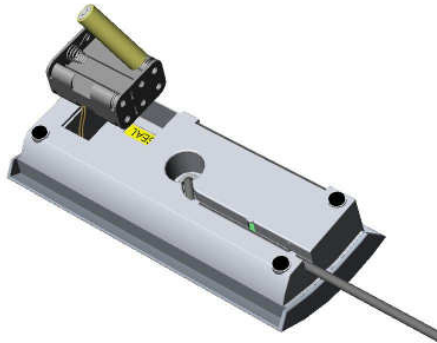
## INSTRUCTION FOR REPLACING BATTERY



1. Remove the battery cover



2. Take the battery housing out.



3. Replace new batteries.



4. Make sure batteries are well installed.



5. Reinstall the battery housing.




6. Reinstall the battery cover.



## GRAVITY COMPENSATION

If the scale has been moved (transported to another city/state/country) from the place where it has been calibrated, the user need to carry out Gravity Compensation Procedure to compensate the Gravity difference between the place of calibration and place of use (refer P.32 for example). Please follow the procedure below:

Steps	Description	Display
1	Push the switch to right side to enter into TEST MODE. (See P.16) Power on the scale.	
2	Long press <u>ZERO</u> key for 3 seconds to enter "Gravity Compensation Mode". Initially display will show G-on. <i>Note: If display shows G-OFF, press HOLD/BMI button to change it to G-On and press TARE key (step.3).</i>	
3	Press <u>TARE</u> key to start setting the original gravity.	
4	The display will show the last origin gravity value. The top arrow will appear. (see right picture)	
5	Input the gravity value by using HOLD/BMI and TARE key	
6	After setting the original gravity value, press TARE key and start setting the gravity value of the place for use.	
7	The display shows the gravity value of using place. The bottom arrow will appear. (see right picture)	
8	Input the gravity value by using HOLD/BMI and TARE key	
9	After setting the gravity value, press TARE key and return to zero count mode.	
10	Power off the indicator and push the switch to left side. Then power on again to start weighing.	

**For Example-** The scale has been calibrated in France therefore origin gravity (step.4) is . Later the scale has been transported to England, as the gravity of England is not same as of France, thus we need to compensate the gravity and key in the gravity of England (step.7) using (0~9) key.

**Situation.1-** *The scale has been re-calibrated in France and place of use is England*

Key in the Gravity value of France in step.4 and Gravity value of England in step.7 to compensate the gravity difference.

**Situation.2-** *The scale has been originally calibrated in France and place of use is England but later the scale has been moved to Germany.*

When the user is at step.4, no need to change this gravity value (gravity of France), simply press TARE key, then display will show the gravity of England, step.7, at step.7 key in the gravity of Germany and press TARE.

**Situation.3-** *The scale has been calibrated in France (Paris) and the place of use is also France (Paris).*

As the place of calibration and use is same, thus there is no need to compensate the gravity. Please turn off the gravity: in step.2, if it is  please change it to **G-OFF** using HOLD/BMI key.

**Situation.4-** *The scale has been calibrated in France (Paris) and place of use is France (Bordeaux).*

Please make sure whether there is any difference in Gravity value of both the cities.

- *If the gravity value of both the cities is same, then no need to compensate the gravity. In step.2, if it is  please change it to G-OFF using HOLD/BMI key.*
- *If the gravity value is different, please follow the same procedure as **Situation.1***

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3. Revision Sheet

Release No.	Date	Revision Description
Rev. 0		