

1. INTRODUCTION

1.1. Purpose

To develop a low-cost weigh only scale which caters OIML Standard.

1.2. Features

DS671 offers the following features:

- ◆ Low cost weight computing scale.
- ◆ Quick response to weight changes.
- ◆ Capacity : 2kg, 10kg, and 20kg with 1/1,000 resolution, multi-interval.
1.5kg, 3kg, 6kg, 15kg and 30kg with 1/3,000 resolution, single interval.
- ◆ Resolution :
 - a) Display Resolution 1/1000 (multi-interval), internal resolution 1/16,000.
 - b) Display Resolution 1/3,000 (single-interval), internal resolution 1/24,000.
- ◆ Low power consumption: 6 X D size dry battery backup for more than 500 hours of continuous usage.
- ◆ Fast self-test procedure when power on.
- ◆ Selectable automatic shut of time.
- ◆ Two -Point battery-low detect.
 - a) When battery is weak, the battery indicator will light up.
 - b) When the power from battery becomes low so that the scale cannot compute actually, all displays will shut off except the Battery indicator. The power is then shut off completely after 1 minute.
- ◆ Calibration by software.
- ◆ Splash proof.
- ◆ LCD operator display and optional LCD customer display.
- ◆ 3 keys: REZERO key, TARE key, ON/OFF key.
- ◆ Plastic body and base.
- ◆ Flat platter.

1.3. Operation Conditions

- Power Source : DC 6V ~ 12V from AC/DC Adapter or DC 9V from 6 * D size dry battery.
- Operating Humidity : 15 ~ 85% RH
- Operating Temperature : -10Co~ +40Co
- Power Consumption : 0.07W when 6V, 0.1W when 9V

1.4. Analogue Specification

- Input Sensitivity : 0.67mV/V – 2kg(J3, 1mV/V), 20kg(J30, 1mV/V)
0.75mV/V – 1.5kg(J1.5, 0.75mV/V), 10kg(J8, 0.6mV/V)
1mV/V – 3kg(J3, 1mV/V), 6kg(J6, 1mV/V),
15kg(J15, 1mV/V), 30kg(J30, 1mV/V)
- Zero Adjust Range : 40% F. S. (40% Full Span)
- Zero Balance Range : 10% F. S.
- L/C Applied Voltage : DC 5V
- Speed of A/D Conversion: 4 times/sec
- Internal Resolution : 16,000 or 24,000

1.5. Existing Parts to Be Used

- Liquid Crystal Display LD-B7873AZ (DI-20)
- J Type Load Cell (DS-580)

1.6. Display and Indicator

1.6.1. Display Specifications

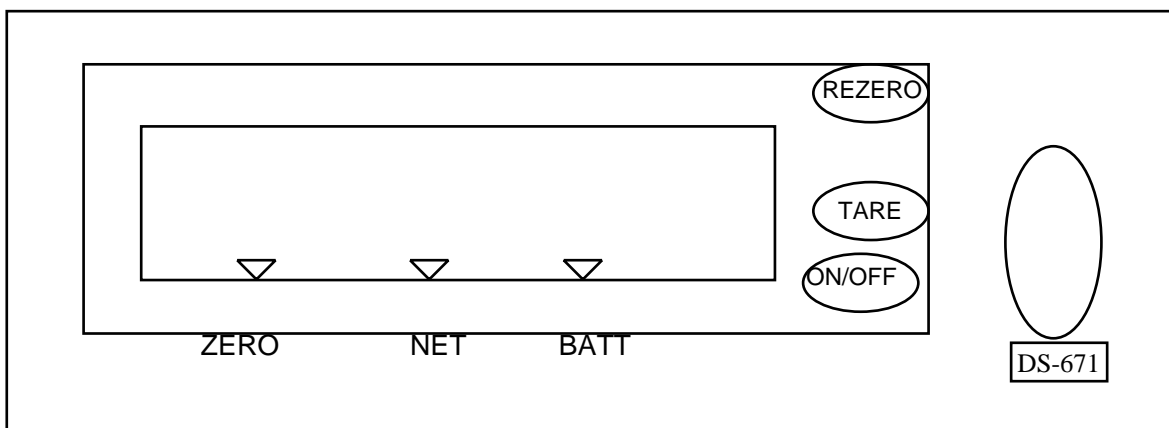
Weight Display : 6 digits with ZERO, TARE, LOW BATTERY indication
Special Display : 6 digits.
Decimal Point : Selectable by SPEC.

1.6.2. Indicators

- ZERO : On when scale is zeroed and zero point is stable.
- TARE : On when tare subtraction is performed.
- BATTERY : On when battery is weak and needs to be changed.

1.7. Keypad

1.7.1. Keypad Layout



1.7.2 Key Function

- REZERO Key :For Resetting the scale to zero.
- TARE Key :For setting & clearing tare value.
- ON/OFF Key :For turning the display ON or OFF.