OPERATION MANUAL

JENCO MODEL 63
ANALOG pH BENCH METER

JENCO ELECTRONICS, LTD.
MANUFACTURER OF PRECISION INSTRUMENTS

INITIAL INSPECTION

Carefully unpack the instrument and accessories. Inspect for damages made in shipment. If any damage is found, notify your Jenco representative immediately. All packing materials should be saved until satisfactory operation is confirmed.

GENERAL INTRODUCTION

The model 63 is a high performance, low cost, general purpose laboratory instrument for the measurement of pH.

The model 63 uses a 5 1/2 inch analog meter with a mirror scale to increase readability to 0.02 pH.

AC LINE VOLTAGE

The model 63 can be used with 117 VAC or 234 VAC AC adaptors. Check the label on the AC adaptor supplied with the instrument to make sure that the AC line voltage is correct. If the wrong AC adaptor is supplied, notify your Jenco Electronics, Ltd. distributor immediately.

BEFORE USING THE INSTRUMENT

When you first received the model 63 it is possible that the Meter scale needle is not centered at pH 7.00. You can fix this by using a small screwdriver and adjusting the OFFSET NULL.
Refer to figure 1.

CAUTION

While using the instrument it is highly advised to set the MODE switch to STANDBY before rinsing or removing the probe from the solution to prevent erratic swing of the meter scale needle.

pH STANDARDIZATION

1. Connect the pH electrode to the rear of the instrument. (Refer to Figure 2.)
2. Set the MODE switch to STANDBY. Connect the AC adaptor to the AC line, make sure the correct AC adaptor is used. (Refer to Figure 2.)
3. Rinse the pH electrode in distilled water and immerse in pH buffer 7.00. Set the MODE switch to pH.
4. Set the TEMPERATURE control on the front panel to that of the buffer 7.00.
5. Adjust the STANDARDIZE control for the instrument to read the buffer value at the temperature of the buffer set in step 4.
(Refer to Table 1.) Be sure to allow sufficient time for the pH electrode to reach temperature equilibrium with the buffer.
6. Set MODE switch to STANDBY. Remove the pH electrode from buffer 7.00. Rinse the probe with distilled water. Immerse the probe in buffer 4.01 or 10.01. Set MODE switch to pH. Set the TEMPERATURE control to the temperature of the buffer 4.01 or 10.01.
7. Adjust the SLOPE control for the meter to indicate the value of the buffer 4.01, or 10.01, corresponding to the temperature set in step 6. (Refer to Figure 2 and Table 1.) Be sure to allow sufficient time for the pH electrode to reach temperature equilibrium with the buffer 4.01 or 10.01.
8. Buffers other than 4.01 and 10.01 can be used to slope the instrument.

9. Set MODE switch to STANDBY. Rinse the electrode with distilled water. The model 63 is dual point standardized and ready for measurements.

pH BUFFERS

℃	4.00	7.00	10.01
0	4.00	7.11	10.32
5	4.00	7.08	10.25
10	4.00	7.06	10.18
15	4.00	7.03	10.12
20	4.00	7.01	10.06
25	4.01	7.00	10.01
30	4.02	6.98	9.97
35	4.02	6.98	9.93
40	4.03	6.97	9.89
45	4.04	6.97	9.86
50	4.06	6.97	9.83
55	4.07	6.97	9.80
60	4.10	6.98	9.78

(TABLE 1)

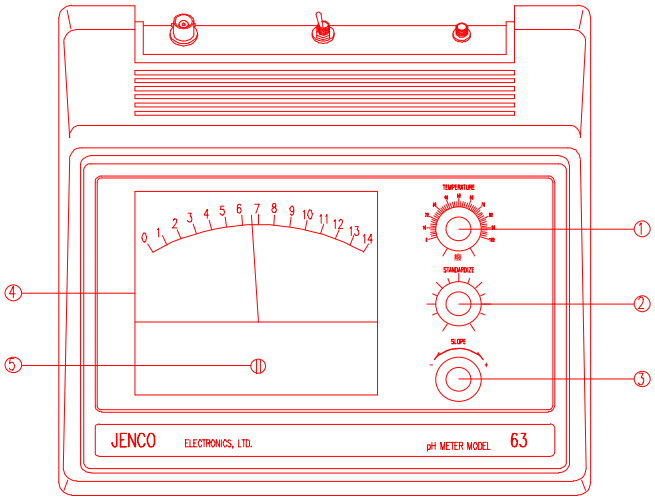

Figure 1 Front View

1. Temperature Control
2. Standardize Control
3. Slope Control
4. Analog Display
5. Offset Null

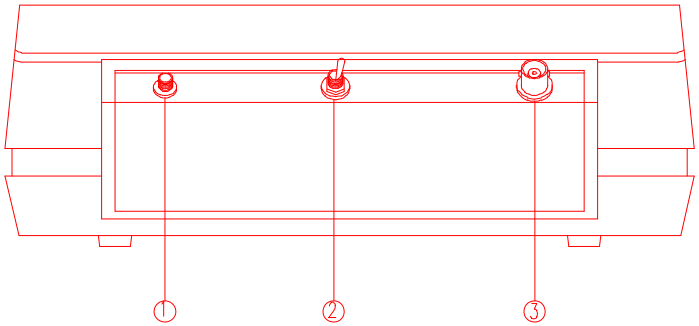

Figure 2 REAR VIEW

1. Adaptor Input
2. Mode Switch
3. BNC Input Jack

PECIFICATIONS

RESOLUTION
0.2 pH

ACCURACY
±0.05 pH (Relative : within 2 pH of calibration buffers)

RANGE
Scale 0-14 pH

READABILTY
±0.04 pH (mirror scale)

TEMPERATURE COMPENSATION
MANUAL 0-100 ℃

INPUT IMPEDANCE
$>10^{12}$ Ω

POWER SOURCE (Standard Accessory)
115V or 230V ±15%, 50/60 Hz AC adaptor

WEIGHT
1 Kg.

DIMENSIONS (WxLxH)
250 mm x 240 mm x 100 mm

RETURN OF ITEMS

Authorization must be obtained from one of our representatives before returning items for any reason. When applying for authorization, please have the model and serial number handy, including data regarding the reason for return. For your protection, items must be carefully packed to prevent damage in shipment and insured against possible damage or loss. Jenco will not be responsible for damage resulting from careless or insufficient packing. A fee will be charged on all unauthorized returns.

NOTE: Jenco Instruments, Inc reserves the right to make improvements in design, construction, and appearance of our products without notice.

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