# Model SC72 Personal Conductivity Meter   Quick Manual

This manual briefly describes setup, measurement, and routine maintenance procedures for the Model SC72 Personal Conductivity Meter. Before using this meter, read Instruction Manual (IM 12D03D02-01E).

Key switches

When meter is OFF, press for at least 1 sec. to turn on power. When meter is ON, press for about 2 sec. to turn off the power. Automatic Power OFF function default: 20 min. inactivity.

If you press this key during measurement, HOLD mark is displayed, and present measured values are held. To cancel, press HOLD or MEAS keys.

If pressed during measurement, DATA mark flashes. Press F/ENT key to store measured values in memory. To abort data storage and return to MEAS mode, press DATA or MEAS key again while DATA mark is flashing.

Auto Power Off
POWER
MEAS
HOLD
F/ENT
DATA
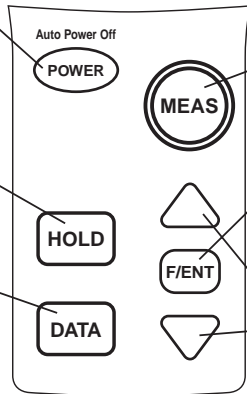
Press to start measurement mode. If already in MEAS mode, it switches the display panel.

If pressed while in MEAS mode, switches to function mode. Also used to enter set value.

Change set value.

List of items in function mode

Item		Details
dAt	dAt	Display stored measurement value
t.Co	tCo	Temperature compensation setting
rnG	rnG	Range selection
C.C	CC	Cell constant setting
CAL	CAL	Calibration with standard solution
dEL.A	dELA	Delete all stored measuring data
dAtE	dAtE	Date setting
tIME	tIME	Time setting
ALM	ALM	Alarm time setting
A.oFF	AoFF	Set Auto Power Off interval
bZ.o	bZo	Set buzzer ON/OFF
SC.U	SCU	Set measurement unit
tP.U	tPU	Set temperature unit
VEr	VEr	Version number display
dFLG	dFLG	Defragment storaged data

T01.EPS

F01.EPS

Display (faint color display for flashing state)

Flashing state: 0.0   Lit up state: 0.0

All display elements shown ON

Battery life indicator

Lit or flash when storing measured values or displaying stored data.

Lit when setting cell constant.

TEMP MAN
DATA HOLD CAL
8.8.8.8
CELL   mµS
NaCl%/°C°F   kMΩ/cm
8.8.8.8.8.8.8.8 °F
°C

Lit when setting temperature compensation coefficient.

Lit when setting fixed ranges.

Lit when calibrating with standard solution.

Lit when temporarily holding measured values.

F02.EPS

1. Preparation for Measurement (refer to IM 12D03D02-01E, Chapter 2)

(1) Install Battery
(When first purchased, when replacing batteries, or when meter has not been used for an extended period of time.)

close
open
45° or more
Batteries
Gasket
close
Press with your fingers

F03.eps
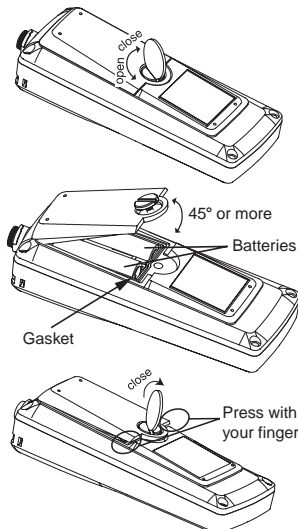
(1) Loosen the screw holding the battery box cover using a coin or similar object.

(2) Remove the battery box cover, and then install the batteries observing polarity diagram inside.

(3) Make sure the gasket on the inside rim of the battery box is free of foreign material.

(4) Put the cover back on. Insert the tabs on the top of the cover into the slots at an angle of at least 45° and lower the cover into position.

(5) Press the both ends of the cover down with your fingers and tighten the screw to fix the cover onto the unit using a coin or similar object.
Note: Do not attempt to tighten further when you feel resistance before the cover is fastened in place. Loosen the screw once and retighten.

(2) Connect Sensor Cable (when not connected)
When connecting sensor cable, tighten by turning only the silver locknut, do not turn cable or waterproof cover.

Display Character Table

Alphabet	Display	Alphabet	Display	Numerals	Display
A	A	N	n	0	0
B	b	O	o	1	1
C	C	P	P	2	2
D	d	Q	q	3	3
E	E	R	r	4	4
F	F	S	S	5	5
G	G	T	t	6	6
H	H	U	U	7	7
I	I	V	H	8	8
J	J	W	u	9	9
K	K	X			
L	L	Y	y		
M	n	Z	Ξ		

* Alphanumerics are represented as follows on the LED display.

T02.EPS

(3) Set Date and Time (only when purchased or after replacing batteries)
(4) Set Temperature Unit (only for °F)
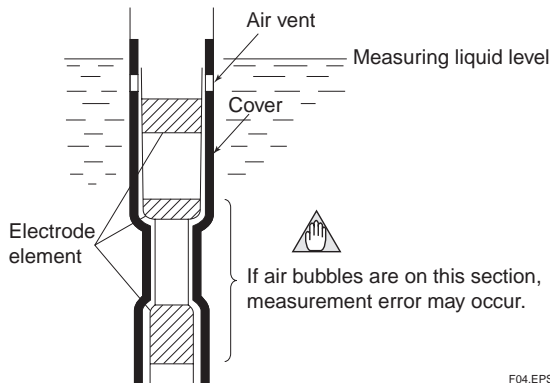(5) Set Cell Constant (refer to IM 12D03D02-01E, Sec. 2.5)
(6) Set Temperature Compensation Coefficients (refer to IM 12D03D02-01E, Sec. 2.6)

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2. Measurement (refer to IM 12D03D02-01E, Chapter 3)

Measuring liquid's temperature should be between 0 and 80°C.

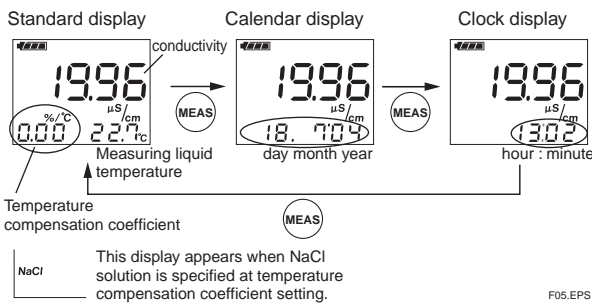To fix the measuring range, see IM 12D03D02-01E, Sec. 4.3, Item (3).

● How to immerse the sensor.

Air vent

Measuring liquid level

Cover

Electrode element

If air bubbles are on this section, measurement error may occur.

F04.EPS

● Measurement display

When the sensor is immersed into the measuring liquid, the conductivity value is displayed. Each time the (MEAS) key is pressed, the display toggles among the three display types shown below.
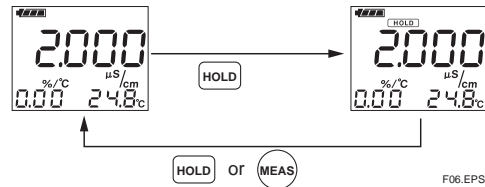
Standard display   Calendar display   Clock display

conductivity

Measuring liquid temperature

day month year

hour : minute

Temperature compensation coefficient

NaCl — This display appears when NaCl solution is specified at temperature compensation coefficient setting.

F05.EPS

● How to store the measured value
● HOLD (temporary storage)

HOLD or MEAS

F06.EPS

● How to store data in memory

DATA

Abort data storage.

While DATA is flashing, press DATA or (MEAS) keys to abort data storage.

Data is not stored when (F/ENT) key is not pressed.

Execute data storage.

Press (F/ENT) key to store data while DATA is flashing.

F07.EPS

To check the stored data, refer to IM 12D03D02-01E, Sec. 4.3, Item (1).

Stored measurement data

F/ENT

Display dAt with ▲ or ▼ key.

Press F/ENT key to set.

Latest data

Display other data.

Display day and month of stored data

Display year of stored data

Display time of stored data

Press F/ENT key to abort data deletion.

Delete stored data

Press (MEAS) key to return to measurement mode.

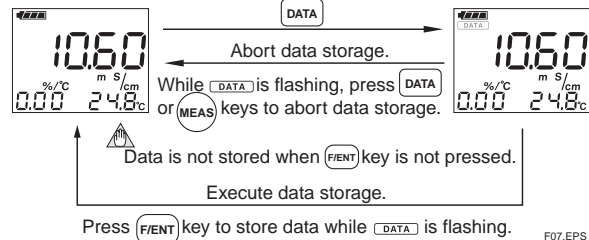Press F/ENT to delete stored data.

F08.EPS

3. Maintenance

● Washing Sensor (refer to IM 12D03D02-01E, Sec. 5.2)

After the measurement, rinse the sensor with clean water (for example, tap water) to remove stains.

● Calibration with Standard Solution

If sensor is not clean after long time use, use standard solution and recalibrate the conductivity meter to check if cell constant is normal.

● Replacing Batteries (when ▭ is flashing) (Refer to IM 12D03D02-01E, Sec. 2.1)

When replacing batteries, replace both batteries at the same time.

After replacing, reset the time.

● Replacing O-rings and gaskets (refer to IM 12D03D02-01E, Sec. 5.5)

If sensor connecter O-ring or battery box gasket become dirty or damaged,

waterproofing is not assured. Then replace to new ones.

4. Error Messages (refer to IM 12D03D02-01E, Sec. 6.2)

Error message	Name
Err1 $Err1$	Temperature compensation computation value out of range
Err2 $Err2$	Out of temperature measuring range
Err3 $Err3$	Calibration error
Err6 $Err6$	Meter electronics failure
or or	Out of measuring range

T03.EPS

Refer to IM 12D03D02-01E, Sec. 6.2 for corrective action.

5. Storage (refer to IM 12D03D02-01E, Sec. 5.5)

· Wash sensor with water before storing.

· Leave sensor connected to meter to keep connector clean.

· Remove batteries from meter if it is to be stored for long time.