Emission Thermometer
User's Manual

Model: **53008**

YOKOGAWA ◆
Yokogawa Meters & Instruments Corporation

Compliance with the Radio Waves Act (Republic of Korea)

This product complies with the Radio Waves Act (Republic of Korea).
Note the following when using the product in Republic of Korea.
The product is for business use (Class A) and meets the electromagnetic
compatibility requirements.The seller and the user must note the above
point and use the product in a place except for home.

Registration No:	**KCC-REM-IMY-EEN326**
Equipment Name:	**Emission Thermometer**
Trade Name:	**Yokogawa Meter & Instruments Corporation**
Manufacturer:	**Yokogawa Meter & Instruments Corporation**
Country of Origin:	**Japan**

Thank you very much for purchasing Thermometers products. This device is a non-contact thermometer to convert the infrared energy emitted from the surface of an object into temperature. This thermometer measures the surface temperature of solid and liquid without contacting them. The temperature of gas cannot be measured by this thermometer.

Contents

Introduction

• Please make sure the model you purchased is the one you specified.

• Please read the manual thoroughly before using the Products for correct usage.

• After reading this manual, please retain it for future reference.

• YOKOGAWA is not liable for any incidental or consequential damages or losses including losses of data or chances of measurement, arising from accident, misuse or abnormal conditions of operation or handling.

Safe Usage

When operating the instrument, be sure to observe the cautionary notes given below to ensure correct and safe use of the instrument. If you use the instrument in any way other than as instructed in this manual, the instrument's protective measures may be impaired.

Yokogawa is by no means liable for any damage resulting from use of the instrument in contradiction to these cautionary notes.

⚠ **CAUTION :** **This symbol signifies that improper usage may result in injuries or damage.**

⚠ **CAUTION**
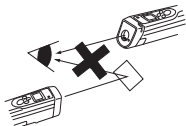
Do not look into the laser beam, nor point it directly at eyes.Even the reflection is harmful.This laser may cause eye injury or damage to your health.

⚠ **CAUTION**
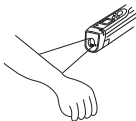
This product is not a clinical thermometer and therefore, can not be used for medical purposes.

⚠ **CAUTION**

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Safe Usage — Warnings & Cautions on Environment and Usage

Environmental Warnings / Cautions ⊘ — Warning ❶ — Caution

**⊘ KEEP THE THERMOMETER AWAY FROM DROPPING WATER AND DO NOT USE IN WATER.**
This thermometer has waterproofing, but it cannot be operated in the water. Water drops on the filter or the area around it may cause incorrect measurement. Wipe up the filter and the area around it completely before taking measurement.

❶ KEEP THE THERMOMETER AWAY FROM DIRECT SUNLIGHT, DUST, HIGH TEMPERATURES AND HIGH HUMIDITY DURING USE AND STORAGE.
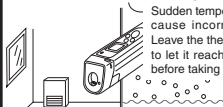This may cause irreparable damage or incorrect measurement.
e.g. Leaving the thermometer in a car under a burning sun for long may result in damage as it will get hot inside the car.
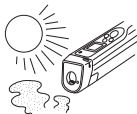
❶ DO NOT EXPOSE THE THERMOMETER TO SUDDEN TEMPERATURE CHANGES.
Sudden temperature changes may cause incorrect measurement. Leave the thermometer for a while to let it reach stable temperature before taking measurement.

❶ DO NOT OPERATE THE THERMOMETER NEAR LARGE ELECTROMAGNETIC FIELDS.
Usage in such environments may cause irreparable damage or incorrect measurement.

## Usage Warnings / Cautions ⊘ — Warning ❶ — Caution

❶ AVOID MEASURING SHINY OBJECTS.
Shiny objects, of which emissivity value is near 0, reflect surrounding temperatures. As this thermometer's sensitivity to emissivity is fixed at 0.95 / 0.70, the displayed temperature could differ from the actual temperature of objects, which have different emissivity value. (See "Emissivity" on page 14)
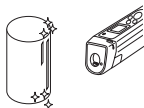
⊘ DO NOT DROP THE THERMOMETER OR APPLY VIOLENT SHOCKS.
This product has shock resistant structure to survive under normal usage, but throwing or falling the unit intentionally with force may cause irreparable damage.
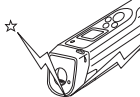
⊘ DO NOT USE ANY BATTERY OTHER THAN SPECIFIED.
This may cause irreparable damage or incorrect measurement.

⊘ DO NOT LET THE THERMOMETER TOUCH THE OBJECT THAT IS BEING MEASURED.
The unit is a non-contact thermometer. Touching or getting too close to the objects with high temperatures may cause irreparable damage or incorrect measurement.
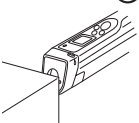
⊘ DO NOT TOUCH THE FILTER.
Do not touch the filter with something hard or things with sharp points, which may damage the filter. Damaged filter causes incorrect measurement.
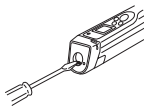
❶ KEEP THE THERMOMETER AWAY FROM CHARGED OBJECTS.
This may cause irreparable damage or incorrect measurement.

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Specifications

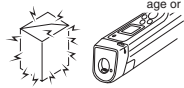|	
Model	53008-E
Measurement range	0 to 500 ˚C
Display range	−10 to 650 ˚C
Field of view	ϕ 25 / 300mm (D : S=15 : 1)
Optics	mirror / silicon filter
Sensing element	Thermopile
Spectral response	8 to 14 μm
Response time	0.7 sec. / 90%
Accuracy ($\varepsilon \fallingdotseq$ 0.95)	0 to 200 ˚C : ±2 ˚C, 201 to 500 ˚C : ±1 %
Repeatability	±1 ˚C of reading value
Display resolution	1˚C
Sighting method	Non-coaxial laser marker (Class 2)
HOLD time	15 seconds
Continuous measurement mode	ON / OFF Switchable
Memory	99-point memory
High / Low Limit Temp. for Alarm LED / Buzzer	ON / OFF Switchable
Emissivity(ε) Adjustment	DARK(ε =0.95) / BRIGHT(0.70) Switchable
Power supply	9V layer-built alkaline dry battery (1 piece)
Battery life	Approx. 12 Hours (With max load)
Ambient temperature	0 to 50 ˚C
Ambient humidity	35% to 85%Rh (Without due condensation)
Storage temperature	−10 to 60 ˚C
Protective structure	IP67
Material	ABS (Antibacterial)
Dimension	H x W x D = Approx. 160 x 44 x 42mm
Weight	Approx. 200g (Including Battery)

Accessories : 9V layer-built alkaline dry battery (1 piece)
Quick Reference Card, user's Manual
Option : Blackbody tape (Maximum available temperature 250˚C)
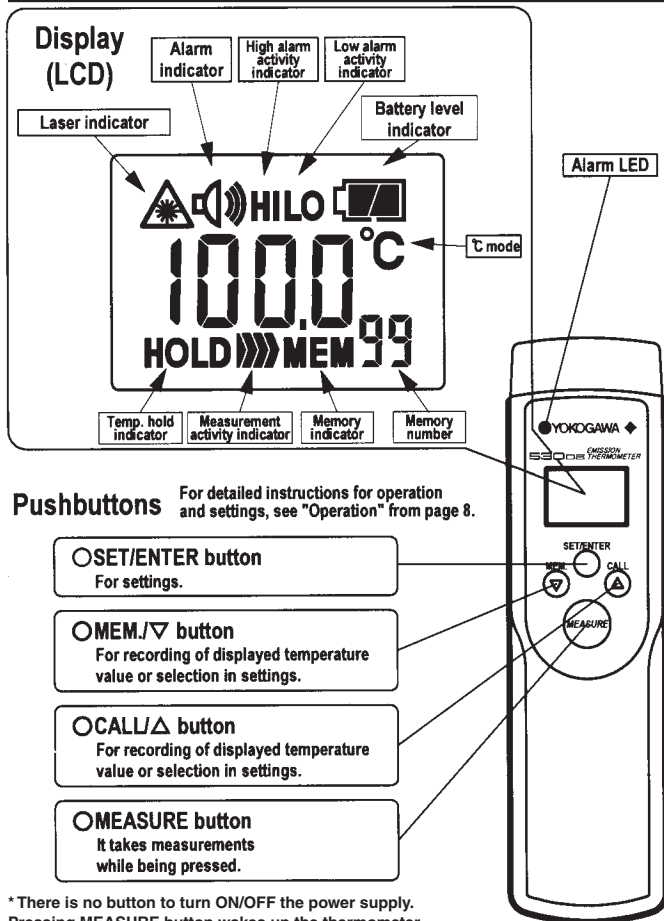Compliant standards.
IEC 60825-1
EN 60825-1
US 21 CFR 1040.10 and 1040.11
EN 61326-1
※ Specifications may change without prior notice.

Name of Components

Display (LCD)

Alarm indicator
High alarm activity indicator
Low alarm activity indicator
Laser indicator
Battery level indicator
Alarm LED

℃ mode

HILO

100.0 ℃

HOLD 》》》 MEM 99

Temp. hold indicator
Measurement activity indicator
Memory indicator
Memory number

Pushbuttons

For detailed instructions for operation and settings, see "Operation" from page 8.

○ **SET/ENTER button**
For settings.

○ **MEM./▽ button**
For recording of displayed temperature value or selection in settings.

○ **CALL/△ button**
For recording of displayed temperature value or selection in settings.

○ **MEASURE button**
It takes measurements while being pressed.

● YOKOGAWA ◆
530□□ EMISSION THERMOMETER

SET/ENTER
MEM CALL
▽ △
MEASURE

* There is no button to turn ON/OFF the power supply.
Pressing MEASURE button wakes up the thermometer.
The power supply turns off automatically after 15 seconds' absence of pressing any button.

Silicon filter
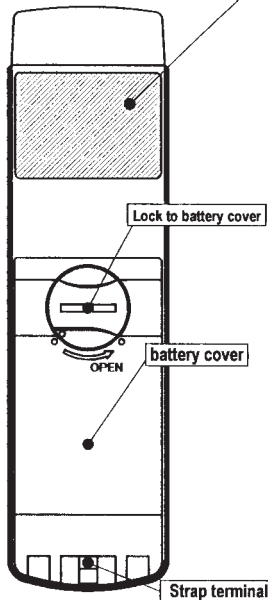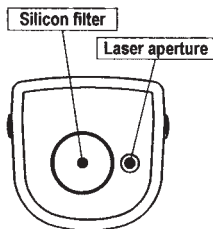
Laser aperture

EMISSION TERMOMETER

MODEL 53008-E

$\boxtimes$ CE ⊖ K N200

YOKOGAWA ◆
Yokogawa Meters & Instruments Corporation
Made in Japan

LASER APERTURE

CAUTION

LASER RADIATION
DO NOT STARE
INTO BEAM
CLASS II LASER PRODUCT
LASER RADIATION
DO NOT STARE INTO BEAM
WAVE LENGTH
630~670nm
POWER
MAX 1.0mW
CLASS 2 LASER

COMPLIES WITH:
21 CFR 1040.10 AND 1040.11:2001
IEC 60825-1/A2:2001
EN 60825-1/A1:2002

Caution label

Safety Precautions for Laser Products
This Instrument uses a laser light source. This instrument is a Class 2 laser product as defined by IEC60825-1 Safety of Laser Products-Part1: Equipment classification and requirements. In addition, this instrument complies with 21 CFR 1040.10 except for deviations pursuant to Laser Notice No.50, dated June 24, 2007.
DO NOT STARE INTO BEAM.
CLASS 2 LASER PRODUCT.

Lock to battery cover

battery cover

OPEN

Strap terminal

Settings

1.High Limit Temperature for Alarm···(P.12)
When any temperature higher then a preset value is measured, an alarm LED(red) turns on and alarm bell goes off.

2.Low Limit Temperature for Alarm···(P.13)
When any temperature lower then a preset value is measured, an alarm LED(green) turns on and alarm bell goes off.

3.Emissivity Ratio:DARK/BRIGHT mode···(P.14)
Emissivity rasio (DARK/BRIGHT mode) is switchable according to the emissivity value of measuring object.
DARK(ε =0.95): Food,rubber,plastic,painted area,etc
BRIGHT(ε =0.70): Oxidized metal,etc

4.Record Erasing···(P.14)
Erasing all the stored temperature data.

5.HOLD mode Selections···(P.15)
Making a selection from the three types of HOLD mode.

—**Initial Settings**—
1. High Limit Temp. : 500℃/Alarm OFF
2. Low Limit Temp. : 0℃/Alarm OFF
3. DARK(ε =0.95)
4. No record of temperature data
5. OFF (NOR HOLD)

Operation

Set the battery supplied as an accessory and operate the unit according to the following procedure:

● **Normal Measurement**
[Starting Normal Measurement]
① Press (MEASURE) button to turn on the power supply. A laser beam is emitted and the measurement starts. (In the Normal Measurement mode, the unit takes measurements while (MEASURE) button is pressed.)

② Point the laser beam at a measuring object and aim it at the center of the area to be measured. For the distance from this thermometer to the measuring object, refer to page 9.

③ In the Normal Measurement mode, the measurement indication " " is shown on the LCD display and a laser indicator blinks.
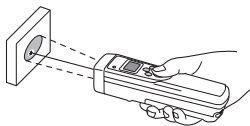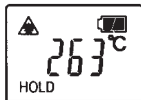
[Quitting Normal Measurement / HOLD mode]
① Release (MEASURE) button. Then, the laser beam turns off and a value measured last is displayed for 15 seconds (HOLD mode). The power supply turns off automatically after 15 seconds.

* NOR HOLD can be changed into MAX/MIN HOLD.
(See "Setting" on page 15)

● **Continuous Measurement**
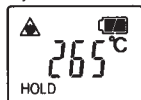#### [Starting Continuous Measurement]
① Press and hold both of (MEASURE) button and (SET/ENTER) button simultaneously for two seconds or more, then the Continuous Measurement mode switched on. (In the Continuous Measurement mode, the thermometer keeps measuring temperatures without pressing (MEASURE) button.)

② During the Continuous Measurement mode, LCD display shows " ".
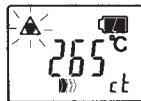
[Quitting Continuous Measurement]
① To quit the Continuous Measurement mode, press and hold (SET/ENTER) button for two seconds or more. Then, it switches to HOLD mode. The power supply turns off automatically after 15 seconds in the HOLD mode.

CAUTION : The laser beam is constantly emitted during Continuous Measurement mode.
          Be careful of it while operating the thermometer.

8

Field of View

For the non-contact thermometer (infrared thermometer), the field of view (spot size) is specified depending on the distance from the thermometer to the measuring object as shown below. The temperature value displayed is the average temperature within the spot size. To take an accurate measurement, check the correlation between the size of object and the distance to it.

[Field of View]

D:S=15:1

1000
600
300
13

φ 25   φ 40   φ 66.7

Optical Axis   Laser Marker

[Unit: mm]
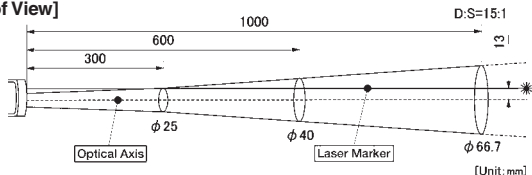
* Remarks

ex.) The average temperature of surface of the circle 25 mm in diameter is measured at a distance of 300 mm away from the measuring object.

* The laser beam points 13mm off to the left from the center of the field of view. The laser marker functions as a sighting method and not a sensing element.

* It is possible to take temperatures with this thermometer at a distance of 1,000 mm or more away from the measuring object, unless there is any obstacle. However, please note that the measuring field of view enlarges in proportion to the measuring distance. This thermometer has an optical resolution of 15:1 [D(Distance to the measuring object):S(Spot size)].
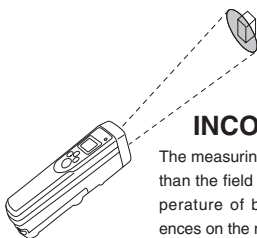
[For Correct Measurement]

The optical resolution values stated in "Field of View" are at minimum 90% energy. The size of measuring object should be sufficiently larger than the field of view (spot size) shown in the above illustration.

INCORRECT

The measuring object is smaller than the field of view. The temperature of background influences on the measuring value.

CORRECT

The measuring object is bigger than the field of view.

Note. If any water drop is on the filter and/or the area around it, the thermometer measures temperature of the water drop, which results in incorrect measurement. Wipe up the filter and the area around it completely before taking measurement. (See "Maintenance" on page 16)

9

Memory Function

53008 can store 99-point temperature data in memory.
Operate according to the following procedure:

[Recording / MEM. mode]

①Press and hold (MEM./▽) button for two seconds or more to record the temperature value displayed at the time when you start pressing the button. Memory function is available in Normal Measurement mode, Continuous Measurement mode or HOLD mode (refer to page 8).

②When the temperature data is recorded, "**MEM**" sign and the memory number (01 to 99) on LCD display blink.
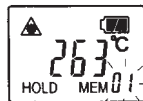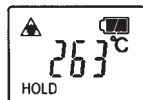
③A maximum of 99 points of temperature data can be recorded in the memory.

④When you try to enter the memory over 100 points, the display shows "**FULL**".
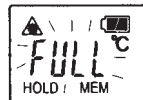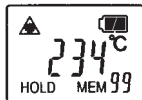
[Recalling / CALL Mode]

①Press and hold (CALL/△) button for two seconds or more in HOLD Mode (refer to page 8), and "**CALL**" sign appears on the LCD display. In CALL (recalling) mode, the last record of temperature data and the corresponding memory number are shown on the display.

* Data cannot be called during the continuous measurement mode.
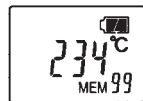
②By pressing (MEM./▽) or (CALL/△) button, you can select the memory number to show the stored temperature value corresponding to the memory number.
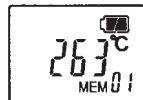
③To quit CALL mode, press (SET/ENTER) or (MEASURE) button. You can enter HOLD mode by pressing (SET/ENTER) button, or Normal Measurement mode by pressing (MEASURE) button.
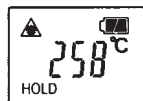
* To erase all the stored records, see "Record Erasing" on page 14.

10

Settings

This section gives you an explanation on how to set the following functions: "High Limit Temperature for Alarm", "Low Limit Temperature for Alarm", "Emissivity Ratio (DARK/BRIGHT mode)", "˚C mode" and "Recorded Erasing" "HOLD mode Selections".

[Selecting Functions]

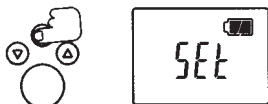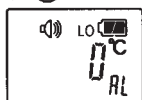① Press and hold (SET/ENTER) button for one second or more in the HOLD Mode (refer to page 8), and "SET" sign appears on the LCD display. (Function selecting mode follows.)

② By pressing (CALL/△) or (MEM./▽) button, you can select functions as shown in the right illustrations.

③ When the name of the function you desire appears on the display, press (SET/ENTER) button to set. Then, you can enter the detailed setting mode.
- "High Limit Temperature for Alarm" : refer to page 12.
- "Low Limit Temperature for Alarm" : refer to page 13.
- "Emissivity Ratio (DARK/BRIGHT mode)"
- "˚C mode" : refer to page 14.
- "Record Erasing"
- "HOLD mode Selections" : refer to page 15.

④ When each setting is completed, it automatically turns to the next setting mode. (For example, when setting of "High Limit Temperature for Alarm" is completed, it comes to the setting mode for "Low Limit Temperature for Alarm".)

⑤ To quit the setting mode, press (MEASURE) button.

SEt

◁))Hi
500˚C
AL

Setting mode for "High Limit Temperature for Alarm"

◁)) LO
0˚C
AL

Setting mode for "Low Limit Temperature for Alarm"

Hold
HL

Setting mode for "HOLD mode Selections"

drk
E

Setting mode for "Emissivity Ratio (DARK/BRIGHT mode)"

CLP˚C
MEM

Setting mode for "Record Erasing"

11

Setting — "High Limit Temperature for Alarm"

When the measured temperature exceeds the High Limit value, the alarm LED blinks in red and buzzer (high tone) sounds.

[Setting "High Limit Temperature for Alarm"]

① Enter the setting mode for "High Limit Temperature for Alarm" according to the procedure described in page 11. The initial setting is at 500 ˚C.

② Press ▽ or △ button in the detailed setting mode to change the temperature vale, which your need alarm at.

③ Press (SET/ENTER) button to set the displayed value as the High Limit Temperature for Alarm.

Note: The "High Limit Temperature for Alarm" cannot be set at lower temperature than "Low Limit Temperature for Alarm".

[Turning ON/OFF Alarm Function]

① When the High Limit Temperature setting is completed, the setting mode for ON/OFF Alarm Function appears. Press ▽ or △ button to select ON or OFF.

② Press (SET/ENTER) button to set ON or OFF. While the Alarm function is OFF, the Alarm function does not work even if the measuring temperature goes higher than a preset level.

Setting mode for "High Limit Temperature for Alarm" (Initial setting: 500 ˚C)

Changing the temperature value to 200 ˚C by using ▽/△ button.

Setting the temperature value with (SET/ENTER) button.

Alarm function: ON

Alarm function: OFF

Setting — "Low Limit Temperature for Alarm"

When the measured temperature is below the Low Limit value, the alarm LED blinks in green and buzzer (low tone) sounds.

[Setting "Low Limit Temperature for Alarm"]

①Enter the setting mode for "Low Limit Temperature for Alarm" according to the procedure described in page 11. If you have already set the High Limit Temperature as in page 12, the setting mode for "Low Limit Temperature for Alarm" turns up automatically. The initial set ting is at 0 ˚C.

②Press ▽ or △ button in the detailed setting mode to change the temperature vale, which your need alarm at.

③Press (SET/ENTER) button to set the displayed value as the Low Limit Temperature for Alarm.

Note: The "Low Limit Temperature for Alarm" cannot be set at higher temperature than "High Limit Temperature for Alarm".

Setting mode for "High Limit Temperature for Alarm" (Initial setting: 0 ˚C)

Changing the temperature value to 10 ˚C by using ▽/△ button.

Setting the temperature value with (SET/ENTER) button.

[Turning ON/OFF Alarm Function]

①When the Low Limit Temperature setting is completed, the setting mode to ON/OFF Alarm Function appears. Press ▽ or △ button to select ON or OFF.
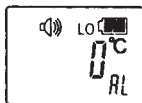
Alarm function: ON

Alarm function: OFF

②Press (SET/ENTER) button to set ON or OFF. While the Alarm function is OFF, the Alarm function does not work even if the measuring temperature goes higher than a preset level.

13

[Emissivity Ratio (DARK/BRIGHT mode)]

Emissivity ($\mathcal{E}$)
Emissivity is a value that indicates the infrared energy emitted from the surface of an object. Every object has its own emissivity value and it varies depending on the surface condition or the temperature of the object. The emissivity ratio of PT-5LD is fixed at two points, i.e., DARK ($\mathcal{E}$=0.95) and BRIGHT ($\mathcal{E}$=0.70).
Example : DARK ($\mathcal{E}$=0.95): Food, rubber, plastic, paintwork, etc.
           BRIGHT ($\mathcal{E}$=0.70): Oxidized metal, etc.

If the object has different emissivity value from either of the above ratio, there could be some possibilities that the measured temperature value on the display shows different from the actual temperature value of the object. Refer to the above examples as a guideline for setting DARK/BRIGHT mode. When you wish to measure shiny object like metals, put a piece of optional blackbody tape ($\mathcal{E}$=0.95) on the surface of the measuring object to cover the measuring area, if possible.

①Enter the setting mode for "Emissivity Ratio (DARK/BRIGHT mode)" according to the procedure described in page 11.
The initial setting is DARK ($\mathcal{E}$=0.95).

②Press $\triangledown$ or $\triangle$ button in the setting mode to change the emissivity ratio (DARK or BRIGHT).

③Press (SET/ENTER) button to set the emissivity ratio.

[DARK mode]
"drk" and "0.95" are displayed in turn.

[BRIGHT mode]
"brt" and "0.70" are displayed in turn.
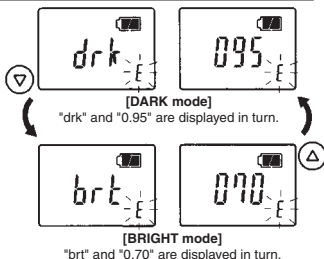
[Record Erasing]

Note this function is to erase all the stored records in memory.
It is not able to erase data one by one.

①Enter the setting mode for "Record Erasing" according to the procedure described in page 11.

②Press $\triangledown$ or $\triangle$ button in the setting mode to select "CLR" sign on the display.

③Press (SET/ENTER) button, and all the recorded data are erased.

* If you wish to cancel the Record Erasing, press $\triangledown$ button to select "ESC" sign on the display and press (SET/ENTER) button. Then, you can return to the setting mode again.

* Please note that Yokogawa M&C is not liable for any loss of data.

[Record Erasing mode]

[Record Erasing Cancel mode]

14
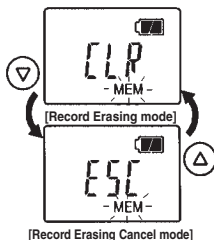
Setting — "HOLD made Selections"

[Setting "HOLD mode Selections"]

①Enter the setting mode for "HOLD mode Selections" according
   to the procedure described in page 11.

②Press ▽ or △ button in the setting mode to select ON or OFF.
   The initial setting is OFF. (NOR HOLD)

③Press (SET/ENTER) button to set ON or OFF.
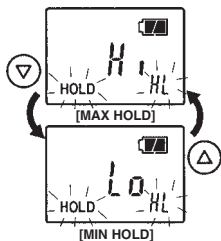
④In case of ON, "HOLD mode Selections" can be available.
   Press ▽ or △ button to select the HOLD mode. (MAX or MIN).

⑤Press (SET/ENTER) button to set the HOLD mode.

NOR HOLD : A value measured last is displayed.

MAX HOLD ("Hi" on display) : The maximum value is displayed
                             during the measurement.

MIN HOLD ("Lo" on display) : The minimum value is displayed during the measurement.

Troubleshooting

Symptom	Cause	Things to Check
Display dose not appear.	The batteries have been exhausted. Battery installation is incorrect.	Replace the batteries. Re-install the batteries correctly.
Laser beam is not radiated.	The laser ejection exit is stained.	Clean the laser ejection exit referring "Body" of "Maintenance" described in page 16.
	Voltage necessary for lighting up laser beam is not satisfied.	Replace the batteries, (The -b- sign blinks.) or re-install the batteries correctly.
Measured value is incorrect.	The filter unit is stained.	Clean the filter referring "Filter" of "Maintenance" described in page 16.
	Field of view is deviated from the measuring object.	Center the laser beam on the measuring object by referring "Field of View" described in page 9.
	The measured object is smaller than the field of view.	Adjust the measuring distance referring to the "Field of view" described in page 9.
	The thermometer is affected by a nearby heating source.	Cut off the heat sources with a shield or such.
Measured value is unstable.	A shiny metal surface is being measured.	This thermometer causes an error when measuring a shiny metal surface. Perform measurement after putting optional blackbody tape onto the object.
	The thermometer is affected by considerable temperature fluctuation.	Wait until the temperature of thermometer stabilizes.

When the above symptoms are not removed even after the corresponding countermeasure has been taken,
the thermometer may have a fault. In such cases, contact the vendor from purchased the product.

Maintenance
[Filter]
Dust, stain or scratch on the filter causes incorrect measurement. If the filter is stained, clean the filter with a lens-cleaning blower or wash it with clean water.
If the filter is still stained, gently wipe the stain off with a cotton swab or lens cleaning cloth, which may be moistened with ethyl alcohol.

Note. If any water drop is on the filter and/or the area around it, the thermometer measures temperature of the water drop, which results in incorrect measurement. Wipe up the filter and the area around it completely before taking measurement.

[Body]
This thermometer has waterproofing; therefore, it can be washed with clean water.
If the thermometer is stained considerably, wash it with a little neutral detergent diluted with clean water. After cleaning the thermometer by washing, wipe it completely before use.

Note. Do not use hot water exceeding 50˚C and chemicals such as thinner and benzene, which may cause fading of characters, deformation, or damage.

[Periodical Inspection]
It is recommended that the thermometer be calibrated annually.
For further information, please contact the vendor from which you purchased the product.
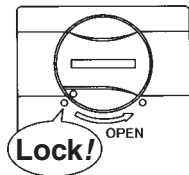
Battery
[Battery replacement]
When the battery level indicator shows little electricity left and/or "-b-" sign on the display blinks, replace the battery with a new one.

Note. Upon replacing the battery, keep the battery compartment out of the water. Wipe the main unit completely.

①Turn the lock for battery cover at the back of main unit counterclockwise to open the battery compartment.

②Much the"＋" "－" polarities of the battery with the signs on the battery compartment.

③Close the battery cover and turn the lock clockwise to fix it.

Note. If the compartment cover is not locked properly, water penetrates the inside and the waterproofing does not work. Be sure to lock it completely.

Precaution when handling batteries
● Do not dispose exhausted batteries in a fire, nor recharge them.
● Please dispose of depleted batteries in accordance with environmental protection regulations of region.
● Remove batteries when the thermometer is not used for along term.

Disposing the Product

Waste Electrical and Electronic Equipment (WEEE). DIRECTIVE 2002/96/EC
(This directive is valid only in the EU.)
This product complies with the WEEE Directive (2002/96/EC) marking
requirement.The following marking indicates that you must not discard this
electrical/electronic product in domestic household waste.

Product Category

With reference to the equipment types in the WEEE directive Annex 1,
this product is classified as a "Monitoring and Control instrumentation" product.
When disposing product in the EU, contact your local Yokogawa Europe B. V.
office. Do not dispose in domestic household waste.

How to Replace and Dispose the Batteries

New EU Battery Directive DIRECTIVE 2006/66/EC
(This directive is valid only in the EU.) Batteries are included in this product.
When you remove batteries from this product and dispose them, discard them in
accordance with domestic law concerning disposal.
Take a right action on waste batteries, because the collection system in the EU
on waste batteries are regulated.

Battery type: Alkaline dry cell

Notice:
The marking (see above), which is marked on the batteries, means they shall be
sorted out and collected as ordained in ANNEX II in DIRECTIVE 2006/66/EC.

How to remove batteries safely:

For further details, see "Battery" of Maintenance / Battery.

"Measures for Adominstration of the Pollution Control of Electronic Information Products" of the People's Republic of China

This User's Manual explains the Prevention of Pollution Control of Electronic Equipment Method in China.
This manual is valid only in China.

产品中有毒有害物质或元素的名称及含量

部件名称	有毒有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
＜形式名＞ 53008						
框架（塑料）	○	○	○	○	○	○
线路板 ASSY	○	○	○	○	○	○
电池	○	○	○	○	○	○
○：表示该部件的所有均质材料中的有毒有害物质的含量均在 SJ/T 11363-2006 标准中所规定的限量以下。 ×：表示该部件中至少有一种均质材料中的有毒有害物质或元素的含量超过 SJ/T 11363-2006 标准所规定的限量要求。						

环保使用期限：

表示该有毒有害物质在该产品中的含量均在 SJ/T 11363-2006
标准规定的限量要求以下。