

MODEL: JTR168

**DELUXE IN/OUT REMOTE THERMOMETER
WITH TREND CHART**

Instruction Manual

Mode D'emploi

Bedienungsanleitung

Manuale di Istruzioni

Instrucciones de Funcionamiento

Deluxe In/Out Remote Thermometer with Trend Chart

MODEL: JTR-168
USER'S MANUAL

INTRODUCTION

Congratulations on your purchasing the JTR-168 Deluxe In/Out Remote Thermometer.

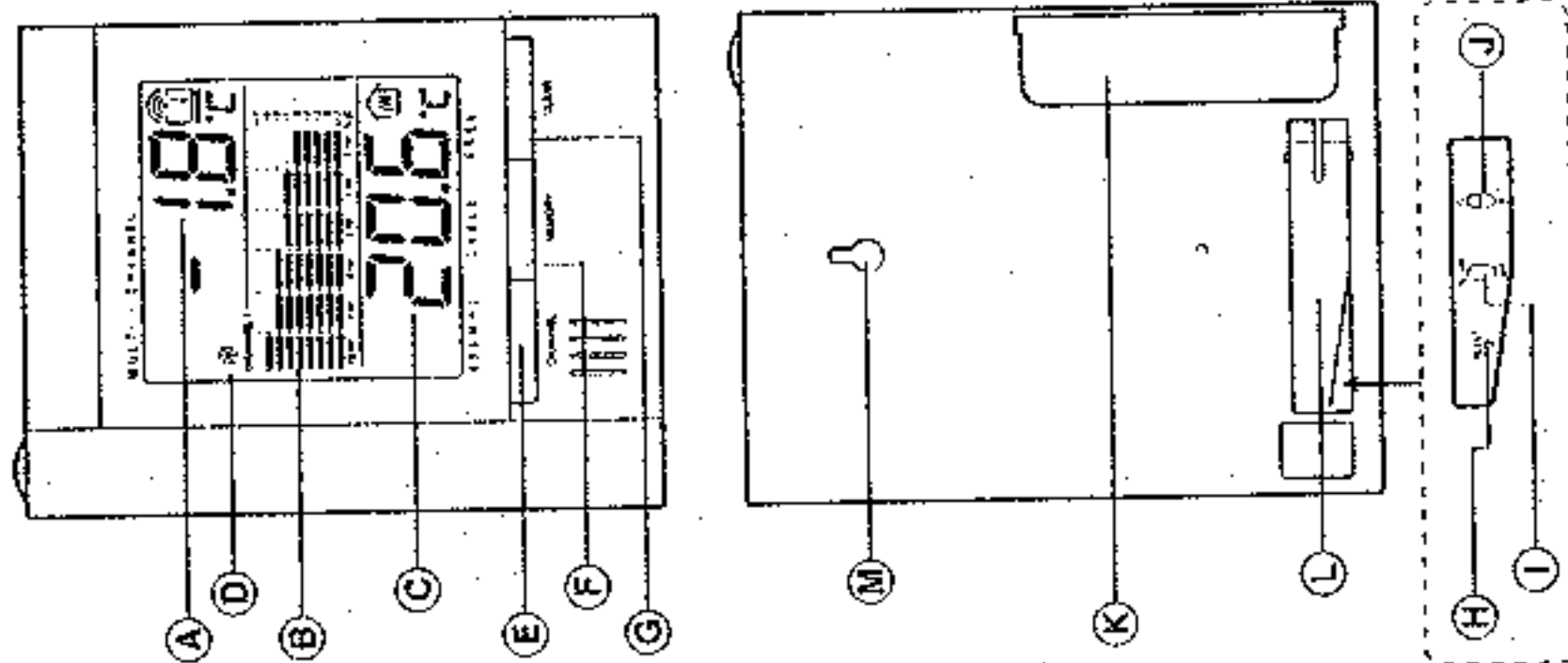
The basic package comes with a main unit (the temperature station) and a remote unit (the thermo sensor). The main unit can support up to three remote units.

The JTR-168 is very easy to use. The main unit has large display for the outdoor temperature, temperature variance for the last 12 hours and the indoor temperature.

Additional features include ice warning, maximum and minimum temperatures for indoors and outdoors and display backlight.

No wire installation is required between the main unit and the remote units. As the JTR-168 operates at 433MHz, it can be used in the U.S. and most places in Continental Europe.

MAIN FEATURES



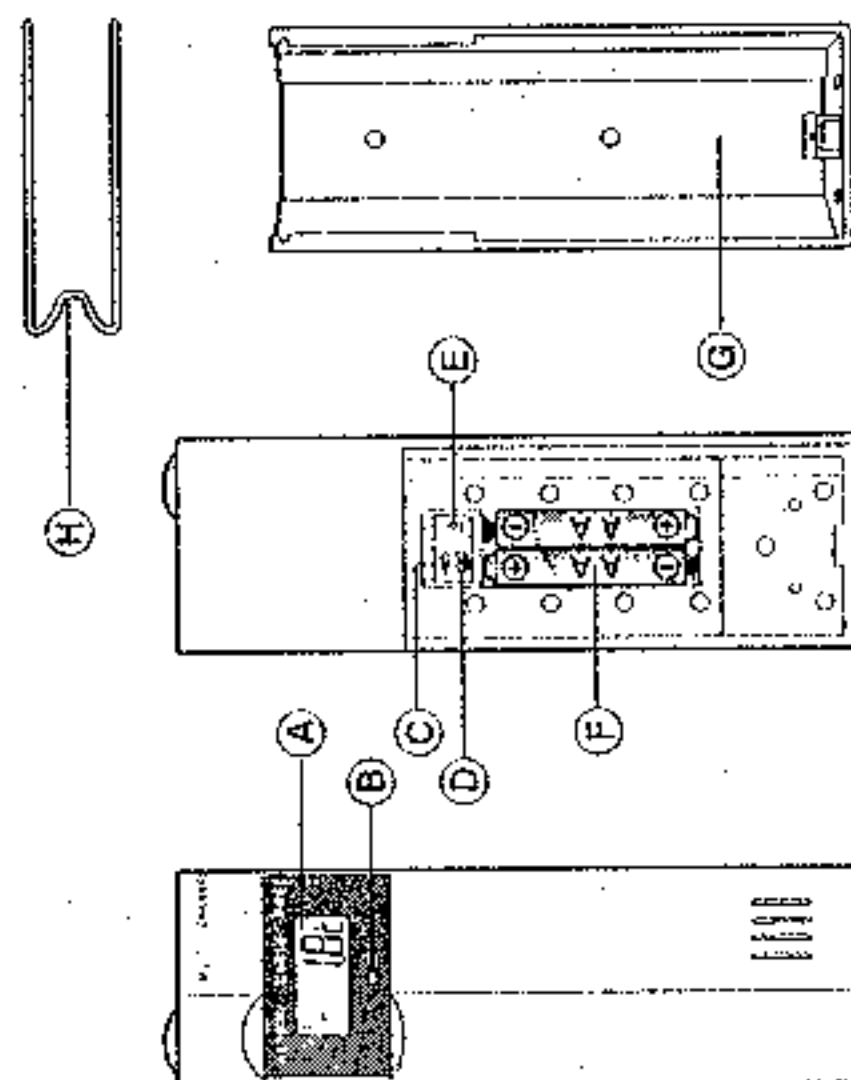
- (A) OUTDOOR TEMPERATURE**
Shows the temperature of the selected channel
- (B) TEMPERATURE TREND CHART**
Shows the temperature variance for the last 12 hours
- (C) INDOOR TEMPERATURE**
Shows the temperature collected indoors
- (D) ICE WARNING ICON**
Lights up when the ice warning function is active
- (E) CHANNEL BUTTON**
Selects among different channels
- (F) MEMORY BUTTON**
Toggles among current, maximum and minimum temperatures
- (G) CLEAR BUTTON**
Clears the memory for the indoor temperature and that for the displayed channel
- (H) RESET BUTTON**
Returns all settings to default values
- (I) ICE WARNING SLIDE SWITCH**
Turns on or off the ice warning function
- (J) °C/°F SLIDE SWITCH**
Selects between degrees Centigrade (°C) and Fahrenheit (°F)
- (K) BATTERY COMPARTMENT**
Accommodates two AA-size batteries

L-TABLE STAND

For standing the main unit on a flat surface

- (M) WALL-MOUNT RECESSED HOLE**
For mounting the main unit on a wall

MAIN FEATURES: REMOTE UNIT



- (A) LCD**
Displays the current temperature monitored by the remote unit
- (B) LED INDICATOR**
Flashes when the remote unit transmits a reading

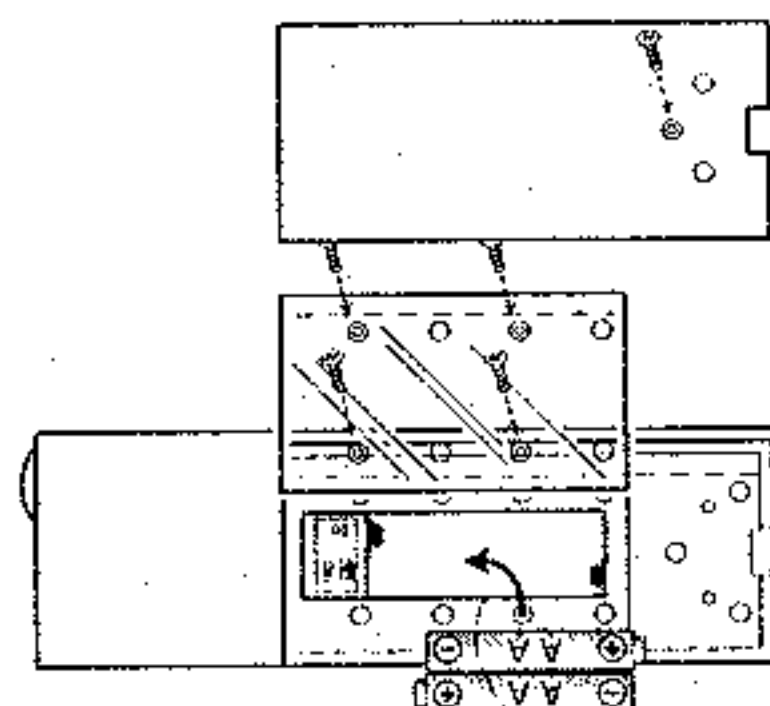
- (C) °C/°F SLIDE SWITCH**
Selects between degrees Centigrade (°C) and Fahrenheit (°F)
- (D) CHANNEL SLIDE SWITCH**
Designates the remote unit Channel 1, Channel 2 or Channel 3
- (E) RESET BUTTON**
Returns all settings to default values
- (F) BATTERY COMPARTMENT**
Accommodates two AAA-size batteries
- (G) WALL-MOUNT HOLDER**
Supports the remote unit in wall-mounting
- (H) REMOVABLE TABLE STAND**
For standing the remote unit on a flat surface

HINTS FOR BEST OPERATION

- Assign different channels to different remote units.
- Insert batteries for remote units before doing so for the main unit.
- Set the main and remote units as close as possible. The effective transmission range is 20 to 30 meters.
- The effective range is vastly affected by the building materials and how the units are positioned. Try different set-ups for best results.
- Though the remote units are weather proof, they should be placed away from direct sunlight, rain or snow.

**BATTERY AND CHANNEL
INSTALLATION: REMOTE UNIT**

1. Remove the screws on the battery compartment.
2. Select the channel number on the CHANNEL slide switch.
3. Select the temperature display unit on the °C/°F slide switch.
4. Insert two AA-sized batteries.

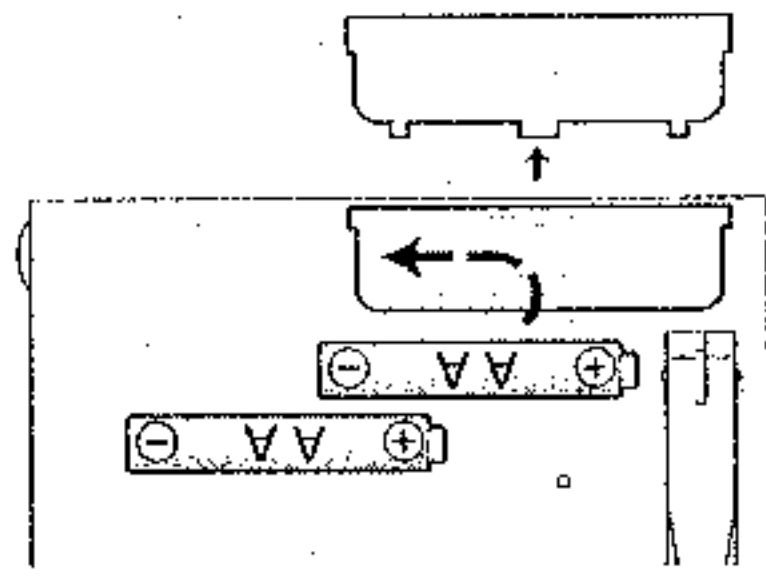


5. Replace the battery compartment door and secure its screws. Replace the batteries when the low-battery indicator of the particular channel lights up on the main unit.
- Note that once a channel is assigned to a unit, you can only change it by removing the batteries and repeating the above procedure.

Note that once a channel is assigned to a unit, you can only change it by removing the batteries and repeating the above procedure.

BATTERY INSTALLATION: MAIN UNIT

- 1. Slide open the battery compartment door.
- 2. Insert two AA-sized batteries.



- 3. Replace the battery compartment door.
- 4. Flip open the table stand and press the RESET button with a blunt stylus. It ensures easier synchronization between the transmission and reception of signals.

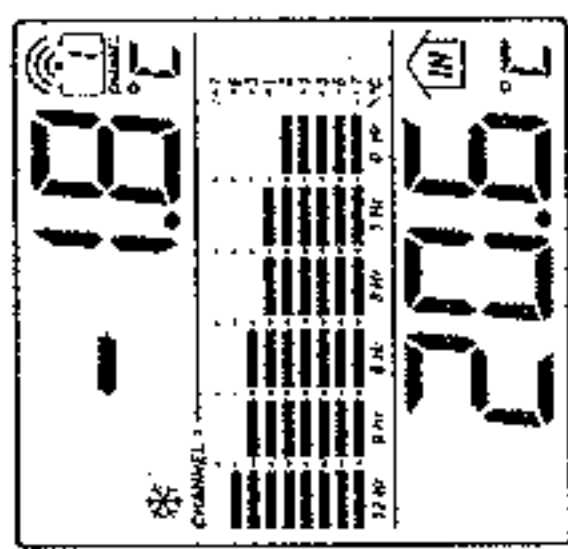
Replace the batteries when the indicator [] of the indoor temperature lights up.

GETTING STARTED

Once batteries are in place for the remote units, they will start

transmitting samplings roughly at 30-second intervals.

The main unit will also start receiving once batteries are installed. The temperature of the selected channel will be displayed on the top line and the indoor temperature on the bottom line. The main unit will automatically update its readings at 30-second intervals. The temperature variance for the last 12 hours is automatically scanned on the trend chart.



If no signals are received, blanks will be displayed. Press CHANNEL and CLEAR simultaneously to enforce another search. This is useful in synchronizing the transmission and reception of the remote and main units.

Repeat this step whenever you find discrepancies between the reading shown on the main unit and that on the respective remote unit.

HOW TO CHECK REMOTE AND INDOOR TEMPERATURES

The indoor temperature is shown on the bottom line of the display. As for the remote sites or channels, press CHANNEL to go from

one channel to another. The kinetic wave display on the channel number indicates the reception of that particular channel is in good order.

The unit is in searching mode.	•	☎
Temperature readings are securely registered.	•	☎
No signals.	•	•

If no readings are received from one particular channel for more than two minutes, blanks will be displayed until further readings are successfully searched. Check the remote unit is sound and secure. You can wait for a little while or press CHANNEL and CLEAR simultaneously to enforce an immediate search. Of course no reading will be shown if no remote unit is assigned to that channel.

The JTR-168 is capable of measuring temperatures within the -50°C (-58°F) and +70°C (+158°F) range. If the temperature goes above or below that, the display will show "HHH" or "LLL".

MAXIMUM AND MINIMUM TEMPERATURES

The maximum and minimum recorded indoor temperatures and those of each channel will be automatically stored in memory. To display them,

- 1. Press CHANNEL to locate the desired channel.

- 2. Press MEMORY to rotate through the maximum [MAX], minimum [MIN] and current temperatures. The readings of the indoor temperatures will also be displayed.

To clear the memory of a particular channel,

- 1. Press CHANNEL to locate the desired channel.
- 2. Press CLEAR. Note it will also erase the memory for the indoor temperatures. If you press MEM now, the maximum and minimum temperatures will have the same values as the current ones until different readings are recorded.

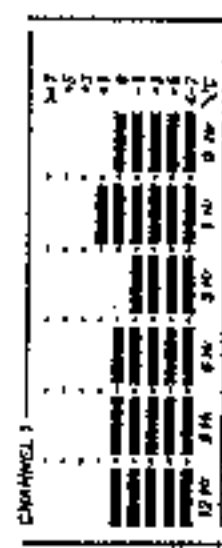
DISCONNECTED SIGNALS

If without obvious reasons the display for a particular channel goes blank, press CHANNEL and CLEAR to enforce an immediate search. If that fails, check if the remote unit of that channel is still in place. Make sure the transmission is within range and path is clear of obstacles and interference.

HOW TO READ THE TEMPERATURE TREND CHART

The temperature variance of the indoor temperatures for the past 12 hours is automatically scanned on the screen in six equal columns.

The variance is represented in rows of degrees C above or below the current temperature at 0 Hr (current time) and 0°C (no variance).



HOW TO USE THE ICE WARNING

The ice warning is selected on the ICE WARNING slide switch on the main unit. The warning only applies to CHANNEL 1. To turn on the warning, slide the switch to ON. A beeping alarm will go off and the icon [*] will flash when the temperature recorded at CHANNEL 1 falls between -2°C (28.4°F) to +3°C (37.4°F). The alarm will go off every minute so long as the recorded temperature is within alarm range. To stop the alarm, press any key or change the channel. The icon [*] will still flash. To deactivate the ice warning function, slide the ICE WARNING switch to OFF.

NOTE ON °C AND °F

The unit of temperature display is selected on the °C/°F slide switch. Select °C for Centigrade or °F for Fahrenheit. Note that the remote temperature display on the main unit is dominated by the selection on the °C/°F slide switch of the main unit. Whatever the display units of the remote sensors are, they will be automatically converted to the chosen one of the main unit.

LOW BATTERY WARNING

When it is time to replace batteries, the respective [] indicator will show up when the respective channel is selected. The battery level of the main unit will be shown on the indoor temperature when it is running low.

Remote Unit

HOW TO USE THE TABLE STAND OR WALL MOUNTING

Flip open the table stand to place the main unit on a flat surface. Or you can flip close the stand and mount the unit on a wall using the recessed hole.

As for the remote unit, it comes with a wall-mount holder and a removable stand. Use either to hold the unit in place.

Main Unit

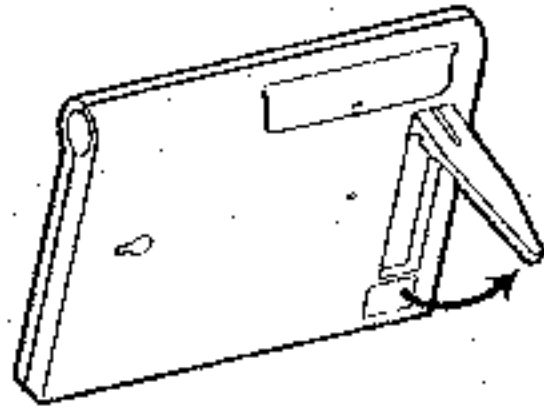
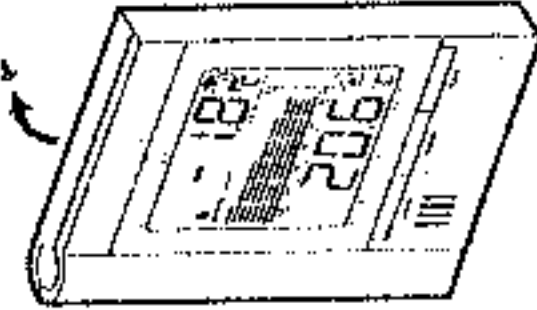


Table Stand



Wall Mount

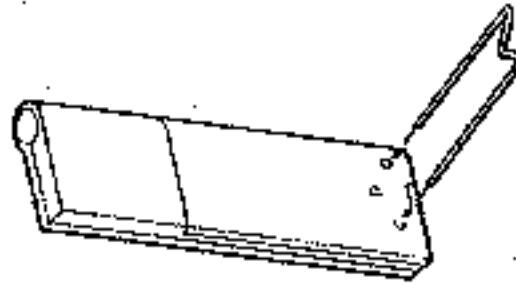


Table Stand



Wall Mount

THE RESET BUTTON

The RESET button is used to enhance synchronization of signals after battery replacement or when the unit is operating in an unfavorable way or malfunctioning. Use a blunt stylus to hold down the button. All settings will return to their default values.

PRECAUTIONS

This unit is engineered to give you years of satisfactory service if you handle it carefully. Here are a few precautions:

- 1. Do not immerse the unit in water.
- 2. Do not clean the unit with abrasive or corrosive materials.
- 3. Do not subject the unit to excessive force, shock, dust, temperature or humidity.

- 4. Do not tamper with the unit's internal components. Doing so will invalidate the warranty on the unit and may cause unnecessary damage.
- 5. Only use fresh batteries as specified in the user's instructions. Do not mix new and old batteries as the old ones may leak.
- 6. Always read the user's instructions thoroughly before operating the unit.

SPECIFICATIONS

Temperature Measurement

Main Unit

Indoor Temperature measurement

Displayed IN temperature range : -9.9°C to +70.0°C
(14.0°F to 158.0°F)

Proposed operating range

: -5.0°C to +50.0°C
(23.0°F to 122.0°F)

Temperature resolution

: 0.1°C (0.2°F)

Temperature Scale

: ≤ -7°C to ≥ 7°C

Ice Warning function

: -2°C to +3°C

(Channel-1 Remote Sensor)
(28.4°F to 37.4°F)

Remote Sensor Unit

Displayed range

: -50.0°C to +70.0°C
(-58.0°F to +158.0°F)

Proposed operating range

: -20.0°C to +60.0°C
(-4.0°F to +140.0°F)



Temperature resolution : 0.1°C (0.2°F)
 RF Transmission Frequency : 433 MHz
 No. of Remote unit : Maximum of 3
 RF Transmission Range : 30 meters
 Temperature sensing cycle : 30 seconds
 User selectable °C and °F

Power

Main unit : use 2 pcs UM-3 or "AA" 1.5V alkaline battery
 Remote unit : use 2 pcs UM-4 or "AAA" 1.5V alkaline battery

Weight

Main unit : 200 g (without battery)
 Remote sensing unit : 87 g (without battery)

Dimension

Main unit : 153 (L) x 117 (W) x 23.5 (T) mm
 Remote sensing unit : 152 (L) x 48 (W) x 23 (T) mm

NOTE ON COMPLIANCE

This product complies to standards and specifications of BZT, FCC and article number 334 of PTT.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is needed.
- Consult the dealer of an experienced radio/TV technician for help.

CAUTION

- The content of the manual is subject to change without further notice.
- Due to printing limitation, the displays shown in this manual may differ from the actual display.
- The manufacturer and its suppliers held no responsibility to you or any other person for any damage expenses, lost profits, or any other claim arise by using this product.
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