Cronotermostato Digitale
TUO WI-FI BATTERIA

User Manual
DIGITAL CHRONOTHERMOSTAT

vemer SPA

Index

English

This device is an electronic wall-mounting Wi-Fi chronothermostat powered by batteries, designed to act on the control circuit of the burner or of the circulation pump (heating mode) or on the control circuit of the air conditioner (air conditioning mode) in order to guarantee maintenance of the desired temperature.

Thanks to the Vemer Cloud service, you can access your device from anywhere in the world through the internet connection. Just connect the device to the home router and install the "**Clima Wi-Fi**"app, which can be downloaded from the iOS and Android stores, on your smartphone.
However, the device can also be used without connection to the Vemer Cloud, as a common weekly chronothermostat with batteries.
The choice whether to use the device with Wi-Fi connection or not, takes place during the initial configuration; this choice can however be changed by the user at any time.

Tuo Wi-Fi Batteria   Access Point   Cloud Vemer   App
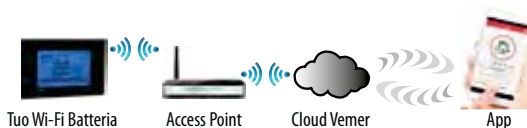
Code	Model	Description
VE788600	Tuo Wi-Fi Batteria Bianco	Wi-Fi chronothermostat with batteries colour white
VE788700	Tuo Wi-Fi Batteria Nero	Wi-Fi chronothermostat with batteries colour black

SAFETY WARNINGS

■ **During installation and operation of the device, it is necessary to comply with the following instructions:**

1) **The device must be installed by a skilled person, in strict compliance with the connection diagrams.**
2) **Do not power on or connect the device if any part of it is damaged.**
3) **After installation, inaccessibility to the connection terminals without appropriate tools must be guaranteed.**
4) **The device must be installed and activated in compliance with current electric systems standards.**
5) **Before accessing the connection terminals, verify that the leads are not live.**
6) **The device performs actions of 1B type and is suitable for environments with pollution degree 2 and overvoltage category III (EN 60730-1).**

IMPORTANT USAGE NOTES

In order to extend the battery life, the keypad is active only when the backlighting is on.

To activate the keypad, you need to press the key SET. The keypad remains active as long as the backlighting is turned on.
This operation is not shown in the procedures described here below in this user manual, but the user must take it into account every time he intends to use the device keypad.

The "**energy saving**" function is useful for extending the life of the batteries because it allows you to set the frequency with which the device connects to the Vemer Cloud to download any programming updates.

The basic setting (factory configuration) requires the device to log in to the Cloud:

- • in the winter period (from October 1st to April 30th) once every 15 minutes in the time slot from 6:00 to 24:00 and once every hour in the time slot from 24:00 to 6:00
- • in the summer period (from May 1st to September 30th) once every 8 hours

This setting should ensure the ideal compromise between battery life and parameters update frequency, but **can be customized by the user using the app "Clima Wi-Fi" (see page 55).**

It is important to keep in mind that any programming update can be received only by the device only at the next programmed connection to the Cloud.
If the user is close to the device, he can still force a connection by pressing the key ⌃ for at least 3 seconds until the symbol ⌢ starts flashing.

DIMENSIONS

130

28

85

CONNECTION DIAGRAM

NC NO C
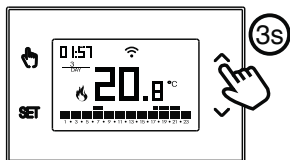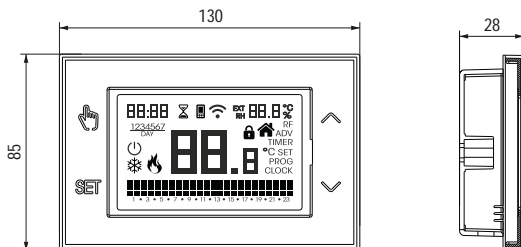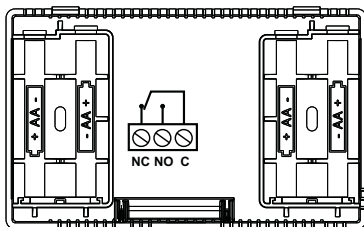
DEVICE DESCRIPTION
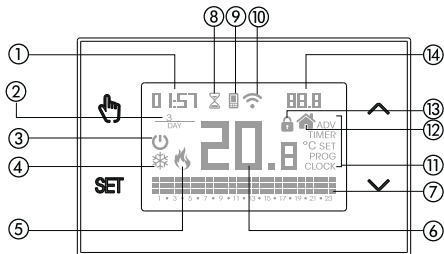
① Clock
② Day of the week
③ Off operation
④ Active load (conditioning mode)
⑤ Active load (heating mode)
⑥ Measured temperature
⑦ Running daily program divided into 24 histograms, one for each hour of the day.
Each hour is associated with one of the 3 temperatures:

■ Temperature **T1**   ■ Temperature **T2**   ■ Temperature **T3**

⑧ Active timed operation
⑨ Connection to the Vemer Cloud in progress
⑩ Connection to the active Wi-Fi network
⑪ Configuration menu:
   ADV   advanced parameters of the device
   TIMER   timings
   SET   automatic operating temperatures T1, T2, T3
   PROG   automatic operating programs
   CLOCK   date and time
⑫ Local active operation. In this status the device is disconnected from the
Cloud Vemer and any change in operation must be made using the keys on the
chronothermostat. Local operation can be disabled only by the app (see page 54)
⑬ Active keypad lock
⑭ Connection error information

English

DEVICE INSTALLATION AND CONFIGURATION

Device installation

The device can be installed on the wall or to cover the 3-module flush-mounting box (type 503).

We recommend positioning at a height of 1.5 meters from the floor, in an area that respects as much as possible the average temperature conditions of the entire environment. Make sure that the distance between the Access Point and the device is such as to guarantee stable communication.

Avoid installation near doors or windows, in niches, behind doors and curtains or in positions with excess or total lack of ventilation, to avoid that the reading of the temperature measured by the probe is in some way offset.

Preliminary operations

If you intend to use the device by remote control, before proceeding with the installation and configuration make sure you have a Vemer account available.

To create a Vemer account,
proceed as follows:

1. Install and start the **"Clima Wi-Fi"** app on your smartphone (or tablet)
2. Choose "Register" and fill in the "e-mail" and "password" fields
   Note: for security reasons it is recommended to choose a password different from the one used to access your e-mail box
3. Check your e-mail box: confirm the activation of the account by clicking on the link contained in the e-mail sent by the system
4. Log in by entering the e-mail address and password chosen in the registration process

Installing the device.

To install the device proceed as follows:

1. press the retaining hook on the underside to disconnect the display from the base
2. unscrew the terminal block cover **(A)**
3. pass the wires for connection to the boiler (or air conditioner) through the hole in the base and fix the latter to the wall (or to cover the 3-module recessed box) using the supplied screws **(B)** and connect the relay to the boiler or air conditioner control circuit
4. close the cover of the terminal block and tighten the sealing screw **(C)**
5. insert the batteries observing the correct polarity and taking care not to bend the contact strips **(D)**
6. reposition the display on the base, first coupling the teeth on the upper side **(E)**
7. turn the display until it hooks onto the retaining hook on the underside, applying slight pressure on the hook until you hear a **"click" (F)**
8. the display turns on: proceed with the device configuration
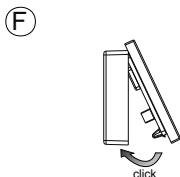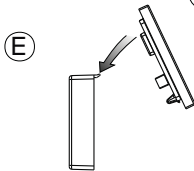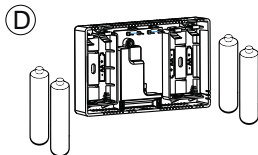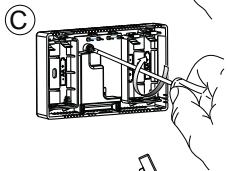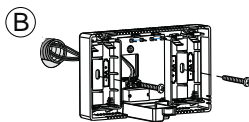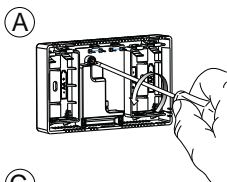
Device configuration with remote control (for Android)

To configure the device after the first power up or after a factory reset using an Android smartphone, proceed as follows:

1. While the screen shown is displayed in the figure on the side, press the keys ⌃ and ⌄ to choose **NET ON** and press the key 🕐 to confirm (a lack of choice within 30 seconds is equivalent to choosing NET ON).

2. Make sure the device displays "ⅭonF nEŁ". If not, press the keys 🕐 and SET simultaneously for a long time until the display shows "ⅭonF nEŁ" and the 🛜 icon starts flashing (wait for it to become steady before proceeding with the next point).

3. Start the app, choose "**New Thermostat**", select the **TUO BATTERIA** model among those available and press "**Next**".

4. Select the network "**iwm...**" to connect to the network generated by the device. Wait for the device display to show the 🖳 icon to indicate the successful connection between the app and the device.

5. Now choose the Wi-Fi network to connect the device to and enter the password, <u>be careful to digit faithfully all characters</u> (uppercase, lowercase, spaces, digits) that compose them. Confirm to continue.

Important: before proceeding make sure that the 🖳 icon on the device display is still on. Otherwise, access the Wi-Fi settings of the smartphone to manually reconnect to the "iwm ..." network

6. The device restarts: wait for the 🛜 icon on the device to become steady and the 🖳 icon to start flashing.

7. Enter a name that identifies the **Tuo Wi-Fi Batteria**, and choose an icon to help to identify the device from those proposed and confirm.

8. The configuration procedure is finished. Now: *the app* displays the list of devices associated with your account among which also the newly associated device must appear.. *The Tuo Wi-Fi Batteria* displays the main screen. Check that the icon 🛜 is steady and the time shown at the top left is correct.

NOTE: If the configuration is not successful, the message "**Err**" followed by a number may appear on the device display. Repeat the configuration procedure <u>be careful to digit faithfully all characters</u> (uppercase, lowercase, spaces, digits).

Device configuration with remote control (for iOS)

To configure the device after the first power up or after a factory reset using an iPhone proceed as follows:

1. While the screen shown is displayed in the figure on the side, press the keys 🔼 and 🔽 to choose **NET ON** and press the key 🔘 to confirm (a lack of choice within 30 seconds is equivalent to choosing NET ON).

2. Make sure the device displays "ᒧᒧᑎᖴ ᑎᕮᖕ".
   If not, press the keys 🔘 and SET simultaneously for a long time until the display shows "ᒧᒧᑎᖴ ᑎᕮᖕ" and the 📶 icon starts flashing (wait for it to become steady before proceeding with the next point).
3. Start the app, choose "**New Thermostat**", select the **TUO BATTERIA** model among those available and press "**Next**".
4. Connect to the "**iwm...**" network generated by the device by following the instructions on the App. Check that the device display shows the 🔲 icon and wait for the 📶 icon to appear on the iPhone display to indicate successful connection between the app and the device.
5. Now enter the complete name of the Wi-Fi network where connect the device and enter the password, be careful to digit faithfully all characters (uppercase, lowercase, spaces, digits) that compose them. Confirm to continue.

Important: before proceeding make sure that the 🔲 icon on the device display is still on. Otherwise, access the Wi-Fi settings of the smartphone to manually reconnect to the "iwm ..." network

6. The device restarts: wait for the 📶 icon on the device to become steady and the 🔲 icon to start flashing.
7. Enter a name that identifies the **Tuo Wi-Fi Batteria**, and choose an icon to help to identify the device from those proposed and confirm.
8. The configuration procedure is finished. Now:
   the app displays the list of devices associated with your account among which also the newly associated device must appear..
   The Tuo Wi-Fi Batteria displays the main screen. Check that the icon 📶 is steady and the time shown at the top left is correct.

NOTE: If the configuration is not successful, the message "**Err**" followed by a number may appear on the device display. Repeat the configuration procedure be careful to digit faithfully all characters (uppercase, lowercase, spaces, digits).

Device configuration without remote control

To use the device as a normal weekly chronothermostat with batteries (without Wi-Fi connection), proceed as follows:

1. When the screen shown in the figure on the side is displayed, press the keys ∧ and ∨ to choose **NET OFF** and press the key 🖐 to confirm (a lack of choice within 30 seconds is equivalent to choosing NET ON)

2. Set date and time. To set the date and time:
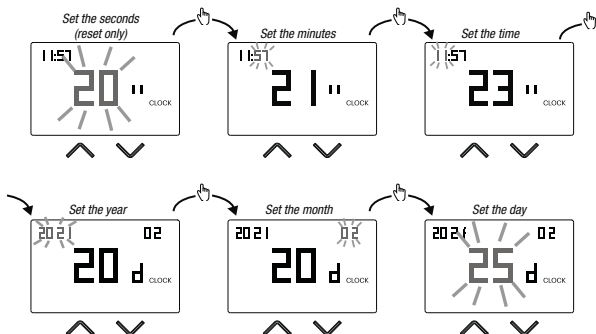
To exit the date and time setting:

• press the key SET for a long time to return to the home screen
• to change the settings of the summer/winter time change, press the key 🖐 for a long time (see "Configuration of the summer/winter time change" on page 60)

NOTE: if the device has been configured without remote control and later you want to connect it to the home Wi-Fi network, proceed as follows:

1. press the keys SET and 🖐 simultaneously for a long time until the display shows "`ConF nEt`".

2. follow points 3-4-5-6-7-8 of the configuration procedure with remote control described on page. 48 or 49.

APP DESCRIPTION

Thanks to the app you can control your device remotely, easily and intuitively.

Page "Devices list"

— identifies a device or created group

— allows you to record a new device

— allows you to group several devices
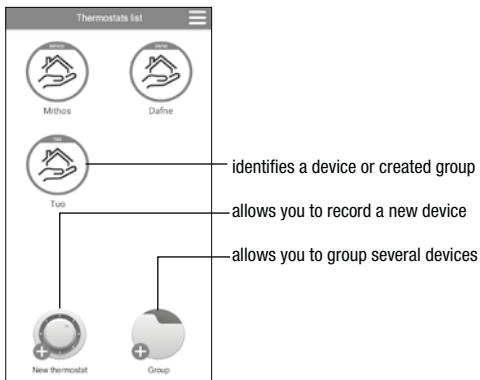
Main page

This screen shows the "TUO Wi-Fi Batteria" status:

indicates the measured temperature (25.0°C),
the operating mode (Heating),
the system status:
   🔥 (❄) red = on
   🔥 (❄) gray = off

indicates the set temperature
and running program name:
touch this area to access the program list

indicates operating mode:
touch this area to change the operating mode
(heating/cooling) and mode (automatic/manual/off).
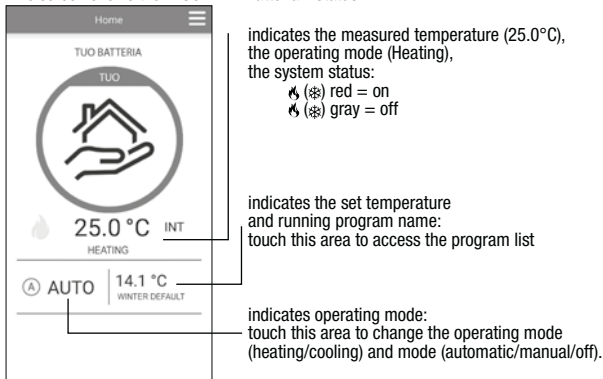
"Programs List" page

From the "Program List" screen, it is possible to:

 — to create a new program

to select, to modify, to delete or
to rename an existing program

Note: the padlock to the left of the name
WINTER DEFAULT indicates that the program
can not be modified or canceled
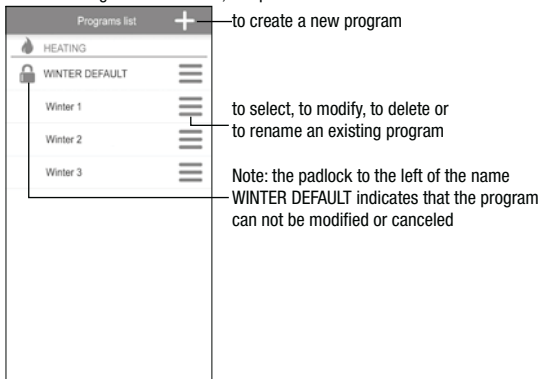
Modify a program

To modify an existing program, select the profile program of the day to be modified.
Created a program for a day, it's possible to copy it to any other day of the week
("Copy" function). It is also possible to set a delay of switching by tapping on the
desired time. To know what a switching delay is, see page 62.
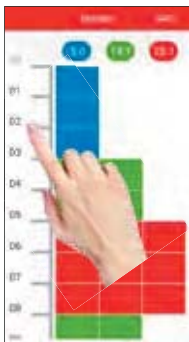
Configuration menu

Touch the symbol ≡ on the upper right to access the advanced configuration.

NOTE: the chronothermostat is compatible with *Google Home* and *Amazon Echo*.
By the association with *Google* or *Amazon* account is possible to interact with the device by giving voice commands by speaking to the *Voice Assistant* via the voice activated speaker.

"Tuo Wi-Fi Batteria" settings

set the name of "TUO BATTERIA"

modify the icon that identifies it

set the themperature values TO, T1, T2 and T3

access to the setting screen
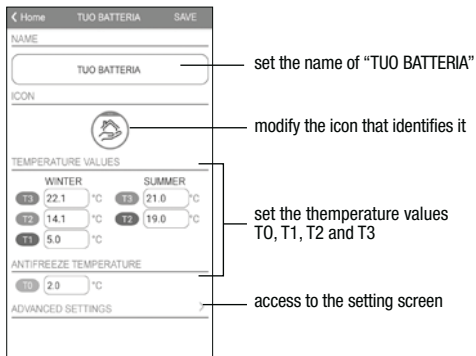
Set a holiday period

Set vacation days in which the regulation is turned off by selecting them on the calendar.
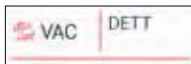
During the holiday period the operation filed shows VAC

Advanced settings
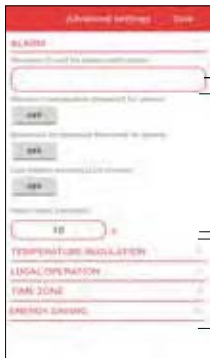
enter the user email who will receive the alarm

set temperature thresholds, low battery warning and delay to activate the alarm

access the screen for setting the temperature, blocking local operation, choosing the time zone and energy saving (battery management)

NOTE: LOCAL OPERATION

When the chronothermostat keyboard is operated, the device activates local operation. In this way the device does not check if there are new settings on the Cloud and adjusts the temperature according to the settings entered from the keyboard (the programming and configuration on the Cloud are not changed).

Local operation is indicated both on the device display by the icon ⌂ and on the app. Local operation can be stoped and/or disabled at any time from the app (but not from the device). If local operation is disabled (useful if you want to have control of the device only from the app), the 🔒 icon will appear on the display and when you try to access the configuration menu using the device keyboard, will not be possible to make changes.

Energy saving (battery management)
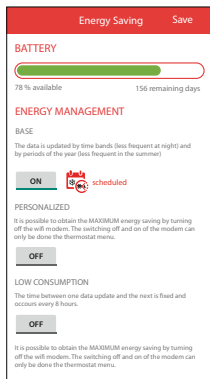
With this function you can set the frequency with which the device connects to the Cloud

• **"BASIC" setting:**
  - from October 1st to April 30th : every 15 minutes in the time slot from 6:00 to 24:00 and every hour in the time slot from 24:00 to 6:00
  - from May 1st to September 30th: every 8 hours

• **"CUSTOM" setting:**
  - to set the time interval between one connection and the other.
    Minimum value 10 minutes, maximum value 6 hours.

• **LOW CONSUMPTION" setting:**
  - to set up a connection every 8 hours.

The device can operate according to the following 3 modes:

Automatic mode

It allows you to use the device as a
chronothermostat and the temperature
regulation follows the "profile" of the
set program.
The program profile assigns one of the 3
temperatures T1, T2 or T3 to each hour of the day.
It is possible to assign a different program to each day of the week.
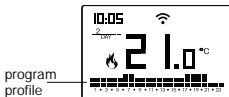
In the example, the device adjusts the temperature based on the value of:
T2 from 00:00 to 6:00 and from 8:00 to 17:00
T3 from 6:00 to 8:00 and from 17:00 to 21:00
T1 from 21:00 to 24:00
The values of T1, T2 and T3 can be set by the user.

Manual mode

It allows you to use the device as
a thermostat and the regulation is according
to the temperature Tm.

Off mode

It is suitable when long periods of absence are expected.
In this mode the device does not perform any regulation
however, if it works in heating mode, it maintains a
minimum temperature (antifreeze temperature) to prevent
possible freezing of the system.

To switch from automatic to manual operation

Automatic operation

10:05

2 DAY

21.0 °C

Tm operation

10:05

21.0 °C SET

∧ ∨

Manual operation

10:05

2 DAY

21.0 °C
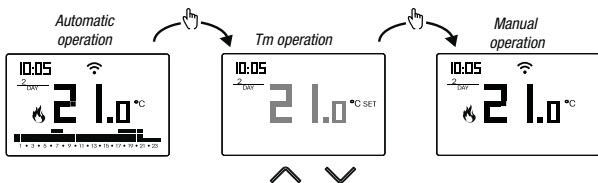
To switch from manual to automatic operation

Manual operation

10:05

2 DAY

21.0 °C

Tm operation

10:05

DAY

21.0 °C SET

Automatic operation

10:05

2 DAY

21.0 °C
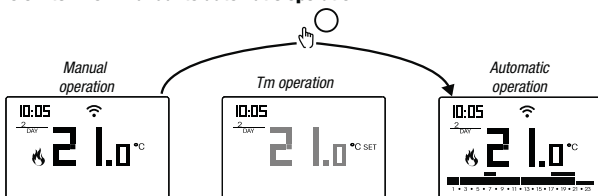
To switch from automatic operation (or manual) to the one switched off and viceversa

Automatic operation

10:05

2 DAY

21.0 °C

Off operation

10:05

2 DAY

⏻ 21.0 °C

English

The CLOCK menu allows you to set date and time. It also allows the configuration of the daylight saving time change.

The PROG menu allows you to change the programming of the automatic operating mode.

The SET menu allows you to modify of the values of the 3 temperatures of the automatic operation (T1, T2, T3).

The TIMER menu allows setting of one of the 3 timed operations.

The ADV menu allows you to configure the general operating parameters of the device.

CLOCK MENU - DATE AND TIME SETTING

When connected to the Wi-Fi network, the device acquires the date and time settings from the server and no settings are required.
If instead the device is not connected to the Wi-Fi network, proceed as follows:
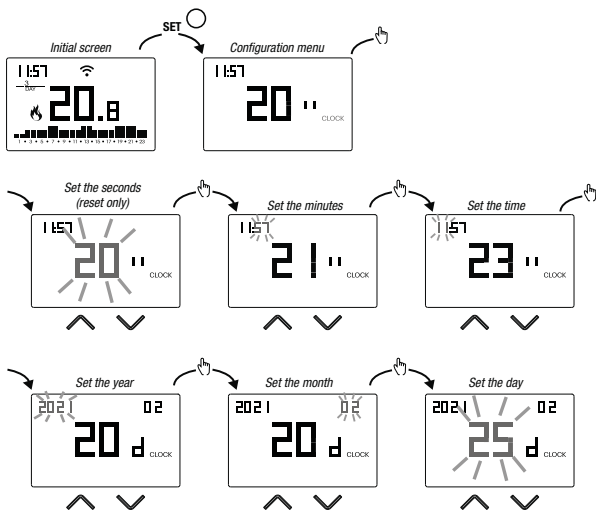
To exit the date and time setting:

• press the key [SET] once to return to the configuration menu
• press the key [SET] twice to exit the menu and return to the initial screen
• to change the settings of the summer/winter time change, press and hold for a long time the key 🖐 (see "Configuration of the summer/winter time change")

Configuration of the summer / winter time change

You can configure the device to independently manage the summer time update.
The factory setting includes:
  • the passage winter time → summer time (+1h) the last Sunday of March at 2:00 o'clock
  • the passage summer time → winter time (-1h) the last Sunday of October at 3:00 o' clock

To change the configuration of the summer/winter time change:
  • when changing any of the clock parameters (seconds, minutes, hour, year, month or day), keep the key 🖐 pressed for a long time until the display shows ᗅᑌᐸᗝ

Changing the clock

Automatic on/off time change
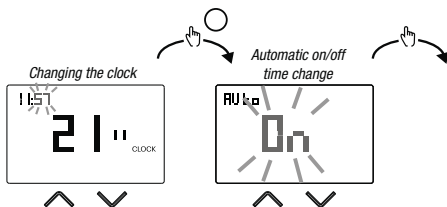
If the function is enabled (AUTO ON), it is necessary to set:
  • the day of the week (1= Monday...,7= Sunday)
  • the week of the month (1st= first, 2nd= second,...LSt= last)
  • the month of the year
  • time
using the keys ⌃ and ⌄ to set the value and the key 🖐 to confirm and move on to the next parameter.

o r ——————

a ——————

ee

mo
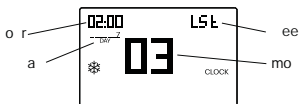
To exit the summer/winter time change configuration:
  • press the key SET once to return to the configuration menu
  • press the key SET twice to exit the menu

  Note: the winter time change → summer time is identified by the symbol ❄.
        the summer time change → winter time is identified by the symbol 🔥.

For example, in Italy the summer time starts the last (LST) Sunday (7) of March (03) at 2:00 o' clock and the last (LST) Sunday (7) of October (10) at 3:00 o' clock.

PROG MENU - PROGRAMS SETTINGS

Access the PROG menu to change the programming of the automatic operation.
The **factory setting** includes:
- the P1 program from Monday to Friday
- the P2 program on Saturday and Sunday

If this program is not suitable for your needs, you can:
- assign a different program for one or more days of the week
- modify one or more existing programs by personalizing the profile, that is, assigning different temperature levels for one or more hours of the day.

How to choose a different program for the day Y
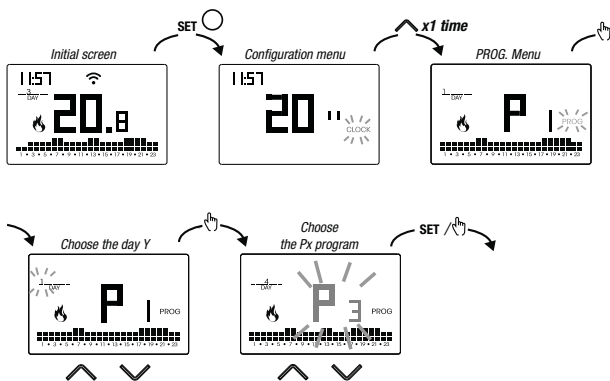
If the program meets the needs:

- press the key [SET] once to confirm and choose another day to which to assign a different program
- press the key [SET] twice to return to the configuration menu
- press the key [SET] three times to exit the menu and return to the initial screen

If no program meets the needs:

- choose the one that is closest to you and press the key 🖑 to customize the profile (see "How to customize the profile of a Px program")

How to customize the profile of a Px program

Choose the PX program

Choose the temperature for the selected time

Choose the temperature for the next hour
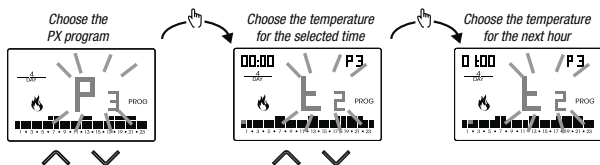
- starting from midnight 00:00, press the keys ⌃ and ⌄ to assign to each hour of the day one of the 3 possible temperatures (T1, T2, T3) and the key ☝ to confirm and go to the next hour.

- to enter a switching delay for the selected hour, hold down the key ☝ for a long time.
  For more information about switching delay, see "How the switching delay works"

When the profile program is suitable for your needs:
- press the key SET to exit the customization.

How the switching delay works

Set a switching delay for a specific hour
to maintain, for the duration of the delay, the temperature value
assigned to the previous hour.
For example, if the program includes:
   T2 from 12 to 13
   T3 from 13 to 14 pm with 30 minutes delay
the chronothermostat adjusts the temperature based on the value of
   T2 from 12 to 13.30 and
   T3 from 13.30 to 14.00
It is possible to set delays of 15, 30, 45 minutes,
independent for every hour of the day.

SET MENU - TEMPERATURES T1, T2, T3 SETTING

Access the SET menu to change the values of the 3 temperatures used in automatic operation. The factory setting includes:

• T1 = 5°C, T2 = 15°C, T3 = 18°C (heating/winter operation ❄)
• T1 = off, T2 = 23°C, T3 = 25°C (conditioning/summer operation ❄)

How to change the temperature values T1/ T2/ T3

Initial screen — **SET** — *Configuration menu* — **x2 times** — *SET Menu*

Change T1 — *Change T2* — *Change T3*
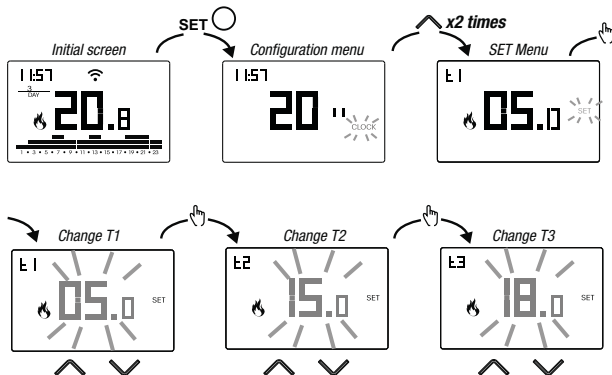
Per uscire dalla modifica delle temperature:
• premere una volta il tasto SET per tornare al menù di configurazione
• premere due volte il tasto SET per uscire dal menù e tornare alla schermata iniziale

Nota: sono ammessi valori di temperatura compresi tra L O (valore minimo) e H I (valore massimo).
Questi valori di fabbrica sono: L O = 2°C, H I = 50°C ma possono essere modificati attraverso il menù ADV.

Nota: è necessario rispettare la condizione T1 ≤ T2 ≤ T3.

TIMER MENU - TIMING SETTING

Set a timing to prolong the current operation for the duration of the timing itself. There are 3 timings available:

- **Timed manual:** set a time delay during manual operation to maintain this operation until timing has elapsed.
  At the end of the timing, the device activates the automatic operation.
- **Timed automatic:** set a timing during the automatic operation to maintain this operation until the timing has elapsed.
  At the end of the timing, the device activates the off operation
- **Off timed:** set a timing during off operation to maintain this operation until timing has elapsed. At the end of the timing, the device activates automatic or manual operation, depending on which operation was active before switching off.

How to set a timing
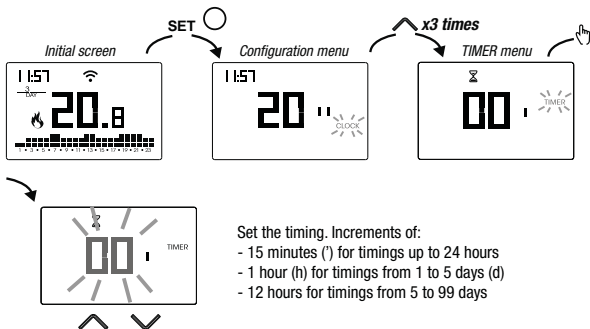
Set the timing. Increments of:
- 15 minutes (') for timings up to 24 hours
- 1 hour (h) for timings from 1 to 5 days (d)
- 12 hours for timings from 5 to 99 days

To exit the timing change:
- press the key [SET] once to return to the configuration menu
- press the key [SET] twice to exit the menu and return to the initial screen

When a timing is in progress, the symbol ⏳ is lit.

Note: to cancel a timing in progress or to exit without activating the timer, set 00'.
Note: the timing ends in the case of changes to the operating mode.

ADV MENU - ADVANCED PARAMETERS SETTING
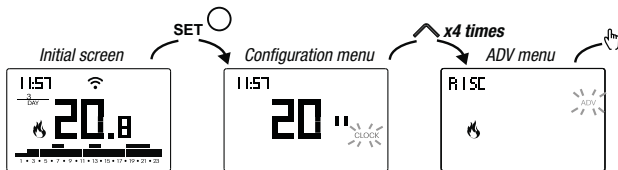
In the ADV menu, the parameters related to the advanced configuration of the device are proposed in sequence. Press:

- the keys ⌃ and ⌄ to change the value of the selected parameter
- the key 👆 to go to the next parameter
- the key SET to exit and confirm the changes

Note: the device exits the menu after about 40 seconds without any key being pressed.

Operating mode

Setting up:
- �052C if the device is connected to a heating system (winter operation)
- �nd if the device is connected to an air conditioning system (summer operation)

Factory value: �052C (heating).

Type of regulation (active only with heating operating mode)

Setting up:
- ▯ to choose on/off regulation.
- ▯ to choose proportional regulation.

Factory value: ▯ (on/off).
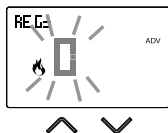
Note: the on/off regulation is suitable for most home situations.
Therefore it is advisable to modify this parameter only in case of real need.
For more information on the characteristics of the on/off and proportional regulation logic, see "Regulation types" on page 74.

Parameters for the regulation type
(this menu varies depending on the chosen regulation type)

If the chosen regulation type is on/off, set the
differential ▯ ▯F . Allowed values: 0.1°C ÷ 1°C.

Factory value: 0.3 °C

If the chosen regulation type is proportional,
set the band ▯▯▯ and the period ▯▯▯ .
Allowed values: 0.5°C ÷ 5°C (band),
10, 20 or 30 minutes (period).

Factory value: 0.5 °C (band),
10 minutes (period).

For more information on the parameters
of the regulation logics, see
"Regulation types" on page 74.
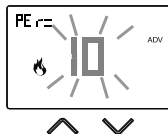
Antifreeze temperature (active only with heating operating mode)

The antifreeze temperature avoids the risk of freezing
of the system when on the chronothermostat is set
the off operation ⏻.

Allowed values: - - - (excluded), 1°C ÷ 50°C .

Factory value: 6 °C.

Note: the "- - -" setting excludes the antifreeze function; in this case, when the device
is off, no minimum temperature is guaranteed
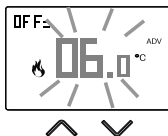
Adjustment of the measured temperature

In particular installation conditions, it can happen
that the temperature measured by the device deviates
from the average temperature present in the room.
In this case, introduce an adjustment temperature
with the ⊓⊔⊔ menu.

Allowed values: -5°C ÷ 5°C .

Factory value: 0 °C.

Note: the temperature value shown on the display during normal operation is inclusive
of any adjustment introduced.
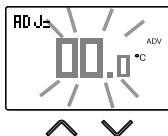
Modem Wi-Fi (NET)

The NET menu allows you to switch the modem on or off:

- **NET ON** = modem on, the device can connect to the
  home router to be controlled remotely with the
  "Clima Wi-Fi" app

- **NET OFF** = modem off, the device cannot be
  controlled remotely. In this case it is possible to
  program the device only using the keypad.
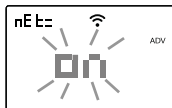
To use the device as a normal chronothermostat without connection to the Cloud, it is
advisable to turn off the modem to limit consumption and extend life of the batteries.
The subsequent reactivation of the modem can only be done from the keypad of the
device. In this case the device, if it had previously been connected to a Wi-Fi network,
attempts to connect to the Wi-Fi network with the previously saved parameters.

The 🛜 symbol on the home screen indicates the connection status:

- On fixed: modem on and device connected to the Cloud
- Off: modem off
- Blinking: modem on and connection problem.
  Field (14) indicates the cause:

  - **Lan**: no connection to the Wi-Fi network.
    If this condition persists, check that the router
    is turned on and that the network parameters
    have not been changed
  - **nEt**: lack of internet access.
    Check that the Wi-Fi network guarantees internet access
  - **CLd** : failure to connect to the Vemer Cloud.
    The problem resolves itself once the connection between the Vemer Cloud
    and the device is restored. If this condition persists for more than 24 hours,
    do not carry out any operation and contact Vemer assistance.
  - **CLd +** 🔋 flashing: the device is no longer associated with any user
    (see page 75)
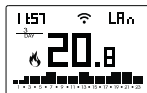
WiFi menu (active only with remote control enabled)

The signal strength ($F L d$) and the MAC address ($\Pi H c$) are information visible only when the modem is turned on (NET = ON). To switch between $F L d$ and $\Pi H c$ display, press the keys ⌃ and ⌄.

- • The signal strength indicates the quality of
  the connection with the access point.
  - values higher than -60dB: excellent signal quality
  - values between -60dB and -90dB: good signal quality
  - values below -90dB: poor signal quality which could
    compromise communication between the device
    and access point. In this case, move the device closer
    to the access point
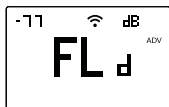
- • The MAC address of the device is a sequence alphanumeric that uniquely identifies
  a device within a network of devices.
  Reading must be done from left to right by scrolling through the 2 dedicated pages
  using the arrows (in the example: AA-F8-FA-C2-8d-7b).
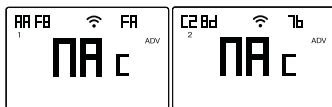
Minimum/Maximum settable temperature

Under particular installation conditions, for example in public buildings, hotels, etc., it may be useful to limit the range of values that the temperatures T1 / T2 / T3 and Tm can assume, in order to prevent incorrect settings by the user.

- $\mathsf{L\,\square}$ is the lower limit

  Allowed values: 2°C ÷ $\mathsf{H\,I}$
  Factory value: 2°C

- $\mathsf{H\,I}$ is the upper limit

  Allowed values: $\mathsf{L\,\square}$ ÷ 50°C
  Factory value: 50°C
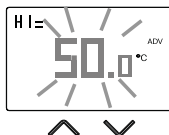
Activation / deactivation of the keypad lock

Under particular installation conditions, for example in public buildings, hotels, etc., it may be necessary to lock the keypad to prevent changes to the settings by unauthorized persons.

To activate the keypad lock,
set a password between 001 and 999.

To deactivate the lock, keep the key $\boxed{\vee}$
pressed until you set "--".
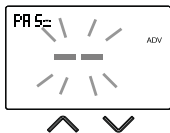
When the keypad lock is active, the symbol 🔒 appears on the display and, after pressing a key, the word $\mathsf{bL\,\square c}$ appears.
To find out how to unlock the keypad, see page 72.

English

Operating hour meter

It displays the operating hours of the system (relay contacts on C-NA).

The device has two counters (5-digit)
independent for heating operation
and for the conditioning operation, but
is displayed only the counter of the
selected operation mode.
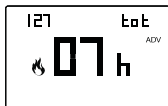
To reset the counter, keep the key [⟐] pressed for a long time during the display.
The maximum count is 65535h (about 7 years), when this digit is reached, the counter
resumes the count from 0h.

Battery charge level

Indicates the battery charge level as a percentage.

- For values greater than 20:
  - Guaranteed operation, no alarm signal

- For values below 20:
  - the device display flashes
  - the "Home" screen of the app shows the indication "replace the batteries"
  - the user receives a low battery alarm email (if the function is enabled)

- for values equal to 0
  - the device display flashes
  - the app shows a popup with the indication "low batteries"
  - the device turns off the modem and it is no longer possible to communicate
    with the device remotely. The temperature is adjusted until the batteries are
    completely discharged on the basis of the last programming set (whether
    downloaded from the Cloud or set from the keypad)
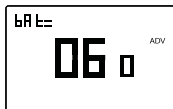
OTHER FUNCTIONS OF THE DEVICE

Display of minimum/maximum daily temperature

The device stores the maximum and minimum values of the temperature measured during the day.

Initial screen → *Maximum values display* → *Maximum values resetting*

Initial screen → *Minimum values display* → *Minimum values resetting*
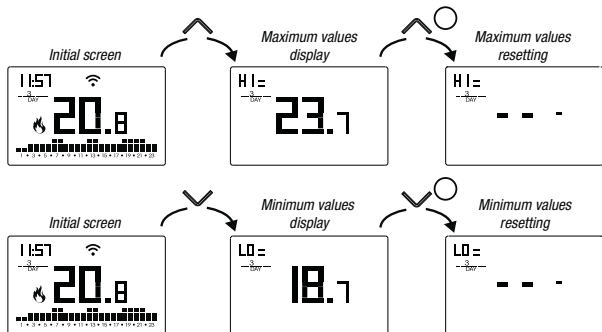
Keypad unlock

When the key lock is active, the device adjusts the temperature using the set programming. In this condition, after pressing a key, the display shows the writing "**bLOc**"

To unlock the keypad:

1. While displaying the writing "**bLOc**" hold down any of the 4 keys for a long time until the display shows "**- - -**".
2. Enter the correct password using the keys ⌃ and ⌄ and confirm with the key 🖑.

   The keypad remains unlocked for about 45 seconds from the last press of a key, after which the keypad reactivates the lock.

To deactivate the keypad lock, see page 70.

Note: if the password has been forgotten, to unlock the device it is necessary to remove and restore power to the device. When switched on again, the keyboard remains unlocked for 30 seconds, which is sufficient time to access the appropriate menu and consult / deactivate the password.

English

DEVICE RESET

Perform a reset to delete the settings entered and restore the device to the factory values (excluding the network settings for remote control which can be changed as described on pages 48-49).

To reset:
1. from the initial screen, press and hold the key [SET] to enter the configuration menu. The CLOCK indication flashes.
2. press and hold down the keys ⌃ and ⌄ simultaneously until " RES " appears on the display.
3. when the display shows all the segments, keep the key [SET] pressed until " dEF " appears
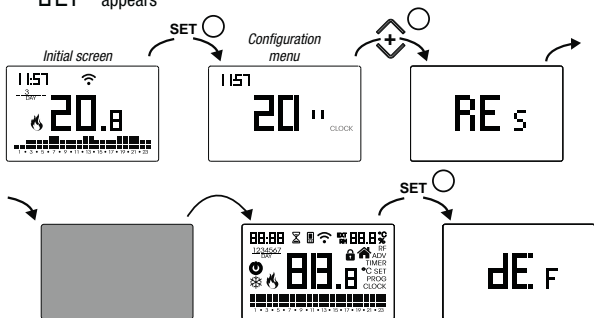
⚠ To reset if the key lock is active and you do not know the unlock password, you must remove and restore power and, when the display shows all the segments, keep the key [SET] pressed until " dEF " appears.

Operation mode	heating (winter)	Adj. ADJ temperature	0 ℃
Regulation type	on/off	Min. settable temperature	2 ℃
Differential (on/off)	0.3 ℃	Max. adjustable temperature	50 ℃
Band (proportional)	0.5 ℃	Hour meter operation 🔥/❄	0 h
Period (proportional)	10 minutes	Automatic summer time change	active (according to EU rules)
Antifreeze temperature OFF	6 ℃	Key lock password	deactivated

REGULATION TYPES

On/off regulation

With the on/off regulation, the device activates the heating (air conditioner) until the measured temperature is lower (higher) than the set one.

In order to avoid the oscillation straddling the set temperature which would cause the system to switch on and off continuously, a differential (or hysteresis) is introduced.

In this way the system is switched on:

  • in heating, when the ambient temperature drops below the value
    "set-temperature-differential" and remains on until the set temperature is reached.
  • in conditioning, when the ambient temperature exceeds the value
    "set temperature+ differential" and remains on until the set temperature is reached.

The differential can be set from the ADV menu (see page 65).

Keep in mind that a low differential (0.1°C - 0.2°C) leads as a consequence more frequent ignitions of the system but the temperature will be more uniform than a high value (0.9°C - 1°C).

Proportional regulation (only for operation = heating)

The proportional regulation allows to keep the ambient temperature more constant and is based on the concept of band and period. The regulation band is the temperature range (centered on the setpoint) in which the proportional regulation is implemented. The adjustment period is the duration of the adjustment cycle (Switch-on time Ton + Switch-off time Toff). Operation is described by the following diagram:
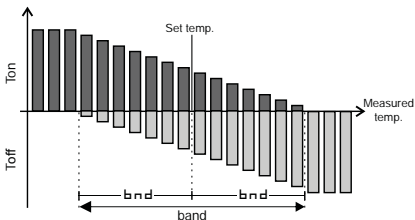
How to choose the period:
• 10 minutes for low thermal inertia systems (fancoil)
• 20 minutes for medium thermal inertia systems (aluminum radiators)
• 30 minutes for high thermal inertia systems (cast iron radiators)
How to choose the band:
• narrow band (0.5 °C) for systems with low thermal inertia
• narrow band (5 °C) for systems with high thermal inertia

HOW TO DO IN CASE OF REPLACEMENT OF THE ACCESS POINT

In case of replacement of the router/access point of the home network, it is necessary to connect the device to the new wi-fi network. Proceed as follows:

1. *On Tuo Wi-Fi Batteria*:
   a. Hold down the keys [⟳] and [SET] simultaneously until the display shows "ConF nEt"
2. *On the app*:
   b. Choose **"New Thermostat"** → **Tuo Batteria** → "Next"
   c. Connect to the "**iwm**..." network generated by the device and follow the instructions shown on the App. Wait for the device display show the icon 🖳 to indicate the successful connection between the app and the device.
   d. Now choose (with Android) or enter (with iOS) the complete name of the Wi-Fi network where connect the device and enter the password, be careful to digit faithfully all characters (uppercase, lowercase, spaces, digits) that compose them. Confirm to continue.
   e. Exit the app **without entering** the name and PIN serial number.

HOW TO TRANSFER CONTROL OF THE DEVICE FROM ONE ACCOUNT (USER) TO ANOTHER

If it is necessary to assign control of the device to another user (typical situation for example when the device is installed in a rented house and the tenants change), proceed as follows:

1. Disconnect the device from the old user (via one of the following two alternative ways):
   a. Access the Wi-Fi signal strength page (ADV → FLd menu, see page 69) and while the 🛜 icon flashes, hold down the [∧] and [∨] keys for a long time until the display shows "dEL"
   b. On the old user's app, access the "Device list" page and hold down the icon of the device to be deleted until the deletion confirmation request appears. At the end of one of the two operations of deleting the device from your account, the 🖳 icon will start flashing on the chronothermostat display

2. *On the app* of the new tenant:
   perform the device configuration procedure with the new user account (see pages 48-49).

TECHNICAL CHARACTERISTICS

- Power supply: 4 1.5V alkaline batteries (type AA)
- Battery life: up to 36 months thanks to the energy saving function
- Output: bistable relay with changeover contact 5A / 250V AC
- Weekly programming with 3 settable temperatures: T1, T2, T3
- Daily resolution: 1h
- Switch-on delay set between 15, 30 or 45 minutes (independent for each hour)
- Measured temperature scale: 0°C ÷ + 50°C
- Measured and displayed temperature resolution: 0.1°C
- Temperature regulation range: 2.0°C ÷ + 50°C
- Measurement update: every 20 seconds
- Measurement accuracy: ± 0.5 ° C
- Temperature regulation:
  – on/off with adjustable differential between 0.1°C and 1°C
  – proportional with settable band and regulation period
- Operating mode: heating (winter) or conditioning (summer)
- Automatic winter time/summer time
- Keypad lock with password for installation in public places
- Wall installation (or covering the box 503)
- Terminal block for cables with section of 1.5 mm^2
- Operating frequency band: 2.4 GHz IEEE 802.11 b/g/n
- Maximum power of transmitted radiofrequency: 18.3 dBm
- Operating temperature: 0°C ÷ +50°C
- Operating humidity: 20% ÷ 90% non condensing
- Storage temperature: -20°C ÷ +65°C
- Degree of protection: IP: XXD
- Insulation: reinforced between accessible parts (front) and all other terminals

DISPOSAL OF BATTERIES

⚠ It is necessary to remove the batteries
before the instrument is scrapped.

⚠ In case of replacement, dispose of the batteries in the
appropriate places separate waste collection containers.

REFERENCE STANDARDS

EU CONFORMITY DECLARATION

Vemer declares that the device complies with the Communitary Directive:
2014/53/EU (RED)
with reference to the following standards:
**EN 60730-2-7, EN 60730-2-9, ETSI EN 300 328, ETSI EN 301 489-1,
ETSI EN 301 489-17**

The full text of the EU Conformity Declaration is available at www.vemer.it address.

**information to users pursuant to art. 14 of the directive
2012/19 / EU of the european parliament and of the council
of 4 july 2012 on waste electrical and electronic equipment (WEEE)**

If the crossed-out bin symbol appears on the equipment
or packaging, this means the product must not be included
with other general waste at the end of its working life.

The user must take the worn product to a sorted waste center,
or return it to the retailer when purchasing a new one.

Products for disposal can be consigned free of charge
(without any new purchase obligation) to retailers with a sales area
of at least 400 m², if they measure less than 25 cm.

An efficient sorted waste collection for the environmentally friendly
disposal of the used device, or its subsequent recycling, helps avoid
the potential negative effects on the environment and people's health,
and encourages the re-use and/or recycling of the construction materials.

English

P1

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3							■	■										■	■	■	■	■		
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P2

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3							■	■	■	■	■	■	■	■	■	■	■	■	■	■				
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P3

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3							■	■					■	■				■	■	■	■			
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P4

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3								■	■	■	■	■	■	■	■	■	■	■						
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P5

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3							■	■						■	■	■	■	■	■	■				
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P6

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3																								
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P7

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3																								
T2																								
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P1

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3	■	■	■	■	■	■			■	■	■	■	■	■	■	■							■	■
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P2

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3	■	■	■	■	■	■	■																■	■
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P3

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3	■	■	■	■	■	■			■	■	■	■			■	■	■						■	■
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P4

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3	■	■	■	■	■	■													■	■	■	■	■	■
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P5

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3	■	■	■	■	■	■			■	■	■	■	■	■									■	■
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P6

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3																								
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P7

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3																								
T2																								
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

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