INSTALLATION AND OPERATING INSTRUCTIONS
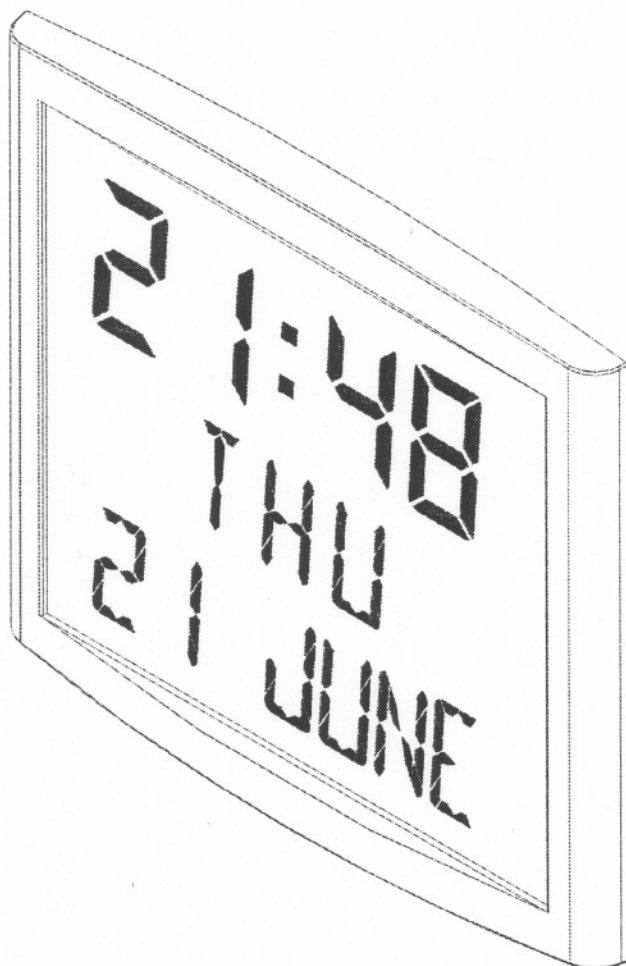
INSTALLATION UND GEBRAUCHSANWEISUNG

Cristalys Date

$$CE$$

When receiving goods please check nothing is broken otherwise make a claim near shipping company.

Bitte, vergewissern Sie sich am Empfang der Waren, daß diese keine Schaden erlitten.

Table of contents

I - INITIAL VERIFICATION

Thank you for choosing a Cristalys clock.

We advise you to read this manual thoroughly before attempting to manipulate the clock.

These ⚠ indicate important comments.

Keep this booklet during all the life of your clock, so that you can refer to it each time it is necessary.

1.1 Unpacking the clock

Unpack with caution and check the contents of the packaging. It must contain :
- The Cristalys date clock clipped on to its wall holder,
- For batteries version, 4 x 1,5 volt batteries, type LR 14,
- A fixation kit (2 screws + 2 rawlplugs),
- A cleaning kit (impregnated antistatic cloth)
- This booklet,
- with option, a table holder.

Remark : when unpacking, some segments of the clock can be activated. This is not a default, insert batteries, or connect the low voltage power supply and after a few seconds the problem will disappear.

Versions : A descriptive label is fixed to the back of the clock :

IND QZ = the clock is independent.

RAD FI = the clock is radio-synchronised by a *France Inter* antenna.

RAD DCF = the clock is radio-synchronised by a DCF antenna.

AF/IMP PILE = the clock is receiving (driven by a master clock delivering impulses, minute or 1/2 minute, on a serial or parallel line, or coded time AFNOR NFS-87500A).

AF/IMP +6/24V = the clock works similarly but is powered by an external power supply delivering between 6 and 24V AC/DC.

The manufacturer accepts no responsibility for any use not in compliance with these instructions.

Any modification to the product will invalidate the warrantee.

1.2 Cleaning

Use an antistatic product of similar type to the one shipped in the original packaging. Never use alcohol, acetone or any other solvent liable to damage the casing and filter on your World clock.

1.3 Backup

All the parameters for the clock are saved permanently even in the absence of batteries. However, the date and time (time basis) are not saved in the absence of batteries. The clocks powered by external low voltage (+6/24V) keep their time bases during a few days thanks to their internal battery.

II - INTRODUCTION TO THE *CRISTALYS* CLOCK

The Cristalys Date clock is a calendar clock for indoor use. For the clocks with batteries (type LR14), the service life of the batteries is over 3 years.
It displays the hours (in 12 hr or 24 hr mode), minutes and date. It automatically manages summer-winter time changeovers.
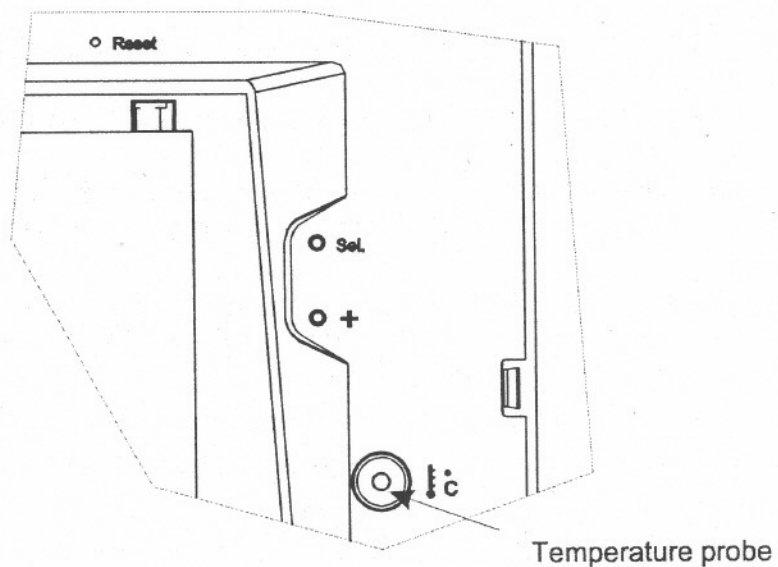An ECO function enables the display to be switched off at night between 11.00pm and 06.00am.

It has three menus for making adjustments :
- the **time setting menu** ;
- the **configuration menu** ;
- the **technician menu**, which is reserved for maintenance personnel .

Adjustments can be made using the two push buttons [SEL] and [+] located on the back of the clock.

Diag. 1

Temperature probe

III - SETTING IN OPERATION - INSTALLATION

3.1 Clock with batteries

Fitting the batteries

A. Turn the clock over onto a table.
   Unscrew the anti-theft locking screw.
   Push in front of the 2 arrows on the wall
   bracket to unclip it.
   Remove the wall bracket / battery cover on
   the back of the clock.

b. Insert the 4 batteries (type LR14) matching up
   the [+] and [-] symbols (the clock can function
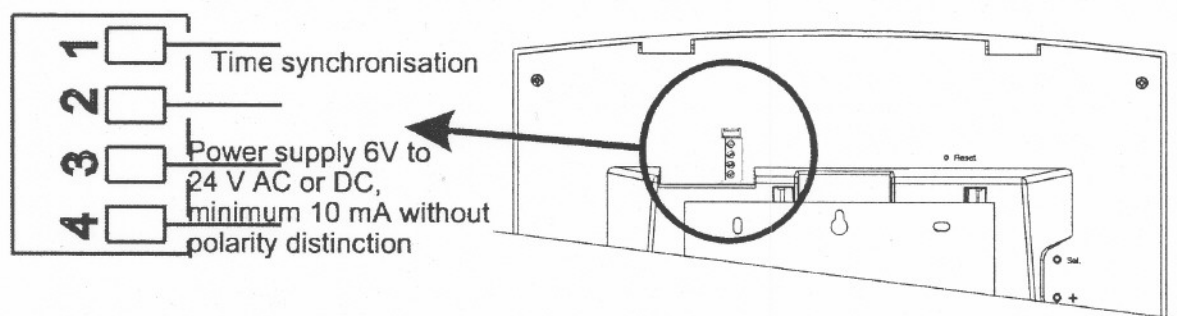   with only the upper 2 batteries).
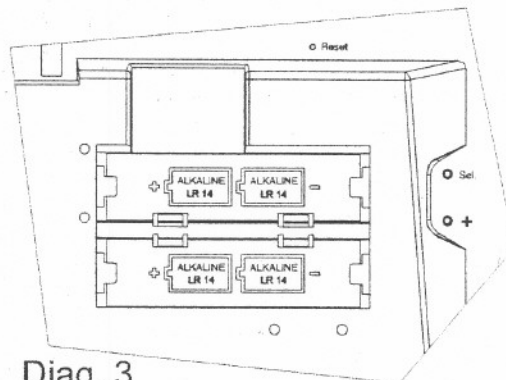
Diag. 3

Using batteries

⚠️ **Caution** : You should not drop, heat, make holes in, dismantle, modify or short circuit
the batteries, nor allow them to come into contact with water or fire. Do not use different
makes of batteries together.
Always use batteries from the same batch. Never mix new batteries with used ones.
Dispose of used batteries in accordance with the instructions given and with the laws in
force in the country.

3.2 Clock with external power supply

For external power supply Cristalys clock : connect the low voltage power supply, 6V to 24
V AC or DC on terminals 3 and 4.

1 — Time synchronisation
2 —
3 — Power supply 6V to
     24 V AC or DC,
4 — minimum 10 mA without
     polarity distinction

⚠️ The external power pack must be
SELV-type, supplying voltage contained between 6 and 24V AC/DC, 10 mA minimum and in
accordance with the limited power supply criteria of the EN60950 standard § 2.5.
Do not insert batteries if an external power supply is connected.

3.3 Link-up to a time distribution network

Cristalys clocks can be synchronised by Minute or ½ minute //, or IRIG-B/AFNOR time
distribution network.

Connect the time coded line to terminals 1 and 2 on the terminal strip.

Time distribution type has to be configured in the technician menu (see page 20

Time synchronisation

Minute //, ½ minute // or IRIG-B/AFNOR impuls

Power supply
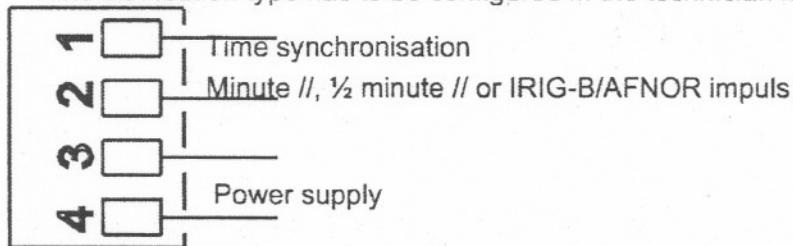
Remark : There is no polarity, but if there is several clocks, they have to be connect in the same order.

3.4 Installation

161

90

Diag.: 2

150

100

Anti-theft locking screw
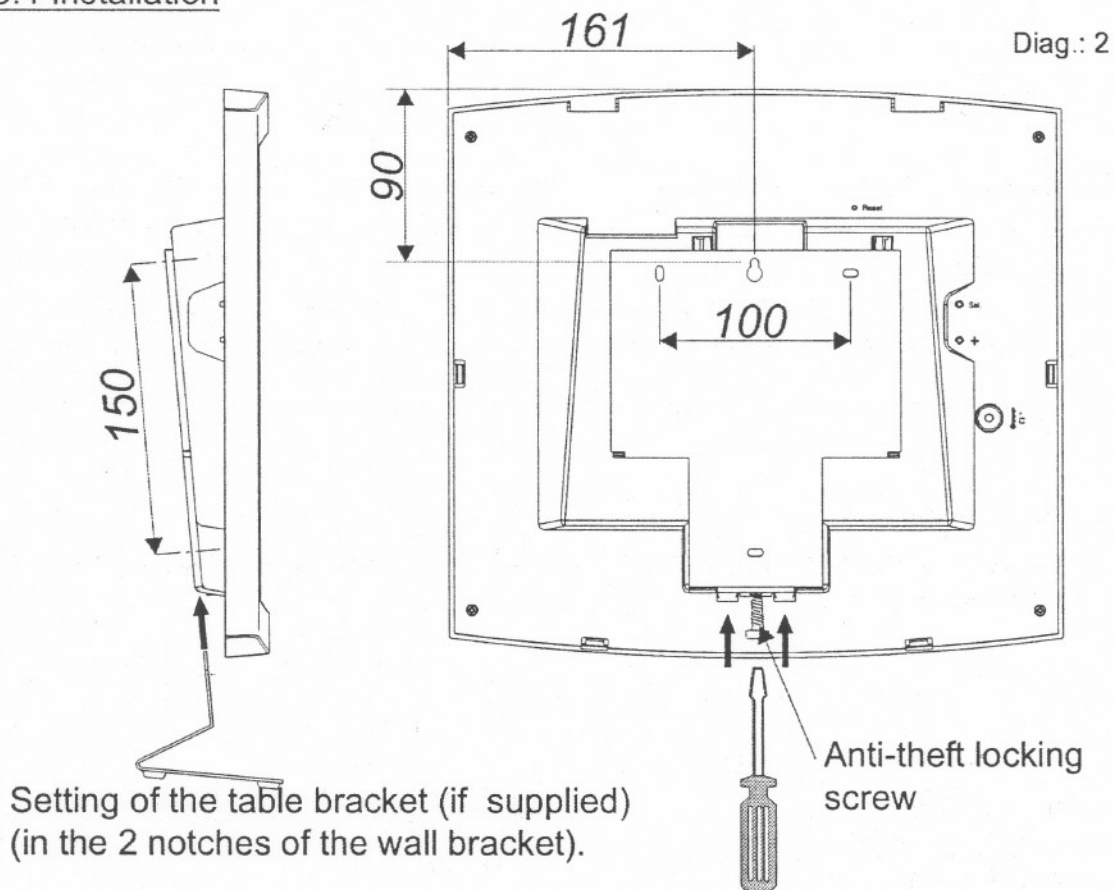
Setting of the table bracket (if supplied)
(in the 2 notches of the wall bracket).

- Fit the wall bracket using the plugs and screws supplied (see the drill template page 21).
- Clip the clock in place on the bracket and secure with the anti-theft locking screw provided (see Diag.2).
- Remove the protective sheet from the front panel and use the anti-static cloth to clean the clock.

Mounting on vertical bracket or ceiling bracket :

- Cristalys clocks can be installed on various types of brackets (ref. 938901, 938907 and 938908). See the installation manual delivered with the bracket.

IV - TIME SETTING MENU

4.1 Quartz Clock with batteries

Adjusting the time and date

The [SEL] button enables you to shift between
the different menus and the [+] button enables
you to scroll through the setting values.
Each time [SEL] is pressed, the option that is
flashing is validated.
To set the clock to the correct time, proceed as
follows :

1. a On installing the batteries or on the initial powering up, the time is
     initialised at 00h00 01/01/2000. Press [SEL] for 2 seconds : the
     hour flashes.

   b Press [+] until the required hour is shown (the display of hours takes
      account of the 12 /24 hr mode, see paragraph 5 page 11).

2. a Validate the hour by pressing [SEL] : the minutes flash.
   b Press [+] until the required minute is displayed. To synchronise your
      clock to the nearest second, select the current minute +1 and as
      the minute pips, validate by pressing [SEL] ;
      The internal second counter is then reset to zero and starts up.

3. a Having validated the minutes : the year flashes.

   b Press [+] until the current year is displayed.

4. a Validate the year by pressing [SEL] : the month flashes.
   b Press [+] until the required month is displayed.

5. a Press [SEL] to validate the month : the day flashes.

   b Press [+] until the chosen day is displayed (Scrolling of the days
      takes account of the month and year selected (leap years)).

6. a To conclude time setting, press the [SEL] button.

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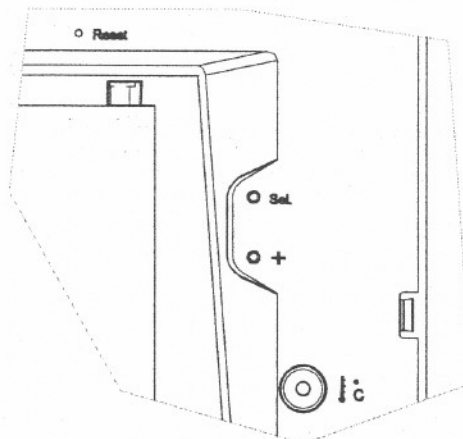
(1)*Maintaining pressure on the [+] button for longer enables you to increase the values rapidly
(minutes, hours, days, etc).*

Caution : At any time by holding down [SEL] then :
pressing [+] quickly, will return you to normal display mode.
pressing [+] for longer (more than 3 seconds), will take you to the configuration menu.
If no buttons are pressed for a period of over 10 minutes, the clock automatically returns to normal time display mode.

4.2 Radio synchronised Clock

If the quality of reception is good, the time on the clock will be set automatically. In zones where the radio signal is difficult to receive, clock can be set on time manually, following the procedure described in the previous chapter.

4.3 AFNOR or impulses slave Clock

The time on the AFNOR/Irig-b slave clock will be set automatically.
After a reset or a time setting, the clock search each minute, during 20 seconds, until it get synchronised.
Minute or ½ minute slave clocks must be set to the time of time distribution network.

Remark : See the chapter "Technician Menu" page 20 to parameter to time distribution.

Caution : In case of no AFNOR synchronisation message :
- After setting up or after changing the batteries, the time will not be running and the clock will only display two points.
- It is always possible to modify the time setting but the time will not be running and the cock will only display the two points.

V - CONFIGURATION MENU

This mode enables you to select the different modes : 12 /24 hr, Eco, language selection, type of display, summer-winter time zone and time difference. With the different languages, there are no less than 4 million display possibilities offered by your calendar clock. We only give the simple functions below, but by combining them, you can find them all.

To programme your clock, select the display option below then go to the paragraph "Advanced Functions" page 11.

Standard display on your clock.

Hour
Day of the week
Date

Time display in 12 hr AM/PM mode.
Go into the configuration menu, point "2" (page 11).

Changing the language.
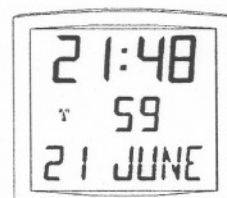Go to the configuration menu, point "4" (page 11).

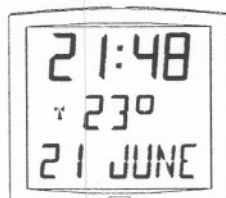**Alternating display in 2 languages.**
Go into the configuration menu point "4" (page 11).

Display of the central line : To access these functions, go into the configuration menu, point "5"

(page 12).
seconds

temperature   day of the week

day number

week n°

Alternating display between 2 functions on the second line

```
2 1:48
THU
2 1 JUNE
```
```
2 1:48
  Y 23°
2 1 JUNE
```

To alternate the display between 2 functions, go to point "4" (page 11).

A single alternating mode is possible, this is why you cannot display alternating information in 2 languages. But the alternating display of functions is compatible with the options (date "DT", event "EV" or world "WO") for the language selected.

Select and validate the option (otherwise, select "- -").

Select and validate the following option alternating display "Alt".

Display of the bottom line :

```
2 1:48
  Y THU
2 1·6·0 1
```

Digital display of the date.

Go into the configuration menu, point "4" (page 11).

Select and validate the first language, then select and validate the option "DT".


```
2 1:48
THU
D-5
```

Countdown to an event.

Go into the configuration menu, point "4" (page 11).

Select and validate the first language, then select and validate the option "EV".

Select the date of this event (year, month, day).

Then select the display mode for this event.

Either fixed validating by FIX or alternated with the date validating by ALT or alternated with a programmed message validating by ALT PRG.


```
2 1:48
THU
20YEARS
```

N.B. when the countdown is finished, the clock returns to displaying the date.


```
2 1:48
  Y THU
LONDON
```

World Clock.

To display the name of a city as a fixture, go into the configuration menu, point "4" (page 11).

Select and validate the first language, then select and validate the option "WO".

Select and validate the city.

Then select the display mode fixed or alternated with the date.

Configuration menu

1. To go to **Configuration mode**, press the [SEL] button and while holding it down press [+] for more than 3 seconds.

2. The 12/24 menu is displayed. Press [+] to choose between "*12h*" mode (display of AM/PM from 1 hr to 12 hrs) or "*24 h*" mode (display from 0,00 to 23.00 hrs). Press [SEL] to validate.

3. The Economy menu is displayed "*Eco*" or "*nor*". Press [+] to choose normal "*nor*" or economy "*Eco*" mode. The latter mode switches off the display between 11pm and 06am (period not parameterisable), to enable savings of up to 20% on the battery charge. Press [SEL] to validate.

4. The Language display menu appears. This menu determines the information which will be displayed :

- Display language, choice available :

• F French	• NL Dutch	• HG Hungarian
• GB English	• DK Danish	• SL Slovene
• D German	• N Norwegian	• HR Croatian
• SP Spanish	• S Swedish	• TR Turkish
• I Italian	• FI Finnish	• CA Catalan
• P Portuguese	• PL Polish	• BA Basque

- Then, after validation ; the choice between a second language for alternating display or :

  – "--", no second language.

  – "DT", display date in digital format (eg : 21-6-01).

  – "WO" WORLD function, displays the name of a city as a fixture on the bottom line. 5 cities to choose from (Paris, London, Tokyo, New York, Sydney) or PRG mode to enter the name of a city or site (7 characters maximum).

  – "EV", displays the countdown in days before an event (eg : D-194 days before the Euro is adopted).

4.a **The sub-menu** *Language1* **is displayed**[2].

---

(2)Reminder : At any time, by holding down [SEL] then pressing [+] quickly, it is possible to go to normal display mode and exit the configuration menu.

The display language flashes. Choose the language with [+] (table below) and validate with [SEL].

4.b   **The sub-menu** *Language2* **is displayed.**
Choose with [+] from the different options :

"--", to validate the first language only,

Display of a second language alternating with the first language selected. Validate with [SEL].

"DT", this option will display the date on the bottom line of your clock, validate with [SEL].

"WO" World function, this option displays the name of a city on the bottom line, validate with [SEL].

"EV",display of a countdown to an event in days, validate and go to point 7 (page 16) to follow the programming.

5.a   After validation, the sub-menu "centre info" appears :

This menu determines the information which will appear on the centre line. With [+] choose between :

Display of the day of the week :

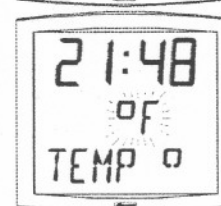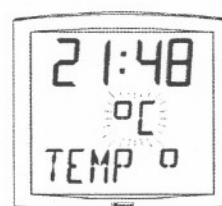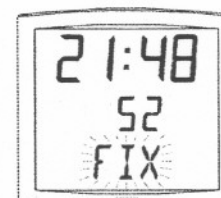Display of the day number :
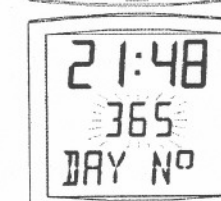
Display of the week number :

```
2 1:48
   52
 WEEK Nº
```

Display of the seconds :

```
2 1:48
   60
 SECONDS
```

Display of the temperature Celsius or
Fahrenheit[3] (limited at 99°) :

```
2 1:48        2 1:48
  °C            °F
 TEMP °       TEMP °
```
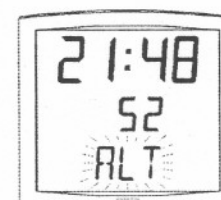
Press [SEL] to validate.

5.b The Display sub-menu appears : it enables
you to obtain :

a fixed display, choose FIX with [+]

```
2 1:48
   52
  FIX
```

an alternating display, choose ALT with [+], alternating between the
day of the week or the World function and the information selected
above.
Press [SEL] to validate.

```
2 1:48
   52
  ALT
```

6.a The *Time mode* menu appears. This enables you to specify the
geographic zone in which the clock is located (to automatically
manage the summer/winter time changeovers) or to give (for radio synchronised or
AFNOR/Irig-B receiver models) a *"time difference"* in relation to UTC time.
b Press [+] and choose your zone from the list available (eight predefined zones and one
programmable).
The change from summer to winter time = BDT[4] - 1 h.
The change from winter to summer time = BDT + 1 h.

Central Europe Zone "mode_eur" (France, Germany, etc.).
Winter to summer time = last Sunday in March at 1am UTC[5] (that is
2am local time).

```
Eu r

EUROPE
```

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(3)*Fahrenheit temperature display is only available on special program version*
(4) *BDT = Time base*
(5)*UTC = Universal Time Code, corresponding to the Greenwich meridian*

Summer to Winter time = last Sunday in October at 1am UTC (that is 3am local time).

Western Europe Zone "mode_eu-1" (England, Portugal, Ireland).
Winter to summer time = last Sunday in March at 1am UTC (that is 1am local time).
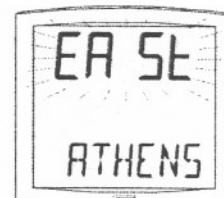Summer to Winter time = last Sunday in October at 1am UTC (that is 2am local time).
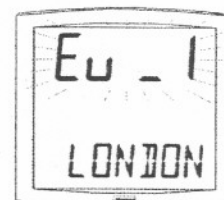
Eastern Europe Zone "mode_east " (Greece, Finland, etc).
Winter to summer time = last Sunday in March at 1am UTC (that is 3am local time).
Summer to Winter time = last Sunday in October at 1am UTC (that is 4am local time).

East USA Zone "mode_usae" (New York, Toronto, etc).
Winter to summer time = first Sunday in April at 2am local time.
Summer to Winter time = last Sunday in October at 2am local time.

Central USA Zone "mode_usac" (Chicago).
Winter to summer time = first Sunday in April at 2am local time.
Summer to Winter time = last Sunday in October at 2am local time.

Mountain USA Zone "mode_usam" (Denver).
Winter to summer time = first Sunday in April at 2am local time.
Summer to Winter time = last Sunday in October at 2am local time.

Pacific USA Zone "mode_usap" (Los Angeles).
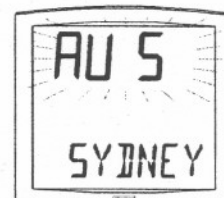Winter to summer time = first Sunday in April at 2am local time.
Summer to Winter time = last Sunday in October at 2am local time.

Australia Zone "mode_aus" (Sydney).
Winter to summer time = last Sunday in October at 2am local time.
Summer to Winter time = last Sunday in March at 3am local time.

Without seasonal change "mode_gmt".
No summer/winter changeover.
For radio synchronised or AFNOR clocks, it is necessary to programme the time zone.
The GMT function imposes an offset between the time received in coded time (radio or AFNOR message) and the time displayed.
Validate this option with the [SEL] button.

Menu only operational for radio synchronised or AFNOR/Irig-B in mode LOC models.

Setting the offset in GMT mode.

The offset can be adjusted by pressing [+]. The value to be chosen is between -12 h 30 and +12 h 30 by increments of 0 h 30.
The time displayed = GMT + or - x hours.

⚠ **N.B. : for independent clocks (without external synchronisation, radio or time distribution), this adjustment is inactive. The time is adjusted only via the time setting menu and the geographic zone selection.**

A independent clock in GMT zone = no seasonal changeover.
A independent clock in xx zone = seasonal changeover according to the zone.

Seasonal change programmable on "mode_prg"
This menu enables you to programme the dates of summer/winter time changeovers. It allows you to determine the start of the summer period (points 1 to 3) then the start of the winter period (point 4 and following points).

1) Go to mode_prg and press [SEL] : the number of the month flashes.

Press [+] to select the month.

2)Press [SEL] : "Order" flashes. Order denotes the sequence number for the day of the week[6] (from 1 to 5 according to the months) (order always denotes the last week).

The value "F" gives the choice of a fixed date.

_____
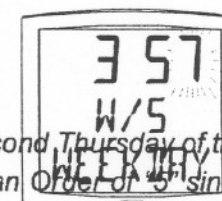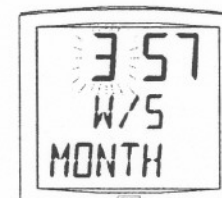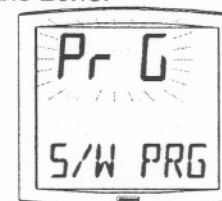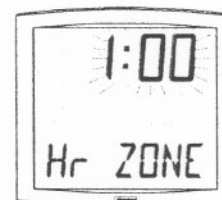
(6)*Example of Order calculation : the second Monday of the month and the second Thursday of the month will each have an Order of "2". While the last Tuesday in June has an Order of "5" since there are no more than 5 weeks in a month.*

3) Having determined the Order, press [SEL] : the "number of the day" flashes.
– **Choice of a day of the week** (Order from 1 to 7) : press [+] and select one of the values between 1 (Monday) and 7 (Sunday).

– **Choice of a fixed date** (Order = F) : press [+] and select a value between 1 and the last day of the chosen month[7].

4) Press [SEL] : the number of the month flashes. Give the start of the winter period. Press [+] to select the month. Then continue as described in points 2 and 3 to set the start of the summer period.
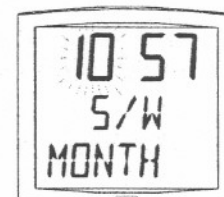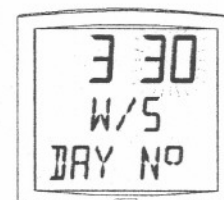
7. Countdown "Event" in days
   Select the value "EV" using the [+] button and validate with [SEL] (see page 12).
   a) Select the date of the event to be counted down to :
   Begin with the year with [+] from 00 (2000) to 99 (2099) and validate with [SEL].
   Then proceed in the same way for the month and the day.
   b) Determine with [+] the display mode :
   FIX for a fixed display,
   ALT to programme an alternating display of number of days and date,
   ALT PRG to programme an alternating display of number of days and a programmed message.
   Validate with [SEL].
   If the option *ALT PRG* is selected : enter the text you want displayed.
   A) the first character is selected with the [+] button and validate with [SEL].
   B) proceed in the same way for the subsequent characters. When the last one is entered, validate with [Sel].
   Validating it will return display to time mode (point 5 in the "user : configuration " section (page 12)).

   Note : once the date of the event has passed, that is D + 1, the countdown is deactivated and the date appears as a fixed display.

8. The "**World**" option enables the display on the third line of the name of the city.

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(7)*The last day is either 28, 30 or 31 depending on the month (28 is imposed for the month of February whatever the year).*

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- When the World sub-menu is displayed,
choose between Paris, London, Tokyo, New York, Sydney or PRG
(to enter your city or town).
- If you validate one of the five cities, you will return to Time mode
(point 5 in the "User : Configuration" section (page 12)).

- If validating PRG. Enter the name of the city or site, you are
allowed up to seven characters.
a) the first character is chosen by pressing [+] and validating it with
[SEL].

b) proceed in the same way for the subsequent characters. When
the last character has been chosen, validating it with [SEL].
-determinate the display mode by pressing key + : either FIX to
display a fixed text or ALT to alternate text and date. Validation will
return you to Time mode (point 5 in the "User : Configuration"
section (page 12)).

Examples of display :
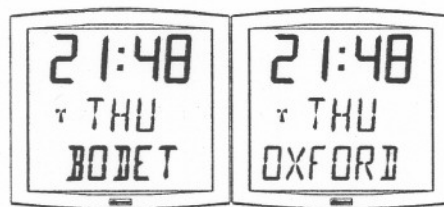
VI - PRINCIPLE OF TIME SETTING

6.1 AFNOR receiver model

1. On the initial powering up, the time is initialised at 00h00mn00ss on 01/01/2000.
   After a powering up, a time setting, a reset or a new configuration, the clock search to be synchronised. Since 3 consecutives correct messages have been received, it set up its time base to the correct time. After, it is automatically done each hour.
   Between 2 synchronisation, the time base bring forward according to the internal base.
   If the clock is in mode COD[8], the time displayed is the time received.
   If the clock is in mode LOC[9], the time displayed depend on the offset selected in the Time mode menu (Seasonal change and offset change).
   Caution: if the current time of the master clock is modified after the synchronisation of the slave clocks, the correction will be achieved the next hour.

2. If the synchronisation is not correct after 20 seconds, a new time code search is made the following minute.
   If the synchronisation is not correct after 24 hours, the clock pictogram will flash every 5 seconds, the display disappeared with only the 2 dots fixed.

Nota: On an Irig-B network, year must be manually entered by the user.

6.2 24V parallel Minute or ½ minute 24V receiver

1. A time distribution network "Minute" or "½ minute" emit only impulses, so that it is necessary to set the clock at the time of the this network.
   To add a clock on a network, it is not necessary to stop this network. It is enough to set on time and when it will received the next impulse from the master clock, it will add a minute.
   For a 1/2 minute mode clock, if there is an offset of 30 seconds reverse the connection of the line.
   In fact, the same impulse is either positive or negative according to the connexion mode and one of these two impulses emits per minute is the minute stroke (second zero).
   The clock pictogram is displayed during 1/2 second, at each impulse.
   Cristalys clock does not work with minute or ½ minute serial impulses.

6.3 Radio receiver model clock

1. 1. On the initial powering up, the time is initialised at 00h00mn00ss on 01/01/2000.
   Radio reception is made on each clock setting in operation and each time the user sets the time manually.
   When the clock is synchronised, it is carried out automatically every night at 3am local time.

2. If reception is not correct after one hour, a new radio search is made the following night at 3am.
   If reception is not correct, the radio pictogram will flash every 5 seconds.
   The radio clock is fitted with a double antenna enabling it to pick up the time no matter

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(8)See the technician menu page 20.
(9)See the Time mode menu page 13

what position the clock is in.

6.4 Annex for time difference

Choose the reference country for the summer/winter time changeovers, as well as the time difference, according to the city in which you wish to display the local time. If the time is set manually, do not take the time difference into account. If the time is set with a radio antenna, enter the corresponding time difference.

CITY	Zone	Reference zone	Time difference / GMT
LOS ANGELES	USAP	United States / Canada	-08
MEXICO	USAC	United States / Canada	-06
CHICAGO	USAC	United States / Canada	-06
NEW YORK, TORONTO	USAE	United States / Canada	-05
BUENOS AIRES	GMT	No Change	-03
RIO DE JANEIRO	PRG	Programmable Mode	-03
LONDON	EU_1	Europe	00
PARIS (*)	EUR	Europe	+01
HELSINKI, ATHENS	EAST	Europe	+02
JOHANNESBURG	GMT	No Change	+02
MOSCOW	EAST	Europe	+02
SINGAPORE (**)	GMT	No Change	+08
TOKYO, SÉOUL	GMT	No Change	+09
SYDNEY	AUS	Programmable Mode	+10
WELLINGTON	PRG	Programmable Mode	+12
PARAGUAY	PRG	Fixed Date (≠ every year)	-04
TEHERAN	PRG	Fixed Date (≠ every year)	+3.30
BOMBAY	GMT	No Change	+5.30

(*) Paris and the following cities: Frankfurt, Madrid, Stockholm, Oslo, Zurich, Milan, Amsterdam, etc.

(**) SINGAPORE, and the following cities: Taipei, Bangkok, Hong-Kong, Kuala Lumpur, Beijing, etc.

VII - TECHNICIAN MENU

Access to the technician menu is via the two push buttons [SELECT] and [+] located on the back of the clock. The [SELECT] button is above the [+] button.

Proceed in two stages.

1. Press the [SELECT] button, and while holding it down, press [+] for more than 3 seconds to go initially to Configuration menu.

2. Press the [SELECT] button, and while holding it down, press [+] for more than 7 seconds to go to Technician menu. The programme version for the clock is displayed.

3. Press the [SELECT] button to display the menu for the type of synchro. The [+] button enables you to choose between *Ind* and *Sync* (if the synchro card is connected).
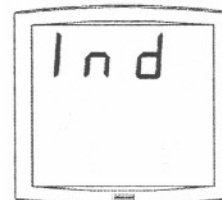
> *Ind* : autonomous mode (deactivates radio card or pulse/coded time reception card).
> *Sync* : activates the radio synchronisation card or coded time pulse reception.
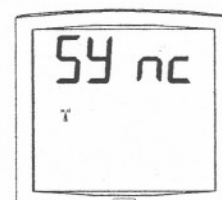
4. Press [SELECT], according to the clock's option and the previous selection :

> *Ind :* the programme of the clock go directly to the step "Test display".
>
> *Sync (radio) :* The Radio Reception menu is displayed. The radio pictogram flashes to indicate that the search is under way. The display shows the construction of the time message as and when the data arrives.
> *Sync (impulse) :* Select with the [+] button the impulse type between :
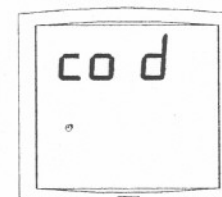> > Min : Minutes // impulses network.
> > 1:2M : ½ Minutes // impulses network.
> > AFn : Afnor NFS87500A coded time network.
> > IriG : Irig B coded time network.
>
> The default configuration of the receiver clock is AFNOR. For a coded time pulse AFNOR or Irig-B, press [SELECT] to obtain the "coded time type" menu.
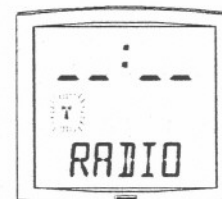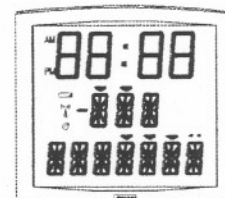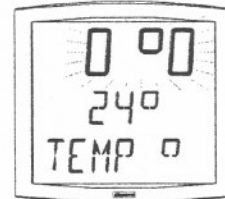
If the clock is in mode COD, the time displayed is the time received from master clock.

If the clock is in mode LOC, the time displayed depend on the offset selected in the Time mode menu (Seasonal change and offset change).
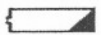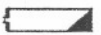
5. Press the [SELECT] button. Adjusting the temperature offset. Variation, using the [+] button between −9.5°C and +9.5°C by increments of 0.5 (on leaving the factory, an adjustment can be made). The current temperature is displayed on the second line, taking the offset in consideration. The temperature is read every 10 seconds.

6. Press [SELECT] to obtain the Test display menu. This menu enables you to check that all the clock segments are giving the correct display. On the Cristalys Date clock, the [+] button enables you to scroll the character table.

7. Press [SELECT]. The Correction menu appears. This enables you to correct the time base manually. On leaving the factory, the value of the offset is 0. The value of this offset may vary (using the [+]) between -9s99 and +9s99 per 10ms step (#0.12 ppm). The addition of this daily offset to the time base will be spread over 24 hours.

8. Press [SELECT] again to exit the technician menu and return to the time display.

Reminder : At any time, holding down the [SELECT] button, then pressing the [+] button quickly, goes to normal display mode and exits the configuration menu.

If no buttons are pressed for 10 minutes, the clock returns automatically to time display mode.

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VIII - WHAT TO DO IF...?   ...CHECK.

WHAT TO DO IF...?	... CHECK.
■ The clock displays ▭◢.	■ The clock detects the "low battery" threshold ▭◢, the pictogram representing an empty battery appears as a fixed display for 5 days. After this period, it flashes until the display disappears completely (batteries have run out). Replace the batteries. Resetting of the time and date is, automatic for radio synchronised or Irig-B / AFNOR clocks, manual for independent and receiver clocks. Dust on the battery contact terminals (+ and -) can disrupt the power supply to the clock. Clean these contact terminals with a soft dry cloth, if necessary.
■ The clock does not display the day of the week but a number.	■ The clock is programmed in week number or day number display mode (reread the note on page 12, § 5).
■ The clock display does not go beyond 12 hrs.	■ The clock is programmed in 12 hr instead of 24 hr mode (reread the note on page 11, § 2).
■ The time synchronisation of the clock is correct (the radio pictogram is on fixed display), but the time change has not taken place, the date or the time is not correct.	■ Check in time change mode that the clock is correctly programmed (reread the note on page 13, § 6).
■ The radio pictogram flashes once every 5 seconds.	■ No radio reception, move the clock.
■ The display has disappeared, only the 2 dots are flashing.	■ You are in "Eco" mode.
■ The display is completely blank.	■ The batteries are completely discharged, replace them.

WHAT TO DO IF...?	... CHECK.
■ Irig-B / AFNOR clocks not on time after a time setting on the master clock.	■ 1) wait the hour stroke on the slave clock so that it search to be synchronised, ■ 2) change manually the time of the clock, so that it will have to do an immediate search of AFNOR or Irig-B synchronisation.
■ A receiver clock on a ½ minute network is 30s alter after the installation.	■ It is impossible for a slave clock to discern between two 1/2 minute impulses which one is the master clock minute stroke, the reversal of the two wires is needed to correct the time.
■ Incorrect year on an Irig-B network.	■ Year must be manually entered on an Irig-B network.
■ Minute or ½ minute receiver with fixed display of time and 2 dots.	■ Lack of impulse, check the master clock and the network.
■ AFNOR or Irig-B receiver with no display of time, the 2 dots fixed and the clock pictogram flashing.	■ Lack of time coded message since more of 24 H. Check the master clock and the network.

IX - TECHNICAL FEATURES

The Cristalys Date clock complies with electromagnetic compatibility directive 89/336/EEC. It is intended for a residential or commercial environment. It complies with the European standards in force.

Power supply : 4 x type LR14 batteries to last up to 3-4 years or external SELV (Safety Extra-Low Voltage) from 6V to 24 V AC or DC, 10 mA maximum.
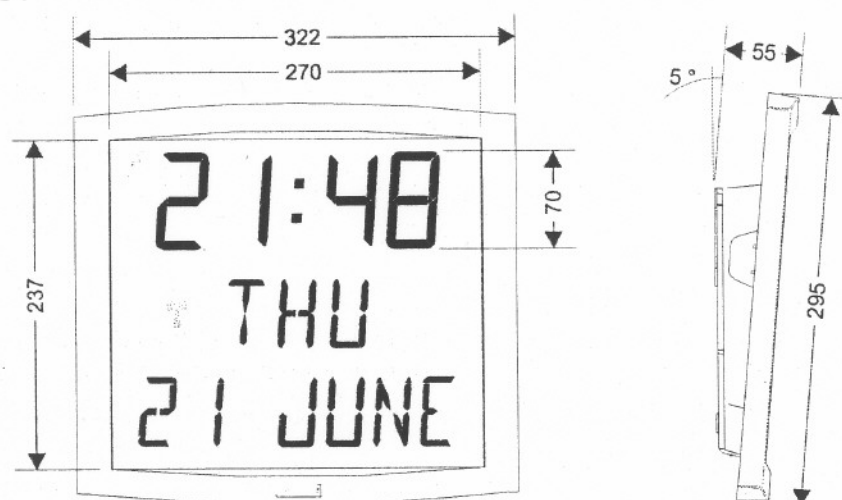
Operating temperatures : from 0 °C to +50 °C.
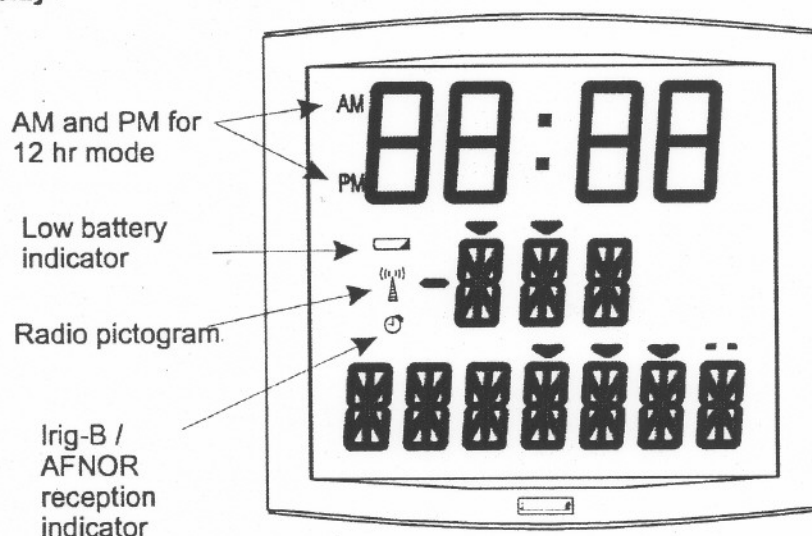
Humidity : 80 % at 40 °C

Protection : IP 40

Weight : 1,4 Kg

Dimensions :

Display :

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(10) *Fixed : the clock is radio-synchronised, flashing on the second : the clock is attempting to synchronise itself, flashing every 5 seconds : the clock has not succeeded in synchronising itself, it will retry the following night at 3 o'clock.*