# STYLE RADIO France Inter - DCF

Style 7



Style 7D



Style 7E



INSTALLATION AND OPERATING INSTRUCTIONS



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# 1) GENERAL INFORMATION

#### Security rules:

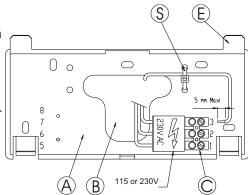
**Caution**: The installation and the maintenance service of this clock has to be done by skilled person.

- The installation has to be done according to electrical standards (NFC 15-100 for France). Refer to your local norms.
- You need a 4A break circuit before the power supply.
- This break circuit has to be turned off in case of maintenance service.
- Clocks must be protect by a 0,8A, 2,5A or 4A fuse (F1) (See Technical features page 14).
- The power supply has to be turned on only after fixing the clock. Connection according to the installation instructions TN (ground/phase) or TT (ground/ground).

Any operation not complying with the present instructions can cause irreversible damage to the clock, and renders the warranty invalid. The Bodet company declines any responsibility in case of product operation not in accordance with previous instructions.

#### Initial check:

In its original packaging, each Style clock is supplied clipped on to its wall holder, together with a cleaning kit (impregnated anti-static cloth), a bag containing 3 screws, and 3 pegs. Unclip the holder (A): insert your finger at the base of the opening (B), then pull firmly towards you.



#### Product information labels:

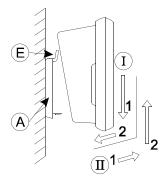
A descriptive label is fixed to the back of the clock, and visible once the holder has been removed. It indicates the following information: Clock model (Style 7, ...), power supply, display color, antenna model France Inter or DCF. This clock is radio synchronised with a France Inter or DCF radio antenna.

# 2) INSTALLATION AND ELECTRICAL CONNECTIONS

#### Wall mounting:

Fix the holder (A) in the chosen position, using the 3 rawlplugs and 3 screws supplied.

I )- Clip the clock onto its holder, by introducing the two studs (E) into the two corresponding openings made in the back of the clock, and then by pressing firmly on the lower part of the clock, until it clicks into place. Take care not to jam the cables during this operation.



II )- The clock can be subsequently unclipped from its holder, by pulling the lower part of the clock firmly towards you, and then by removing it via the top.

#### Mounting on vertical or ceiling bracket:

The holder (A) fits the single-sided mounting bracket, P/N 936301, the double-sided mounting bracket, P/N 936300, and the double-sided chain suspension P/N 936302. Use the tapping screws supplied with the bracket.

#### Electrical connections:

NB : Style clocks have been designed for a 230 Volt +/- 10 % mains supply.

E.g.: 230 V clock operates correctly in countries where the mains voltage is 220 or 240 Volts.

Remove the black protective cover (covering the terminal strip (C). Connect the 230 Volt 50/60 Hz mains supply line to the terminal strip: Live and Neutral on terminal 1 and 2 (Wire max. section: 1.5 mm² with 5 mm bare). As this clock is classified on the 2<sup>nd</sup> level, the connection to the earth is not required because it is not used. Put the protective cover back in place. Lock wires with collars (S).

# 3) QUICK SETTING IN OPERATION

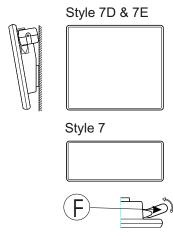
The clock equipped with a radio receiver enables the time synchronisation and the summer / winter time changeovers.

After the power supply connection, orientate the antenna on its support to obtain a regular blinking of the antenna LED.

No display is on the clock until the radio synchronisation is achieved.

The antenna is ideally orientated at 90° from the France Inter or DCF emitters according to model ordered.

The clock doesn't display information at power up. After few minutes (5 to 10 minutes) the clock will set on time automatically.



# 4) DISPLAY BRIGHTNESS ADJUSTMENT

Push successively on the "+" key to select directly the best display brightness among 4 levels according to the ambient luminosity. To keep the same luminosity during 24 h, configure the clock in "NORM" mode (page 9).

In "ECO" mode, the display brightness will be reduced to the minimum level from 10 p.m. to 7 a.m. and will return to its original level outside this time window.

# 5) COMPLETE SETTING IN OPERATION

# 5-A.Radio synchronisation concept Antenna Orientation (F) To orientate the antenna, use the LED to appreciate the signal reception quality. A good reception is provided when the LED is blinking every second regularly. By turning the antenna find

the correct position offering the best reception.

Generally, the best orientation is perpendicular to the emitter direction (DCF or France Inter according to the antenna selected).

After few minutes (5 to 10 minutes) the clock will set on time automatically.

#### General information on radio synchronisation :

The clock is radio synchronised with a France Inter or DCF integrated antenna.

#### France Inter antenna :

The receiver France Inter picks up the time signals supplied in phase modulation by the France Inter emitter 162 kHz based in Allouis (France).

#### - DCF antenna:

The DCF receiver picks up the amplitude modulated time signals transmitted by the DCF 77.5 kHz emitter based in Mainfligen (Germany).

The time code received by the 2 antenna models includes hour, minute, day, date and a signal data for synchronisation (Western Europe time). These antennas automatically ensure the summer / winter time changeovers and guarantee absolute accuracy.

In principle, signals are received all over Europe and North Africa (see map). A daily time code reception of a few minutes is sufficient to maintain the clock synchronisation.

The time signal acquisition by the master clock is normally achieved after 5 or 10 minutes after power up. However in case of difficult reception or meteorological interference, the signal acquisition can last up to 24 hours. The signal is usually well received during the night.

No display is on the clock until it has correctly received the radio signal unless a manual time setting is made.

When hour and date are displayed, check if they are correct. If they aren't, set manually on time (see page 7) or do a RESET (page 9 TEST menu).

#### Automatic synchronisation:

Every night, the clock is automatically checking the radio reception. If before 3 a.m. no correct radio signal is received the clock display becomes blank. The clock is then in the "LISTENING" mode until it receives a signal (the blank display improves the radio reception quality).

If the radio reception becomes correct, the clock is automatically synchronised and displays the time again.

If the radio reception is impossible before 5 a.m., the clock displays the running time, but keeps the 2 central diodes fixed (instead of blinking) to inform that the radio reception has not been done.

# 5-B. Radio synchronisation in difficult environment

In case the clock is not automatically set on time as explained in § 3, follow the steps as ordered :

- 1- Wait 24 h to check if the radio synchronisation is made. (the radio synchronisation is generally better during the night).
- 2- In case step 1 is not sufficient to ensure the synchronisation, change the antenna location by fixing its support on a non metallic surface from 15 to 20 cm of the clock after unplugging or unscrewing the antenna. Pull on the cable to free the corresponding cable length stored in the clock body (20 cm cable is stored in the clock).

Fix again and orientate the antenna. Wait for the synchronisation.

# 5-C. Clock configuration

#### Access to the menu

#### – Control keys location :

These 2 keys are located on the back of the clock on the bottom left.



#### - To enter the menu:

Push the "Select" key then keeping the "Select" key pressed down push the "+" key both keys pushed down during 3 seconds.

#### - To exit the menu:

Repeat this operation to exit the menu at any time or exit the program at the end of the menu.

The clock delivered with a France Inter antenna is set in French language. The clock delivered with a DCF antenna is set in German language. To access to this configuration menu:

Press both keys "+" & "SELECT" simultaneously for 3 seconds and browse using the "SELECT" key until you reach the ECO or NORM menu.

# Time setting:

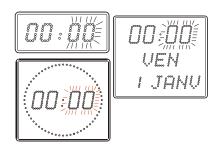
**Be careful**, time automatically sets is always the correct time. So, if a wrong time is manually set, the clock never automatically correct it.

To have an automatic synchronisation you must reset the clock after the configuration (see page 9 TEST menu). Enter the menu (see above).

#### – The minutes are blinking :

With the "+" key, increment the minutes display step by step or with a rapid scrolling up to the desired minute value. Seconds begins to elapse since minute is selected.

For example, to set time at 20 h 29 min, increment minutes up to the 28<sup>th</sup> minute, then when the reference time reaches the 29<sup>th</sup> minute, push the "+" key. Push the "SELECT" key to select hours.



#### The hours are blinking :

With the "+" key, increment the hour display step by step or with a rapid scrolling up to the desired hour value. Validate with "SELECT" key.





#### – 24 h or 12 a.m. is blinking :

- A) The clock displays "24 h" ( time display from 0:00 to 23:59).
- B) The clock displays "12 a.m." (UK / USA display from 1:00 to 12:59). You can choose one of these option using the "+" key.

Enter by pressing the "SELECT" key.





#### - The year is blinking:

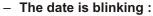
Select the current year (from 1993 to 2092) using the "+" key, then enter by pressing the "SELECT" key.



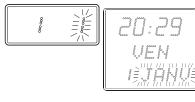


#### - The month is blinking:

Select the current month using the "+" key, then enter by pressing the "SELECT" key.



Select the date using the "+" key, then enter by pressing the "SELECT" key. This last operation enables to exit the TIME SETTING menu and going to the CONFIGURATION menu.





## Configuration menu

#### Eco mode display

Press "+" key to show the modes, then enter by pressing the "SELECT" key.



■ ECO : Reduction of the clock luminosity at its minimum from "10 p.m." to "7 a.m.". (power consumption saving). Eco mode is set as standard



NORM : Normal mode, the clock luminosity is kept the same all day long.





TEST : Calibration diode testing.

down during 3 seconds.

Be careful, if press on the "+" key during

the test, a RESET is activate. In that case, the clock is blanked and researching a radio signal to be synchronised (same case with a first power up).



Select the required mode with "SELECT" key. To return to display mode after a RESET, push the "Select" key then keeping the "Select" key pressed down push the "+" key both keys pushed

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According to the clock model refer to the following chapters.

#### Configuration of Style 7 and Style 7 Ellipse clocks.

Display choice:

Hour and minute fixed display.



Hour and minute display alternates with date and month display.



 Hour and minute display alternate with month and date display (US mode).



Hour and minute display alternate with the week number.



Select the required display choice with "+" key. Validate by pressing the "select" key.

The programming go on with the summer / winner time changeover, go to § Summer/Winter changeover, page 12.

# Configuration of Style 7 date clocks

- Language selection:

Select the desired language using the "+" key. Enter by pressing the "Select" key. Using the "+" key, choose any second language as required for alternate display.

If you select "--", only the first language will be used. Enter by pressing the "Select" key.



#### Available languages:

F	French	N	Norwegian
GB	English	S	Swedish
SP	Spanish	DK	Danish
D	German	FI	Finnish
I	Italian	CA	Catalan
Р	Portuguese	ВА	Basque
NL	Dutch	GA	Gallego

(Other languages are available in EST and EXO eproms. See attached pages).

## - Choice of display:

Using the "+" key, select the type of central display required from one of the following 3 options then validate with "SELECT" key:

- Day of the week (MON, TUE, ..., SUN).
- "52". This selection corresponds to the week number display.
- "365". This selection corresponds to the Julian calendar display (Day number of the year 1 to 365).





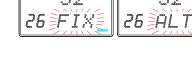


#### - Fix or Alternate display:

NOTE: this function is not available if an alternate display between 2 languages has been selected.

Using the "+" key, select whether the central display is to be permanent or alternate:

(Only if "Day of the week" has been chosen, or if an alternate display with 2 languages has been selected).



The display chosen previously (week number or Julian calendar) will be permanent.

The display chosen previously (week number or Julian calendar) will alternate with the day of the week.

Enter by pressing the "Select" key.

#### Summer / Winter time changeovers :

Chilo 7/7E Chilo 7D

The automatic time summer / winter changeover and the time difference with the radio time is made with the following mode :

<ul> <li>Style /// □</li> </ul>	Style 1	ט־
EUR	EUR	= European time change
		<ul> <li>time display = radio time.</li> </ul>
GB	UK	= European time change
		<ul><li>time display = radio time -1h.</li></ul>
EST	EST	= European time change
		- time display = radio time + 1h.
GMT	HGMT	= Minute synchronisation
		- no automatic time changeover

 no automatic time changeove neither date reception

Select with the "+" key the required mode.

Validate by pressing the "Select" key. Wait for the radio synchronisation. The clock display is blank until a good radio reception is achieved.

The time changeover is made at the following time in the morning:

EUR : at 2h00 (W>S) or 3h00 (S>W) local time.

GB : at 1h00 (W>S) or 2h00 (S>W) local time.

EST : at 3h00 (W>S) or 4h00 (S>W) locale time.



# 6) WHAT TO DO IF .....? .....CHECK

What to do if?	Check
■ The clock display is blank	<ul> <li>The clock is either in setting to time mode or in radio listening mode from 3 to 5 a.m.</li> <li>In this case, the display will be come again bright from 5 a.m. or when the radio synchronisation in achieved.</li> <li>Never the less check the clock is powered on by seeing the LED indicator blinking on the antenna.</li> <li>Be careful not to change the antenna orientation if correct.</li> </ul>
The clock display the time but the 2 dots in the centre are continuously lighted on (no blinking).	The clock has been synchronised for more than 24 <sup>H</sup> , repeat the time setting operating mode of the clock orientating eventually better the antenna.
The clock does not display the week day but a number.	■ The clock is programmed with the week number or the day number ( check § "Fix or Alternate display" in the central clock display page 12).
■ The clock time display does not go over 12 <sup>H</sup> .	The clock is programmed in 12 <sup>H</sup> instead of 24 <sup>H</sup> mode.
■ The clock synchronisation is correct (LED and two dots are blinking) but the time changeover did not happen, the date or time is not correct.	Check in the time changeover mode that the clock is not in minute synchro mode only or with another synchronisation mode (FI/DCF -1 <sup>H</sup> ; FI / DCF +1 <sup>H</sup> ,).

# 7) GENERAL INFORMATION

# 7-A. Data saving

Style clocks possess a <u>permanent</u> data back-up facility up to one week which permits the clock to store all the configuration parameters and display selections.

On the other hand, the date and the time can be "lost" following an exceptionally long mains power failure (i.e. one lasting more than one week); in which case, once the mains power supply is restored, the clock display is blank.

The clock setting to time is achieved automatically with the radio reception such as the initial setting in operation.

#### 7-B. Cleaning

Use an anti-static cleaner similar to that supplied in the original packaging. Never use cleaning spirits, acetone or any other solvents which are likely to damage the casing and the filter of your *Style* clock.

#### 7-C . Technical features

- Power supply : 230 V +/- 10 % 50/60 Hz. (optional 110V)
- Protection by a fuse (F1).
  - Style 7:0,8 A temporised
  - Style 7E: 2,5 A temporised
  - Style 7D: 4 A temporised
- Date and Time back-up without power supply : 1 week.
- Other data back-up : permanent.
- Operating temperature : 0 to 50° C
- Storage temperature : -30 to +65°C
- Protection: IP.30.
- Electric protection class II (Level 2).
- Style clocks are complying with the electromagnetic compatibility directive 89/336/EEC.
- They are aimed for a residential, commercial or industrial environment.
- They are in agreement with the European norms :
  - NF EN 55022 (DEC. 1994) Radio disturbance of information technology equipment.
  - NF EN 50082-1 (JUNE 1992) Generic immunity standard electromagnetic compatibility.
  - NF 60950 Directive of low voltage equipment 73/23/EEC.

#### - Style 7

Size (in mm): Weight: 1,1 kg

Maximum nominal current: 65 mA.

#### - Style 7D

Size (in mm): Weight: 2,2 kg

Maximum nominal current: 150 mA.

#### - Style 7E

Size (in mm): Weight: 2,1 kg

Maximum nominal current: 80 mA.

#### - Antenna

Size (in mm): Weight: 0,17 Kg

Power by the clock 8-12 VDC.

# - Wall bracket

