

IRT 7090/00

CARPE DIEM hand-/wall transmitter

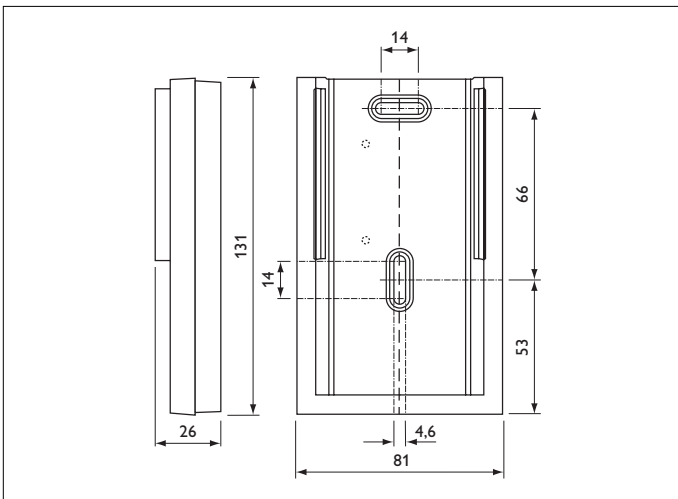
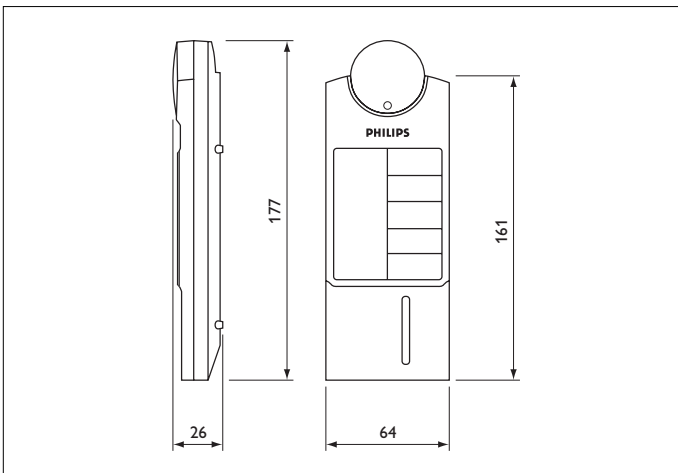
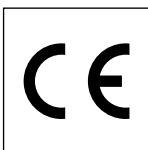


Figure 1 Dimensions



Product details

- The IRT7090 is a hand-held infrared transmitter complete with wall holder, suitable for the remote control.
- Ten functions can be controlled with the large front keys.
- Under a hinged cover 2 additional keys are provided for less frequently used functions.
- The group address of the transmitter can be selected with DIP switches
- A red LED at the front of the unit indicates the transmission of infrared signals and gives a warning when the unit is in "teach mode".
- Battery lifetime (with Philips Powerlife batteries – 1050 mAh) is at least 4 years, when used 50 times per day as an average.
- The unit is delivered complete with wall holder, batteries and installation instructions.

Applications

- CARPE DIEM Personal Light.
- CARPE DIEM Dynamic Ambiance.
- Although designed for handheld or tabletop operation, the unit will frequently be used from a fixed position, i.e. in the wall holder. The Infrared radiation pattern has been optimised for this application.
- Programming functions are incorporated as well.

Functionality

The IRT7090 is a dedicated transmitter for CARPE DIEM Personal Light and CARPE DIEM Dynamic Ambiance.

When used with CARPE DIEM Personal Light

The first two buttons (see Figure 2) are for switching the lighting ON (I) and OFF (O). The level and colour temperature of the lights depends on the last selected preset (default: preset 1).

The luminaire has four presets in its memory, ranging from warm to cold lighting. If e.g. preset 3 is selected, the light is switched off (O) and than on (I) again, the level and colour temperature will be as set in preset 3. Switching on the lights with one of the preset buttons is also possible.

When the lights are switched on, it is always possible to adapt the colour temperature and lighting level. When a personal setting of colour and lighting level is made. The luminaire can remember this by pressing the "store" button under the hinged cover, followed by one of the preset buttons (1, 2, 3 or 4). This setting will now be remembered, also when the lighting is switched off and mains is disconnected.

When pressing, "recall" the controller will:

- Replace the personal presets that are stored under presets by the default factory presets.
- Switch lights on when mains is connected. This mode will remain until the user sends an IR command to the controller. After this the lights will stay off when mains is connected.

When used with CARPE DIEM Dynamic Ambiance

The CARPE DIEM lighting system has four dynamic scenarios in its memory (see figure 2). The standard scenarios are: Natural rhythm (1), Human rhythm (2), Pendulum rhythm (3) and Wave rhythm (4). When one of these scenarios is selected by pressing the corresponding button on the transmitter, the lighting will be altered according the programmed rhythm from that moment onwards. If scenario 2 is selected, the lighting is switched off (O) and than on (I) again, the rhythm will be as set in scenario 2. You can also switch on your lighting with one of the scenario buttons.

It is possible to adapt the colour temperature and lighting level. However, on the next time point in the selected scenario for an adaptation of the lighting, the colour temperature and level will be according the scenario. With the colour button the colour temperature can be adapted and with the lighting level buttons the level.

When after a manual adaptation the lighting is switched off and switched on again the programmed values of the scenario are used.

Note:

The buttons under the hinged cover of the transmitter have **no function** for CARPE DIEM Dynamic Ambiance.

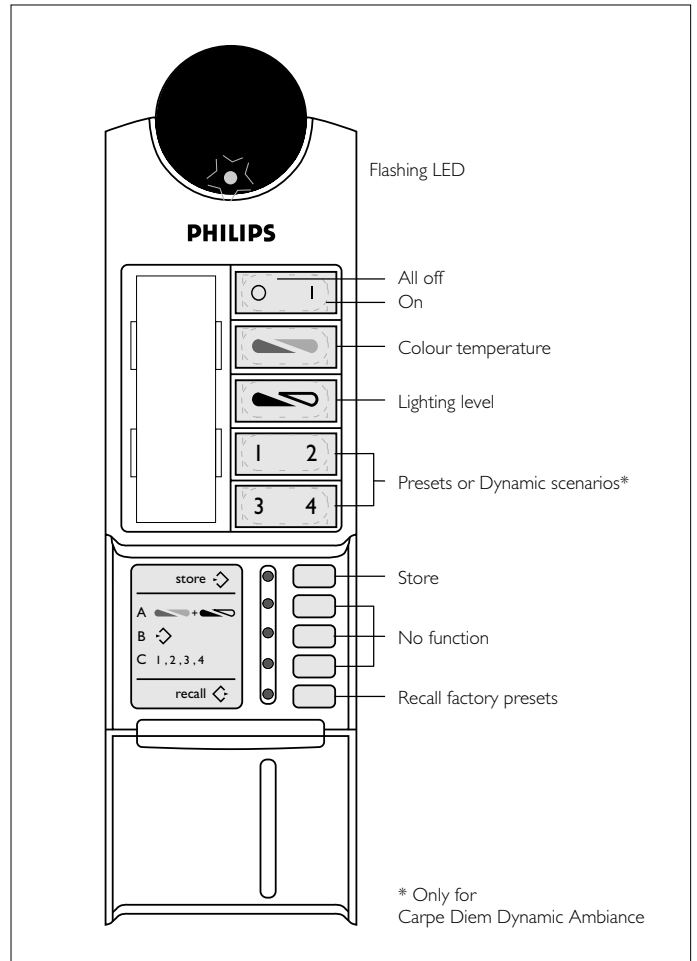


Figure 2 Key functions

The following remote control functions are available

- | | |
|-------------------|--|
| Control lights: | select presets |
| | dim colour |
| | dim level |
| | switch off all lights |
| | program presets |
| | recall factory presets |
| Generic commands: | absent |
| | switch to "teach mode" (for temporary use as programming tool) |

With the programming tool the following functions can be executed

- set infrared group address
- recall factory presets

Operation instructions

General information

In the transmitter the allocation of keys is such that most common functions can be operated with the large upper keys and the less important functions with the keys under the hinged cover.

Some of the additional and supporting functions require a “two-step” operation: First the correct parameter must be selected, then the required operation can be executed or the selected value entered.

Set group address

Change group address transmitter

The following groups are available: A, B, C, D, E, F, G and general. Out of the box the group address of the transmitter is group A.

The infrared group address of the transmitter (itself) can be set by dip switches located behind the text plate under the hinged cover (see figure 3). Remove the plastic foil and text plate and set the group address by a pencil, a paperclip or other pointed device. When done replace the text plate and plastic foil. The transmitter is now set into the new group.

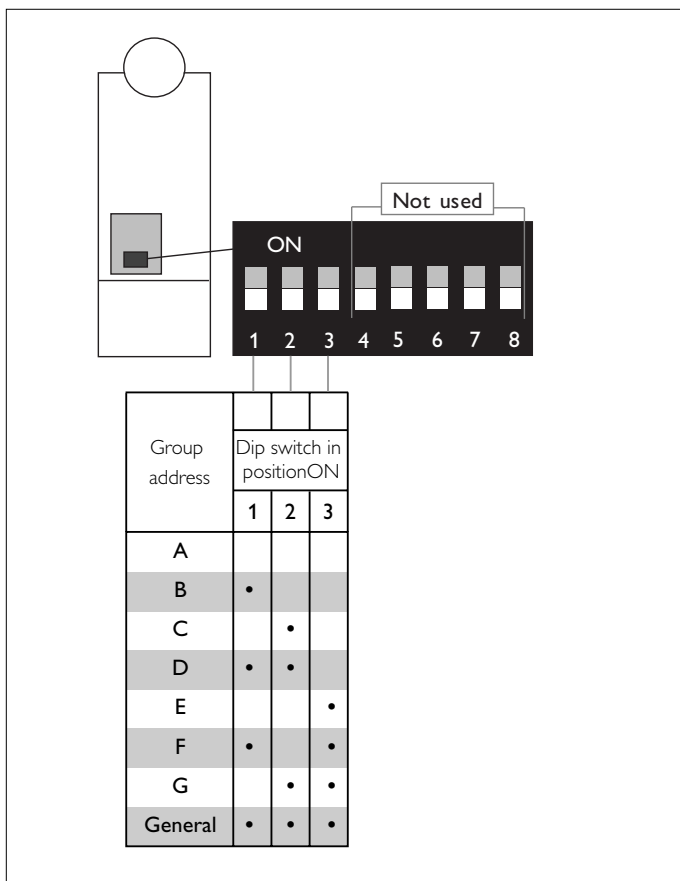


Figure 3 Setting the group address

Note:

- Keep dipswitch 4 till 8 into the “0” position.
- It is possible to write the dipswitch settings on the back of the transmitter.
- In the group “General” one can control all luminaires that are standing into other groups.

Change group address CARPE DIEM Personal Light luminaire

The following groups are available: A, B, C, D, E, F and G.

Out of the box the group address of the CARPE DIEM Personal Light luminaire is group A.

- Press the two keys under the hinged cover simultaneously for at least 3 seconds (enable “teach mode”), the transmitter is set into “teach mode”, the IR LED is flashing.
- Select “Group Address” via the “Select parameter” key. A LED indicates the selected parameter. When the “Select parameter” key is pressed momentarily (less than 1/2 seconds) the LED shows the (last) selected parameter. When the key is pressed continuously or repeatedly, the next parameter is selected. This action can be continued or repeated until the required selection is reached. If no further keys are pressed the LED stay on flashing for 5 seconds after the last key release.
- Group address can be entered using the appropriate upper keys. When the “Group” command is transmit the luminaire will blink as a sign that the command is received and the luminaire is set into the new group.
- Back to “normal mode”, press again the top two keys under the hinged cover simultaneously for at least 3 seconds (disable “teach mode”), or wait 1 minute and it will automatically go to the “normal mode”. The IR-LED stops flashing.

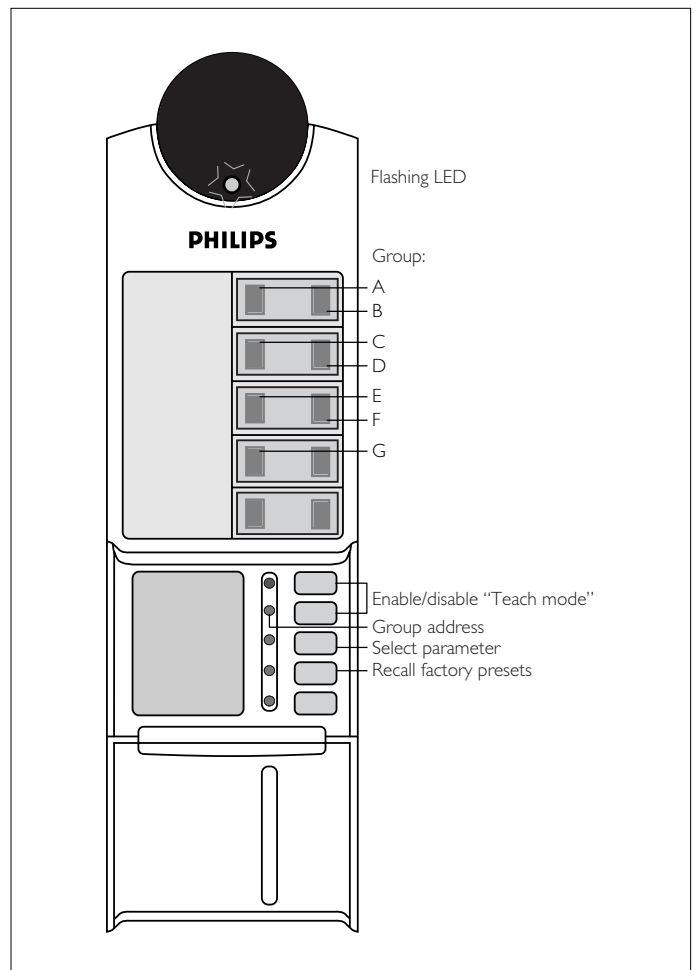


Figure 4 Key functions when in “Teach mode”

Notes:

- Changing group address is only possible for Capre Diem Personal Light Luminaires. For Capre Diem Dynamic Ambiance luminaries the group address is set by means of the Unilon PC software.
- When the transmitter is used as a programming tool the infrared radiation pattern is reduced to a narrow beam, in order to facilitate selective programming of luminaries. Therefore the transmitter must be held directly under the receiver and the distance from transmitter to receiver must be less than 3 meters. (see figure 5)
- All commands are transmitted in the "general" group code, in order to assure proper reaction regardless the group address of the luminaire.
- When pressing "recall factory presets" the controller will do:
 - Replace the personal presets that are stored under presets by the default factory presets.
 - Switch lights on when mains is connected. This mode will remain until the user sends an IR command to the controller. After this the lights will stay off when mains are connected.

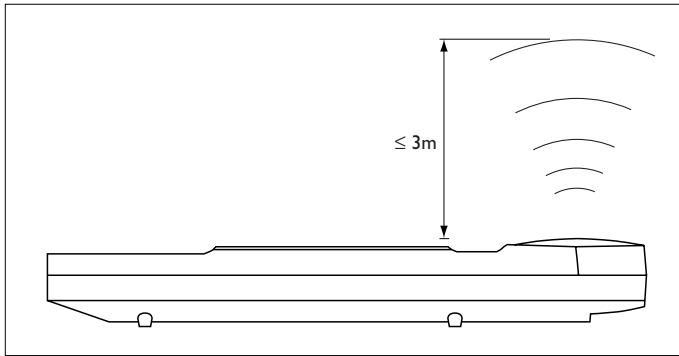


Figure 5 Radiation pattern in "teach mode"

Related equipment

Personal Light

Colour Variation Controller LCC 1660/00
 CARPE DIEM sensor IRR 1225/00

Dynamic Ambiance

Dynamic Ambiance Controller LRC 5140/71
 IR Receivers IRR 8124, IRR 8125
 Multi sensors LRI 8133, LRI 5133

Technical data

Number of keys: 15
 LED indicators: 1 Red LED for indication of IR transmission
 5 red LED's, located behind a window in the cover of the transmitter
 Number of IR-LED's: 5
 Carrier frequency: 36 kHz (RC5 standard)
 Supply voltage: 6.0 V nominal
 Number of batteries: 4 each 1.5 V nominal
 Battery type: LR03, AAA, alkaline, capacity at least 1000 mAh
 Battery life: over 4 years (calculated with Philips Power Life batteries -1050mAh- and 50 commands per day)

Environmental conditions

Operating Temperature: 5...50°C
 Relative humidity: 20...85 %
 Condensation not allowed
 The IRT7090 should not be exposed to direct sunlight or to high temperatures and should not be used in damp rooms such as bathrooms

Storage conditions

Temperature: -25...85°C
 Relative humidity: 5...95 %

Dimensions: transmitter: 177x 64 x 26 mm (max. height x width x depth)
 Wall holder: 131 x 81 x 26 mm

Weight: 0.119 Kg (without batteries)
 0.164 Kg (with batteries)
 0.212 Kg (with batteries and wall holder)

Housing transmitter

Material: ABS
 Colour: White (Bayer 0177 - close to RAL 9010)
 Mounting: in wall holder (loose or fixed)
 Fixation in wall holder: two Parker screws in battery compartment. (see figure 8)

Housing wall holder

Material: ABS
 Colour: White (Bayer 0177 - close to RAL 9010)
 Mounting: with screws or double-sided tape

EMC

Immunity: in accordance with EN 50082-1
 Radiated interference: in accordance with EN 50081-1

Reliability

Call rate: 0.2 - 0.5% per year (estimated)
 Lifetime: 10 years (estimated)

Positioning

The transmitter IRT7090 is suitable for wall mounted operation, hand-held operation and for tabletop operation. For details see figure 6.

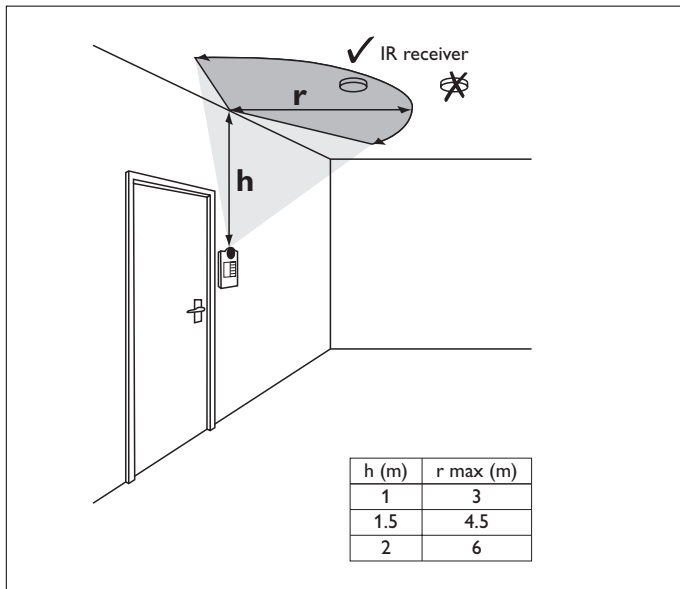


Figure 6 Positioning

Mounting

The transmitter can be placed in a wall holder. If necessary the transmitter can be locked in the wall holder. For details see figure 7 and 8.

Battery handling

The transmitter is powered by 4 batteries, type LR03 or AAA. Batteries must be replaced simultaneously. Always use a set of 4 batteries from the same brand with the same production date. Please make sure that batteries are inserted with the correct polarity. Inverted batteries may cause damage to the transmitter! For details see installation instructions. Disposal of batteries must be in accordance to local regulations.

Note:

It is recommended not to use rechargeable nickel cadmium batteries, in view of their limited performance.

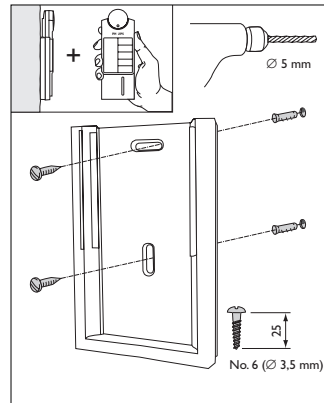


Figure 7 mounting the wall holder

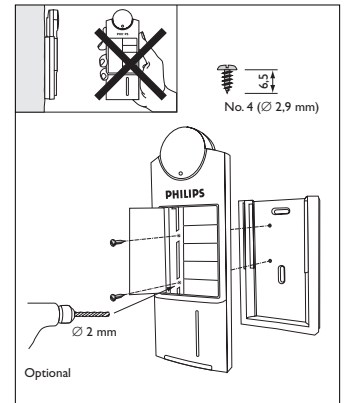


Figure 8 locking the transmitter in the wall holder

Indications and diagnostics

1 Red LED, located in the infrared window, indicating:

- OFF: transmitter not used
- fast flashing: infrared transmission takes place
- slow flashing: transmitter in "teach mode"

5 red LED's, located behind a window in the cover of the transmitter.

- fast flashing in "teach mode": parameters for which programming commands are being transmitted.
- slow flashing In "teach mode": selected parameter (programming mode)

Packing data

Type	Box dimensions (mm)	Quantity	Material	Weight (Kg)	
				net	gross
Unit box	220 x 95 x 50	1	card board	0.215	0.285
Outer box	230 x 200 x 210	8	card board	1.720	2.580

Ordering Data

Type	MOQ	Ordering number	EAN code level 1	EAN code level 3
IRT7090/00	8	9137 003 17703	87 11559 518862	87 11559 518855

For more information of CARPE DIEM in general and offerd solutions, please visit www.carpediem.philips.com

3222 636 35061
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 Data subject to change
www.controls4lighting.com

