

*The Light Control LC 2 is easy to install and will require only a touch of a hand or a signal from a Beolink Terminal to control your lights.*

*The LC 2 can be used in numerous ways: from a simple and easy single lamp system in your living room to an advanced combination of several LC 2 units. If you add a Bang & Olufsen Local Control System it even offers control of round-the-house lights.*

The remote control terminals referred to in this guide are the Beolink 5000 and the Beolink 1000 (mkIII). As for instructions on operating the LC 2 via the Beolink 7000 or via the Master Panel AV 9000, please refer to the user's guides enclosed with these products.

## OPERATING GUIDE

### **4** *Controlling one LC 2 unit*

- Close-up control
- Mains switch control
- Remote control

### **6** *The LC 2 Light Control System*

### **8** *Controlling several LC 2 units*

- Single lamp control
- Local Light Picture control
- Link Light Picture control

### **10** *Programming lights*

- Local Light Pictures
- Link Light Pictures
- Timer programmings

## INSTALLATION GUIDE

### **12** *Technical information*

### **14** *Setting up a lamp*

- Placement
- Opening the LC 2
- Mounting leads
- Checking the lamp

### **19** *Replacing the fuse*

### **20** *Programming lamps*

### **22** *The LC 2 in a Local Control System*

The Light Control LC 2 is a very versatile product. It offers control of most household lights in an elegant and easy way.

The LC 2 works in conjunction with lights. One or more lights may be connected to an LC 2 unit and be controlled simultaneously. When connecting more lights to one LC 2 unit, do not exceed the permitted load power (see *Technical information*).

Individual control of lights require an LC 2 unit for each light - or group of lights - you want to control.

Your LC 2 may be operated either close-up or by remote control. As an option you may also turn on your light at the mains.

### **Close-up control**

*To switch the light on and off:*

Touch the dark front half-dome (the sensi-touch field) briefly. Touching the field briefly once again will turn off the light.

*To adjust the light intensity:*

Touch the sensi-touch field a little longer. The light intensity will be adjusted - alternating up/down.

### **Mains switch control**

*To switch on the light:*

Switch off and then on again at the mains (if this does not work, the reason may be that the on/off function of the LC 2 unit in question has been reprogrammed as described on page 21).

*On these two pages we assume you have only one LC 2 unit installed*

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**Remote control*****To switch on the light:***

Press the LIGHT button twice (or as an alternative LIGHT, PLAY).

***To switch off the light:***

Press LIGHT, STOP.

***To adjust the light intensity:***

Press LIGHT and then either ▲ or ▼ (the step-buttons).

***To switch on the light at a preset level:***

Press LIGHT and then the number of the wanted level.

See the list of factory-set levels for reference.

When leaving the factory each LC 2 unit has been programmed with nine different light levels:

|              |                   |
|--------------|-------------------|
| No 1         | 100 % light level |
| No 2 approx. | 90 % light level  |
| No 3 approx. | 80 % light level  |
| No 4 approx. | 70 % light level  |
| No 5 approx. | 60 % light level  |
| No 6 approx. | 50 % light level  |
| No 7 approx. | 40 % light level  |
| No 8 approx. | 30 % light level  |
| No 9 approx. | 20 % light level  |

See page 10 on how to program your own light levels.

Adding one or more LC 2 units to your initial setup will give you control of individual groups of lights. In fact a Beolink Light Control System enables you to control lighting throughout the house, providing, of course, that the lights you want to control are connected to an LC 2 unit.

The lights can be operated as a room setup, as individual lamps, or as a setup involving several rooms.

You may want light settings for a number of purposes, e.g. overall light in the room (or the house) for cleaning up, light for reading, light for TV viewing, dimmed light for the optimal AV experience, etc.

Each individual lamp may be part of several room- and round-the-house setups.

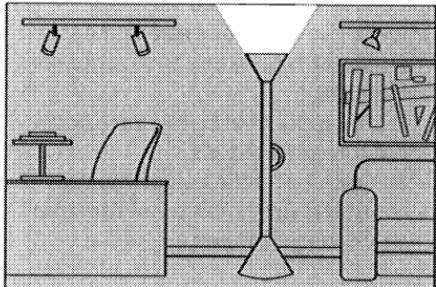
You can create lighting setups and turn them on and off individually or as a group. If your Bang & Olufsen Audio/Video System and Beolink Terminal allow timer programmings you can even program the lights to go on and off at specific times.

Whenever you want to get access to controlling the lights just press the LIGHT button on your Beolink Terminal following the instructions on the next few pages.

*If you own a Beolink 1000 Terminal of a model (mkII) without the LIGHT-button, just press SHIFT, LINK instead.*

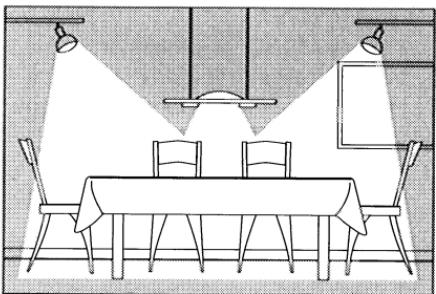
*The step-buttons on this model are indicated by < and >.*

*In the following we assume you have more than one LC 2 unit installed, thus forming an LC 2 Light Control System.*



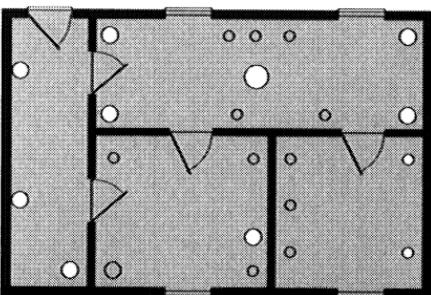
*Individual lamps (Single Lamp)*

Individual lamps in your system can be turned on and off by briefly touching the dark front half-dome on the LC 2.



*Room setup (Local Light Picture)*

Room setups can be designed as you like, up to a total of nine different setups in each room.



*Round-the-house setup (Link Light Picture)*

Round-the-house setups can be designed as you like, up to a total of nine different setups.

*To switch on all lights in the room:*

Press the LIGHT button twice (or as an alternative LIGHT, PLAY).

*To switch off all lights in the room:*

Press LIGHT, STOP.

*To switch on all round-the-house lights:*

Press LINK, LIGHT, PLAY.

*To switch off all round-the-house lights:*

Press LINK, LIGHT, STOP.

**Single lamps**

Individual lamps may be controlled either close-up or by using your Beolink Terminal remote control of individual lamps requires that a number has been allocated to the lamp, see page 20).

You may also turn on a single lamp by first switching off and then on again at the mains (if this does not work, the reason may be that the on/off function of the LC 2 unit in question has been reprogrammed as described on page 21).

Single lamp operation is overruled when a light picture is activated.

Individual lamps may still be controlled in a light picture which is already lit - either close-up or from the Beolink Terminal.

*To control a single lamp close-up:*

Touch the dark front half-dome (the sensi-touch field) briefly to switch on the light.

Touching the field briefly once again will turn the light off.

By touching a little longer you can adjust the light intensity of the lamp - alternating up/down.

*To control a single lamp from your Beolink Terminal:*

Press LIGHT, GO TO + the number you have allocated to the lamp and then either PLAY or STOP (turning the light on or off).

Pressing either ▲ or ▼ (the step-buttons) will adjust the light intensity.

## Local Light Pictures

A Local Light Picture is one or more lights in a room setup, which are activated at the same time. Each light is switched on at an individually set light intensity.

### *To activate a Local Light Picture:*

Press LIGHT and then the number of the wanted light setting.

Pressing LIGHT, STOP will switch the light picture off. LIGHT and then either ▲ or ▼ (the step-buttons) will adjust the light intensity of the light picture.

Only one Local Light Picture at a time can be on in the room. If another light setting is activated, the first will be overruled.

## Link Light Pictures

A Link Light Picture is several lights in a round-the-house setup, which are activated at the same time. Each light is switched on at an individually set light intensity.

### *To activate a Link Light Picture:*

Press LINK, LIGHT and then the number of the wanted light setting.

Pressing LINK, LIGHT and then STOP will switch the light picture off. A Link Light Picture cannot be adjusted.

Only one Link Light Picture at a time can be on in the house. If another light picture is activated, the first will be overruled.

If a Local Light Picture is active and a Link Light Picture is then switched on, this will overrule the Local Light Picture.

Each light setting must be given a number from 1 to 9. One system will accommodate up to nine Local Light Pictures in each room and nine Link Light Pictures throughout the house.

The use of Link Light Pictures will require installation of a Bang & Olufsen Local Control System.

A light picture is created by first setting the light intensity of each lamp individually and then collectively storing the light picture thus created.

The light intensity of each lamp in the light picture may be set either by close-up operation touching the sensi-touch field on each of the LC 2 units, or by remote control from your Beolink Terminal.

*Light levels can be programmed in setups involving one or several LC 2 units.*

#### **Local Light Pictures**

- 1 Switch on and set the light intensity of each lamp you want in the light picture.
- 2 Press LIGHT to get access to the light control function.
- 3 Press STORE, key in a digit (e.g. 1), and then press STORE again.

Your Local Light Picture number 1 has now been programmed into the memory of the LC 2 units and may be recalled just by pressing LIGHT and then 1.

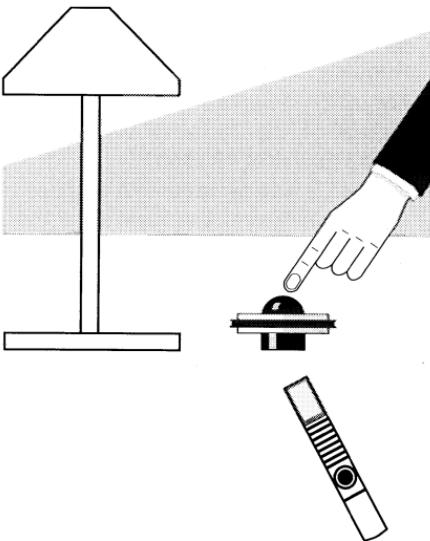
Program other light settings in this way, only select a different digit for each set Local Light Picture.

*While you program your setup, make sure that only the lights you want in your setup are lit - whether it is a local or a round-the-house link setup!*

## Link Light Pictures

- 1 Switch on and set the light intensity of each lamp throughout the house you want in the light picture.
- 2 Press LINK, then LIGHT to get access to the link light control function.
- 3 Press STORE, key in a digit (e.g. 1), and then press STORE again.

Your Link Light Picture number 1 has now been programmed into the memory of the LC 2 units and may be recalled just by pressing LINK, LIGHT and then 1.



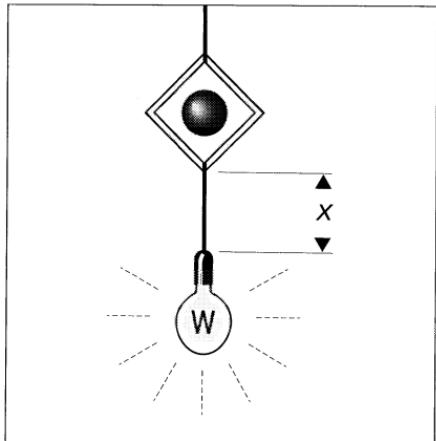
## Timer programmings

If your Bang & Olufsen Audio/Video System and your Beolink Terminal allow timer programmings, it is possible to program lights to go on and off at specific times, e.g. as a security precaution when you are not at home.

Timer programming of the lights is done in exactly the same way as 'ordinary' timer programmings of e.g. an audio source. You just have to select a light picture number as the source, and then key in the start and stop time you want.

Please refer to the user's guide enclosed with your Audio/Video System or Beolink Terminal for specific information on how to program the timer function.

- The LC 2 complies with the EEC directive 89/336 concerning radio frequency interference.
- The LC 2 is designed for a mains voltage of 220 - 240 V (AC), 50 Hz and a load power of 40 - 300 W.  
If the LC 2 is to be used with a 220 - 240 V transformer, the labelling of the transformer must not exceed 300 VA.  
*The transformer must be of an approved double-insulated model with a thermal fuse.*  
If the LC 2 is set up for low-energy lighting, the input power must not exceed 100 W (0 - 100 W).
- The LC 2, type 2130\* is designed only for double-insulated lamps (class 2) and must be mounted on 2-core double-insulated plastic covered leads.
- The LC 2, type 2131\* is designed for lamps requiring 3-core double-insulated plastic covered leads (lamps, class 1 - with a protecting earth-wire).
- The outer diameter of the leads must not exceed 8.2 mm.
- Fabric covered leads must not be used.
- The LC 2 can be used with lamps fitted with the following types of bulb:
  - standard filament bulbs
  - low-voltage halogen bulbs, using a 220 - 240 V transformer
  - high-voltage halogen bulbs, 220 - 240 V
  - low-energy bulbs and fluorescent tubes (on/off function only)
- If the LC 2 is used with halogen lamps using a built-in electronic voltage control, it must be reprogrammed as for low-energy lighting! See page 15.
- The lamp must not weigh more than 2 kg, if hung directly from the leads of the LC 2.
- The LC 2 must not be mounted in damp rooms!



*Do not place the LC 2 unit too close to the light source because of the heat it generates:*

- 40 W, X > 20 cm
- 60 W, X > 30 cm
- 100 W, X > 40 cm
- 200 W, X > 50 cm
- 300 W, X > 60 cm

*The values for load power, mentioned on page 6, are valid only for an ambient temperature not in excess of 25° Celsius. Thus, you should avoid placing the LC 2 unit in direct sunlight or near other sources of heat. Placing the LC 2 in direct sunlight will also impede the reception of the infra-red remote control signals from your Beolink system.*

- \* Both types of LC 2s will not be available in all countries.



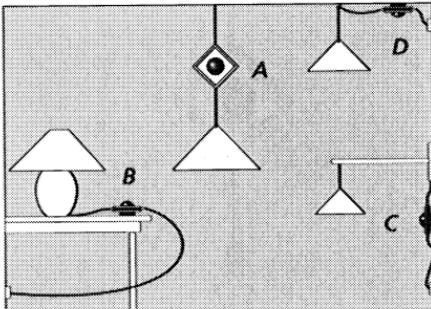
*This symbol indicates double-insulated equipment.*

### Placement

The LC 2 is to be inserted on the lead which connects the lamp to the mains. On lamps using a transformer the LC 2 must be inserted in the leads between the transformer and the mains!

Make sure that the LC 2 can receive the remote control signals from your Beolink terminal directly or via your Local Control System.

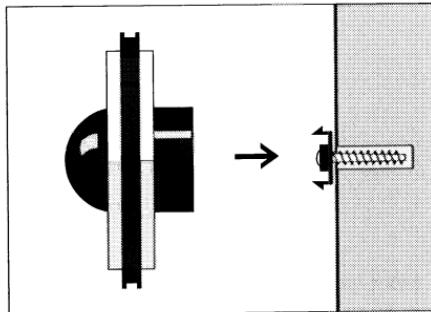
*The LC 2 unit can be placed in several ways:*



- A Hanging directly in the lead of a pendant.
- B Standing on the floor, a table or a shelf.
- C Mounted on the wall.
- D Mounted on the ceiling.

*If the LC 2 is to be mounted on the wall or the ceiling: fix the small bracket to the wall or the ceiling and mount the base onto the LC 2 instead of the rear dark half-ball.*

*The base must also be used if you want the LC 2 to stand on a flat surface.*

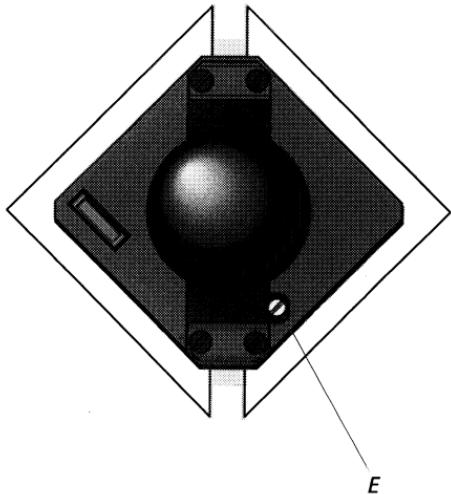


## Opening the LC 2

In order to mount the leads, or if you want to mount the base, you will have to open the LC 2.

During this process it is a good idea to place the unit in one of the foamed plastics halves used for packaging, to protect the surfaces from being scratched.

- 1 Place the LC 2 so that the front (the one with the BANG & OLUFSEN name printed on it) faces downward.
- 2 Remove the white cover by pulling carefully at one of the two corners with holes for the lead.
- 3 Remove the dark half-ball:
  - unscrew the screw E
  - pull the half-ball slightly to one side and
  - remove the half-ball



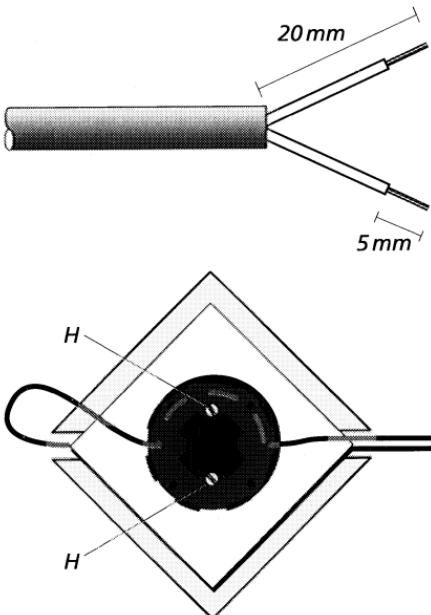
### *Note!*

Do not attempt to disassemble the LC 2 unit any further.

### Mounting leads

Observe the following while mounting the leads:

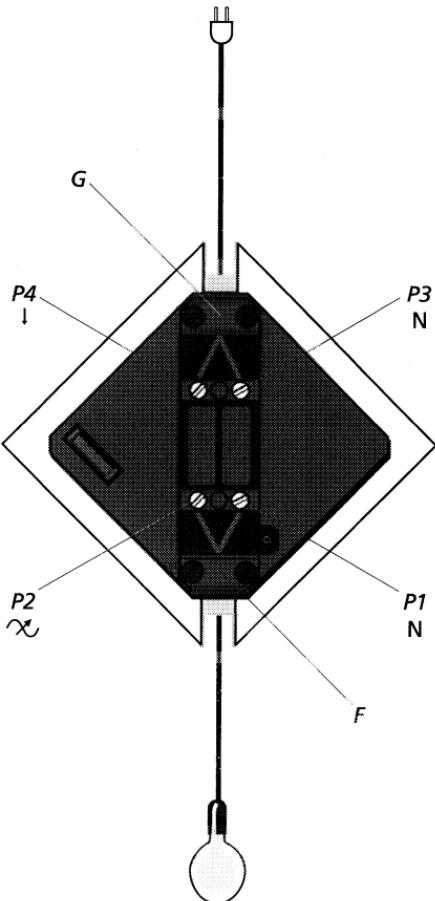
- LC 2, type 2130 is designed for use on 2-core leads (as shown here). LC 2, type 2131 is designed for use on 3-core leads.
- Do not deviate from any of the measurements indicated.
- Twist the copper ends before mounting them. Do not solder the copper ends as this may make the connections less reliable.
- Make sure that no copper ends peer out from the terminal strips!
- The leads must be held by the two clamps so that at least 2 mm of the plastic cover can be seen within the clamps.
- Pull at each lead to make sure that it is firmly fixed in the clamp.



*If you wish, one lead may be run through the base of the LC 2 unit:*

- disassemble the base by unscrewing the two screws marked H
- place the lead in the groove
- reassemble the base

- 1 Switch off at the mains!
- 2 Cut the leads where you want to insert the LC 2 unit.
- 3 Strip the ends of the leads.
- 4 Mount the leads:
  - Run the lead from the lamp through the clamp F.
  - Connect the blue wire (Neutral) to the terminal screw P1 and connect the brown wire (Live) to the terminal screw P2.
  - Run the lead from the mains through the clamp G.
  - Connect the blue wire (Neutral) to the terminal screw P3 and connect the brown wire (Live) to the terminal screw P4.
  - Tighten the clamps F and G.
- 5 Finally, reassemble the LC 2 unit.



**Note - LC 2, type 2131**

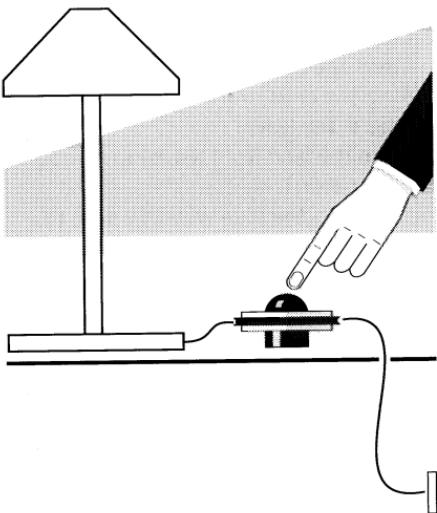
Connect the yellow/green wire (Earth) to the terminal screw in the middle (not shown!)

### Checking the lamp

Switch on at the mains. If the lamp does not light up, check the following:

- have you switched on at the mains?
- have you switched on the lamp?
- has the bulb blown?
- does the lamp use an energy saving bulb or a fluorescent tube? (See page 21)

If the lamp still does not light up, try replacing the fuse in the LC 2 unit.



### Thermal safety

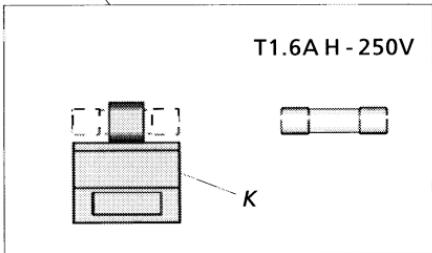
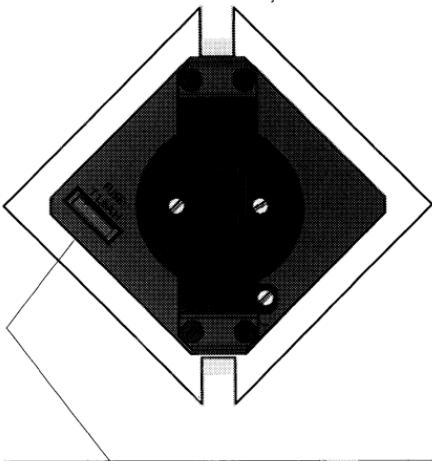
The LC 2 is designed with a built-in circuit-breaker that, in case of excess temperature, will switch off the supply voltage preventing the LC 2 unit from being destroyed.

If the supply voltage is switched off in this way, you just have to wait a few minutes for it to cool off. Then switch the light on again as usual.

If the LC 2 switches off frequently, check the ambient temperature and the power level of the lamp(s) you have connected to it (see *Technical Information*).

If you have to replace the fuse in the LC 2 unit, you can buy another from your Bang & Olufsen dealer.

- 1 Switch off at the mains!
- 2 Remove the white cover on the back of the LC 2 (see page 15).
- 3 Pull out the holder K which keeps the fuse in place.
- 4 Replace the fuse and push the holder back in place.



*Important!*

Make sure to replace the fuse with one of the same type and value, part no.: 6600125 - Fuse T1.6A H - 250V.

When connected to the mains, the LC 2 will be ready for use. However, the LC 2 can be reprogrammed for the following special purposes:

- Numbering of individual lamps
- On/off function
- Low-energy lighting

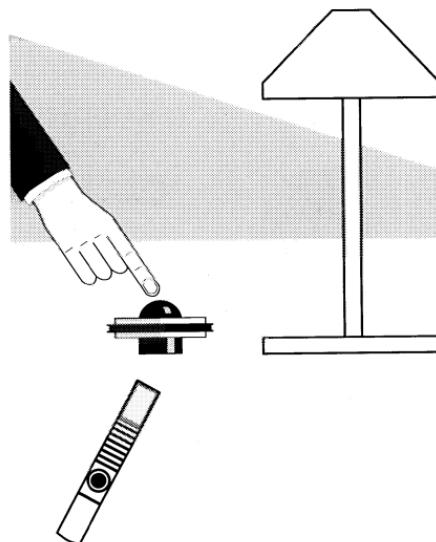
#### Numbering of individual lamps

Numbering of lamps is required only if you have more than one LC 2 unit in a system and want to control individual lamps from your remote control.

Each LC 2 unit must then be given a number from 1 through 9:

*Press LIGHT, GOTO, STORE, the number of your choice, STORE*

The LC 2 units have not been given any number when leaving the factory.



*The three types of reprogramming are all carried out by holding the dark front half-dome (the sensi-touch field) and simultaneously pressing the sequences of keys on your Beolink Terminal.*

## Programming the on/off function

The LC 2 unit may be controlled not only by using the Beolink terminal or by touching it directly, but also when you switch on at the mains. Normally the mains switch should be left on.

However, if power failures occur frequently in your area, we recommend that you reprogram the LC 2:

**Press LIGHT, GOTO, 0, STORE, 1**

Such a reprogramming causes the lamp not to light up if you switch on at the mains (or when the power returns) - unless the lamp was already lit.

To restore the standard on/off function in the LC 2:

**Press LIGHT, GOTO, 0, STORE, 2**

This is the factory setting of the LC 2.

## Programming for low-energy lighting

Fluorescent tubes and low-energy lighting are not designed for light level adjustment.

To reprogram the LC 2 for low-energy lighting:

**Press LIGHT, GOTO, 0, STORE, 3**

### *Important!*

When programmed like this, the LC 2 must not be connected to lamps using a transformer!

To reprogram the LC 2 for ordinary light sources:

**Press LIGHT, GOTO, 0, STORE, 4**

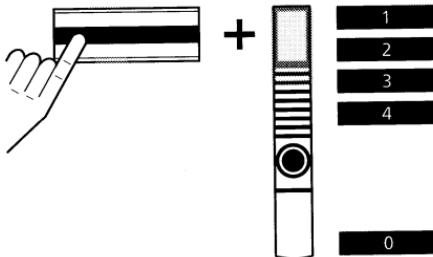
This is the factory setting of the LC 2.

The use of a round-the-house setup (Link Light Pictures) requires installation of a Local Control System. A Transceiver has to be installed in each room where link light control is wanted.

In order to ensure correct transmission of link light commands, each Transceiver in the system has to be programmed with a function code (1 - 4).

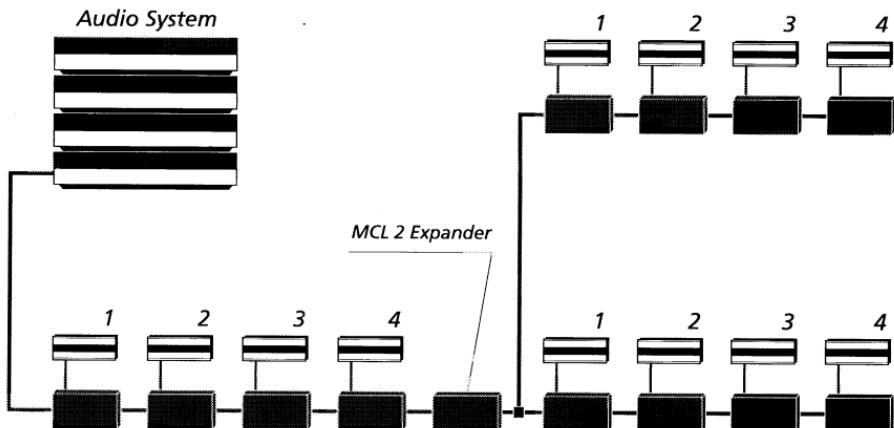
- 1 Press SHIFT ● on the Beolink Terminal to bring the system in total stand by.
- 2 Hold the TIMER button on the Transceiver and press any digit from 1 to 4 on the Beolink Terminal.

Program the other Transceivers in the system in the same way, only select a different digit.



*The Transceiver is programmed with the function code 0 when supplied from the factory.*

*No light command is transmitted with function code 0!*



*Each function code (1 - 4) must not be used more than three times in one system. This means that you can achieve link light control in up to 12 different rooms as shown here.*