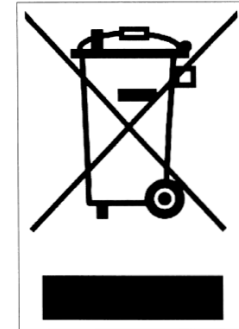




Light-Manager Pro

Manual of operation

Note
Hinweis
Remarque
Nota



English

This symbol [the crossed-out wheeled bin/PICTURE] means that the product should be brought to the return and/or separate collection systems available to end-users, when the product has reached the end of its lifetime. This symbol applies only to the countries within the EEA (*).

(* EEA = European Economic Area, which comprises the EU Member States plus Norway, Iceland and Liechtenstein.

Deutsch

Dieses Symbol (die durchgestrichene Abfalltonne) bedeutet, dass dieses Produkt nach der Lebenszeit nur in einem für den Endanwender verfügbaren Rücknahme- oder getrenntem Sammelsystem zurückgebracht werden soll. Dieses Symbol gilt nur in den Staaten der EWR (*).

(* EWR = Europäischer Wirtschaftsraum, welches die EU Mitgliedstaaten plus den Staaten Norwegen, Island und Lichtenstein umfasst.

Français

Ce symbole (un conteneur à déchets barré d'une croix) signifie que le produit, en fin de vie, doit être retourné à un des systèmes de collecte mis à la disposition des utilisateurs finaux. Ce symbole s'applique uniquement aux pays de l'EEE (*).

(* EEE = Espace économique européen, qui regroupe les États membres de l'UE plus la Norvège, l'Islande et le Liechtenstein.

Italiano

Questo simbolo significa che il prodotto, giunto a fine vita, dovrebbe essere conferito ai punti di raccolta differenziata a disposizione dell'utente finale. Questo simbolo si applica ai paesi aderenti all'EEA (*).

(* Europea Economic Area che comprende gli stati membri dell'EU, compresi Norvegia, Islanda e Liechtenstein.

Español

Este símbolo (imagen de un cubo de basura tachado) significa que el producto debería ser llevado a los sistemas de recogida dispuestos para los usuarios finales cuando llegue al final de su vida útil. Este símbolo solo tiene validez en los países de la EEA (*).

(* La EEA incluye a los países miembros de la UE y Noruega, Islandia y Liechtenstein.

Light-Manager Pro for universal remote controls

Thank you for choosing the Light-Manager Pro. The Light-Manager Pro is compatible with every universal remote control which has infrared learning capability. This includes the Logitech Harmony, the Philips Pronto and the Nevo SL series for example. Supported radio bus actuators are InterTechno (434 MHz), Conrad/ELV FS20 (868 MHz) as well as IKEA Koppla (434 MHz).

The Light-Manager can be used as a standalone device or as a USB-periphery device for the PC. In the first case power supply is achieved by the included A/C adapter. In the latter case the Light-Manager is powered by the USB bus of the PC. The configuration is done with the comfortable PC Software **Lightman Studio**.

The Light-Manager makes it possible to create complex light scenes containing FS20, InterTechno and Koppla actuators. Each light scene can be triggered by 5 different sources:

- the remote control
- the integrated timer
- the button at the front of the case
- the internal temperature module (optional)
- the web-interface (Light-Manager must be attached to PC)

The complexity of the light scenes is limited only by the memory space of the Light-Manager. The memory is sufficient for

- 350 light scenes of 1 actuator
- 160 light scenes of 3 actuators
- 56 light scenes of 10 actuators
- 1 light scene of 600 actuators

This is much more than you need in practice.

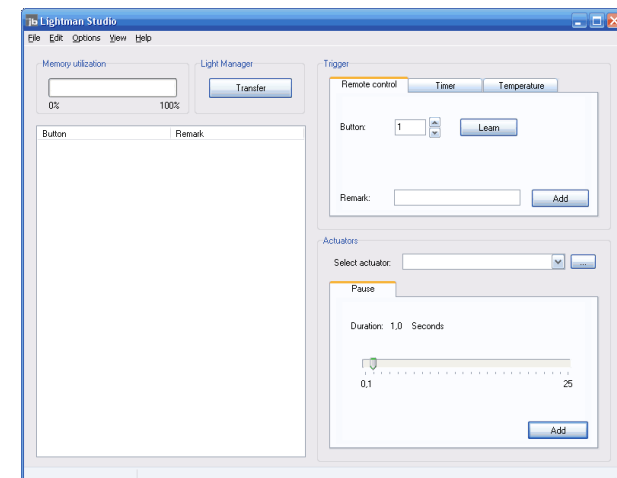
Included in delivery

The package contains

- Light-Manager Pro
- 5V A/C adapter with USB socket
- USB cable of 1 m length
- CD with Lightman Studio software for PCs
- This manual

Lightman Studio Software

The configuration of the Light-Manager is done with the software Lightman Studio. You get this software in the download section of the website www.jbmedia.de. Please understand that we do not include a CD in this package, as the CD would contain an outdated version at time of delivery already. After the program is started you will see the main application window.



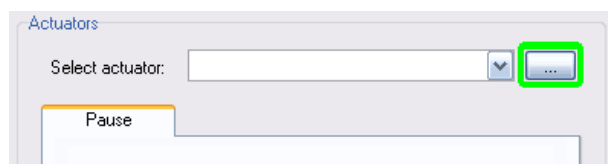
On the left side there is a table containing all light scenes you have defined. In the upper right part there is the panel **Trigger** which defines the way a light scene is triggered, by the remote control, the timer or the temperature module (optional). In the lower right part you find the panel **Actuators** which is for the selection of the actuator type, the address and the action performed.

Creating a light scene

A light scene is defined by two parameters, the trigger and the actuators. In the following we create a light scene which is triggered by the remote control. First press **Add** on the remote control page of the trigger panel. In the table there appears a new entry called **Button 1**. Use the remark input box to assign a name to the light scene, for example **Living room on**.

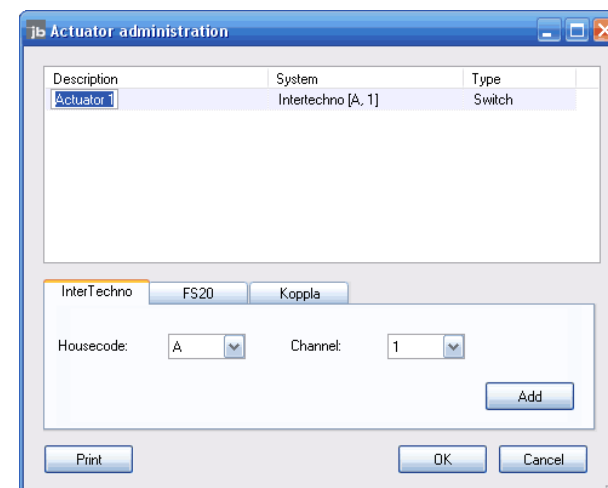
Button	Remark
Button 1	Living room on

Now we have defined that the light scene is triggered by the button on the remote control which has been assigned the code 1. The only thing missing is the list of actuators for this light scene. This is done by the **Actuators** panel.



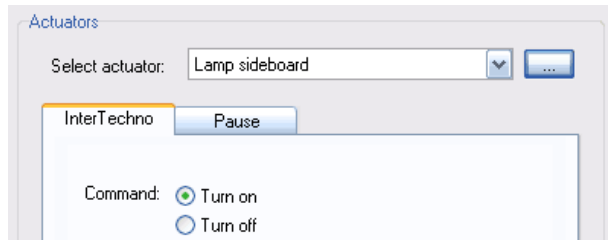
First open the actuator administration by pressing the button with the green frame. In the actuator administration you can define all actuators you want to use and give them a

description. This will make the later configuration much easier as the actuators will be appear by that description, you don't have to deal with their address anymore.



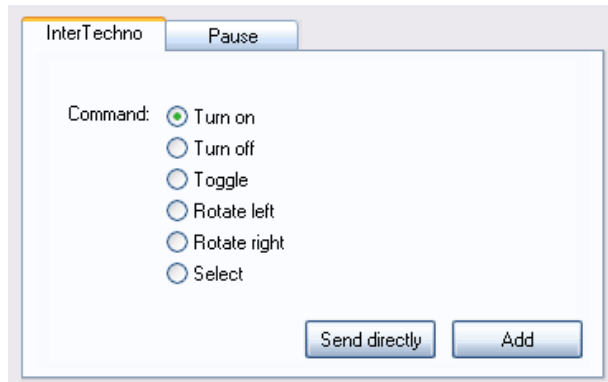
On the first tab InterTechno actuators are defined, FS20 is found on the second tab and Koppla on the third. So if you want to create an InterTechno actuator, select the first tab, adjust the housecode and channel, then press **Add**. In the table the actuator appears as **Actuator 1** at first. It is recommended to replace this by a meaningful description directly, like **Lamp sideboard**. In the right column you have the possibility to select if the actuator is a switch or a dimmer. This selection decides which commands are offered for this actuator later. All parameters, the description, the system and the type can be changed any time by clicking on it.

If no housecode is selected (-/- chosen from the list) the Light-Manager will send the associated commands to the currently active actuator. This can be the actuator which has been selected before by the action **Select**. This way of operation makes it possible to choose the desired actuator from the display of your remote control while you turn it on and off by hard buttons e.g. the up/down buttons. This reduces the number of buttons needed in total and increases the comfort of operation



When you have added all actuators close the window by pressing **OK**. The field **Select actuator** lists all actuators defined before. Depending on the one currently chosen the corresponding tab with all available commands will be shown.

InterTecho actuators



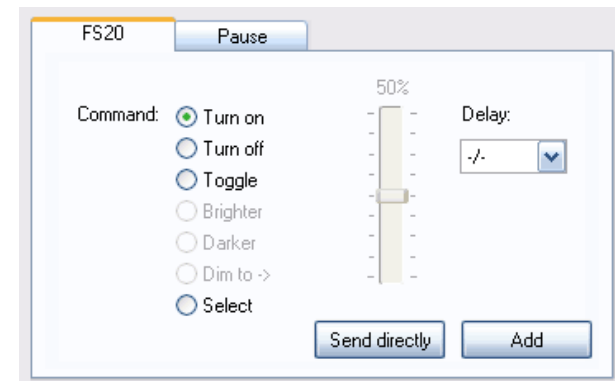
The commands have the following meaning:

- **Turn on:** Turns the actuators on. In case of dimmer actuators the dim procedure can be started and stopped by this command.
- **Turn off:** Turns the actuator off.
- **Toggle:** Turns the actuator on and off alternatingly. So you can control a switch actuator comfortable by one button on the remote control only.
- **Rotate left/right:** These commands are for electric blinds. They turn on and off the actuator for a short moment, so that the blinds are rotated by a small angle.

- **Select:** Selects the actuator for actions which are initiated later without changing the state of the actuator.

Note: The commands rotate left/right must be used only if the motor supports short operation periods. Otherwise using these commands can cause overload resulting in damage to the motor.

FS20 Actuators



The commands have the following meaning:

- **Turn on:** Turns the actuator on. In case of a dimmer actuator it will be turned on with the last used level of brightness.
- **Turn off:** Turns the actuator off.
- **Toggle:** Turns the actuator on and off alternatingly. So you can control a switch actuator comfortable by one button on the remote control only.
- **Brighter:** Increases the level of brightness by 6.25%
- **Darker:** Decreases the level of brightness by 6.25%
- **Dim to:** Makes it possible to select a certain level of brightness directly in the range of 0-100% in 6.25% steps. When the slider is moved the actuator is driven in real time and changes its brightness simultaneously.
- **Select:** Selects the actuator for actions which are initiated later, without changing its state.

Delay: It is possible to assign a delay to a dimming operation, which can be in the range of 2 seconds up to 4 ½ hours. Within this interval the change of brightness is done smoothly without any visible abrupt changes of brightness. There are 4 pre-configured intervals available, which can be selected by the dropdown list. The configuration of the available intervals is done via the menu item **Options → FS20 Settings**.

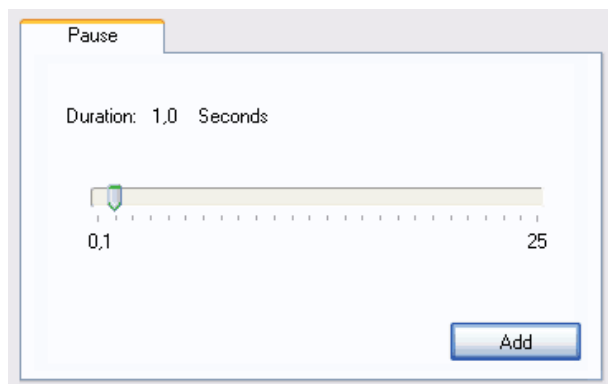
Hint: If you want to enable dim actuators with 100% brightness then choose the command **Dim To 100%** instead of **Turn on**.

Hint: Programming the housecode and the address into a FS20 actuator can be done much more comfortable with the Light-Manager Pro than with the FS20 remote control. Just enable the learn mode of the actuator and press **Send directly**. In the same moment the actuator is set to this value. The housecode can be selected from the options menu.

A click on **Add** is sufficient to assign the actuator to the light scene. If no address group is selected (-/- chosen from the list) the Light-Manager will perform the desired action on the currently active actuator. See previous chapter for closer information.

Pauses

With the third tab pauses in the range of 100 ms up to 25 seconds can be inserted into a light scene. It is possible to add multiple pauses one after another to extend the total period of time.



Note: During the execution of a pause no other light control signals are processed.

Editing a light scene

After one or several actuators have been added to a light scene it will show up in the table like:

Button	Remark
Button 1	Living room on
Living room lamp 1	Dim to -> 100%
Living room lamp 2	Dim to -> 100%
Living room lamp 3	Dim to -> 100%
Sideboard	Turn on
Lamp sofa left	Turn on
Lamp sofa right	Turn on

To move an actuator within a light scene just mark it with the left mouse button, keep the button pressed and moved it to its new position. If you move the actuator along the left border of the column insert marks will appear which makes it easier to select the new position:

Button	Remark
Button 1	Living room on
Living room lamp 1	Dim to -> 100%
Living room lamp 2	Dim to -> 100%
Living room lamp 3	Dim to -> 100%
Sideboard	Turn on
Lamp sofa left	Turn on
Lamp sofa right	Turn on

An actuator can be removed by marking it, then pressing the delete key. It is possible to select of group of actuators and delete them all together.

To modify an item, mark it with the left mouse button. Then the properties of the item can be modified with the panels **Trigger** and **Actuators**.

By doing a double click on an actuator you will automatically be moved into the actuator administration where all parameters can be modified. When doing a single click on an actuator its data will be shown in the status bar of Lightman Studio. So it is easy to keep track of the configuration.

Living room lamp 1	Dim to -> 100%
Living room lamp 2	Dim to -> 100%
Lamp sofa left	Turn on
Living room lamp 3	Dim to -> 100%
Sideboard	Turn on
Lamp sofa right	Turn on

F520 [1, 1 - 1111]

Timer

The Light-Manager Pro has an integrated timer which allows scheduling light scenes for a certain time at certain days of the week.

When transferring the configuration to the Light-Manager its internal clock is synchronized to the clock of your PC. The internal clock has power reserve of about half an hour. Within this time limit the Light-Manager has to be powered again to ensure correct timing. If required you can verify and set the internal clock manually with the options menu. The clock of the Light-Manager is very accurate and has an aberration of

only few seconds per month. It is allowed to place more than one light scene on the same point of time if required.

Temperature Control

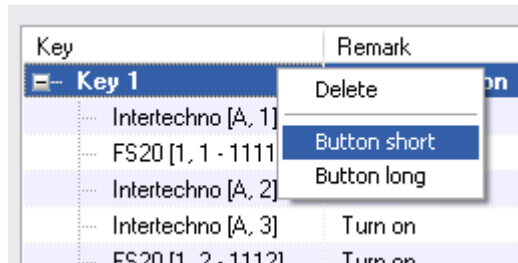
If your Light-Manager has the optional temperature module it is possible to trigger light scenes in conjunction of the current indoor temperature. A scene can be triggered if temperature falls below a certain point or goes above a certain point of temperature. The Light-Manager checks every 20 seconds the room temperature and triggers light scenes accordingly. This function can be useful to control electric blinds in a winter garden for example.

Note: The temperature sensor is placed inside the Light-Manager. Because of this the temperature reported is slightly too high in the first 30 minutes after power connect until the device has reached its final operating temperature.

Note: To ensure that the Light-Manager can measure temperature accurately the device must not be placed in direct sunlight or near to a source of heat. The Manager uses a precision sensor for temperature measuring which has an aberration of only +/- 1°C in the range of 0 until 70°C.

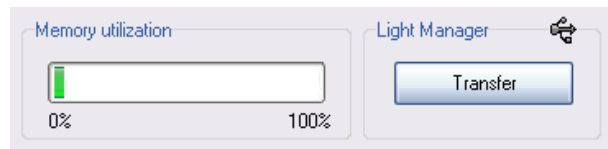
Front button

Two light scenes of your choice can be accessed by the front button of the Light-Manager. For example you can enable your living room lightning without looking for the remote control first. A short press of the button triggers the first light scene, a long press (> 1 second) triggers the second light scene. The selection of light scenes is done by the context menu which appears when you press the right mouse button on the desired light scene:



Transferring the configuration

When you have finished the lightning setup the configuration has to be transferred to the Light-Manager. This is done with the **Transfer** button of Lightman Studio. The process takes a few seconds only.

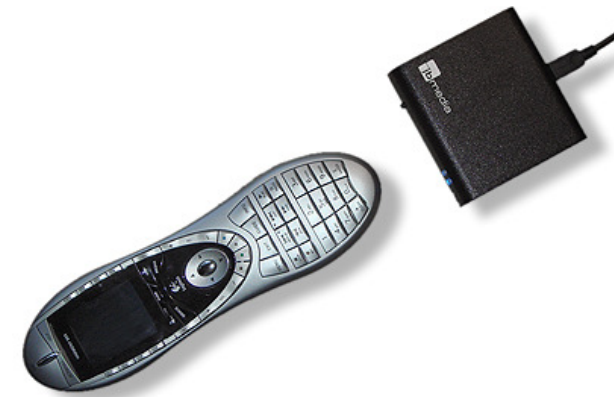


After this the Light-Manager is ready to use. The USB symbol above the Transfer button appears as long as the Light-Manager is connected to the PC.

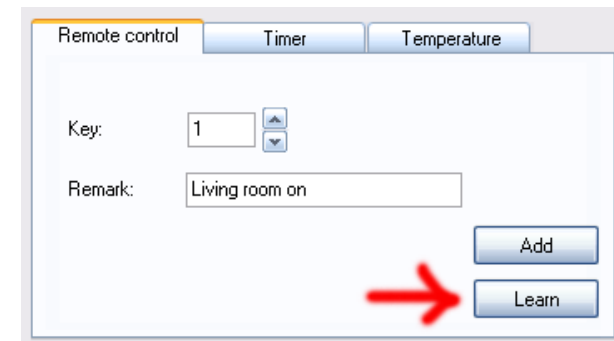
Teaching the remote control

The remote control has to know the infrared codes to control the Light-Manager. This is done by the learning function of the remote control. The Manager contains an infrared transmitter module which allows sending these codes to the remote control.

To start the teaching process place the remote control about 15 cm in front of the Light-Manager.

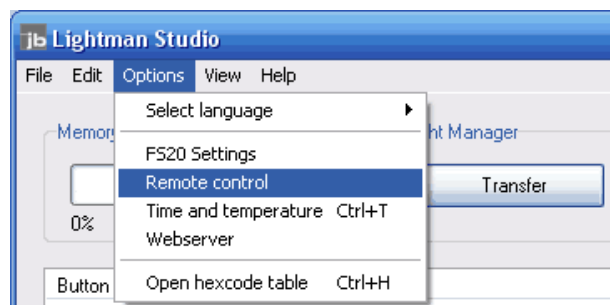


Now set your remote control into the learning mode and select the key you want to teach from the remote control tab. Finally press the **Learn** button.

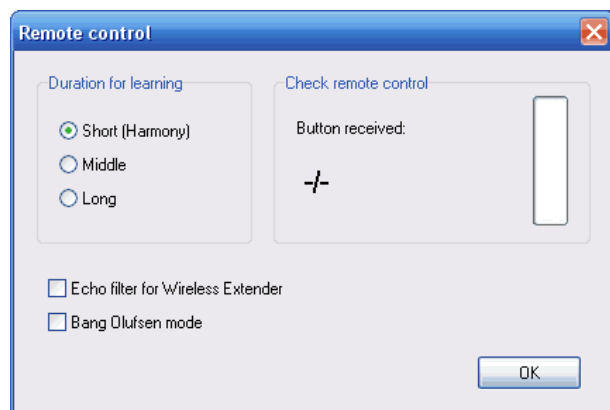


The red LED is flashed for a short moment and the remote control should have learned the code. This procedure is repeated for all keys configured.

Note: If the remote control does not seem to learn the code successfully change the duration of the infrared transmission. This is done by the options menu with the item "Duration for learning". For most remote controls the medium adjustment is recommended.



When the teaching process is finished you can check the remote control codes. This is done by the options menu item **Remote control**.



If you press a button on the remote control you will see the corresponding number on the display. A green bar reflects the intensity of the transmission. The red LED of the Light-

Manager flashes accordingly to the signal received. This is useful to check if any infrared signal can be received at all.

Configuration of the Harmony

The configuration of a Logitech Harmony remote control is very easy as no learning procedure is required. Instead the whole configuration is done by the Logitech PC software. To add the Light-Manger Pro to your profile please follow these steps:

Select **Add Device** → **Home Automation** → **Light Controller** → **JB Media** → **Light Manager Pro**. Please note the spelling of Light Manager Pro without a dash.

That is all and the configuration is almost completed. There are 65 buttons available now, named Light1 up to Light65. So you have the possibility to control up to 65 light scenes. If more buttons are required these can be added manually by learning the codes.

If you plan to use InterTechno impulse switches it is recommended to control the Light-Manager Pro with an action instead of controlling it from the device layer. To add an action please select **Add Activity** → **choose manual configuration** → **Utility** → **Generic activity**. Now add the Light-Manager Pro to the activity and the buttons you want to use. Finally choose **Settings** → **Change Options** → **Leave On** for unused devices. Now the configuration of the activity is finished.

The creation of the activity has a certain background: Only within activities buttons get the so called hold function on Harmony remote controls. The hold function ensures that the infrared signal is sent as long as you press a button on the remote control. This is important for impulse switches. If the button was pressed from the device layer the remote control would send the infrared signal for a fixed interval of about 1 second regardless how long the user would press it.

Finally please do not forget to update your remote control!



Hexcode Table

The hexcode table can be opened by the options menu. It contains the infrared codes of all keys configured in the hexadecimal Philips Pronto format. These hexcodes can be processed by several remote controls like the Philips Pronto or the Nevo SL. For these remote controls it is not necessary to perform manual learning.

It is known that the learning capability of Logitech Harmony remote controls fails on certain PCs. This can be caused by an unstable voltage on the USB bus among other things. In such a case you can email the hexcode table to the Logitech support department. They will integrate these codes into your personal profile. We still have the hope that Logitech will enable this option for all users in their PC software one day.

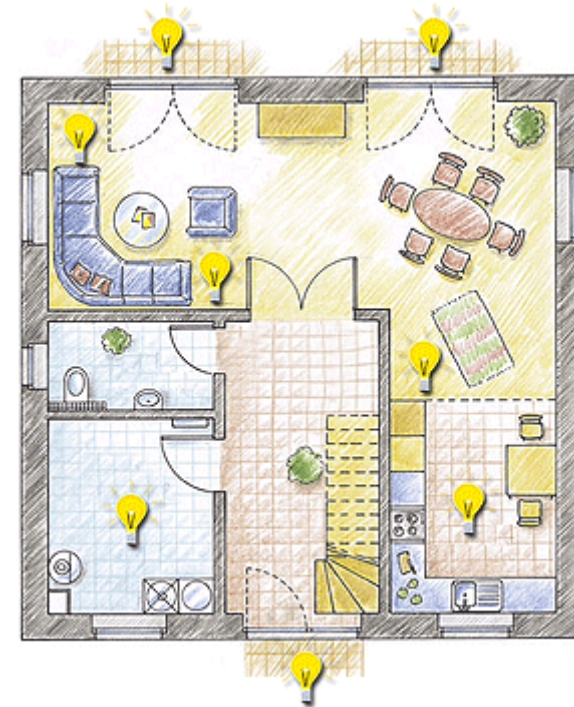
Web-Interface

The Lightman Studio software contains a simple but powerful web server. It enables you to control your lightning by a web interface. To do that you can create your own html files which have to be placed in the \html subfolder of the Lightman Studio program folder. Before you can use the web interface the server has to be enabled. This is done by the options menu with the item **Webserver active**. The port the server listens to can also be selected by the options menu. If the port is in use by another application already an error message appears.

The control of light scenes is realized by hyperlinks with the extension **?key=n**. The letter n is a placeholder for the number of the key respectively the light scene you want to trigger through the hyperlink. So the link

`Light Scene 3`

will enable the light scene configured to key 3. In the html folder you will find an example file.



If the Light-Manager is equipped with the temperature module you can even display the current temperature in the web site. For this purpose place the phrase **[temp]** in your source code. The phrase will be replaced by the web server automatically with the temperature, for example like **22.5**. To open the website in your browser just type <http://localhost:81> in the address field. The value 81 is the number of port which has been assigned to the web server.

Note: To test the function of the website you can use the remote control check function of Lightman Studio. Select the menu item "Check remote control" from the options menu. If a hyperlink is clicked the corresponding key number appears on the screen.

Note: When using the web interface the Light-Manager Pro must be connected to a running PC via USB bus. It is possible to use the Light-Manager by Web-Interface as well

as by remote control, even if the PC is in standby. Only make sure that USB voltage is present.

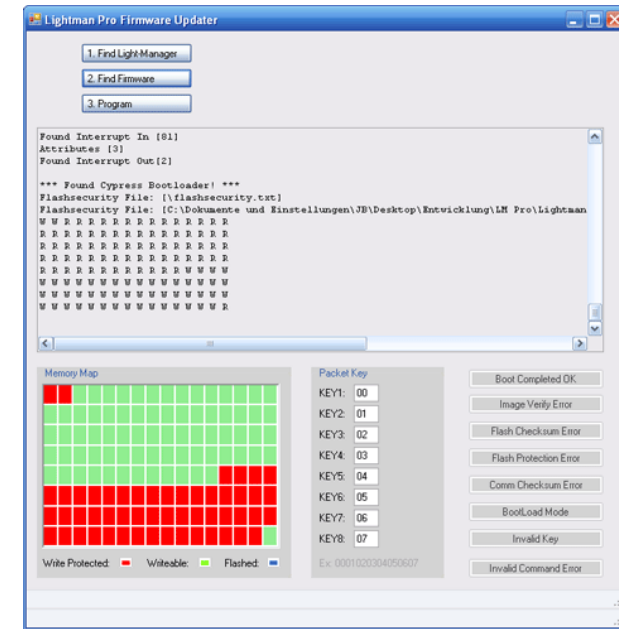
Firmware Update

From time to time there will appear new firmware version for the Light-Manager Pro. These updates are made to integrate new features as well as to fix bugs.

You can start a firmware update from the help menu. After confirming that you really want to do an update the Light-Manager will cut the connection with Lightman Studio and a new device will be found by your PC.

The first time you perform a firmware update a driver has to be installed for the new device. Please select manual install in the Windows driver install dialog. In the next step you can enter a folder containing the driver. Please select the location **c:\programs\Lightman Studio\firmware** and confirm with OK. Now the driver is about to be installed and the update can be performed.

Change to the program **Lightman Pro Firmware Updater**, which was started by Lightman Studio automatically. Click on **Find Light-Manager**, then on **Select Firmware**. Here you select the appropriate firmware file. Finally click on **Program Firmware** to start the actual update procedure.



During the update you can verify the progress in the lower left area. When the procedure is finished the Light-Manager connects with Lightman Studio software automatically again. With the menu item **Version Info** from the help menu you can verify if the update was successful.

Technical data

Notes

Supply voltage: 5 Volts

Power consumption: ~ 0.35 Watts

Dimensions: 8 x 8 x 2.5 cm

Radio frequency: 433.92 MHz and 868.35 MHz

Range: ca. 20 m indoor, up to 100 meters in open area

Infrared receiver frequency: 30 – 40 kHz

Infrared Transmitter frequency: 38 kHz

Supported actuators: InterTechno series and Conrad / ELV FS20 series as well as compatible models

Supported operating systems of the Lightman Studio software:

Windows 2000, Windows XP and Windows Vista

USB-Mode: Human Interface Device (HID), no driver required

Memory retention without power supply: more than 10 years

Notes