

**CSL Powerline**

**User's Manual**



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## Contents of Packaging



2 x CSL Powerline



2 x LAN Cable

## Security Precautions

- To avoid any danger, do not attempt to repair or open the CSL Powerlines.
- The CSL Powerlines are conceived for indoor use only.
- Avoid direct light, or sunlight on your Powerlines, as well as direct heat sources. To prevent overheating.
- Make sure there is an appropriate ventilation.
- Avoid the penetration of liquids into the CSL Powerlines. Avoid the immersion in water or other fluids
- For cleaning, please disconnect the CSL Powerlines from the mains and use a damp cloth.
- The Powerlines are to be plugged in only into free accessible sockets of your household. So they can be easily unplugged in case of danger.

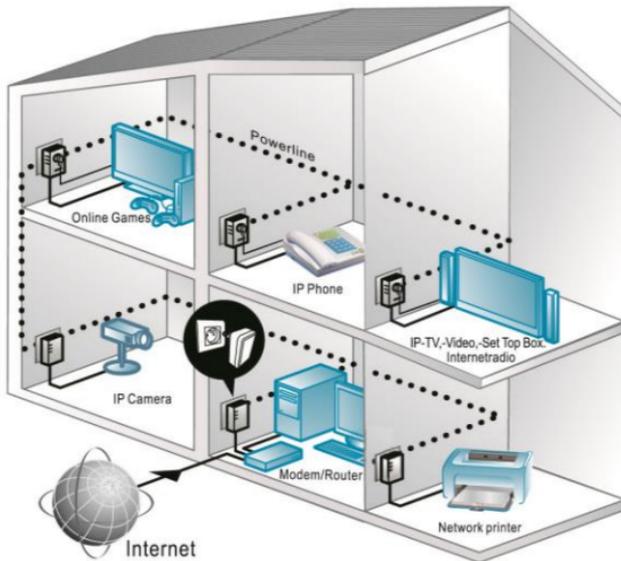
## CE Declaration

The CSL Powerlines meet the following requirements:

- EU Directive 2004/108/EG (EMV)
- EU Directive 2006/95/EG (Low Voltage)
- EU Directive 2009/125/EG (Environmental friendly design)
- EU Richtlinie 2011/65/EU (RoHS)



# Abstract



With the CSL Powerline set you can transmit data over the existing power network in your household. Extending your network without laying further cables.

Plug the Powerline into any socket in your household and link your computer or other network devices.

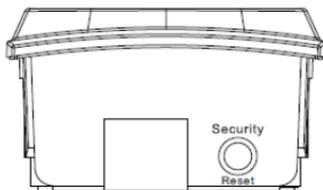
Please note that your Powerline kit is provided with a default key. To prevent unauthorized access, individual encryption is recommended. Read more on page 9.

In case you wish to add more Powerline adapters to your network, read more on page 10.

## Display indicators

	Power	Green - lights	Operative
		Green - flashes	System starts or encryption process is been carried on.
		Green - flashes (and all other indicators are off)	Adapter is in Standby Mode.
		Off	Adapter is not operating.
	Ethernet	Green - lights	LAN Cable is connected- Network is active.
		Green - flashes	Data are been transmitted.
		Off	No LAN Cable is connected or Network not active.
	Data	Green - lights	Adapter linked to Network.
		Off	No compatible Powerline adapter found or no device with matching Network Key.

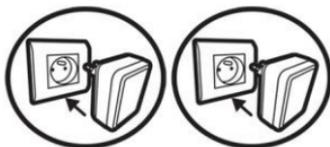
## Control elements



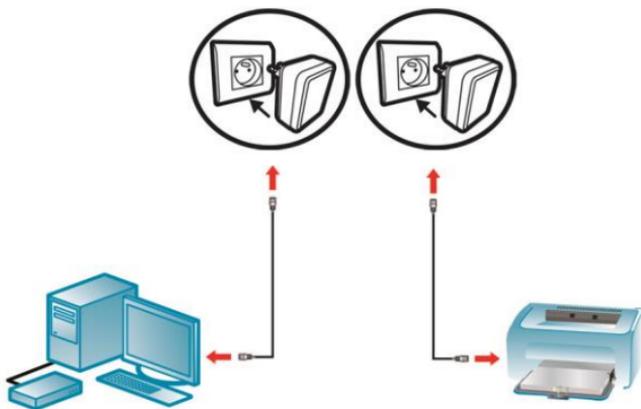
The Security/Reset button is assigned with multiple functions, as indicated in the following table.

Press button 1-2 seconds	Start encryption – or integrate a Powerline adapter into the Network.
Press button 5-8 seconds	Reset the Powerline Network status.

## Startup the Powerline network



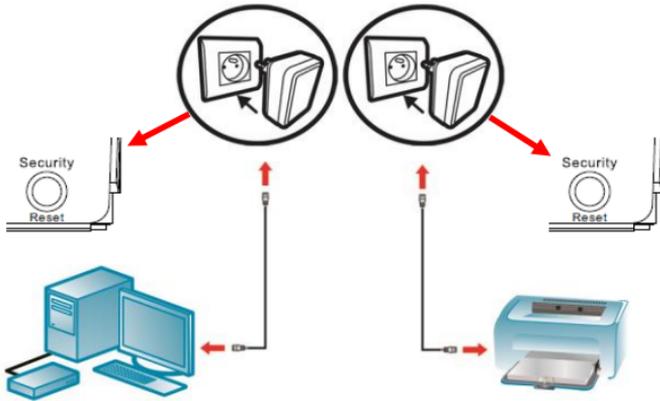
1. Plug the Powerlines into any socket of your household.



2. Link your Network devices (router, printer, TV with network connection or similar) with the Powerlines by using the provided LAN cables.
3. Ready. When all display indicators of the Powerlines light, your network has been successfully set up. The Network is provided with a default encryption key.

! To protect your network from unauthorized access, it is recommended to use an individual key. More on this in the following section.

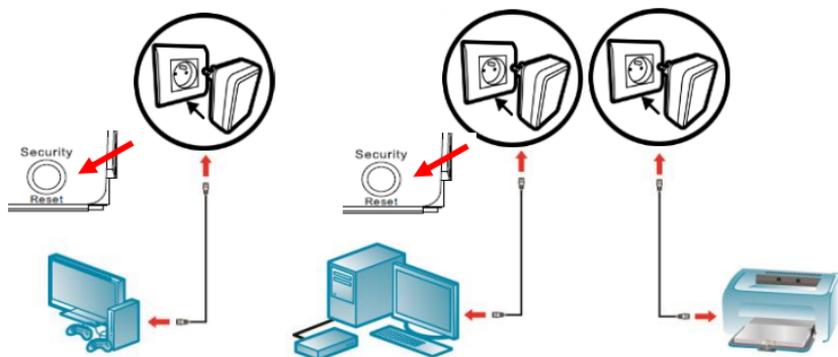
# Encrypting the Powerline Network



1. Both CSL Powerlines have to be plugged in. Power display indicator on.
2. Press the “Security/Reset” button on one of the Powerlines for 5-8 seconds. The device will reset and reboot. All display indicators will turn off briefly.
3. Press the “Security/Reset” button for 1-2 seconds. The power indicator will start to flash.
4. Within 2 minutes press the “Security/Reset” button on the other CSL Powerline for 1-2 seconds. The power indicator will start to flash.
5. When Power and Data indicators light green continuously, the encryption has been performed successfully.

You also have the alternative to encrypt the devices over your PC using the provided Software. See page 15.

## Expand the Powerline Network



If you wish to integrate a further Powerline adapter to the existing Network, proceed as follows.

1. Plug the adapter with which you want to expand the network into a socket in your household.
2. Press the “Security/Reset” button for 5-8 seconds on the Powerline that will expand the network. The device will reset and reboot. All display indicators will turn off briefly.
3. Press the “Security/Reset” button for 1-2 on an adapter of the existing network. The power indicator will flash.
4. Within 2 minutes press the “Security/Reset” button for 1-2 seconds on the network expanding adapter. The power indicator will start flashing.
5. When the Power and Data indicators light continuously green, the encryption has been performed successfully.
6. For further adapter repeat steps 1 to 5.

You also have the option to use the PC Software. See page 14.

## Exit the Powerline Network

If you wish to remove a Powerline adapter from the existing network, proceed as follows.

1. Press the “Security/Reset” button for 5-8 seconds on the Powerline adapter you wish to remove from the Network. All indicators will turn off briefly.
2. The device will reset and will no longer be part of the network. The Data indicator will turn off.

**IMPORTANT:** A reset to factory settings is possible exclusively via the PC software, you can download it at [www.csl-computer.com](http://www.csl-computer.com).

## Energy Saving Mode

The CSL Powerlines are equipped with an energy saving function. If the device connected to the Ethernet port of the CSL Powerlines network device is disabled or turned off, the Powerline will automatically turn to standby mode after approx. 1 minute. The power indicator will flash. Power display. If the network device is turned on again, the CSL Powerline automatically starts the operating mode.

**Attention!** Some network devices (e. g. with Wake on LAN function) are not automatically turned off and keep the network connection active. If you still wish the Powerlines to switch to Standby Mode, make sure you deactivate the Wake on LAN function of your Network device or turn the device off via a switchable socket (e. g. power strip).

## Optimizing the Transfer Speed

The transfer speed is shown in the main menu of the Powerline Utility Program under “Rate”. You have the option to choose the optimal socket for the best transfer speed.

Please observe the following instructions:

- The shorter the distance between the CSL Powerlines, the higher the transfer speed rate.
- Do not plug the CSL Powerline into a multiple socket (e. g. power strip). Thus, always plug the CSL Powerlines into a wall socket in your household.
- If you wish to use multiple sockets (e. g. power strips), plug these into the integrated socket of the CSL Powerlines, which will filter the interferences of the other devices attached to the multiple sockets.
- Multiple sockets with Surge Protection drastically reduce the transfer speed. Avoid this combination.

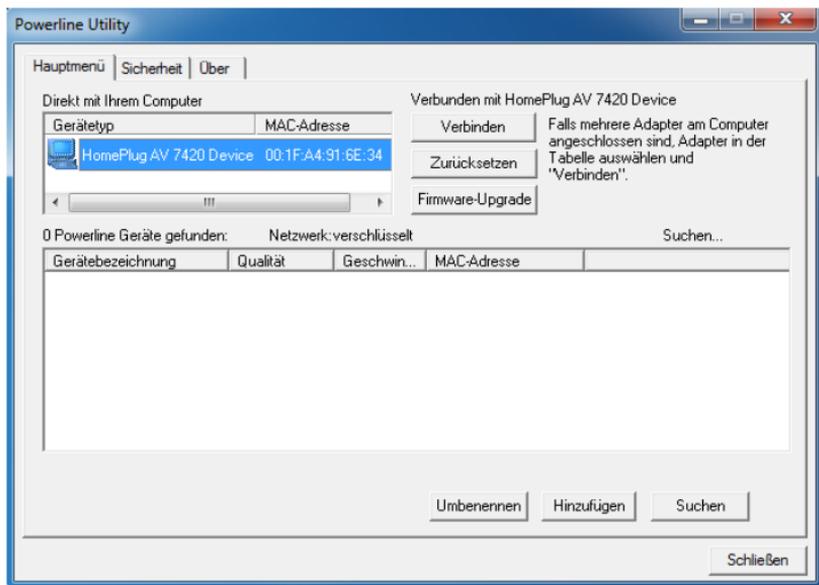
# Powerline Utility Program

On the Powerline Utility program, you have following options:

- Add another Powerline adapter to your existing Powerline network
- Individual encryption of your network
- Restore factory settings
- Perform Software updates

You can download the program at [www.csl-computer.com](http://www.csl-computer.com). Supports Windows 7, Vista and XP.

After the installation you can use the program as follows.



**ATTENTION:** before each action Select the respective Powerline adapter which you want to edit, from the main menu, and *press Connect*.

### Add a Powerline adapter

Link a Powerline adapter from your existing network to your PC.

Go to the main menu and click on “Add”. Enter a description in “Device description” then

Enter the device ID in the “Device ID” field, you can find this ID on the rear part of the device. Now plug this adapter into a socket.

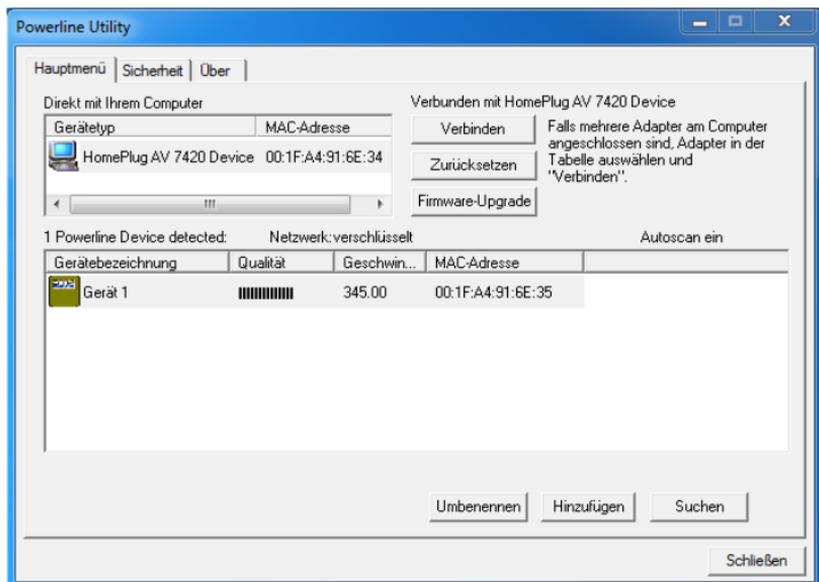
After clicking OK, the Powerline adapter will be added to the existing network, and will appear in the Overview list of the software.



## Rename a Powerline adapter

You can rename the Powerline adapter on your list and give it an individual designation.

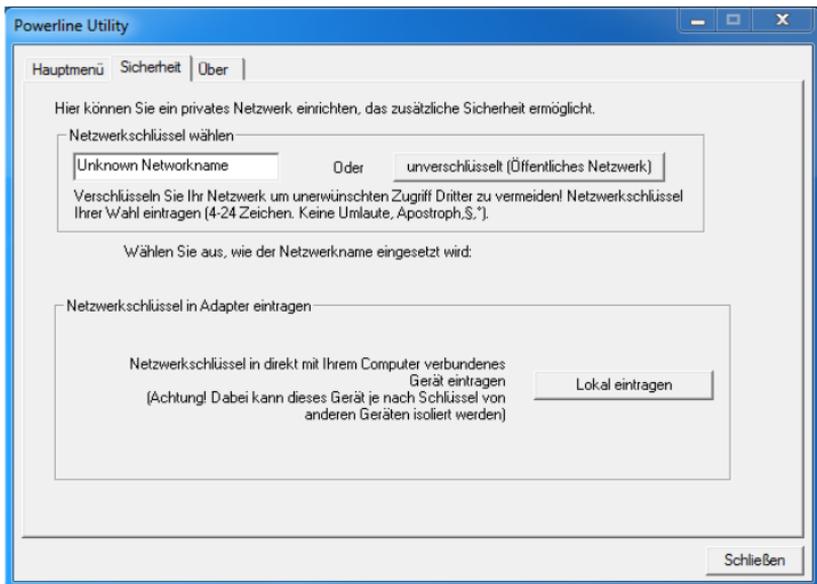
Go to “Rename” and type in the new designation.



## Encrypt individually the Powerline Network

To individually encrypt your Powerline network, go to the main menu, “Security”, “Network Security” and type an individual key into this field. You can also use a default key clicking on “unencrypted” (Public Network).

**ATTENTION:** Your Powerline network will not be protected from third party access if you are using a default key. It is recommended to use an individual key.



To enter the new key of the Powerline adapter linked to your computer, go to “enter local”

Repeat this process for all further Powerline adapters.

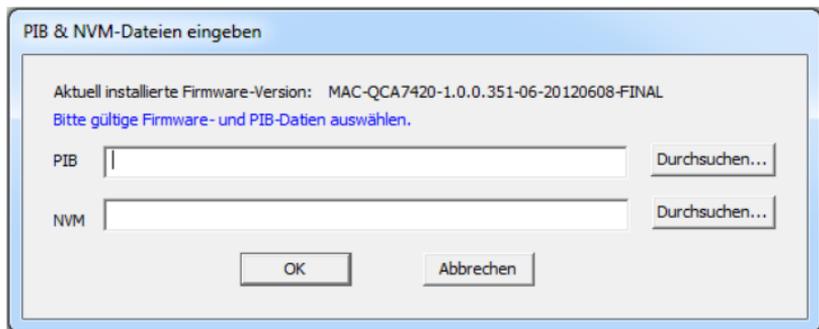
**ATTENTION!** Powerline adapter not using the same encryption are not able to communicate with each other.

## Reset Powerline adapter to factory settings

To reset the Powerline adapter to local factory settings, go to “Reset” in the main menu.

## Perform a software update

To perform a software update, download the necessary data at [www.csl-computer.com](http://www.csl-computer.com), and save them on your PC. Click on “Firmware Upgrade” on your main menu.



Select the downloaded PIB and NVM data and click OK.

**ATTENTION:** Do not unplug the device while a software update is been carried out.

## Technical Details

Protocol	Home Plug AV, compatible to IEEE P1901, Compatible to 200 and 500 Mbit/s Powerline Adapters, Coexistent to Home Plug 1.0
Ports	100 Mbit/s Ethernet
Encryption	128 Bit AES
Power consumption	< 3 W Operative < 0,5 W Stand-by-Mode
Power	100-240 VAC, 50/60Hz
Temperature	0 °C – 40 °C (Operative) -20 °C – 70 °C (Storage)
Humidity	10 % – 90 %, non-condensation (operative) 5 % – 95 %, non-condensation (storage)
Measures	69 × 60 × 29 mm <sup>3</sup> (L×W×H)
Weight	ca. 80 gr.