

What is the CM11 Computer Module?

The CM11 is an intelligent controller which can be used to turn other X-10 modules on and off, at a chosen time automatically.

The CM11 computer module is yet another device aimed primarily at making our lives easier. It aims to increase the comfort and security of your home by allowing you to control several appliances and lights, whilst also being able to provide a 'lived in' look when the occupants are not home or on holidays. The CM11 is a module which allows

the user to program a specific time at which they wish to turn other modules (such as lights, or lamps) on and off. For example maybe you are going away on holidays for a few days and wish to maintain that 'lived in' feeling of your home. Well with the CM11 module, you are able to program other modules e.g. LM12AU modules to turn on

and off at a pre-defined time or at sunrise or sunset, thereby giving the perception that the home is still occupied.

The picture depicts a common CM11 module, along with the USB and serial cables, and also the ActiveHome software which are supplied with each module.



How can I program the CM11?

The CM11 has a computer interface which can be set-up using the Windows software provided with the module. The software is called 'ActiveHome' and does not require any prior experience to master it.

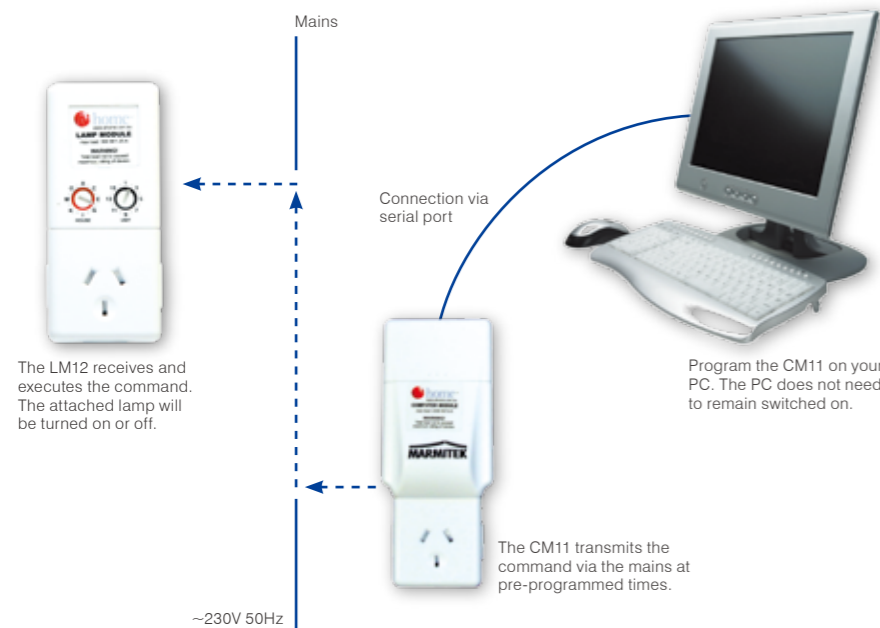
The diagram (opposite page) depicts the ActiveHome programming interface. It allows you to program several modules and also develop macros. These macros can be used to automate a range of actions, such as coming home, leaving the house etc. These actions can specify a range of modules that need to be turned on to accomplish each action.

There are two modes of connecting the CM11 module to the PC; one is via USB and the other via serial cable. After this initial setup, the PC no longer needs to be turned on.

There are several programs options available with this module, such as a timer which can be setup for each module for a daily, weekly monthly or yearly basis. The module is also able to calculate daylight saving time depending on its geographical location.

How does CM11 Work?

As mentioned earlier the CM11 is a programmable module. This means that the module can be programmed to work at certain times of the day or night, and not work at other times. The module also has a permanent memory available on the interface (EEPROM) which ensures that no settings are lost even in the event of a power outage.



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The CM11 works with X-10 communication protocol, and works through the main power supply. The figure below depicts a common way in which the CM11 module may be used in a home automation fashion. Once the CM11 is programmed as shown above, CM11 will transmit an X-10 command through the existing power lines in the house mains. This command is received by the specified X-10 device (e.g. LM12AU module), and consequently the attached device will be turned on.

For example, let us assume we wish to turn on a lamp at sunset (approximate time 7pm). A LM12AU module would need to be connected to the lamp which we wish to turn on, which in turn would be connected to the main (power point).

In addition to this, the CM11 has the capability of being able to 'learn' the user's lifestyle.

This is done through the use of the two way interface. As the user continues to use either wireless remotes or universal remotes (which

operate on X-10 communication protocols or are X-10 compatible products), the two way interface is able to capture these and store them in the EEPROM of the module. This then enables it to emulate the normal lifestyle of the household, during time when the occupants may not be home.

How can I use CM11?

The CM11 interface can be used with a variety of other. Some of the modules which the

CM11 is compatible with are:

- LM12AU - lamp module;
- AM12AU - Appliance module;
- X-10 interface modules (XM10);
- TM13AU - transceiver modules and
- Universal Remotes Controls.

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