

IRRF7243™

MINI CONTROLLER



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IRRF7243™ MINI CONTROLLER

SAFETY WARNINGS

- To prevent short circuits, this product should only be used inside and only in dry spaces. Do not expose the components to rain or moisture. Do not use the product close to a bath, swimming pool etc.
- Do not expose the components of your systems to extremely high temperatures or bright light sources.
- Do not open the product: the device contains live parts. The product should only be repaired or serviced by a qualified repairman.
- In case of improper usage or if you have opened, altered and repaired the product yourself, all guarantees expire. Marmitek does not accept responsibility in the case of improper usage of the product or when the product is used for purposes other than specified. Marmitek does not accept responsibility for additional damage other than covered by the legal product responsibility.
- This product is not a toy. Keep out of reach of children.
- Only connect the adapter to the mains after checking whether the mains voltage is the same as the values on the identification tags. Never connect an adapter or power cord when it is damaged. In that case, contact your supplier.
- Automatic switching devices provide comfort, but can also be dangerous. They can surprise people or can ignite clothing hanging over an electric heat source. Please be careful and take appropriate measures to avoid accidents.

How does Marmitek X-10 work?

Marmitek X-10 components use the existing mains wiring to communicate (using Marmitek X-10 signals). You can build a complete system using the three different kind of components of the Marmitek X-10 System:

- 1. Modules:** These components will receive Marmitek X-10 signals and will switch or dim the attached lamp or appliance.
- 2. Controllers:** These components will transmit Marmitek X-10 signals and thus will control the Modules.

- 3. Transmitters:** Wireless components like remotes. The signals of these components will be received by a controller with transceiver functionality (IRRF 7243, TM13 or console of a Marmitek Security System).
The Transceiver will translate the signals into Marmitek X-10 signals on the power line.

Addresses

Up to a maximum of 256 different addresses can be preset. These are subdivided into a so-called HouseCode (A to P incl.) and a UnitCode (1 to 16 incl.). The HouseCode can also be set on the controllers, so that the controllers and modules become part of the same system. The address can be set either using code dials or by pressing buttons, depending on the type of module.

The Marmitek X-10 System uses standard commands, which control all units with the same HouseCode at the same time (e.g. all lights on, all off, etc.).

Signal Range

Range of Marmitek X-10 signals over the Power Line and how to increase the range.

The Marmitek X-10 System is based on power line communication. The range of the Marmitek X-10 signals very much depends on the local circumstances. On average the range is a cable length of 80 meters.

If you have difficulties with the range of your Marmitek X-10 signals, please pay attention to the following facts:

1. When more than one phase is used for your electrical system, it is necessary to couple these phases for the Marmitek X-10 signals. For coupling you can use FD10 Phase Couplers/Filters. You only need to install a Phase Coupler/Filter when your wall outlets and light switches are divided over more than one phase (more than one group is no problem). For bigger buildings or longer distances we advice you to use an active repeater instead of passive FD10's.

2. It is possible that Marmitek X-10 signals are attenuated by devices and lights which are connected to the power line. In a normal home situation this effect is negligible (the Marmitek X-10 system is using active gain control to eliminate the effects). However, it is possible that a particular device in your house is attenuating the signals so much that the range of Marmitek X-10 signals is decreased significantly. When you have range problems, it is wise to try to locate the device which is attenuating the

signals simply by unplugging devices from the power line, and testing the differences in range for your Marmitek system. When e.g. your conclusion is that e.g. your computer monitor is attenuating the signal, you can use a FM10 Plug-in Filter between the power line and the monitor to eliminate the effects.

Known devices which can cause attenuation are:

PC Monitors
PCs with heavy internal power supplies
Old Televisions
Copiers
Fluorescent Lights
Gas Discharge Lamps (Energy Saving Lamps)

3. Some (old) devices are able to disturb the signal by transmitting noise on the power line. Because the Marmitek X-10 signals are transmitted on 120 kHz, only noise on or near this frequency will have influence on the range. When you use a FM10 Filter to connect this device to the power line, the noise will be filtered.

4. The Marmitek X-10 protocol has several mechanism to avoid modules to be switched on or off by other sources than your Marmitek X-10 Controllers. However, it is possible that the Marmitek X-10 signals are disturbed by e.g. baby phones which are in TALK mode (continuous transmission). When these kind of signals are present on the power line it is possible that the Marmitek X-10 signals will not come through.

5. The mains do not stop at the front door of your home. Everything that is attached to mains nearby your home can have influence on Marmitek X-10 signals (e.g. heavy machinery). If you think that your system is influenced by devices out of your house, it is advisable to install FD10 Phase Coupler/Filter on each phase entering the house. These filters will block signals coming into or going out of your house, but will also match the impedance for the mains. The FD10's will not only filter but will also couple the phases (please see 1).

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INTRODUCTION

Congratulated on buying the Marmitek X-10 IRRF7243 Mini Controller. With the Mini Controller you can operate your lighting and apparatus remotely. You can place the Mini Controller anywhere in the house where there is a plug. For instance in the living room or on your bedside table. You can switch on and off lighting and apparatus with your universal infrared (X-10 compatible) remote control, your X-10 RF (high frequent wall and floor penetrating) remote control or the keys of your Mini Controller. So you can switch off your children's radio remotely or switch off your TV or night lamp in your bedroom. You can also switch on lighting, pressing one button, when you hear a suspected noise in the night or you can switch off all apparatus.

1. PROPERTIES

Marmitek X-10 commands can be given in different ways:

1. Directly with the built-in key board (inclusive 'dim', 'all lights on', and 'all units off' commands. You can operate max. 8 'X-10' modules then. See chapter 3.1.
2. With a universal infrared remote control which is X-10 compatible. Depending on model: One for All, Philips Pronto, Thomson, Marmitek etc. See chapter 3 and 3.2.
3. With any Marmitek X-10 IRRF remote control. In this case the Mini Controller works as a Transceiver. See chapter 3 and 3.3.

2. INSTALLATION MINI CONTROLLER

Installation of your Mini Controller is simple. Take the following steps:

1. You can choose one of the 16-letter-codes through the house code screw wheel with the help of a small screw driver. Select the same letter code as the ones on your modules and remote control (goes for RF remote control and Philips Pronto).
2. Put the cable plug in a 230 VAC 50 Hz wall socket.

3. SET UP OF REMOTE CONTROL

To operate X-10 modules you have to set up the Home Automation IR code on your X-10 remote control. This code can be found in the code book of your remote control. (See the user's manual of the remote control for selecting a code for VCR, SAT etc.) Bear in mind that one of the modus buttons of the remote control must be reserved for this Home Automation code. For actual code lists of your Marmitek remote control, see www.marmitek.com.

For others than X-10 remote control consult your user's manual and the code book of your remote control.

3.1 Operate via keyboard Mini Controller

1. Press the button corresponding to the Unicode of the module you want to operate. Press 'on' to switch the module on; press 'off' to switch it off. The choice switch decides which group of four unit codes will be operated by the buttons of the keyboard (1-4 or 5-8).
2. To adjust 'brightness' press DIM/BRIGHT (this only functions when the lamp is connected to a 'lamp module').
3. To switch on all lamps: press 'all lights on' button.
4. To switch off all modules: press 'all units off' button.

3.2 Operating with the help of your infrared (IR) remote control

To switch on/off a lamp or apparatus:

1. aim the remote control on the front of the Mini Controller.
2. press the mode button of your remote control reserved for Home Automation.
3. select the number of the module via the numerical key board (1-9).

4. press Channel +/- to switch on/off the connected apparatus.

Dimming lamp:

1. aim the remote control on the front of the Mini Controller.
2. press the mode button of your remote control reserved for Home Automation.
3. select the number of the module via the numerical key board (1-9).
4. press Volume +/- to dim the connected lighting.

Note: when using a Marmitek remote control use code 821 or 0821. To operate modules with unit codes higher than 9, on most remote controls the following buttons can be used:

1. '10': press 0 button followed by on (Chan.+) off (Chan -) bright (Vol +) or dim (Vol -).
2. '11': press AV button followed by on (Chan.+) off (Chan -) bright (Vol +) or dim (Vol -).
3. '12': press  (or record) button followed by on (Chan.+) off (Chan -) bright (Vol +) or dim (Vol -).
4. '13': press  button followed by on (Chan.+) off (Chan -) bright (Vol +) or dim (Vol -).
5. '14': press  button followed by on (Chan.+) off (Chan -) bright (Vol +) or dim (Vol -).
6. '15': press  button followed by on (Chan.+) off (Chan -) bright (Vol +) or dim (Vol -).
7. '16': press '/-' button followed by on (Chan.+) off (Chan -) bright (Vol +) or dim (Vol -).

To switch on all lamps:

1. aim the remote control on the front of the Mini Controller.
2. press the mode button of your remote control reserved for Home Automation.
3. press 'power' button of remote control.

To switch off all modules:

1. aim the remote control on the front of the Mini Controller.
2. press the mode button of your remote control reserved for Home Automation.

3. press Mute button of remote control.

Note: Using Philips Pronto

When 'house code P' is selected on the Mini Controller all commands of the Pronto will be changed into an X-10 signal on the electric net. The house code used is the same as the house code selected in the house code screen of the Pronto. When pressing the buttons of the Mini Controller 'house code P' will be used.

3.3 Control with the help of your RF remote control

To dim lamps:

press the 'on' button with the number corresponding with the unit code of the module (1 – 16) you want to dim followed by DIM or BRIGHT.

X-10 IRRF Universal remote control selected for RF use:

1. press the mode button of your remote control reserved for Home Automation.
2. select the number of the module via the numbers key board (1 – 16).
3. press 'volume' +/- to dim.

Note: When on the Mini Controller 'house code P' is selected regardless of the house code the commands of the remote control will be changed into a X – 10 signal on the electric net. The house code used is the same as the one selected on the remote control. When pressing the buttons of the Mini Controller 'house code P' will be used.

4. FREQUENTLY ASKED QUESTIONS

What is the reason for modules to switch on/off spontaneously?

It is possible that a Marmitek X-10 System is installed at one of your neighbours using the same HouseCode. To solve this problem try to change the HouseCode of your system, or have FD10 Phase Coupler/Filter installed at your incoming mains.

My modules will not respond to my controller.

Make sure that the HouseCode on all Modules and Controllers are set to the same HouseCode (A .. P).

My modules will not react to my remote / sensor.

When you use a remote or sensor, you should have at least one TM13 Transceiver or Marmitek Security Console installed in your house. These components will translate the radio signals to the Marmitek X-10 signal on the power line. Only one Transceiver should be installed for all remotes and sensors set to the same House Code.

Am I able to increase the range of my remotes by using more Transceivers?

Yes, you can use more than one TM13 Transceiver in your home when the range of your remotes is not sufficient. The TM13 is using so called collision detection to prevent signals to be disturbed when more than one TM13 is transmitting. TM13's will wait for a quite power line before transmitting their data. To prevent your Marmitek X-10 System to become slow or to prevent dimming from becoming less smooth, make sure that the TM13 units are placed as far away from each other as possible.

The IRRF7243 does not work with my remote control.

The house code of both the remote control and the rest of the components must have the same letter code. Take care that your Marmitek remote control is installed for use with the IRRF7243. The correct code is to find in the code book of your remote control.

My IRRF7243 commands the wrong units.

Is the switch (1-4 5-8) in the wrong position?

Which remote controls can I use with the IRRF7243 ?

The following remote controls can be used with the IRRF7243:

Infrared remotes:

- Marmitek 4in1
- Marmitek 6in1
- Marmitek EasyControl4

- Marmitek EasyControl6
- Marmitek EasyTouch25
- Some Fox models
- Some One for All models
- Some Universal Remote models
- Some Logitech Harmony models
- Some Marantz RC models
- Philips Pronto (Marmitek X-10 IR codes for the Pronto can be found on internet)

X-10 IRRF remotes:

- Marmitek 8in1 Silver
- Marmitek 8in1 Black
- Marmitek EasyControl8
- Marmitek EasyTouch35
- Marmitek PC Control

Do you still have questions? Please check out www.marmitek.com for more information.

TECHNICAL DATA

Supply:	230 VAC/50Hz 2 Watt
Signal transmission:	2.5 Vpp at 120 kHz \pm 1 kHz
X-10 Key codes:	All units off, all lights on, on, off, dim, bright
RF receiver Frequency:	433.92 MHz
Ambient temperature:	- 10° C to + 50° C (operation) - 20° C to + 70° C (storage)
Dimensions	115x95x30mm



Environmental Information for Customers in the European Union

European Directive 2002/96/EC requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about the disposal of your old equipment, please contact your local authorities, waste disposal service, or the shop where you purchased the product.