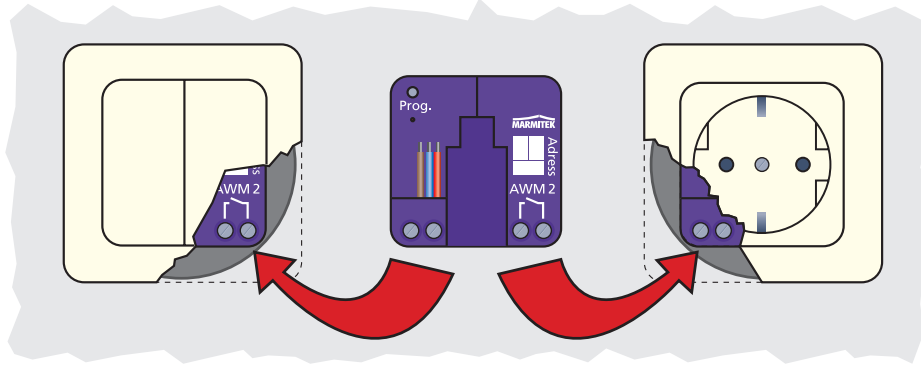


# MICROMODULES

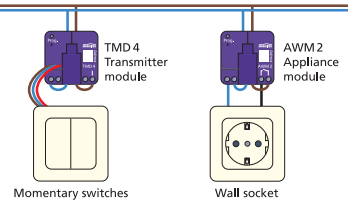
X-10 Built-in Modules for use with standard switching material



MicroModules are part of the Marmitek X-10 Home Automation program, a group of products for remote control of lighting and appliances. The system uses Marmitek X-10 signals via the mains, which makes extra wiring unnecessary.

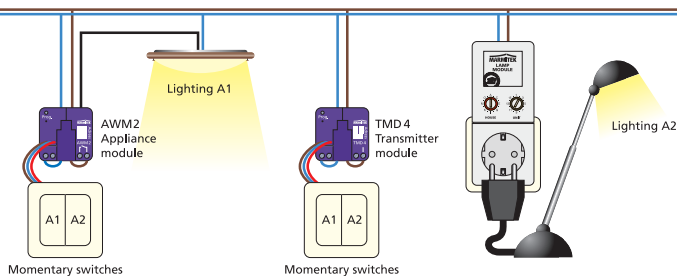
- Designed to be concealed in existing switches or wall sockets.
- Transforms a standard wall socket into a Marmitek X-10 controlled socket.
- For use with any model, colour or brand of switching material.
- Make use of all the advantages of the Marmitek X-10 System, while the technology is totally invisible in your house.
- Both two-way X-10 (AWM2, LWM1, TMA4, TMD4) and one-way X-10 implementation (AW12, LW12).

## Remote control of wall sockets anywhere in the house



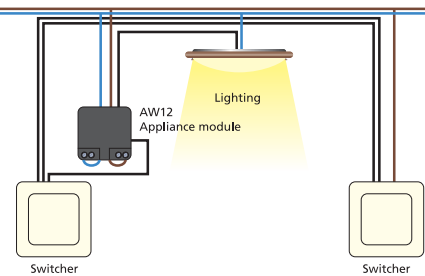
## Hotel switch / Double-throw switch

When using two-way communication no extra wiring between the switches is necessary. The AWM2 and the TMD4 can also control a second X-10 address (e.g. a lamp connected to an LM12, as shown in the image).



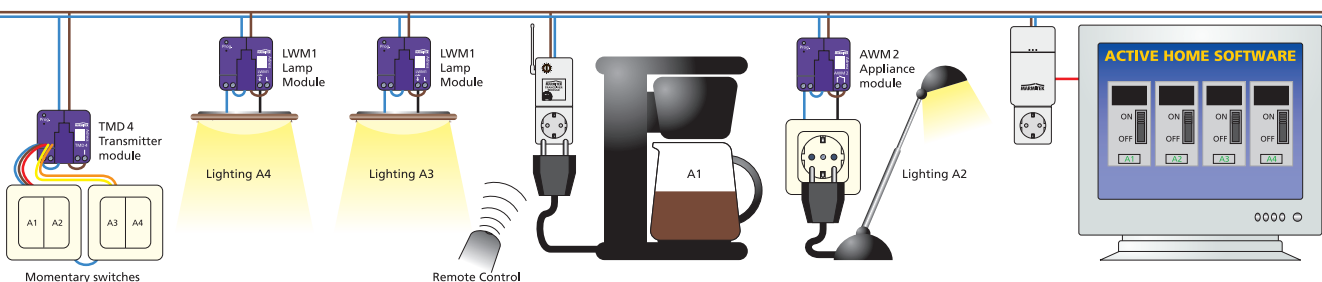
## Hotel switch / Double-throw switch

Hotel switch with AW12 in Wall Module. Conventional communication between switches (via two extra wires).



## Control of appliances and lighting via switches and remote control.

All modules in this diagram use the 2-way principle. The status of the modules can be checked on a computer monitor.



# MICROMODULES

X-10 Built-in Modules for use with standard switching material

## IMPLEMENTATIONS

### Switch module with load connection, AWM2 and AW12

The Marmitek AWM2 appliance module can transmit and receive X-10 commands (two-way), the AW12 only receives (one-way).

### Dim module with load connection: LWM1

The Marmitek LWM1 lamp module can transmit and receive X-10 commands (two-way). The LWM1 will transmit its dim level to other LWM1, LD11 and LW11 modules set to the same address. The LW12 only receives (one-way).

### Transmitter modules, TMA4 and TMD4 (for control of other Marmitek X-10 Modules anywhere in the house)

The transmitter modules TMA4 and TMD4 use two-way X-10 communication.

Product overview						
Characteristic	AWM2	LWM1	TMA4	TMD4	AW12	LW12
X-10 communication	Two-way	Two-way	Two-way	Two-way	One-way	One-way
Switching principle / Load	Relais 16A Ohm 2200W lamp 3A inductive/capacitive	Dimmer 250W lamp 200W low voltage halogen lamp Softstart/Softdim Memory for dim level	N.A.	N.A.	Relais 16A Ohm 2000W lamp 3A inductive/capacitive	60 tot 250W
Built-in dimmer	No	Yes	N.A.	N.A.	No	Yes
X-10 commands	On/Off All Lights On All Off	On/Off All Lights On All Off	On/Off All Lights On All Off	On/Off All Lights On All Off	On/Off All Lights On All Off	Address On/Off Address Bright/Dim All Lights On/Off All Units Off Extended X-10
X-10 commands transmitted	On/Off	On/Off/Dim/Bright/Dim level	On/Off	On/Off/Dim/Bright	N.A.	No
Load can be directly attached to module	Yes	Yes	No	No	Yes	Yes
Silent relais	Yes	N.A.	N.A.	N.A.	No	Yes
Use in 3 phase installation	CAT3000 necessary	CAT3000 necessary	CAT3000 necessary	CAT3000 or CAT6272 necessary	FD10 (3x) or CAT3000 necessary	FD10 (3x) or CAT3000 necessary
Number of X-10 input/output	2	1	4	4	1	1
Attachable switches	Switches or momentary switches	Momentary switches	Switches	Momentary switches	Switches or momentary switches	Momentary switches
Input switches to	Neutral	Neutral	Neutral	Neutral	Phase 230V	Live
Dimensions (mm)	46x46x16	46x46x16	46x46x16	46x46x16	46x46x17	46x46x18
LED display power / programming mode	Yes	Yes	Yes	Yes	No	No
Power	230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz
Power consumption	< 30 mA	< 30 mA	< 30 mA	< 30 mA	< 20 mA	< 6 mA
Description	Appliance Wall Module for 2 adresses	Lamp Wall Module for 1 adress	Transmitter Module Appliances for 4 addresses	Transmitter Module Dimmers for 4 addresses	Appliance Wall Module for 1 address	Dimming Wall Module
Art. No.	IH5500 / 09300	IH5501 / 09534	IH5510 / 09301	IH5520 / 09302	IH5505 / 09463	IH5506 / 09611