VITM6-ATMOD-DD

RF VITM6 DALI/DSI module

Overview

Fig 1

The VITM6-ATMOD-DD is a wireless controller with two output channels capable of controlling incandescent, fluorescent and compact fluorescent lighting when connected to Vitesse Modular Dimming Modules (refer to the user guide for the VITM6-S and VITM6-E for installation and wiring).

Output Channel 1 comprises a mains voltage relay capable of simple on/off switching, while Output Channel 2 provides dimmable control of either DSI or DALI type ballasts.

The unit also includes stored scenes for versatile manual control of lighting levels.

This device is integrated with other devices as part of an **An-10**® lighting control system. The built-in RF transceiver allows wireless communication with all other **An-10**® compatible products, e.g. the AT-BB-IN Input Unit, useful for push-button scene selection and absence detection.

All functionality is fully programmable.

Features

Fig 2: Front features (VITM6-ATMOD-DD shown)

Clear casing
which covers.....
IR Receiver
Status LEDs

Vitesse Modular Connector

IR Receiver
Receives control and programming commands from an IR (infrared) handset (Fig.2).

Status LEDs
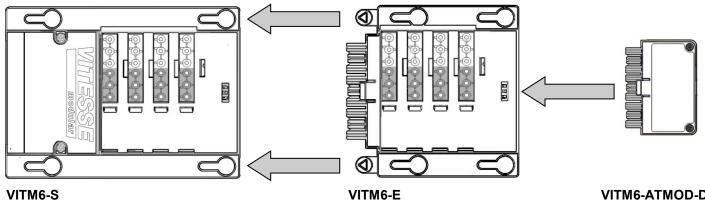These flash **R**ed and/or **G**reen to indicate the following:

Valid setting received	G					
Invalid setting received	R	R	R	R	R	R
Software reset received	G	G	G	G	G	G
Factory reset received	R	G	R	G	R	G

Vitesse Modular Connector
This connector comprises of two functions.

- **Power Input & Switched Output** (Channel 1)
  Used to connect mains power to the unit and to connect a switched load.

- **Dimmable Control Output** (Channel 2)
  Used to connect DSI/DALI controllable ballasts and transformers for dimmable loads.

Installation

VITM6-S
Vitesse modular starter for dimming systems

VITM6-E
Vitesse modular extender for dimming systems

VITM6-ATMOD-DD

Fig 3: Vitesse Modular + An-10 component

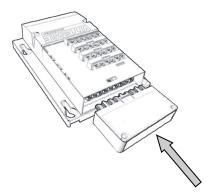Push VITM6-ATMOD-DD into either the end of a VITM6-S or a VITM6-E as shown in Fig 4 below.

Fig 4: VITM6-ATMOD-DD installation

IMPORTANT NOTICE!
This device should be installed by a qualified electrician in accordance with the latest edition of the IEE Wiring Regulations and any applicable Building Regulations.

Fault finding

What if the load does not turn ON?

- Check that the live supply to the Vitesse Modular VITM6-S.
- Check that the load is functioning by bypassing the Controller (e.g. link terminals **L** and **SW/L** on the Vitesse Modular VITM6-S).
- Check that the unit is correctly addressed, see 'Step 1: Set channel addresses and channel load type' on page 3.

The functionality of the VITM6-ATMOD-DD is controlled by a number of parameters which can be changed or programmed by any of the following devices:

- **UHS4** Infrared Handset
- **UNLCDHS** Infrared Handset (with LCD)

For most basic programming operations the UHS4 handset is recommended and the following procedures are based on using this device.

Point the handset at the Controller and send the required programming commands to the unit as shown in Steps 1, 2 and 3.

Valid commands will be indicated by a green LED flash. See page 1 for details of other LED responses.

Step 1: Set channel addresses and channel load type

The Controller has two output channels:

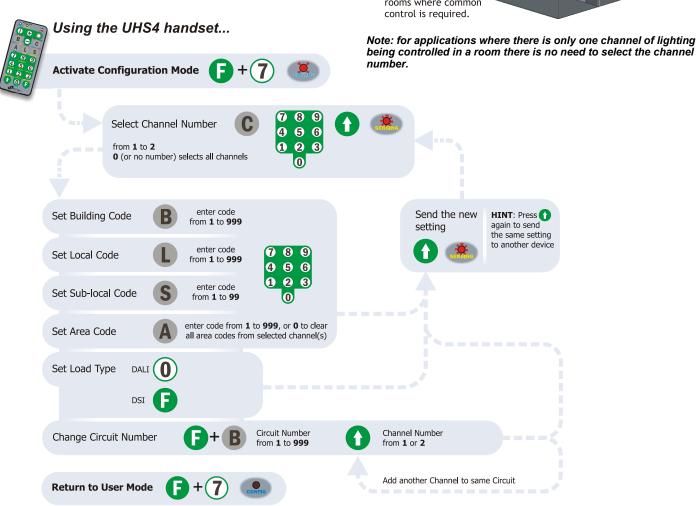- Channel 1 - Switched Output
- Channel 2 - Dimmable Output

To relate the function of different channels it is necessary to set the addresses correctly. For example, a scene select message sent from a device with a Local Code of 1 will only be actioned by devices that also have a Local Code of 1.

To program the settings for a specific channel on the Controller you must specify the appropriate channel number (i.e.1 to 2) using the programming device.

If no channel number (or channel 0) is specified, all channels will be set to the same address.
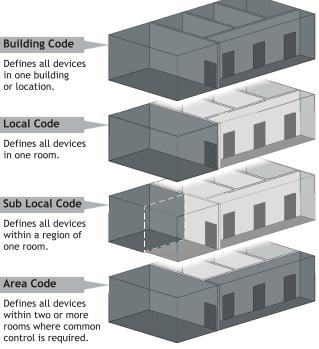
The output channels also have Circuit numbers. This allows different physical channels to be linked and controlled as a single Circuit.

Channel 2 (the dimmable output) can control either DSI or DALI type ballasts. This is called the Load Type and is set to DSI by default.

Building Code
Defines all devices in one building or location.

Local Code
Defines all devices in one room.

Sub Local Code
Defines all devices within a region of one room.

Area Code
Defines all devices within two or more rooms where common control is required.

Note: for applications where there is only one channel of lighting being controlled in a room there is no need to select the channel number.

Using the UHS4 handset...

Activate Configuration Mode F + 7 CONFIG

Select Channel Number C [7 8 9 / 4 5 6 / 1 2 3 / 0] ↑ SENSING
from **1** to **2**
0 (or no number) selects all channels

Set Building Code B enter code from **1** to **999**

Set Local Code L enter code from **1** to **999** [7 8 9 / 4 5 6 / 1 2 3 / 0]

Set Sub-local Code S enter code from **1** to **99**

Set Area Code A enter code from **1** to **999**, or **0** to clear all area codes from selected channel(s)

Set Load Type DALI 0

DSI F

Change Circuit Number F + B Circuit Number from **1** to **999** ↑ Channel Number from **1** or **2**

Add another Channel to same Circuit

Send the new setting ↑ SENSING

HINT: Press ↑ again to send the same setting to another device

Return to User Mode F + 7 CONFIG
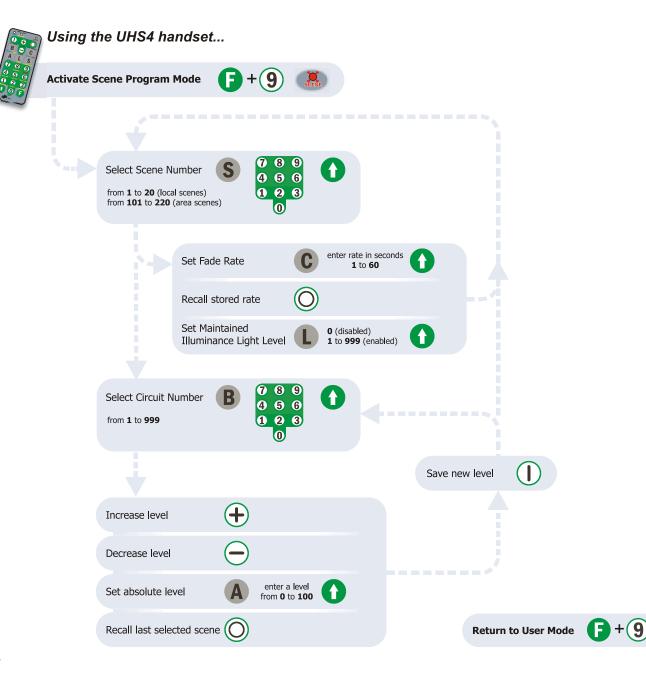
Basic programming

Step 3: Re-program scenes

The VITM6-ATMOD-DD has capacity to store 20 Local Scenes and 120 Area Scenes. By default all Scenes are pre-programmed with the following channel levels, but these can be changed as required:

Each Scene has a Fade Rate, which is the time taken for the existing output channel levels to fade to the levels defined in the selected Scene. By default this is set to 3 seconds for all Scenes.

Local Scenes								
	1	2	3	4	5	6	...	19	20
Ch1	on	on	on	on	on	on	...	on	off
Ch2	100%	75%	50%	25%	100%	75%	...	50%	0%
Area Scenes								
	101	102	103	104	105	106	...	119	220
Ch1	on	on	on	on	on	on	...	on	off
Ch2	100%	75%	50%	25%	100%	75%	...	50%	0%

NOTE: *Local Scene 20 and Area Scene 120 are designated 'off' scenes within a system and should normally be programmed with all channels off or at zero.*

Using the UHS4 handset...

Activate Scene Program Mode F + 9 SCENE

Select Scene Number
from **1** to **20** (local scenes)
from **101** to **220** (area scenes)
S 7 8 9 / 4 5 6 / 1 2 3 / 0 ↑

Set Fade Rate C enter rate in seconds **1** to **60** ↑

Recall stored rate ◯

Set Maintained Illuminance Light Level L **0** (disabled) **1** to **999** (enabled) ↑

Select Circuit Number
from **1** to **999**
B 7 8 9 / 4 5 6 / 1 2 3 / 0 ↑

Save new level |

Increase level +

Decrease level −

Set absolute level A enter a level from **0** to **100** ↑

Recall last selected scene ◯

Return to User Mode F + 9 SCENE

4

The tables on pages 12 to 15 give a summary of all programmable parameters for the VITM6-ATMOD-DD Controller.

Parameter Name	Default Value	Range / Options	Description	UHS4	UNLCDHS
For Device					
Product ID	*Automatically assigned by the device*	1 to 999	A number used to uniquely identify each device within a range of devices that are set to the same Local Code.	✗	✓
Building Code	1	1 to 999	A number shared by all devices that belong to the same building or system.	✓	✓
Lock	0	Enable (1) or disable (0)	Lock the An-10 network. Prevents more devices joining the network.	✗	✓
*For **Channel 1** (Switched Output)*					
Local Code	1	1 to 999	A number corresponding to the Local Code of all devices to be controlled by an associated input channel.	✓	✓
Sub Local Code(s)	*Not set*	1 to 99 0 to clear	A number corresponding to the Sub Local Code of all devices to be controlled by an associated input channel. Up to 20 Sub Local Codes can be set for Channel 1 and 2, e.g. 15 on Ch.1 and 5 on Ch.2, etc.	✓	✓
Area Code(s)	*999*	1 to 999 0 to clear	A number corresponding to the Area Code of all devices to be controlled by an associated input channel. Up to 32 Area Codes can be set for Channel 1 and 2, e.g. up to 16 per channel, or 20 on Ch.1 and 12 on Ch.2, etc.	✓	✓
Circuit Number	1	1 to 999	Sets the circuit number for this channel.	✓	✓
Output State	*Set by Scene*	0-100% 0=off	The current output state of the channel, for example as set by a Scene Select command.	✓	✓
Raise from off	1	Enable (1) or disable (0)	Enables raise from off feature.	✗	✓
Lower from off	1	Enable (1) or disable (0)	Enables lower from off feature.	✗	✓
Emergency output	0	Enable (1) or disable (0)	Enabling this sets the output to a 'switched permanent live' mode for emergency ballasts.	✗	✓
*For **Channel 2** (Dimmed Output)*					
Local Code	1	1 to 999	A number corresponding to the Local Code of all devices to be controlled by an associated input channel.	✓	✓
Sub Local Code(s)	*Not set*	1 to 99 0 to clear	A number corresponding to the Sub Local Code of all devices to be controlled by an associated input channel. Up to 20 Sub Local Codes can be set for Channel 1 and 2, e.g. 15 on Ch.1 and 5 on Ch.2, etc.	✓	✓
Area Code(s)	*999*	1 to 999 0 to clear	A number corresponding to the Area Code of all devices to be controlled by an associated input channel. Up to 32 Area Codes can be set for Channel 1 and 2, e.g. up to 16 per channel, or 20 on Ch.1 and 12 on Ch.2, etc.	✓	✓
Circuit Number	2	1 to 999	Sets the circuit number for this channel.	✓	✓
Load Type	DALI	DSI or DALI	Sets the ballast control protocol to be used by the output channel.	✓	✓
Output Level	*Set by Scene*	0 to 100 %	The current output level of the channel, for example as set by a Scene Select command.	✓	✓
Max Value	100%	0 to 100%	Maximum dimming output level.	✗	✓
Min Value	1%	0 to 100%	Minimum dimming output level.	✗	✓
Burn-in	0	0 (disabled) or 1 to 255 hours	Determines how long the output will be at 100% so that lamps 'burn-in'. The 'burn-in' time is not affected by power supply interruptions.	✗	✓
Raise from off	1	Enable (1) or disable (0)	Enables raise from off feature.	✗	✓
Lower from off	1	Enable (1) or disable (0)	Enables lower from off feature.	✗	✓

Advanced programming

Parameter Name	Default Value	Range / Options	Description	Programming Devices	
				UHS4	UNLCDHS
Local On Scene Fade Rate	1 1 second	1 to 20 0 to 255*	The local scene request sent to all devices with the Local Code specified .	✘	✔
Area On Scene Fade Rate	101 1 second	101 to 220 0 to 255*	The area scene request sent to all devices with the Area Code(s) specified. NOTE: *The Area On Scene is ignored unless one or more Area Codes are set for the corresponding input channel and they match the Area Codes set in any output channel.*	✘	✔
Local Off Scene Fade Rate	20 1 second	1 to 20 0 to 255*	**Time table** **Value** **Fade rate time** 0 No fade 1 to 59 1 to 59 seconds, in 1 second increments	✘	✔
Area Off Scene Fade Rate	220 1 second	1 to 20 0 to 255*	60 to 177 1 to 59.5 minutes, in 0.5 minute increments 178 to 254 1 to 20 hours, in 15 minute increments 255 Infinite fade	✘	✔

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Technical data

Dimensions	See diagrams opposite
Weight	0.1kg
Supply Voltage	230VAC +/- 10%
Frequency	50Hz
Maximum Load	*Channel 1 (switching):* 10A of lighting and/or ventilation including incandescent, fluorescent, compact fluorescent, low voltage (by switching the primary of transformer). *Channel 2 (dimming):* Maximum number of DSI or DALI ballasts is 10 unless the relay is disabled then it is 20.
Terminal Capacity	Refer to #WD290 user guide for the VITM6-S and VITM6-E for installation and wiring.

55mm

95mm

Order code	Region	Radio frequency	Compliance
blank	European Union	868MHz	RED-2014/53/EU LVD-2014/35/EU
-A2	Australia & New Zealand	915MHz	AS/NZS 4268:2008

For further compliance information visit www.cpelectronics.co.uk/compliance

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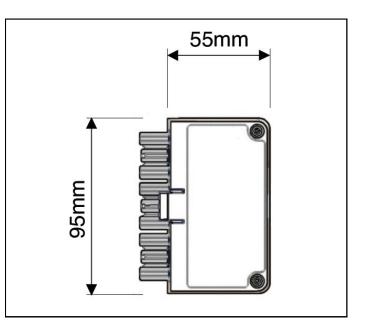|	
Receiver Class	2
Transmitter Duty Cycle	<10% on g3 band (default band) <0.1% on g2 band <1% on g1 band
Range	The maximum RF range between An-10 devices is 100m in free air and up to 30m indoors. However the materials used within a building will vary and this will impact upon the RF range. In reality the nature of how the An-10's hybrid-mesh works means that in most scenarios the individual range of an An-10 product will not be important.
Temperature	0ºC to 35ºC
Humidity	5 to 95% non-condensing
Material (casing)	Flame retardant polycarbonate

Part numbers

EBDSPIR-AT-PRM	RF Ceiling PIR presence detector – switched
EBDSPIR-AT-AD	RF Ceiling PIR presence detector – 1-10V dimming
EBDSPIR-AT-DD	RF Ceiling PIR presence detector – DALI/DSI dimming
AT-BB-IN	RF Input unit
AT-SL-R	RF Relay controller
AT-SL-R-SA	RF relay controller (standalone)
AT-SL-ADR	RF 1-10V + relay controller
AT-SL-ADR-SA	RF 1-10V + relay controller (standalone)
AT-SL-DDR	RF DALI/DSI + relay controller
AT-SL-DDR-SA	RF DALI/DSI + relay controller (standalone)
VITM4-ATMOD	RF Switching module
VITM6-ATMOD-AD	RF VITM6 1-10V module
UHS4	Programming IR handset
UNLCDHS	Universal LCD IR handset

bsi. ISO 9001 Quality Management FM 45789 | ISO 14001 Environmental Management EMS 534520 | ISO 45001 Occupational Health and Safety Management OHS 642036

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Due to our policy of continual product improvement CP Electronics reserves the right to alter the specification of this product without prior notice.

Ref: #WD390 Issue 4