RAM Lighting®

Professional Dimmers

615 / 625 / 1215 / 1225

MD Series

CE

Contents

Introduction

This manual aims to expose how the dimmer operates by describing all the dimmer's display menus.

User friendly features

The dimmer has the following features:

Program memory

It can be programmed in steps, with time between steps and pauses. Three function programs available of 64 steps each.

Information display

Display of the most important parameters and the power input frequency in real time.

Languages

The user may choose the language in which the messages will appear in the display; there are four languages available.

Configuration

The following parameters can be configured:

- *6/12 channel preheat level*
- *Language*
- *Response curve*
- *Response time*
- *DMX channel*

Local mode control

The channels can be controlled by means of a:

- *Push Button*
- *Switch*

DMX-mode control

DMX control of the 6/12 channels.

Analogue mode control

0-10V analogue output desk control.

Operation

Slow preheat

From the starting-up of the dimmer until the information display appears, the intensity level of all the channels increases slowly until it reaches the configured preheat level.

Data

From the second the information display shows, the data that marks the output value of each of the channels will be the maximum one between the DMX and the analogue input.

If the equipment is *Local* or *Program* mode controlled, the analogue and the DMX input are ignored.

If the equipment is Analogue or DMX controlled and the connection fails, the last valid signals are maintained.

After turning-on the equipment, the external DMX and the Analogue values are zero until new values are received.

Information display

A few seconds after having switched on the dimmer, the display below appears:

```
   * DIMMER v3.02 *
      XX CHANNELS
```

XX is the number of channels the dimmer software has got configured.

A few seconds later the following information display shows:

```
DMX: 10     PH: 10 %

Rs: 200 ms   1x50 Hz
```

'**DMX**' is the configured DMX channel, '**PH**' is the preheat level in percentage, '**Rs**' is the dimmer response time with respect to changes in the DMX data, and '**50 Hz**' is the mains power input frequency in real time. **1x** or **3x** appear just before the frequency figure, indicating that the mains power input is three-phase (3x) or mono-phase (1x).

Menu display

We access the dimmer menus by pressing the '**MENU**' button and the following display is shown:

```
1-Test  2-Config
3-Local 4-Prog.
```

Buttons:

- '**1**-**Test**' tests the various equipment systems

- '**2-Config**' parameters configuration

- '**3-Local**' local mode control

- '**4-Prog.**' configuration and execution of customised programs

- '**MENU**' goes back to the information display

Test menu (Test)

```
1-DMX 2-An 3-Ver
4-Preset 5-Auto
```

Buttons:

- '**1-DMX**' tests the DMX digital channels

- '**2-An**' tests the analogue inputs

- '**3-Ver**' shows the software version

- '**4-Preset**' starts all the parameters default values

- '**5-Auto**' luminary sequence test of the equipment

- '**MENU**' goes back to the information display

DMX test (DMX)

```
Ch: XX LEVEL:   YYY %
E-Exit        <,>
```

This test enables you to see the value in percentage of the channel selected. This is the value received through the DMX channel being configured, plus the channel number, minus 1.

At the display above, XX is the DMX channel being tested and YYY is the input level in percentage of the channel selected.

For instance, suppose we have DMX channel 10 configured and have selected Ch: 3, we will then see the level that reaches DMX channel 12.

Buttons:

- '**MENU**' goes back to the information display

- '**<,>**' moves up or down the channel number we are testing

- '**1**' to '**12/6**' (located below display): selects a channel

Analogue Test (An)

```
Ch: XX LEVEL:   YYY %
E-Exit        <,>
```

This test enables you to see the value in percentage of the channel selected. This is the input value of the corresponding analogue channel.

At the display above, XX is the analogue channel being tested and YYY is the input level in percentage of the channel selected.

Buttons:

- '**MENU**' goes back to the information display
- '**<,>**' moves up or down the channel number we are testing
- '**1**' to '**12/6**' (located below display): selects a channel

Version Test (Ver)

```
        DIMMER v3.02
E-Exit
```

Shows the dimmer software version.

Buttons:

- '**MENU**' goes back to the information display
- '**ENTER**' goes back to the test menu

Preset (Preset)

```
        ARE YOU SURE ?
1 - Yes     6 – No
```

```
        VERY SURE ?
1 - No    6 - Yes
```

After having answered 'yes' to the questions above, the next step is the starting up of the default values of all the configurable parameters in the dimmer test menu.

```
    *** CLEARING ***
```

After a few seconds, we go back to the test menu:

```
1-DMX 2-An 3-Ver
4-Preset 5-Auto
```

Auto Test (Auto)

```
*Test*    Step: X
E-Stop    M-Exit
```

A luminary sequence test of the 6/12 is run to check the correct operation of the equipment.

This control test is carried out in the same way as described in the section "*Play a Program (Play)*"

Configuration Menu (Config)

Preheat (PRHT)

Shows the minimum level at which the 6/12 dimmer channels will be at all times.

```
PRHT:   XXX %
E-Change    <,>
```

Buttons:

- '**MENU**' goes back to the information display.

- '**ENTER**' modifies the value. The screen below is displayed.

- '**<,>**' goes to the next or the previous configuration parameter.

```
PRHT:   XXX %
E-Exit      <,>
```

Buttons:

- '**MENU**' goes back to the information display and the parameter modified is not stored in memory.

- '**ENTER**' goes back to the previous display, storing the parameters in permanent memory.

- '**<,>**' increases or decreases the value. When maintained, the value runs continuously.

Response Time

Time in milliseconds that will take any of the 6/12 channels to go from the minimum to the maximum value when a sudden change of data occurs.

```
Response: XXXX ms
E-Change    <,>
```

Buttons:

- '**MENU**' goes back to the information display

- '**ENTER**' modifies the value. The screen below is displayed

- '**<,>**' goes to the next or the previous configuration parameter

```
Response: XXXX ms
E-Exit        <,>
```

Buttons:

- '**MENU**' goes back to the display information, the modified parameter is not stored in memory.

- '**ENTER**' goes back to the previous display storing the parameters in permanent memory.

- '**<,>**' increases or decreases the value10 by 10ms. When maintained, the value runs continuously.

Input DMX Channel

Permits choosing which of the 512 DMX channels will be the one assigned to the first DMX channel. The following channels will be assigned to the rest of the DMX channels in consecutive order. Therefore, the selectable range of channels will be from 0 to 512-6 in the case of the 6-channel dimmer and from 0 to 512-12 for the12-channel dimmer.

```
DMX:
E-Change      <,>
```

Buttons:

- '**MENU**' goes back to the initial information display.

- '**ENTER**' modifies the value. The screen below is displayed.

- '**<,>**' goes to the next or previous configuration parameter.
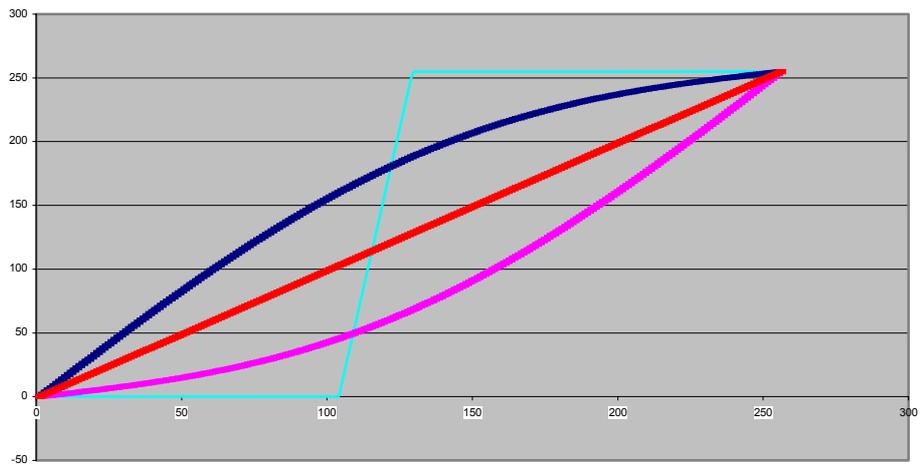
```
DMX:
E-Exit          <,>
```

Buttons:

- '**MENU**' goes back to the information display, the modified parameter is not stored in memory.

- '**ENTER**' goes back to the previous display, saving the parameters in permanent memory.

- '**<,>**' increases or decreases the value. When maintained, the value runs continuously.

Response Curve

Selects the type of response curve to be applied to the input data.

The curve types are the following:

- *Lineal*: Data=output channel

- *Square*: BLUE

- *Invert Square*: PINK

- *ON-OFF*: Changes from ON to OFF at 50% with a 45%-55% ramp.

Graphic 1

```
Curve: CCCCCC
E-Change    <,>
```

Buttons:

- '**MENU**' goes back to the information display.

- '**ENTER**' modifies the value. The screen below is displayed.

- '**<,>**' goes to the next or previous configuration parameter.

```
Curve: CCCCCC
E-Exit      <,>
```

Buttons:

- '**MENU**' goes back to the information display, the modified parameter is not stored in memory.

- '**ENTER**' goes back to the previous screen, storing the parameters in permanent memory.

- '**<,>**' selects the type of curve to be applied.

Language

Selects which of the 4 languages available will be used for all the dimmer displays.

```
Language:
E-Change      <,>
```

Buttons:

- '**MENU**' goes back to the information display.

- '**ENTER**' modifies the value. The screen below is displayed.

- '**<,>**' goes to the next or previous configuration parameter.

```
Language:
E-Exit        <,>
```

Buttons:

- '**MENU**' goes back to the information display, the modified parameter is not stored in memory.

- '**ENTER**' goes back to the previous screen, the parameters are stored in permanent memory.

- '**<,>**' Selects a language among: *Spanish, English, Deutsch* and *Portuguese*.

Local Control Menu

This menu permits the control the dimmer channels by pressing the relevant button (buttons are located below the display).

```
1-Push button
2-Switch button
```

Buttons:

- '**MENU**' goes back to the information screen.

- '**1**' Push-button menu

- '**2**' Switch-button menu

Push-button Control

While holding down the button of the desired channel, the output intensity of the channel will be the same as the level configured in the display below:

```
LEVEL: NNN %
E-Exit         <,>
```

Buttons:

- '**MENU**' goes back to the information display.

- '**<,>**' modifies the output value.

- '**ENTER**' goes back to the local control menu.

- '**1**' to '**12/6**': selects a channel.

Switch Control

One push activates the desired channel, a second push deactivate it. The output intensity of the channel will be the same as the value configured in the display below:

```
LEVEL: NNN %
E-Exit         <,>
```

Buttons:

- '**MENU**' goes back to the information display.

- '**<,>**' modifies the output level.

- '**ENTER**' goes back to the local control menu.

- '**1**' to '**12/6**': selects a channel.

Programming Menu

This menu enables you to carry out running-light sequences, varying the response time and the intensity of each channel of the dimmer. We have the following features available:

- 3 programming memories available.

- 64 steps per program.

- Each program step consists of the values of 6/12 channels, the response time and the time between steps.

```
1-Play 2-Program
3-Clear Program
```

Buttons:

- '**1**' executes a program previously stored.

- '**2**' creates or modifies a lighting program.

- '**3**' deletes one of the programs.

- '**MENU**' goes back to the information display.

Select a Program

Before entering the desired option, you must select the program you want to work with by choosing any of the 3 options of the Programming menu in the display below:

```
Program: P
E-Selection  <,>
```

Buttons:

- '**<,>**' selects the program.

- '**ENTER**' enters the option previously chosen: Play, Program or Clear Program.

- '**MENU**' goes back to the information display.

Play a Program (Play)

Before playing the program, the number of steps already used of the selected program are shown for a few seconds:

```
XX  STEPS USED
```

Once these steps used have been shown, the reproduction starts:

```
Prg.: P   Step: CC
E-Stop    M-Exit
```

By entering the option PLAY, we start the reproduction of the sequence previously stored. In the display above 'P' is the program selected and CC is the step being played. During the reproduction we have the following options available:

Buttons:

- '**MENU**' goes back to the main programming menu.

- '**ENTER**' stops the reproduction. And the following display shows:

```
Prg.: P   Step: CC
E-Play    M-Exit
```

Buttons:

- '**MENU**' goes back to the main programming menu.

- '**ENTER**' resumes the program execution.

Delete a Program

Once a program has been selected, it is cleared as the following display shows:

```
Program: P
        Clearing
```

Modify or create a Program

Before starting programming, the number of steps used of the program selected are shown for a few seconds:

```
XX   STEPS USED
```

Then the following display appears for a few seconds as well:

```
Press MENU to
help control
```

Which indicates that if you press the '**MENU**' button during the configuration of the channels, the following help display will appear:

```
CHAN-Edit Val
<,>-Select E-Exit
```

Channel edit

After the previous help display, the screen below will appear:

```
c-CH: n    n+1   n+2
LV:   100% 100% 100%
```

Where '**c**' indicates the step we are in.

n, n+1, n+2 indicate the steps of the channel we may modify, the value of the three channels are shown one line below.

Buttons:

- '**MENU**' shows the help display.

- '**ENTER**' stores the program and goes back to the programming menu.

- **'n'…'n+2' channel buttons** edit the value of the channel selected.

- **Down key (<)** selects the previous 3 channels to edit. If you are in channels 1, 2 and 3, it goes back to the previous step. If you are in the first step, it will take you to the last step.

- **Up key (>)** goes the next 3 channels to edit. If you are in the last 3 channels, it goes forward to edit the step delay time in milliseconds (*See the relevant chapter*).

Example for 6 channels:

```
1-CH:  1     2     3
 LV:   100% 100% 100%
```

Then press '>'

```
1-CH:  4     5     6
 LV:   100% 100% 100%
```

Then press '>'

```
1 -Delay:     ms
E-Change     <,>
```

To edit the value of channel 5, press '**5**' once you visualise CH-5 in the display. After pressing '5', the value edited will flash and it may be modified with the keys '**<**' and '**>**':

```
1-CH:  4     5     6
 LV:   100%  47% 100%
```

Buttons:

- '**MENU**' has no function at this moment

- '**ENTER**' stores the value and continues with channel editing

- '**<**' and '**>**' changes the value of the channel. Hold down for continuous change.

Response time edit

If you go forward, after having edited the last 3 channels in the 'channel edit' display, the display of the response time configuration for the step we are in appears:

```
1 -Delay:    ms
E-Change    <,>
```

Buttons:

- '**MENU**' has no function
- '**ENTER**' modifies the response time value
- **Down key (<)** goes back to the channel configuration display
- **Up key (>)** goes to the pause configuration display (*See the relevant chapter*)

After pressing **ENTER**, the value may be modified in the following screen:

```
1 -Delay:    ms
E-Exit      <,>
```

Buttons:

- '**MENU**' has no function
- '**ENTER**' stores the value and goes back to the previous display
- '**<**' and '**>**' changes the time value10 by 10 ms. When maintained, the value runs continuously

Pause time edit

After the response time configuration, we go forward to the pause time configuration display for the step we are in:

```
1 -Pausa:    ms
E-Change    <,>
```

Buttons:

- '**MENU**' has no function
- '**ENTER**' changes the value of the pause time
- **Down Key (<)** goes back to the response time configuration screen
- **Up key (>)** goes to the channel configuration display for the NEXT step. In case you are in the last step, it takes you to the first step

After pressing **ENTER** you can modify the value in the following screen:

```
1 -Pause:     ms
E-Exit        <,>
```

Buttons:

- '**MENU**' has no function

- '**ENTER**' stores the value and goes back to the screen where the value is visualised

- '**<**' and '**>**' changes the time value 100 by 100 ms. When maintained, the value runs continuously

Programming sequence sum-up

```
CHANNEL CONFIGURATION
       STEP n
```
↓
```
    TIME RESPONSE
    CONFIGURATION
       STEP n
```
↓
```
     PAUSE TIME
    CONFIGURATION
       STEP n
```
↓
```
CHANNEL CONFIGURATION
      STEP n+1
```
↓
```
    RESPONSE TIME
    CONFIGURATION
      STEP n+1
```
↓
```
     PAUSE TIME
    CONFIGURATION
      STEP n+1
```
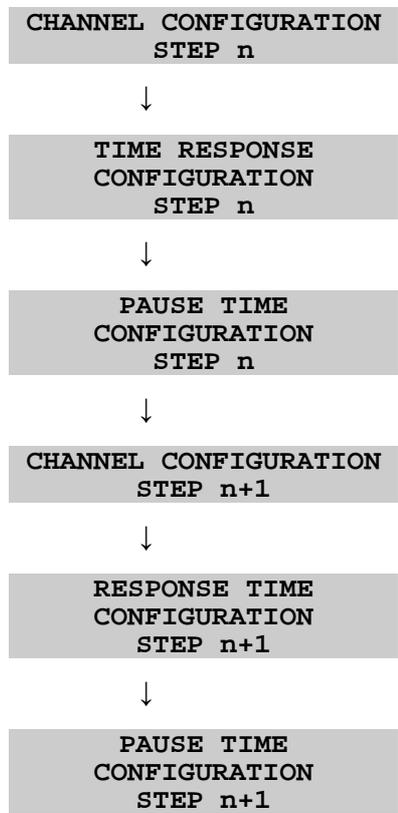
To store a program

When pressing 'ENTER' while in the '*channel edition*' screen, the program will be stored in the permanent memory:

```
Program: n
        Recording
```

After a few seconds of recording, the screen goes back to the programming main menu.