

## ChilliNet RS232 Node Instruction Manual

### Introduction

This manual is intended to enable users to connect any serial communications device that supports the ASCII character format, to communicate with and control the ChilliNet range of equipment.

### Connection

Connect the supplied serial cable between the controlling device and the ChilliNet RS232 Node. The supplied serial cable is non-standard in that only pins 2, 3 and 5 are connected; do not use a standard serial cable in its place as unpredictable control may occur

Connect the supplied RJ12 cable between the ChilliNet RS232 Node and an RJ12 port on any of the ChilliNet equipment.

### Protocol Settings

Baud Rate            9600 Baud

Data structure        No parity, 8 data bits, 1 start bit, 1 stop bit.

### ASCII Overview

ASCII Control Messages provide a simple method of control for AV systems or PC integration. This is achieved by sending a string of ASCII characters to the RS232 serial port.  
The command is not case sensitive.

#### Message Syntax

The general form of the message is:

#### Start Character

Each message starts with the @ character

The command is started receiving the @ character. If a command is incomplete when a new @ is received, the old command is discarded.

#### Command

The start character is followed by a two character command.

Example: PM        (Play Memory)

#### Parameters

After the command characters several characters define the parameters, such as the Memory Number, Area or Dimmer Number, Channel Number and Fade Time.

A colon delimits the values. If a colon is received after only 1 digit then a single digit value is assumed.

#### End Character

The command is ended with a carriage return, <cr> (13 dec). The # character can also be used.

Messages are passed both to and from the Chilli Network, so that synchronisation can be maintained between controllers on the Chilli Network and the ASCII system.

### Operating Modes

The ChilliNet RS232 Node can be used in one of two ways. It can be used to control either individual dimmers - using **dimmer numbers**, or entire areas - using **area numbers** that are assigned to channels on a dimmer. The installer should decide which mode is most appropriate for an installation, and use only messages for that mode.

Zero88 Lighting Ltd. reserves the right to make changes to the equipment described in this manual without prior notice.

This equipment is designed for professional stage lighting control, and is unsuitable for any other purpose. It should be used by, or under the supervision of, appropriately qualified or trained persons only. Servicing of this equipment should be attempted by suitably qualified persons only. E & OE

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## ASCII Commands for Area Control

### Command PM Play Memory

This message plays a memory in an area.

The syntax is: @PMxx:Axx:Fxx<cr>

PMxx defines the Memory Number 00 to 12. Memory 00 is OFF.  
Axx defines the Area Number 00 to 10. Area 00 is all areas.  
Fxx defines the Fade Time 00 to 60 in seconds. Fade Time 00 tells the dimmer to use the stored fade time instead.

### Command PS Play Sequence

This message plays a sequence in an area.

The syntax is: @PSxx:Axx<cr>

PSxx defines the Sequence Number 00 to 03. Sequence 00 is OFF.  
Axx defines the Area Number 00 to 10. Area 00 is all areas.

### Command SM Save Memory

This message saves the current levels to a memory in an area.

The syntax is: @SMxx:Axx:Fxx<cr>

SMxx defines the Memory Number 01 to 12.  
Axx defines the Area Number 00 to 10. Area 00 is all areas.  
Fxx defines the Fade Time 00 to 60 (in seconds) to be stored with the memory. Fade Time 00 tells the dimmer not to alter the existing fade time stored with the memory.

### Command RM Request Current Memory

This message requests the current memory number in an area.

The syntax is: @RMxx<cr>

RMxx defines the Area Number 01 to 10.

### Command RE Report Current Memory

This message reports the current memory number in an area.

The syntax is: @RExx:Axx<cr>

RExx defines the Memory Number 00 to 12. Memory 00 is off.  
Axx defines the Area Number 01 to 10.

### Command RS Request Current Sequence

This message requests the current sequence number in an area.

The syntax is: @RSxx<cr>

RSxx defines the Area Number 01 to 10.

### Command RQ Report Current Sequence

This message reports the current sequence number in an area.

The syntax is: @RQxx:Axx<cr>

RQxx defines the Sequence Number 01 to 03.  
Axx defines the Area Number 01 to 10.

### Command SC Set Channel Level

This message sets the level of a channel in an area.

The syntax is: @SCxx:Axx:Lxx<cr>

SCxx defines the Channel Number 00 to 24 (or number of channels on the biggest dimmer on the network). Channel 00 is all channels in the Area.  
Axx defines the Area Number, 00 to 10. Area 00 is all areas.  
Lxx defines the Level 00 to 99 in %, and FF for FULL (100%).

### Command RC Request Channel Level

This message requests the level of a channel in an area.

The syntax is: @RCxx:Axx<cr>

RCxx defines the Channel Number 01 to 24 (or number of channels on the biggest dimmer on the network).  
Axx defines the Area Number 01 to 10.

### Command RL Report Channel Level

This message reports the current level of a channel in an area.

The syntax is: @RLxx:Axx:Lxx<cr>

RLxx defines the Channel Number 01 to 24 (or number of channels on the biggest dimmer on the network).  
Axx defines the Area Number 01 to 10.  
Lxx defines the Level 00 to 99 in %, and FF for FULL (100%).

### Command AR Area Raise

This message raises the output levels in an area by the given percentage.

The syntax is: @ARxx:Lxx<cr>

ARxx defines the Area Number 00 to 10. Area 00 is all areas.  
Lxx defines the Percentage increase 00 to 99 in %, and FF for 100%.

### Command AL Area Lower

This message lowers the output levels in an area by the given percentage.

The syntax is: @ALxx:Lxx<cr>

ALxx defines the Area Number 00 to 10. Area 00 is all areas.  
Lxx defines the Percentage decrease 00 to 99 in %, and FF for 100%.

### Note on Raise/Lower:

*Only channels which have non-zero levels in the current memory will respond to Raise/Lower commands. Channels with no current memory will not respond.*

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## ASCII Commands for Dimmer Control

### Command PM Play Memory

This message plays a memory on a dimmer.

The syntax is: @PMxx:Dxx:Fxx<cr>

PMxx defines the Memory Number 00 to 12. Memory 00 is OFF.  
Dxx defines the Dimmer Number 00 to 99. Dimmer 00 is all dimmers.  
Fxx defines the Fade Time 00 to 60 in seconds. Fade Time 00 tells the dimmer to use the stored fade time instead.

### Command PS Play Sequence

This message plays a sequence on a dimmer.

The syntax is: @PSxx:Dxx<cr>

PSxx defines the Sequence Number 00 to 03. Sequence 00 is OFF.  
Dxx defines the Dimmer Number 00 to 99. Dimmer 00 is all dimmers.

### Command SM Save Memory

This message saves the current levels to a memory on a dimmer.

The syntax is: @SMxx:Dxx:Fxx<cr>

SMxx defines the Memory Number 01 to 12.  
Dxx defines the Dimmer Number 00 to 99. Dimmer 00 is all dimmers.  
Fxx defines the Fade Time 00 to 60 (in seconds) to be stored with the memory. Fade Time 00 tells the dimmer not to alter the existing fade time stored with the memory.

### Command DM Request Dimmer Memory

This message requests the current memory number on a dimmer.

The syntax is: @DMxx<cr>

DMxx defines the Dimmer Number 01 to 99.

### Command RE Report Current Memory

This message reports the current memory number on a dimmer.

The syntax is: @RExx:Dxx<cr>

RExx defines the Memory Number 00 to 12. Memory 00 is off.  
Dxx defines the Dimmer Number 01 to 99.

### Command DS Request Dimmer Sequence

This message requests the current sequence number on a dimmer.

The syntax is: @DSxx<cr>

DSxx defines the Dimmer Number 01 to 99.

### Command RQ Report Current Sequence

This message reports the current sequence number on dimmer.

The syntax is: @RQxx:Dxx<cr>

RQxx defines the Sequence Number 01 to 03.  
Dxx defines the Dimmer Number 01 to 99.

### Command SC Set Channel Level

This message sets the level of a channel on a dimmer.

The syntax is: @SCxx:Dxx:Lxx<cr>

SCxx defines the Channel Number 00 to the number of channels on the dimmer. Channel 00 is all channels.  
Dxx defines the Dimmer Number 00 to 99. Dimmer 00 is all dimmers.  
Lxx defines the Level 00 to 99 in %, and FF for FULL (100%).

### Command RC Request Channel Level

This message requests the level of a channel on a dimmer.

The syntax is: @RCxx:Dxx<cr>

RCxx defines the Channel Number 01 to the number of channels on the dimmer.  
Dxx defines the Dimmer Number 01 to 99.

### Command RL Report Channel Level

This message reports the current level of a channel on a dimmer.

The syntax is: @RLxx:Dxx:Lxx<cr>

RLxx defines the Channel Number 01 to the number of channels on the dimmer.  
Dxx defines the Dimmer Number 01 to 99.  
Lxx defines the Level 00 to 99 in %, and FF for FULL (100%).

### Command DR Dimmer Raise

This message raises the output levels of all channels on a dimmer by the given percentage.

The syntax is: @DRxx:Lxx<cr>

DRxx defines the Dimmer Number 00 to 99. Dimmer 00 is all dimmers.  
Lxx defines the Percentage increase 00 to 99 in %, and FF for 100%.

### Command DL Dimmer Lower

This message lowers the output levels of all channels on a dimmer by the given percentage.

The syntax is: @DLxx:Lxx<cr>

DLxx defines the Dimmer Number 00 to 99. Dimmer 00 is all dimmers.  
Lxx defines the Percentage decrease 00 to 99 in %, and FF for 100%.

### Note on Raise/Lower:

*Only channels which have non-zero levels in the current memory will respond to Raise/Lower commands. Channels with no current memory will not respond.*

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