Raytec HTTP API Command Summary

Lighting control via HTTP commands

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1 Introduction

1.1 Overview

The Raytec HTTP API allows third party implementers to control the Raytec family of IP controllable LED illuminators using simple HTTP commands. This document will summarise the available commands.

For more technical details on these commands and for further details on HTTP command generation in general it is recommended that the reader refer to the *Raytec HTTP API* document.

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1.2 Lamp Mode Setting

The lamp should be set to *HTTP* or *HTTP+Local* mode when using the HTTP API to control the lamp. This mode can be set on the *Settings / Groups* page on the lamp's web interface using the Lamp Mode selection box.

If the lamp is not in *HTTP* or *HTTP+Local* mode then the command response field *Status* for power, deter and settings commands will be set to '*Error – Lamp not in HTTP mode*'.

The *Status* interface is also available in *Local* mode since it doesn't affect the operation of the lamp.

The two HTTP modes of operation are detailed below:

HTTP mode

- Lamp will respond to HTTP commands.
- Lamp does not respond to triggers from photocell and telemetry inputs that are configured in the lamp settings.
- Lamp does not respond to group control commands that are configured in the lamp settings.
- When an HTTP command is issued and the timer (if specified) expires, the lamp can be instructed to either:
    - Revert to the previous power and level state (default action).
    - Power off.

HTTP+Local mode

- Lamp will respond to HTTP commands.
- Lamp will respond to triggers from photocell and telemetry inputs that are configured in the lamp settings.
- Lamp will respond to group control commands that are configured in the lamp settings.
- HTTP commands effectively put the lamp into 'override' mode for a timed duration period.
- The 'override' timer duration period may be specified in the HTTP command.
- If no timer period is specified the default *Countdown Duration – Manual Override* setting will be used.
- When the HTTP command timer expires the lamp will automatically revert to any active photocell, telemetry or group triggers.

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2 Command Summary

2.1 Power Command Interface

The following commands are available:

Power: Turns the lamp power on or off.

Level: Sets the power level to a value between 20% and 100%.

LightType: Sets the wavelength to be switched on, this can be one of IR or WL. This only applies to Hybrid lamps.

Timer: Sets the timer value for the command. This value can be between 0 and 65535 seconds.

Revert: Determines whether or not the lamp will revert to its previous power and level state when the timer expires.

This command is not available in *HTTP + Local* mode.

Override: Enables and disables lamp manual 'override' mode.

This command is not available in *HTTP* mode.

Group: Instructs the lamp to send the command to other lamps in the same group.

This command is not available in *HTTP* mode.

IfPC: Conditionally executes the power command based on the lamp photocell state.

IfT: Conditionally executes the power command based on the lamp telemetry external input state.

All commands are authenticated.

2.2 Settings Command Interface

The following commands are available:

PCFollow: Sets the photocell duration 'All Night' setting to on or off.

PCAdjust: Sets the photocell sensitivity to a value between 5 and 65 lux.

TFollow: Sets the telemetry 'Duration of Input' setting to on or off.

All commands are authenticated.

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2.3 Status Command Interface

The following commands are available:

Parameter: Returns the status of parameters.

The following parameters can be queried:

- *photocell* Shows whether the photocell status is day or night.
- *telemetry* Shows whether the telemetry input is active or inactive.
- *pcadjust* Returns the value of the photocell sensitivity setting.
- *macaddress* Returns the value of the network MAC address.
- *model* Returns the value of the lamp model.
- *name* Returns the value of the lamp name.
- *ipvoltage* Returns the status of the input voltage.
- *led* Returns the status of the LED.
- *auxoutput* Returns the status of the auxiliary output.
- *deterpat* Returns the value of the current deterrent pattern.
- *deterfreq* Returns the value of the current deterrent frequency.
- *ontime* Returns the value of the lamp on time.
- *powertime* Returns the value of the lamp power connected time.
- *group* Returns the value of the group the lamp is in.
- *volts* Returns the value of the voltage.
- *ledrefv* Returns the value of the LED string reference value.
- *ledstrv* Returns the value of an LED string in volts

  Use this in conjunction with *Index* below

- *all* Returns the status of all parameters.

Index: Use this alongside *ledstrv* to get values of LED strings in volts. Valid values 1 to 8

All commands are authenticated.

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2.4 Deter Command Interface

The following commands are available:

Deter: Turns deterrent mode on or off.

DeterPat: Sets deterrent pattern to SOS, Hi-Lo or Wave.

DeterFreq: Sets frequency of deterrent pattern to Slow, Medium or Fast.

Level: Sets the power level to a value between 20% and 100%.

Timer: Sets the timer value for the command. This value can be between 0 and 65535 seconds.

Revert: Determines whether or not the lamp will revert to its previous power and level state when the timer expires.

This command is not available in *HTTP* + *Local* mode.

Override: Enables and disables lamp manual 'override' mode.

This command is not available in *HTTP* mode.

Group: Instructs the lamp to send the command to other lamps in the same group.

This command is not available in *HTTP* mode.

IfPC: Conditionally executes the deter command based on the lamp photocell state.

IfT: Conditionally executes the deter command based on the lamp telemetry external input state.

All commands are authenticated.

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