

AQUA

ILLUMINATION

Serial Command Set

Revisions	
5/5/08	Initial Release
6/24/08	Added raw commands, revision of existing commands

Command Summary

Command	CMD Code	Description
Direct Set White Intensity	sw	Set white LED array(s) percentage intensity
Direct Set Blue Intensity	sb	Set blue LED array percentage intensity
Ramp Set White Intensity	dw	Ramp white LED array(s) percentage intensity
Ramp Set Blue Intensity	db	Ramp blue LED array(s) percentage intensity
Raw Set White Intensity	rw	Set white LED array(s) intensity with hexadecimal value
Raw Set Blue Intensity	rb	Set blue LED array(s) intensity with hexadecimal value
Set Default White Intensity	mw	Set default white LED array(s) intensity
Set Default Blue Intensity	mb	Set default blue LED array(s) intensity
Set Fixture Address	sa	Assign fixture address
Set Flash Intensity	sf	Set intensity of flash sequence
Set Baseline Temperature	ta	Set baseline temperature of fixture
Set High Temp	tt	Set high temp of fixture (fault protection)
Flash White Arrays	fl	Flash white arrays commanded times
Address Fixture	a	Set address specific array intensity

Note: All commands, unless noted, should be terminated with a carriage return (0x15).

Command Detail

Direct Set White Intensity	CMD: swXXX where XXX is a value between 0 – 100
Set white LED array(s) percentage intensity	

This command directly set the intensity of the white LED array. The intensity is based on a 0 – 100 percent value. This is a global command, and will set all connected fixtures.

Example: sw100<CR> - sets the white LED arrays to 100%

Direct Set Blue Intensity	CMD: sbXXX where XXX is a value between 0 – 100
Set blue LED array percentage intensity	

This command directly set the intensity of the blue LED array. The intensity is based on a 0 – 100 percent value. This is a global command, and will set all connected fixtures.

Example: sb100<CR> - sets the blue LED array to 100%

Ramp Set White Intensity	CMD: dwXXX where XXX is a value between 0 – 100
Ramp white LED array(s) percentage intensity	

This command will ramp from the current intensity to the set intensity. There is approximately a 10 millisecond delay between the intensity changes. The intensity is based on a 0 – 100 percent value. This is a global command, and will set all connected fixtures.

Example: dw100<CR> - ramps the white LED arrays to 100%

Ramp Set Blue Intensity	CMD: dbXXX where XXX is a value between 0 – 100
Ramp blue LED array percentage intensity	

This command will ramp from the current intensity to the set intensity. There is approximately a 10 millisecond delay between the intensity changes. The intensity is based on a 0 – 100 percent value. This is a global command, and will set all connected fixtures.

Example: db100<CR> - ramps the blue LED array to 100%

Raw Set White Intensity	CMD: rwXX where XX is a value between 0x00 and 0xFF or ASCII character
Set white LED array(s) intensity with hexadecimal value	

This command directly set the intensity of the white LED array. The intensity is based on a hexadecimal (0x00 – 0xFF) or ASCII character value. This is a global command, and will set all connected fixtures.

This command allows 8-bits (0-255) of intensity control and reduces noticeable stepping between intensity changes.

Example: rwDEL - sets the white LED arrays to 50% (DEL is delete key character)

Raw Set Blue Intensity	CMD: rbXX where XX is a value between 0x00 and 0xFF or ASCII character
Set blue LED array(s) intensity with hexadecimal value	

This command directly set the intensity of the blue LED array. The intensity is based on a hexadecimal (0x00 – 0xFF) or ASCII character value. This is a global command, and will set all connected fixtures.

This command allows 8-bits (0-255) of intensity control and reduces noticeable stepping between intensity changes.

Example: rbDEL - sets the blue LED arrays to 50% (DEL is delete key character)

Set Default White Intensity	CMD: mwXXX where XXX is a value between 0 – 100
Set default white LED array(s) intensity	

This command sets the default white intensity that the fixture will go to upon reset without a controller connected. The intensity is based on a 0 – 100 percent value. This is a global command, and will set all connected fixtures.

Example: mw100<CR> - sets the default white LED arrays intensity to 100%

Set Default Blue Intensity	CMD: mbXXX where XXX is a value between 0 – 100
Set default blue LED array intensity	

This command sets the default blue intensity that the fixture will go to upon reset without a controller connected. The intensity is based on a 0 – 100 percent value. This is a global command, and will set all connected fixtures.

Example: mb100<CR> - sets the default blue LED array intensity to 100%

Set Fixture Address	CMD: saX where X is a value between a – z, A – Z, and 1 - 9
Assign fixture address	

This command assigns the fixture a unique address for sequential or flash control.

Note: Address 0 is a global command, and should not be assigned to an individual fixture.

Example: sa1<CR> - sets fixture to address 1

Set Flash Intensity	CMD: sfX where X is a value between 0 - 9
Set intensity of flash sequence	

This command sets the intensity of the white array(s) of LEDs when the flash function is sent. Intensity is set in 10% increments where 0 is 10% and 9 is 100%.

Example: sf5<CR> - sets the flash intensity to 60%

Set Baseline Temperature	CMD: ta
Set baseline temperature of fixture	

This command will set the current fixture temperature as its baseline. Fixture should be at room temperature which should be approximately 77° Fahrenheit / 25° Celsius before setting.

Example: ta - stores the current temperature as baseline value

Set High Temp	CMD: ttXX where XX is a value between 0 and 50
Set high temp of fixture (fault protection)	

This command sets the high temperature value of the fixture – typically 10-15 degrees above the full power nominal temperature. If the fixture reaches this temperature, it will reduce the intensity to 50% of the commanded value and set the fans to full power. When the temperature drops to an acceptable range the fixture will return to normal operation.

Note: This value is set when manufactured and should *only* be used when necessary. If this is set too high it can cause damage to the fixture and will void the warranty. Please contact C2 Development, Inc. prior to changes.

Example: tt15<CR> - sets the value as the high temp engage point

Flash White Arrays	CMD: fXY where X is the fixture address and Y is the number of flashes
Flash white arrays commanded times	

This command flashes the white array(s). The command requires the address of the fixture and the number of times to be flashed in roughly 100 milliseconds.

Note: Address 0 will flash all fixtures connected.

Example: f114<CR> - flashes fixture address 1 four (4) times.

Address Fixture	CMD: aXYZZZ where X is the address of the fixture, Y is the color to be set, and ZZZ is a value between 0 - 100
Set address specific array percentage intensity	

This command will set a specific fixture to a desired white or blue intensity.

Examples: a1w50<CR> - this sets the white intensity of fixture address 1 to 50%

a2b100<CR> - this sets the blue intensity of fixture address 2 to 100%