Light Source

LUMINAR ACE

Model LA-HDF5010RL
LA-HDF7010RL

Command Manual

HAYASHI-REPIC CO.,LTD.

Command List

Setting Command		Mode	Command No.	Unit No.	Data		
Set the Light Quantity Value	STX	W	14	00	****1	CS	ETX
OFF	STX	W	14	00	****0	CS	ETX
Memory the Light Quantity Value	STX	W	10	00	00000	CS(08)	ETX
NG Signal Reset	STX	W	08	00	00000	CS(0F)	ETX
External ON/OFF Control	STX	W	00	00	00001	CS(08)	ETX
	STX	W	00	00	00000	CS(07)	ETX

Check Command		Mode	Command No.	Unit No.	Data		
Check the Light Quantity Value	STX	R	14	00	00000	CS(07)	ETX
Check the Status	STX	R	08	00	00000	CS(0A)	ETX

Response to Setting Command and Check Command

In the case of Set Command   If Signal Control is OK, Output the ACK. If the Signal Control is NG, Output the NAK.

		Mode	Command No.	Unit No.			
If Signal Control is OK	STX	W	**	00	ACK	CS	ETX
If Signal Control is NG	STX	W	**	00	NAK	CS	ETX

In the case of Check Comman

		Mode	Command No.	Unit No.	Data		
Check the Light Quantity Value	STX	R	14	00	0***	CS	ETX
Check the Status	STX	R	08	00	*000	CS	ETX

In the case of Signal Control is NG   Outqut the NAK

		Mode	Command No.	Unit No.			
If the Signal Control is NG	STX	R	14	00	NAK	CS	ETX

About Control Contents by Command

Setting Command (Mode is W

Command No.		
14	Set the Light Quantity Value	It Sets the Light Quantity Value and the LED ON.
14	OFF	Turn OFF the LED.
10	Memory the Light Quantity Value	It Memorize the Light Quantity Value.
08	NG Signal Reset	Reset the NG Signal of LED and Temperature Sensor.
00	External ON/OFF Control	It is a Setting to Control the LED ON / OFF by a External Signal.

Check Command (Mode is R)

Command No.		
14	Check the Light Quantity Value	Check to the Light Quantity Value.
08	Check the Status	Check to the NG Signal of LED and Temperature Sensor.

About the Command Format

Format	STX	Mode	Command No.	Unit No.	Data	CS	ETX

STX (0x02), ETX (0x03) are ASCII Control Codes, CS is a Checksum (How to get CS will be Described Later)
The Command is ASCII, Described in the Half-Width Capital Letter
The Data is ASCII, Described in the Half-Width Capital Letter.
It does not use the Unit Number. Please Set to the "00".

Command Detail

Setting Command (Mode is W

Set the Light Quantity Value	STX	Mode	Command No.	Unit No.	Data	CS	ETX
	STX	W	14	00	****1	CS	ETX

**** is Light Quantity Value   The Light Quantity Value is 256 Gradation from 0 to 255.
For example, if the Light Quantity Value is 100, Please Set to the "0100".
The "1" of "****1" Indicate the LED ON.

LED OFF	STX	Mode	Command No.	Unit No.	Data	CS	ETX
	STX	W	14	00	****0	CS	ETX

**** is Light Quantity Value
The "0" of "****0" Indicate the LED OFF.

Memory the Light Quantity Value	STX	Mode	Command No.	Unit No.	Data	CS	ETX
	STX	W	10	00	00000	CS	ETX

Memorize the Light Quantity Value. Next time, If Power ON, It light up with this Memorized Light Quantity Value.
If the Light Quantity Value is Changed, the Memorized Light Quantity Value will be Reset.
After Reset, If it was not Memorized by the time of Power OFF,
The next time the Power on, It does not LED ON.

NG Signal Reset	STX	Mode	Command No.	Unit No.	Data	CS	ETX
	STX	W	08	00	00000	CS	ETX

It is Reset the NG Signal (LED, Temperature Sensor NG). After Removing the NG Factor, Please run.
Note) If it arise the NG Signal, the Output a Signal and turn ON the alarm LED in front panel of Light Source.
　　　　Regarding Connection with External Equipment, Please refer to the Instruction Manual.

External ON/OFF Control	STX	Mode	Command No.	Unit No.	Data	CS	ETX
	STX	W	00	00	0000*	CS	ETX

Note) The Product is set to "Do not Perform External ON / OFF Control" as at the Factory Shipped.
　　　About the ON / OFF Control from External, Please setting this.
　　　If the ON / OFF control is run from the External, Please Setting the Data "00001".
　　　If the ON / OFF control is not run from the External, Please Setting the Data "00000".
　　　If the ON / OFF control is run from the External, Please Setting the REMOTE/MANUAL Switch on the
　　　Front Panel of Light Source to "REMOTE". This setting is Keeped. Please operate once if necessary.

Response to Command

	STX	Mode	Command No.	Unit No.		CS	ETX
Set the Light Quantity Value	STX	W	14	00	ACK/NAK	CS	ETX
OFF	STX	W	14	00	ACK/NAK	CS	ETX
Memory the Light Quantity Value	STX	W	10	00	ACK/NAK	CS	ETX
NG Signal Reset	STX	W	08	00	ACK/NAK	CS	ETX
External ON/OFF Control	STX	W	00	00	ACK/NAK	CS	ETX

Note) If Signal Control is OK, Output the ACK(0x06). If the Signal Control is NG, Output the NAK(0x15).

Check Command Mode is

Check the light quantity value

STX	Mode	Command No.	Unit No.	Data	CS	ETX
STX	R	14	00	00000	CS	ETX

Response to

STX	Mode	Command No.	Unit No.	Data	CS	ETX
STX	R	14	00	****	CS	ETX

**** is Light Quantity Value. If the setting Light Quantity Value is "100", it Indicate the "0100".

Check the Status

STX	Mode	Command No.	Unit No.	Data	CS	ETX
STX	R	08	00	00000	CS	ETX

Response to

STX	Mode	Command No.	Unit No.	Data	CS	ETX
STX	R	08	00	*000	CS	ETX

"*" Indicates the Content of the NG.

NG Contents is Indicate in BIT units. "0 BIT" is Temperature Sensor, "1 BIT" is LED.

"00" = OK for both Temperature Sensor and LED, "01" = Temperature Sensor NG,

"10" = LED OK, "11" = NG for both Temperature Sensor and LED

"*" Is an ASCII indication, "0": OK for Both Temperature Sensor and LED, "1": Temperature Sensor NG

"2": LED NG, "3": OK for Both Temperature Sensor and LED

If the Signal Control is NG, Output the NAK(0x15).

STX	Mode	Command No.	Unit No.		CS	ETX
STX	W	14	00	NAK	CS	ETX

About the Checksum (CS) Calculation Method

For example, use the Error Reset Command,
STX ¦ W ¦ 08 ¦ 00 ¦ 00000 ¦ CS ¦ ETX
Convert ASCII code of "W08 00 00000" part to Hexadecimal No.
W 0x57, 0 0x30, 8 0x38
After Conversion, add it.
0x57 + 0x30 + 0x38 + 0x30+0x30 + 0x30+0x30+0x30+0x30+0x30 = 0x20F
The Lower 1 Bite of the Calculation Result is CS.
As a result, the Error reset command is "STX W 08 00 00000 0F ETX".

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