

Dawn Simulator Command/Response Set

1. Command Set.

a. Command Structure-3 bytes:

@**XY** (3 characters must be sent)

Where:

@=Command Prefix. *Python note: Sent as the '@' character.*

X=Command Character. *Python note: Sent as a character.*

Y=Light Level to set (byte value). Used only by "L" command, but must be sent for all other commands (value irrelevant).

Python note: Sent as chr(value).

b. Command Characters (Upper-case only):

- i. R. Master Reset. Reboots Dawn Simulator processor. Light Level is ignored.
- ii. A. Attention. Requests a response from the Dawn Simulator, but no specific action. Useful to determine if Dawn Simulator is active and to check for cancel conditions. Light Level is ignored.
- iii. C. Clear Cancel. Clears "cancelled" status set by pressing the Override Button on the Dawn Simulator. Useful to clear Cancel Acknowledgements. Light Level is ignored.
- iv. M. Return MaxLevel Value. Queries the maximum Light Level value the dawn simulator can process (as defined by Dawn Simulator software), but invokes no specific action. Light Level is ignored.
- v. F. Off. Set brightness to zero, extinguishing light. Light Level is ignored.
- vi. N. On. Set brightness set to MaxLevel, turning on light at full brightness. Light Level is ignored.
- vii. L. Set light level. Set Brightness to Light Level.

2. Response Set.

a. Response Structure (3 bytes):

ABC (3 characters must be sent)

Where:

A=Acknowledgement Status

B=Command Character being acknowledged--the Command Character sent with the most recent command (Upper-case only)

C=Current Light Level (byte value) for all commands except the "M" command, for which the MaxLevel (byte value) value is returned.

b. Acknowledgement Status Characters:

- i. !. Positive Acknowledgement. Command received and understood.
- ii. ?. Negative Acknowledgement. Command invalid or not understood.
- iii. #. Cancel Acknowledgement. User cancelled down sequence by pressing the Override Button. Any further A, M, F, N, or L commands will be answered with a Cancel Acknowledgement until a C or R command is received.