

Application Note

Room Controller accessory power allocation

Overview

The Room Controller low voltage interface ports provide +24 VDC to power the Keypad(s), Slider Station, Daylight Sensor and Occupancy Sensors(s). The number of low voltage accessories that can be connected to the RJ45 connectors is limited by the maximum amount of power that is available on the low voltage ports. The following information in this application note provides guidelines for alternate combinations of the low voltage accessories while staying within the maximum power limits.

Technical Details

A mix of control accessories can be used by the lighting system designer while at the same time staying within the limits of the Room Controller low voltage power outputs. The maximum allowed combined DC current draw for external Room Controller accessories is 90mA, which is based on industry guidelines and testing. **Table 1** below shows the current draw of various accessories that could be used in a particular application.

Table 1. Maximum Current Consumption of Various Accessories

Accessory	Max Current Consumption (mA)
Keypad	3.00
Slider	2.00
Daylight Sensor*	8.00
Occupancy Sensor, PIR	10.00
Occupancy Sensor, Dual Tech	25.00
Network Node	18.00

*One daylight sensor is allowed per Room Controller panel

— continued on reverse

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Example

Table 2 below illustrates how a variety of accessories can be used while staying within the current limitations of the system.

Table 2. Total Current Consumption of Various Accessories at Maximum Capacity

Qty	Accessory	Max Current Consumption (mA)	Qty X (Max Current (mA))
2	Occupancy Sensor, Dual Tech	25.00	50.00
1	Slider	2.00	2.00
1	Daylight Sensor	8.00	8.00
4	Keypad	3.00	12.00
1	Network Node	18.00	18.00
		TOTAL	90.00

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