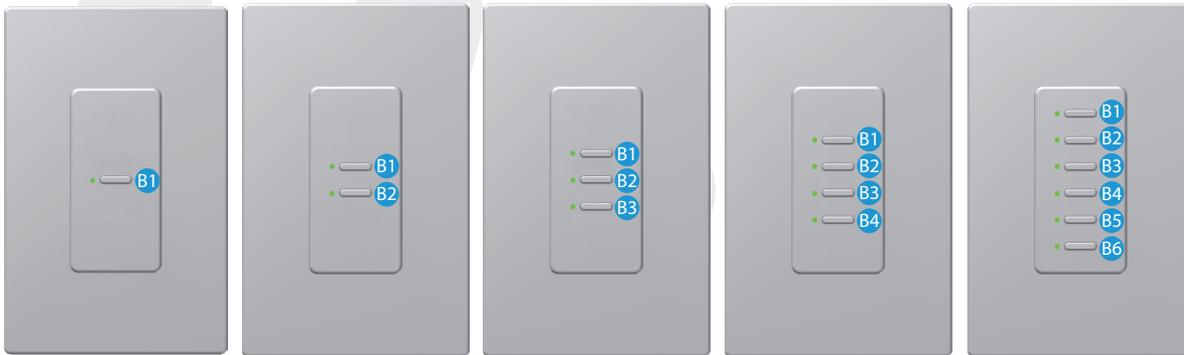# touch-plate®
LIGHTING CONTROLS

Ultra 5-Wire Wiring Diagram for Digital Systems

Use the following to wire an Ultra Smart Station. Digital systems are Touchplate systems. Each system will have different components and this document does not show all possible connections.
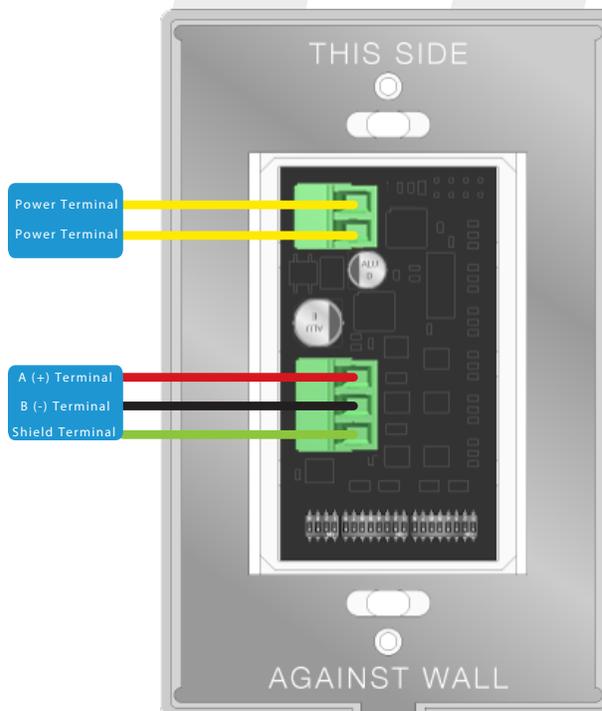
Button Layout

Wiring Information

- Can be home runned, daisy chained, or a combination of both
- Touchplate recommends the use of 22/01PSH+ 18/2C or equivalent wire
- Shield or Ground must be isolated from the ground on the power supply. Using the same ground will create a direct short and damage the unit.

Communicating to and Powering the Station

- Power will typically come from a Smart Control Gateway, Smart Control Link, or Time-Keeper® Max
- Communication and data terminals are typically labeled as GND, -, and +.

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Address Dip Switch Settings

Use the following to change an Ultra Station Address. Normally, addresses are typically pre-set at the factory. Make sure not to duplicate addresses, as each station needs to have its own unique address.

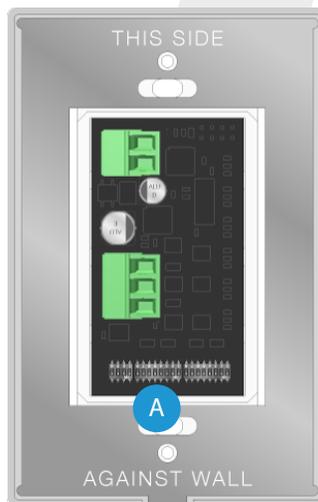**Do not change values unless directed by Touchplate!!! DIP SWITCH #8 ALWAYS STAYS ON!!!**

Address	1	2	3	4	5	6	7	8
1	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
2	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
3	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
4	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
5	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
6	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
7	ON	ON	ON	OFF	OFF	OFF	OFF	ON
8	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
9	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
10	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
11	ON	ON	OFF	ON	OFF	OFF	OFF	ON
12	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
13	ON	OFF	ON	ON	OFF	OFF	OFF	ON
14	OFF	ON	ON	ON	OFF	OFF	OFF	ON
15	ON	ON	ON	ON	OFF	OFF	OFF	ON
Through Address 96 - Use the table below to calculate Smart Switch Address								

Valid addresses are 1 to 96. Addresses are set using the eight Address Dip Switches.

Address Dip Switch	1	2	3	4	5	6	7	8
Value	1	2	4	8	16	32	64	128

The values of all switches in the ON position are added together and the total is equal to the address. See the examples below:

- Smart Control Station Address 1: Turn on switch 1 only and leave all other Address switches off.
- Smart Control Station Address 13: Turn on switches 1, 3, and 4. The values of those switches are $1+4+8 = 13$.

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Option Dip Switch Settings

Use the following to change the LED color and/or intensity. If using a Touchplate Controller, the software will control the color and intensity and override the Option Dip Switch settings.

Options	1	2	3	4	5	6	7	8
Lowest LED Intensity	OFF	OFF	N/A	N/A	N/A	N/A	N/A	N/A
Low LED Intensity	ON	OFF	N/A	N/A	N/A	N/A	N/A	N/A
Medium LED Intensity	OFF	ON	N/A	N/A	N/A	N/A	N/A	N/A
High LED Intensity	ON	ON	N/A	N/A	N/A	N/A	N/A	N/A
1B Station	N/A	N/A	ON	OFF	OFF	N/A	N/A	N/A
2B Station	N/A	N/A	OFF	ON	OFF	N/A	N/A	N/A
3B Station	N/A	N/A	ON	ON	OFF	N/A	N/A	N/A
4B Station	N/A	N/A	OFF	OFF	ON	N/A	N/A	N/A
8B Station	N/A	N/A	ON	ON	ON	N/A	N/A	N/A
LEDs Off	N/A	N/A	N/A	N/A	N/A	OFF	OFF	OFF
Red LEDs	N/A	N/A	N/A	N/A	N/A	ON	OFF	OFF
Green LEDs	N/A	N/A	N/A	N/A	N/A	OFF	ON	OFF
Blue LEDs	N/A	N/A	N/A	N/A	N/A	ON	ON	OFF
Yellow LEDs	N/A	N/A	N/A	N/A	N/A	OFF	OFF	ON
Purple LEDs	N/A	N/A	N/A	N/A	N/A	ON	OFF	ON
Cyan LEDs	N/A	N/A	N/A	N/A	N/A	OFF	ON	ON
White LEDs	N/A	N/A	N/A	N/A	N/A	ON	ON	ON

THIS SIDE

ALT D

ALT E

B

AGAINST WALL