

## Wiring Instructions for TriStar RGB-SMART Lamps

### Instructions:

1. Connect a power supply (A) (e.g. the SP-100Watt 12VDC) to a power line with a pair of Black/Red wires (B).
  - a. Connect the black wire of this power line to the V- output terminal of the power supply.
  - b. Connect the red wire of this power line to the V+ output terminal of the power supply.
2. Connect the Black/Red wires to the TriStar PAVO-32 Controller (C).
3. There is a 4-cored cable attached to each TriStar RGB-SMART lamp. The colors of these cores are red, black, green and white. The red and black cores are for power input to each lamp, and the green and white cores are for signal input.
4. Connect the red core of each lamp to the red wire of the 12V+ power line and connect the black core of each lamp to the black wire of the 12V- power line.
5. Connect the green cores (D+, meaning Data+) of each lamp together through a common extension wire which is then connected to the PAVO-32.
6. Connect the white cores (D-) of each lamp together through a common extension wire which is also connected to the PAVO-32.
7. Each lamp requires a maximum of 5 watts and 500mA, so the total maximum wattage of all of the lamps connected to one power supply cannot exceed the wattage capacity of the power supply. For example, a 100 watt power supply can only be connected to a maximum of 20 lamps.
8. If more than one power supply is required to connect more lamps, the additional separate power supply (D) must be connected to a separate power line (D). This power line (E) must not be connected to the first power line (B).
9. An additional maximum of 20 TriStar RGB-SMART lamps can be connected to a separate power supply (D) and power line (E), and then the green cores (D+) and white cores (D-) connected to each other through common extension wires. These extension wires are then connected to the extension wires that connect the green and white cores of the first set of (twenty) lamps.

| NOTES                                                                                     |            |
|-------------------------------------------------------------------------------------------|------------|
| Power Line maximum length:                                                                | 100 meters |
| Maximum number of TriStar RGB-SMART lamps with one PAVO-32:                               | 32 lamps   |
| Maximum number of TriStar RGB-SMART lamps with one power supply of 100 watt and 12~19VDC: | 20 lamps   |

