



ChristmasExpo

Custom Cables, Cords & Connectors

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ChristmasInKent.com





Low Voltage High Voltage Network



Low Voltage

5 volts or 12 volts?

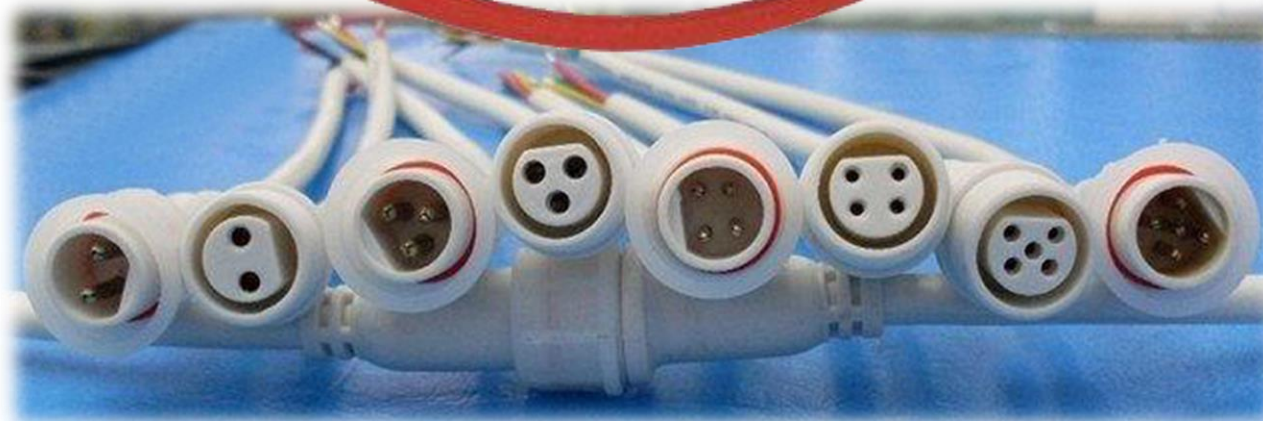
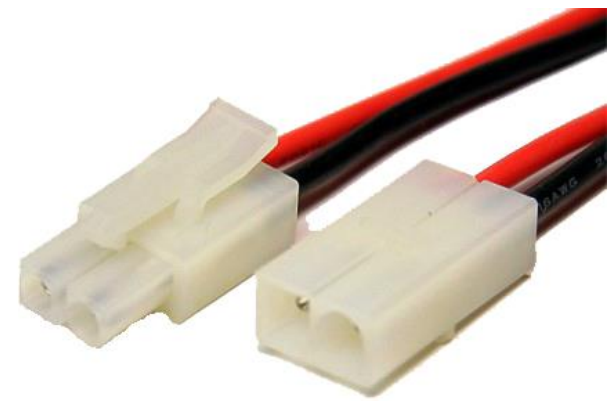
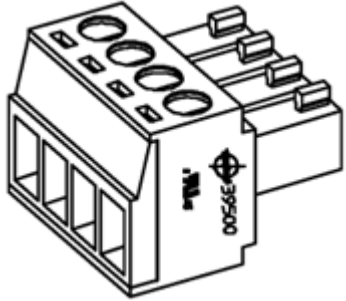
The debate continues

Both are safe (relatively speaking)

Both can use the same connectors



Low Voltage
For
Pixels & Power Supplies





Pigtails

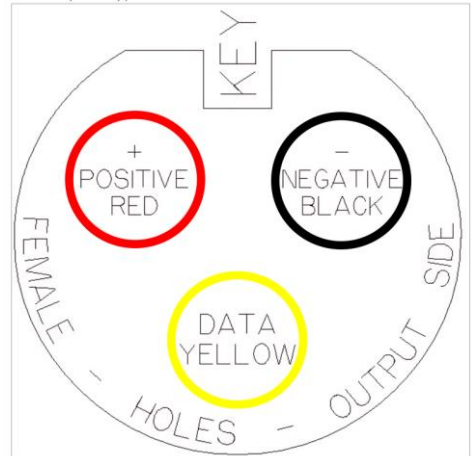
13.5mm - 15mm

Same - Same?

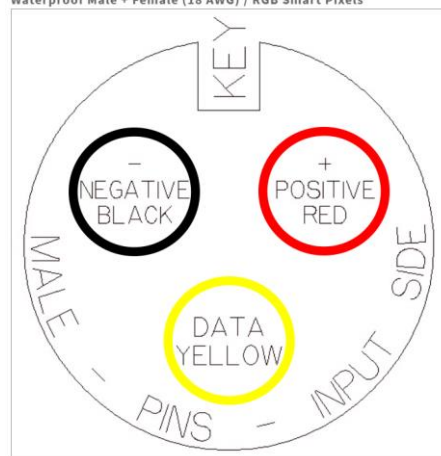


xConnect

EasyPlug3 / 3 Conductor / 10ft / Screw Together Extension / Waterproof Male + Female (18 AWG) / RGB Smart Pixels



EasyPlug3 / 3 Conductor / 10ft / Screw Together Extension / Waterproof Male + Female (18 AWG) / RGB Smart Pixels



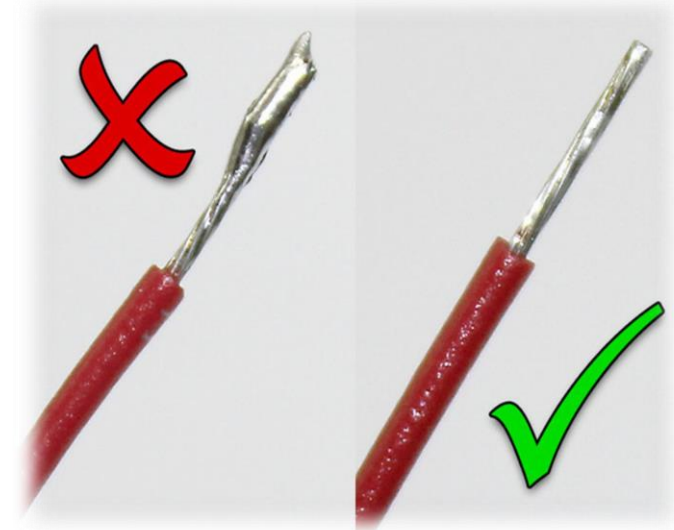
Pixels & Power Supplies

To Tin or not to Tin?

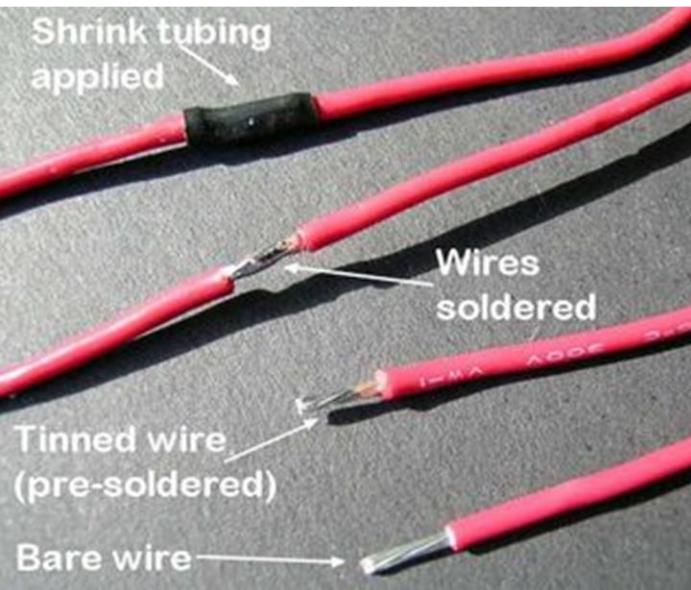
Tin ends usually

(to maintain wire shape)

Connections may work loose
(more of an issue with higher voltages)

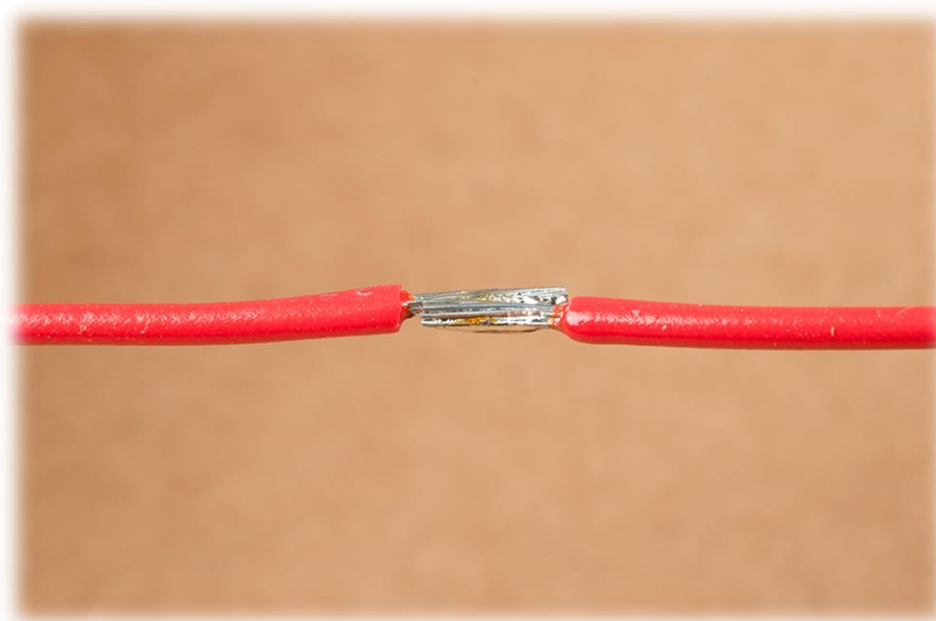
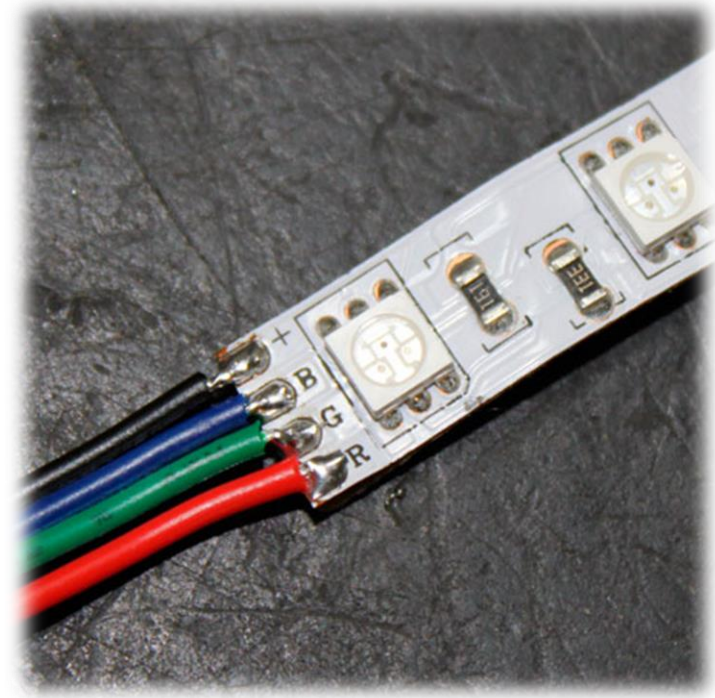


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Pixels & Strips

Tin + Tin + Join



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1. Strip wire insulation 1/3 of an inch both wire ends.



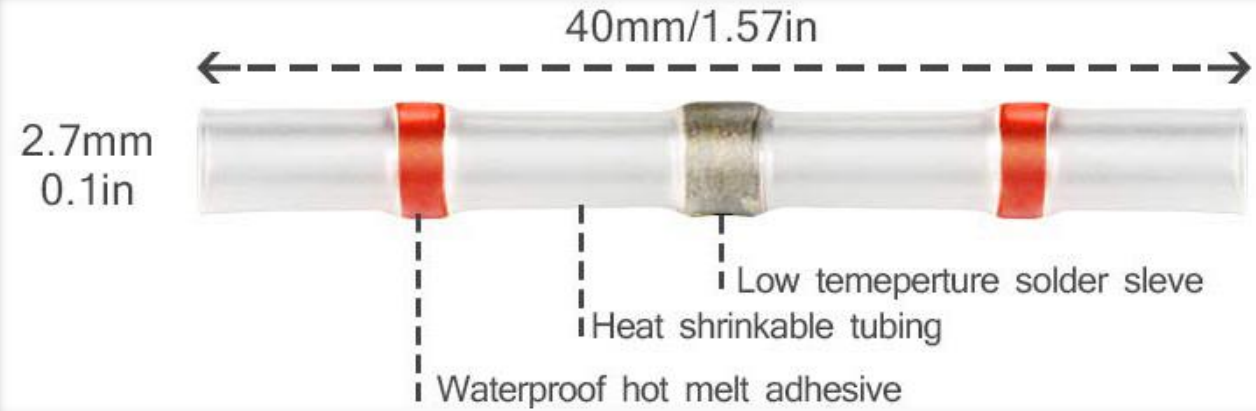
2. Position wires into solder splice.



3. Tubing will shrink and solder will melt and flow through the stripped wires.



No Crimping Needed !!



Low Voltage

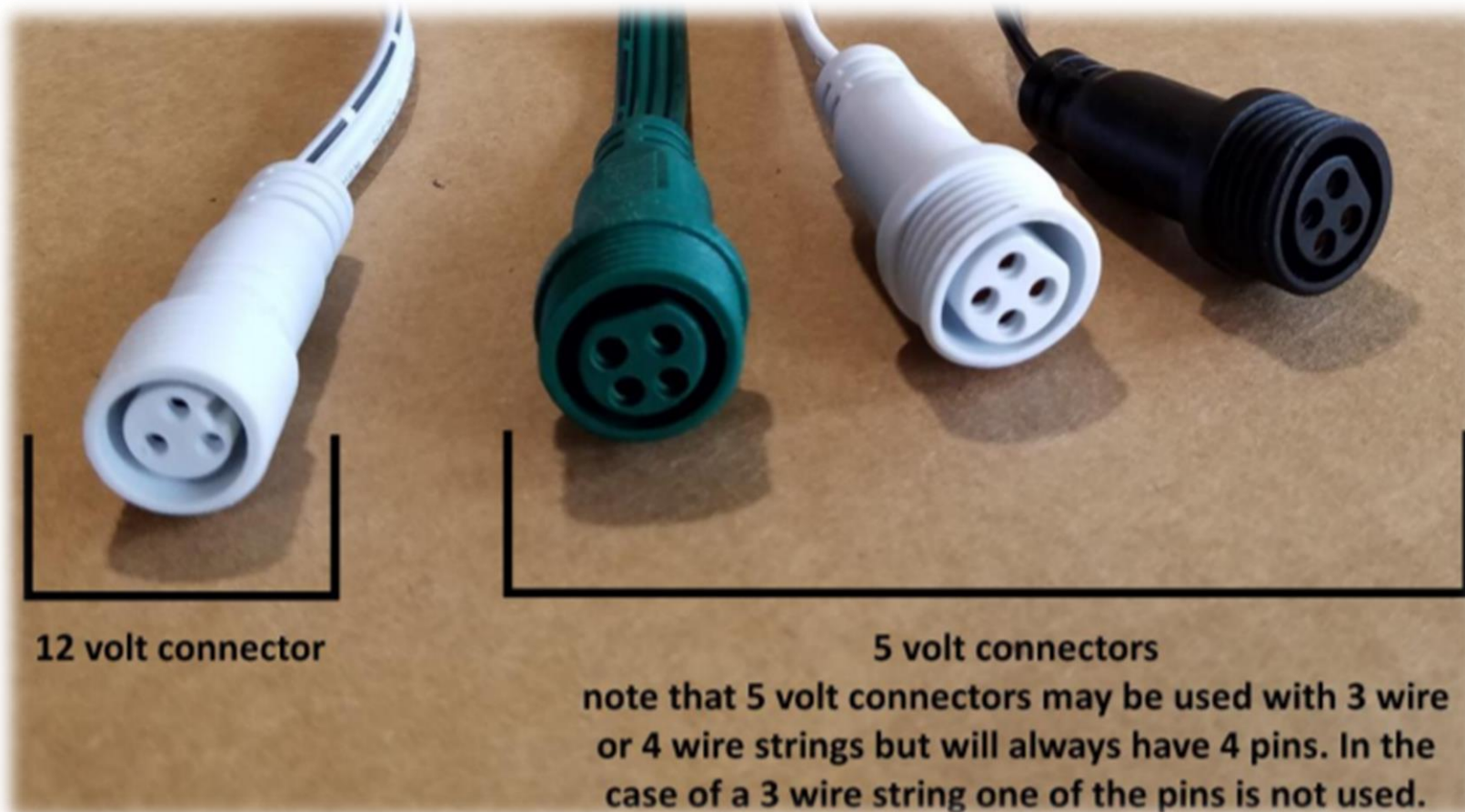
Pixels

Solderless Connector



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Light-O-Rama Pixels



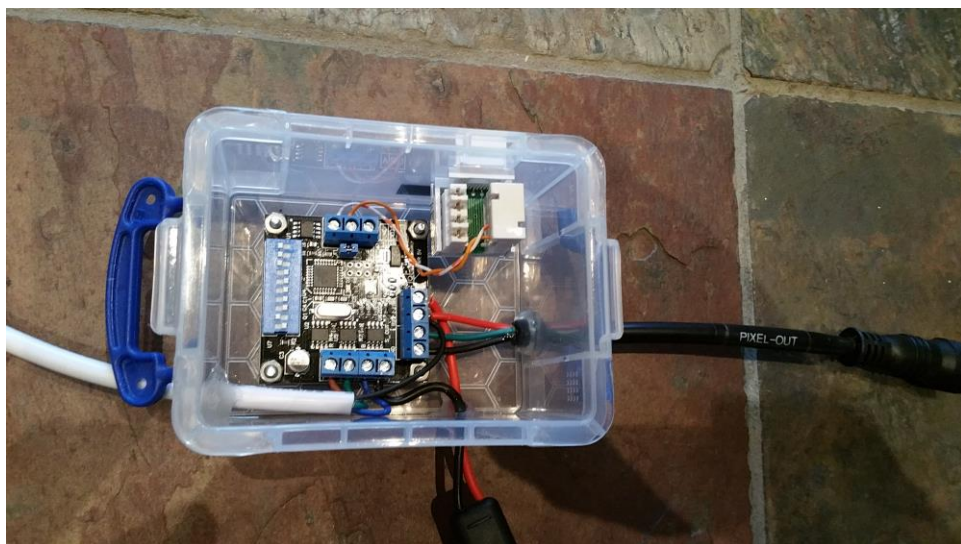


Pixels & Power Supplies

TEST - TEST - TEST



Test for power in & out
Test pixels independent of controller
Test pixels with extensions



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Custom Cables, Cords & Connectors

High Voltage



Extension Cords

100'/50' - 18ga - 7/10 amps

100'/50' - 16ga - 10/13 amps

100'/50' - 14ga - 13/18 amps

100'/50' - 12ga - 18/25 amps

100'/50' - 10ga - 25/30 amps

Identification?



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Spider Boxes



Spider Boxes

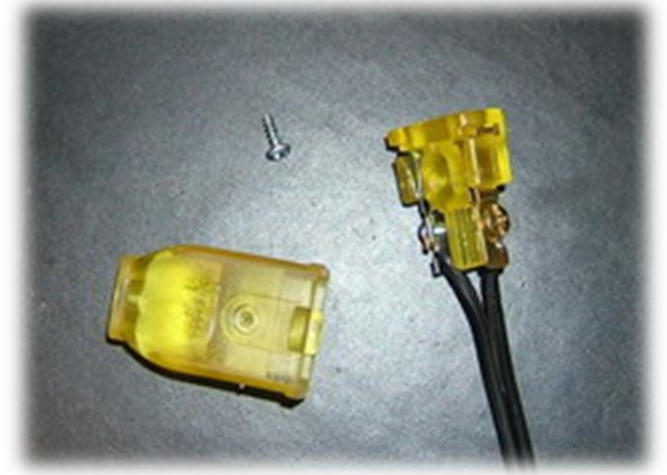


Electrical Female Plug
Locking Male Plug



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Dual Channel Extension Cords



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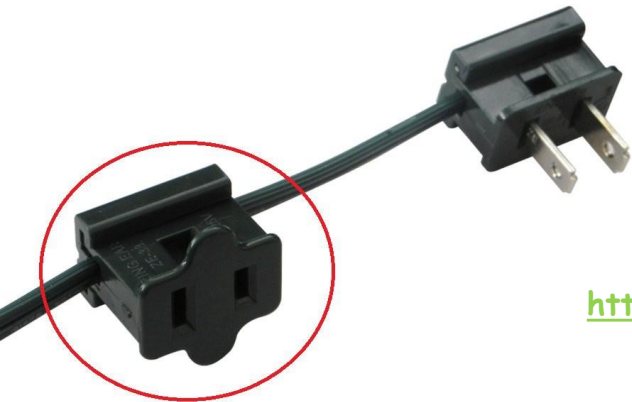
Zip Cord

Zip cord (SPT) & IPC / IDC
Vampire - Attach-On

male / female / C-7 / C-9

Creative Displays
Action Lighting
Novelty Lights
Amazon

https://www.doityourselfchristmas.com/wiki/index.php/SPT_Wire_and_Vampire_Plugs



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Zip cord SPT-1 & SPT-2

Stranded - **P**arallel jacked - **T**hermoplastic

It is not speaker wire or landscape wire!



WIRE INSULATION THICKNESS

18 gauge
SPT-1 rated for 7 amps
SPT-2 rated for 10 amps

Ribbed for identification ;-)



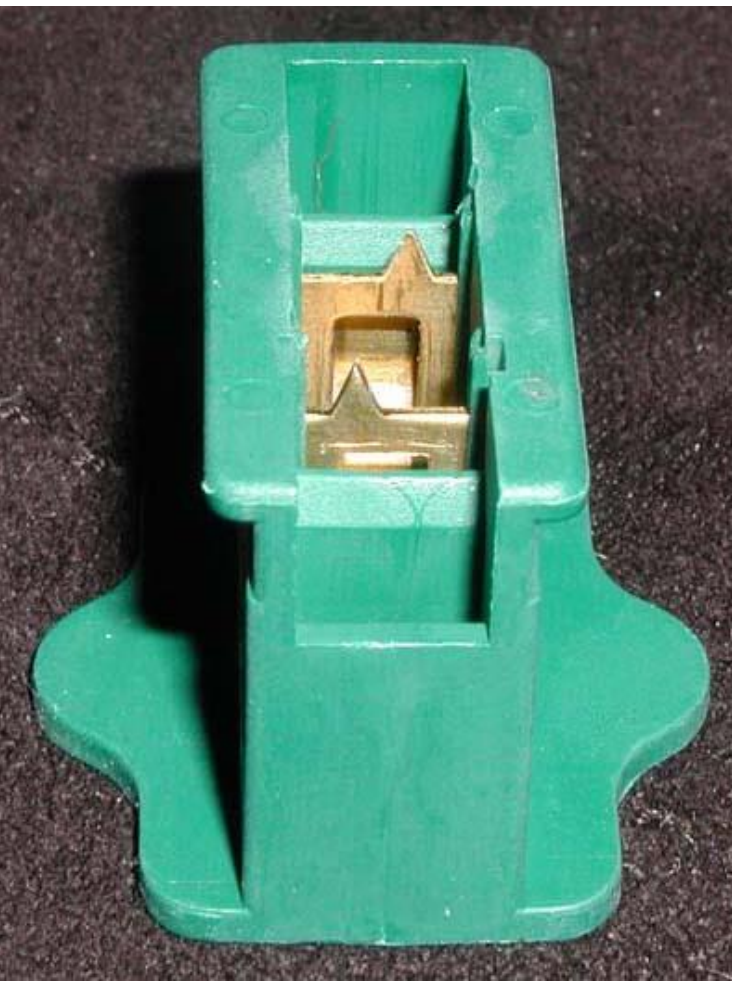
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Zip cord SPT-1 & SPT-2

Vampire - Attach-On

male / female / C-7 / C-9

Ribbed identification (Neutral)

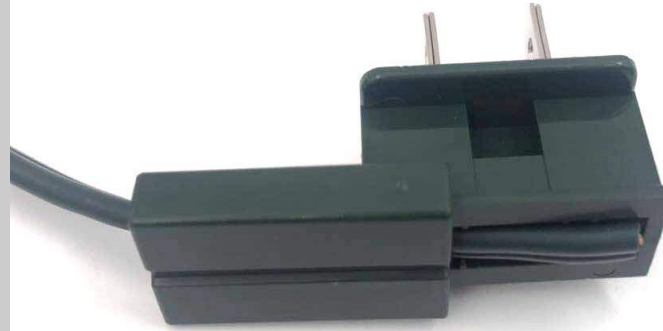
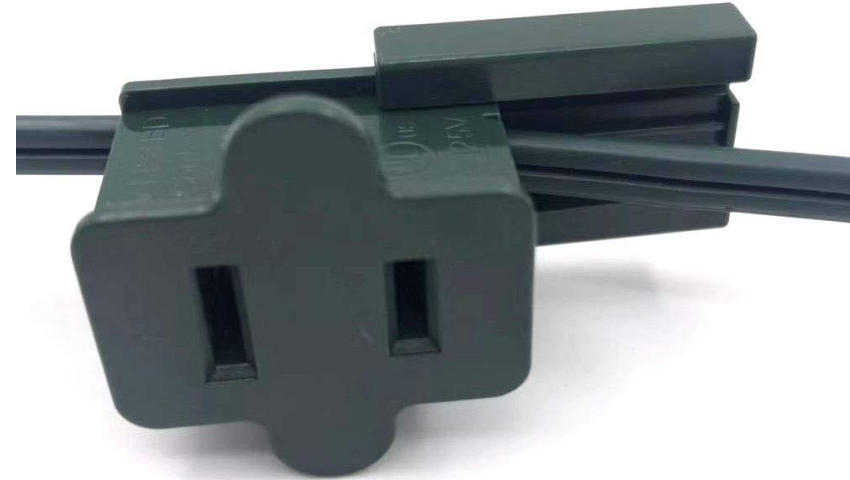
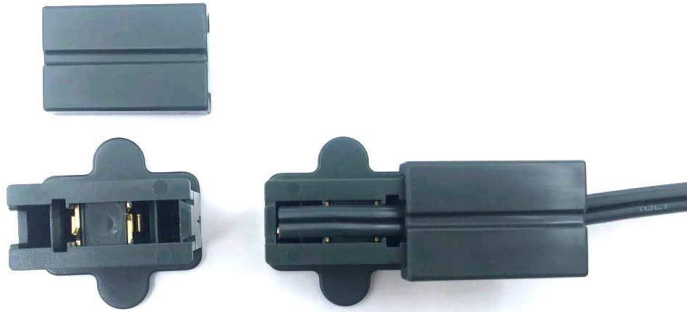


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Vampire - Attach-On Plugs

Ribbed for identification (Neutral)

Wrong ways:

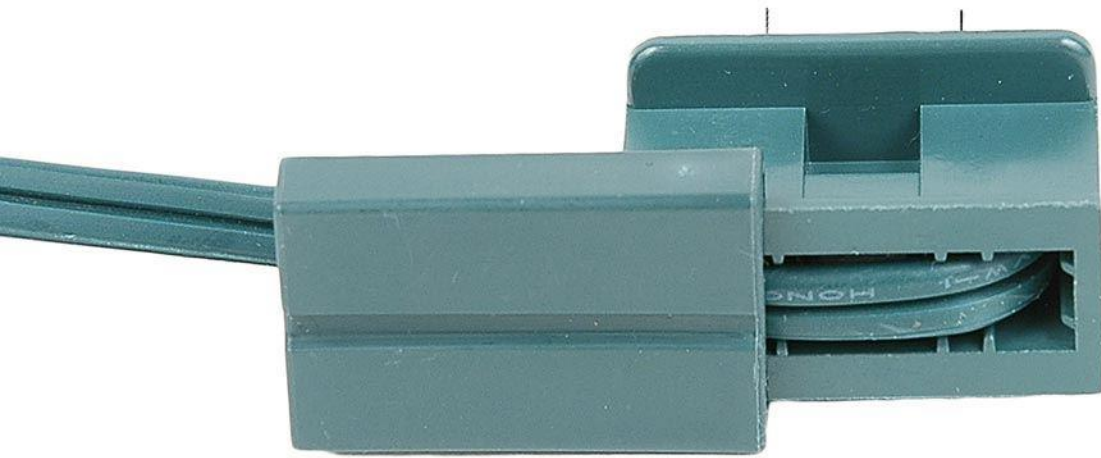


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Vampire - Attach-On Plugs

Ribbed / printed for identification (Neutral)
smooth is hot

Right Way



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Christmas
Designers.com

Tools

cutters - strippers - crimpers - helping hands
soldering iron - heat gun / small torch

Consumables

solder - heat shrink - connectors
tape - zip ties



Tools



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Network

Control Signals
from

Software to Controllers

Cat5, Cat6, XLR/DMX

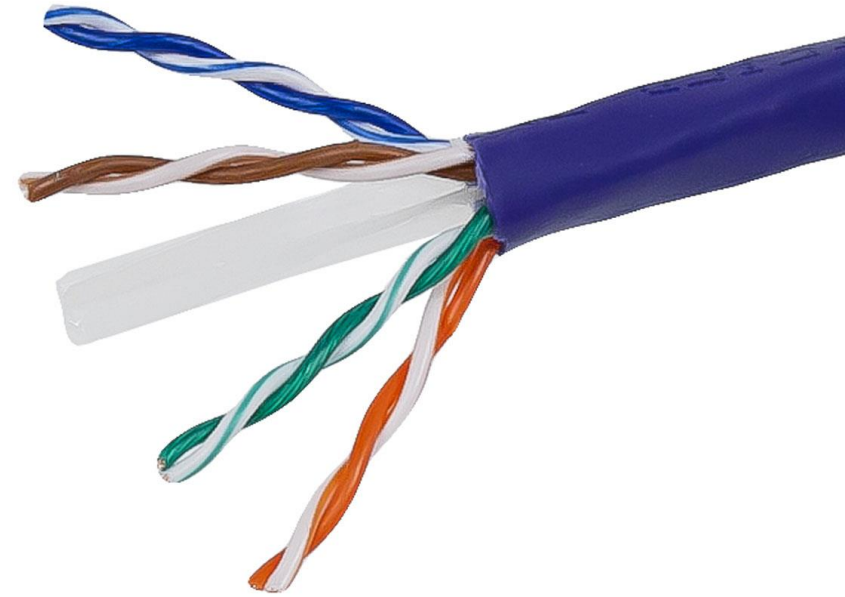
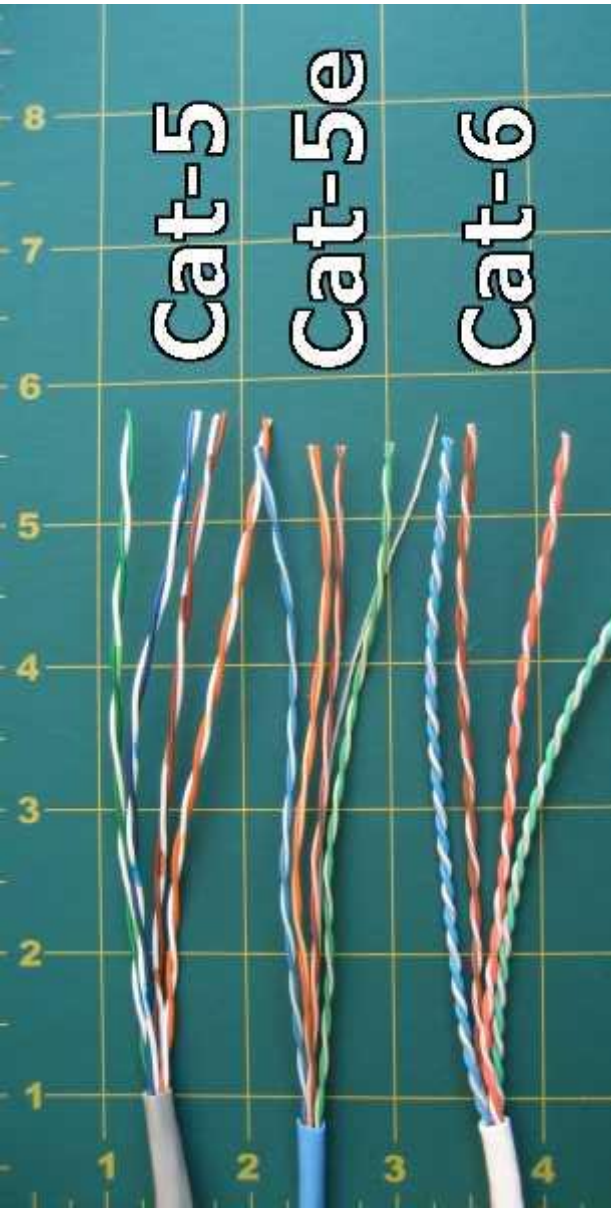


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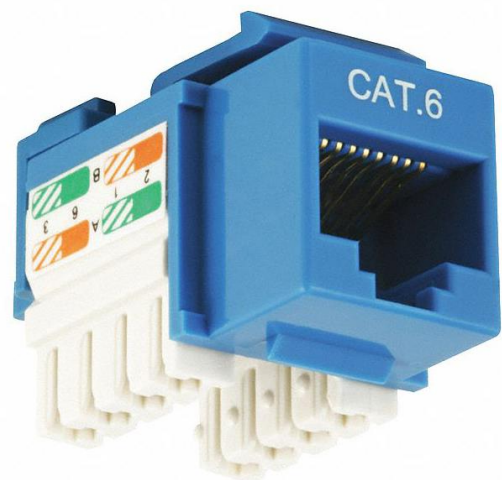
Network

Cat 5, 5e, 6

8 conductors 24ga
4 pairs



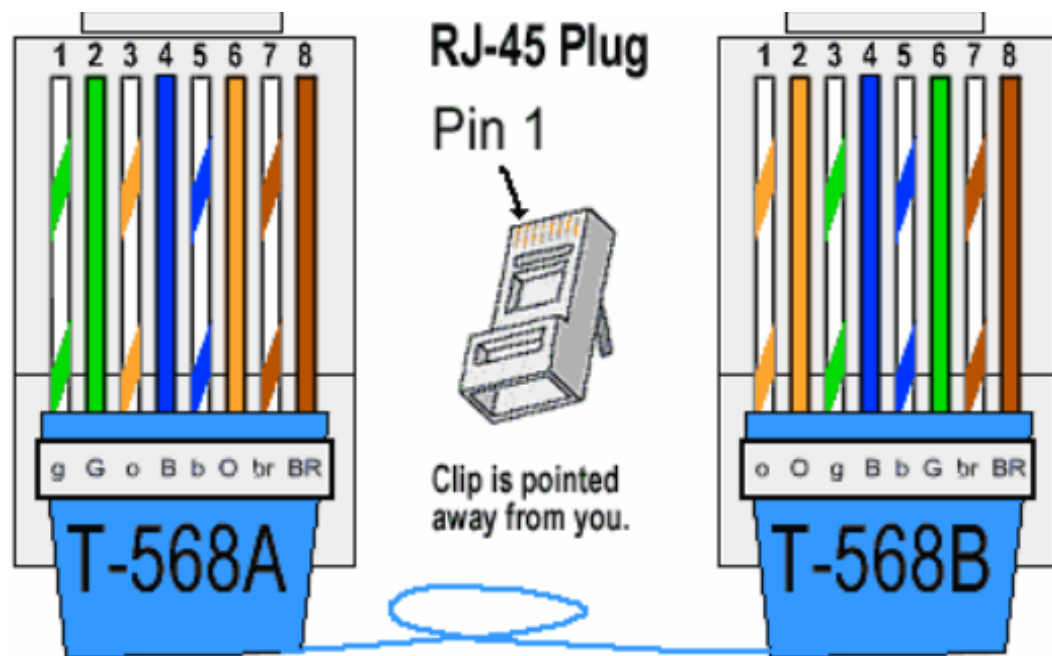
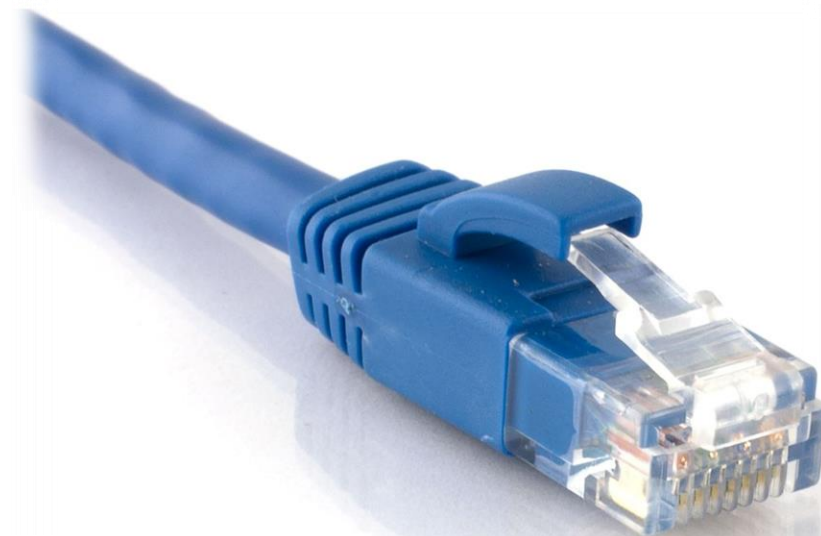
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Connectors

RJ45

Jacks & Pins

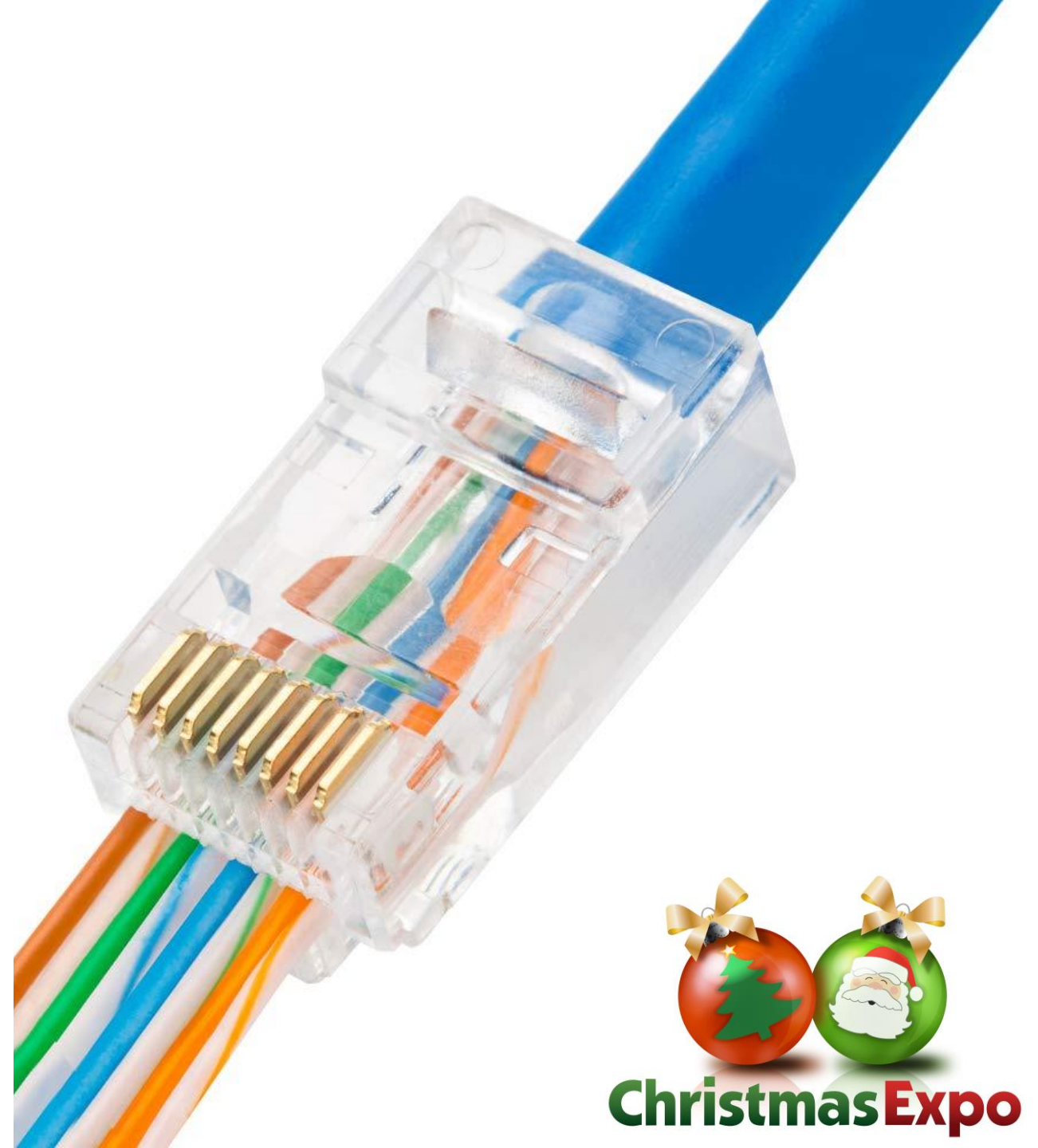
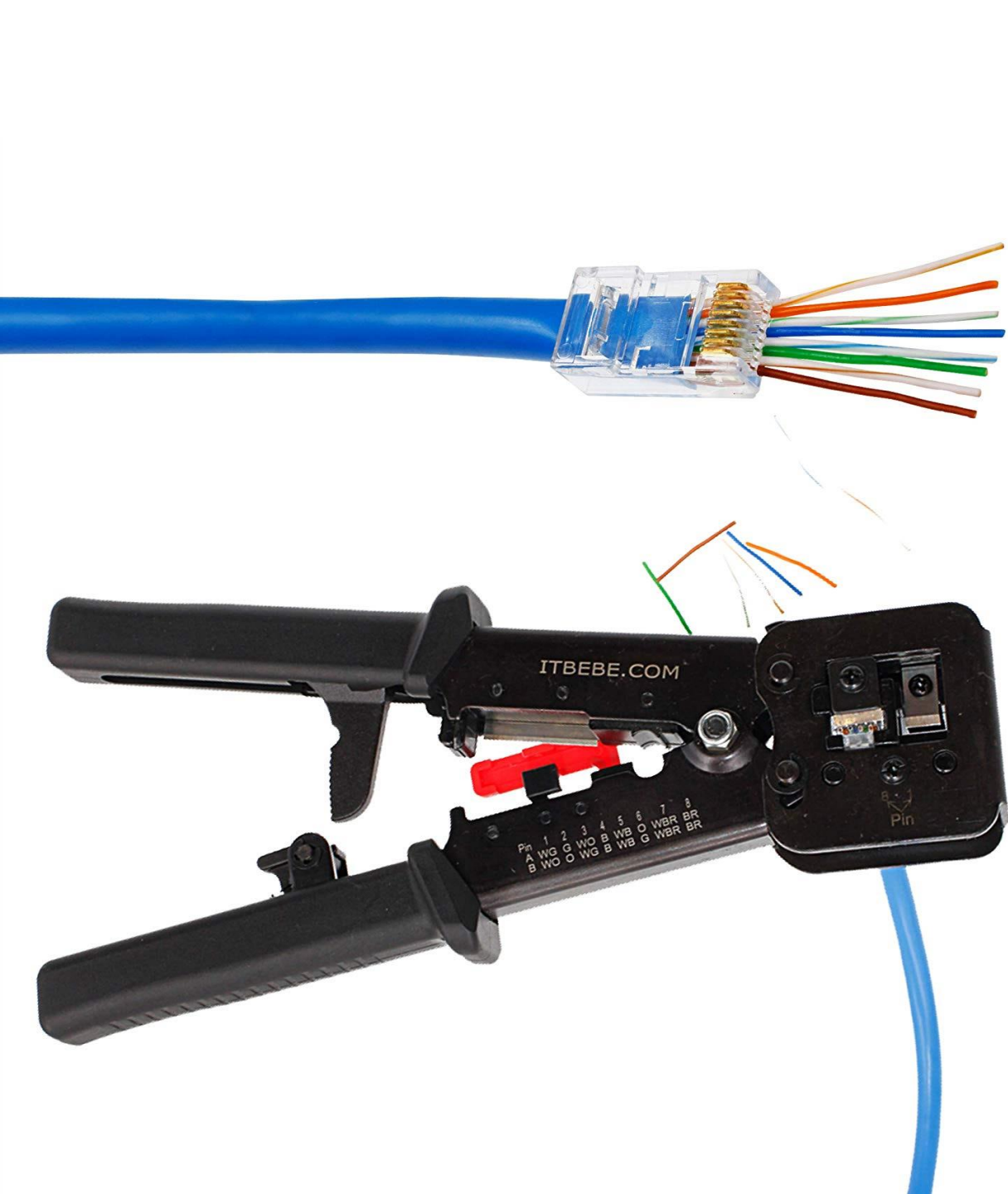


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Cat6 Cables

RJ45 connectors





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Demonstration:

How to make a 10' Cat6 / RJ45 patch cable.

Then test it.

Then give away the kit as a door prize!

In five minutes or less - Ready? Go!

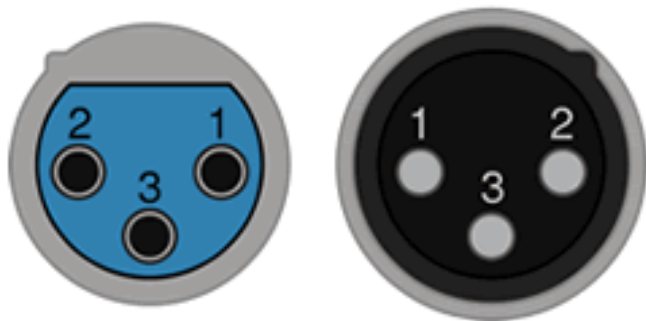


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Connectors

DMX - XLR

Jacks & Pins



XLR-3



XLR-5



Cat6 Cables

Testing 1,2,3,4,5,6,7,8



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Questions?



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**Thank you for being a
part of the Christmas
Expo family!**