Application Guide

Proper Termination of CAT-6/CAT-5e Cables

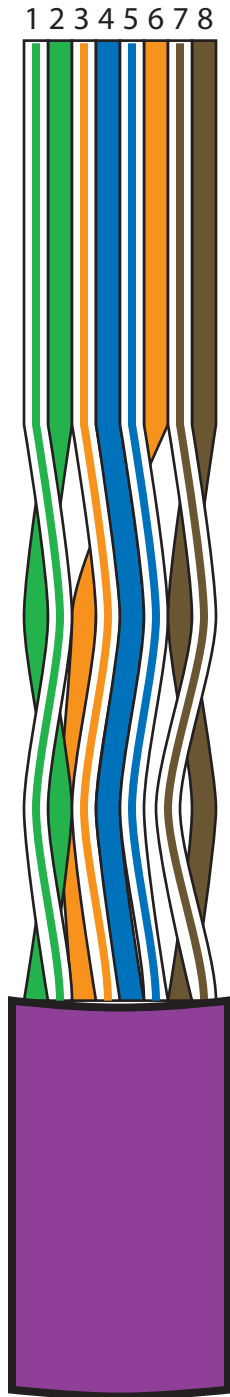ZŌN

1 2 3 4 5 6 7 8

Figure 1

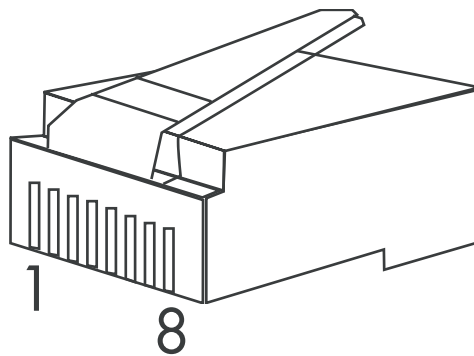| ANSI/EIA/TIA - 568A WIRING SPECIFICATION		
1		WHITE/GREEN
2		GREEN
3		ORANGE/WHITE
4		BLUE
5		BLUE/WHITE
6		ORANGE
7		BROWN/WHITE
8		BROWN

Figure 2

1

8

Figure 3

All CAT-6 or CAT-5e cables used in a ZON system installation must be terminated with the 568A termination method. Termination 568B can be used, however, you should use either all "A" or all "B" throughout the system. Using any other wiring standard (other than 568A or 568B) will void product warranty and probably damage your system hardware.

Figure 1 shows an exaggerated view of the position of the individual conductors in all four pairs as they are in a 568A pattern. You will note that the orange pair (orange/white and orange) are split - orange/white is pin three and orange is pin 6.

Figure 2 is a chart to help you identify which wires (by color) go to what pins in the RJ-45 modular plug.

Figure 3 shows the pin orientation of the modular plug. When holding the connector with the locking pin facing away, pin one is on your left.
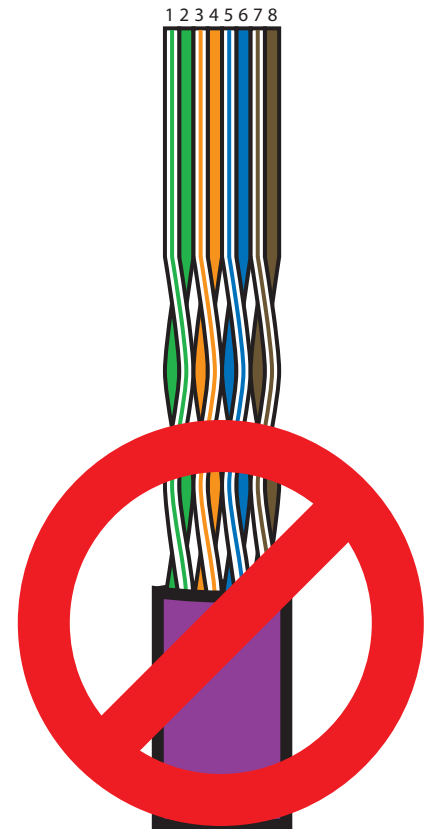
Figure 4 shows an exaggerated view of a CAT-6 cable that is wired straight through with no splitting of the orange pair. If you are used to punch-down termination blocks, this would be the way you would normally position the wires before punching them down. Unfortunately, this will not work when the 568A or 568B termination method for modular plugs is called for. Terminations like Figure 4 will cause some functions of the system not to perform properly, and could damage your hardware.

Not all wiring mistakes cause the ZON hardware to show a "fault" condition. You should always test your wires with a cable tester that can verify pin-to-pin continuity as well as PROPER PAIRING.

For more helpful information on the proper methods for terminating CAT-6/CAT-5e cable, as well as termination tips, please refer to the ZON Installation and User's Guide.

1 2 3 4 5 6 7 8

Figure 4