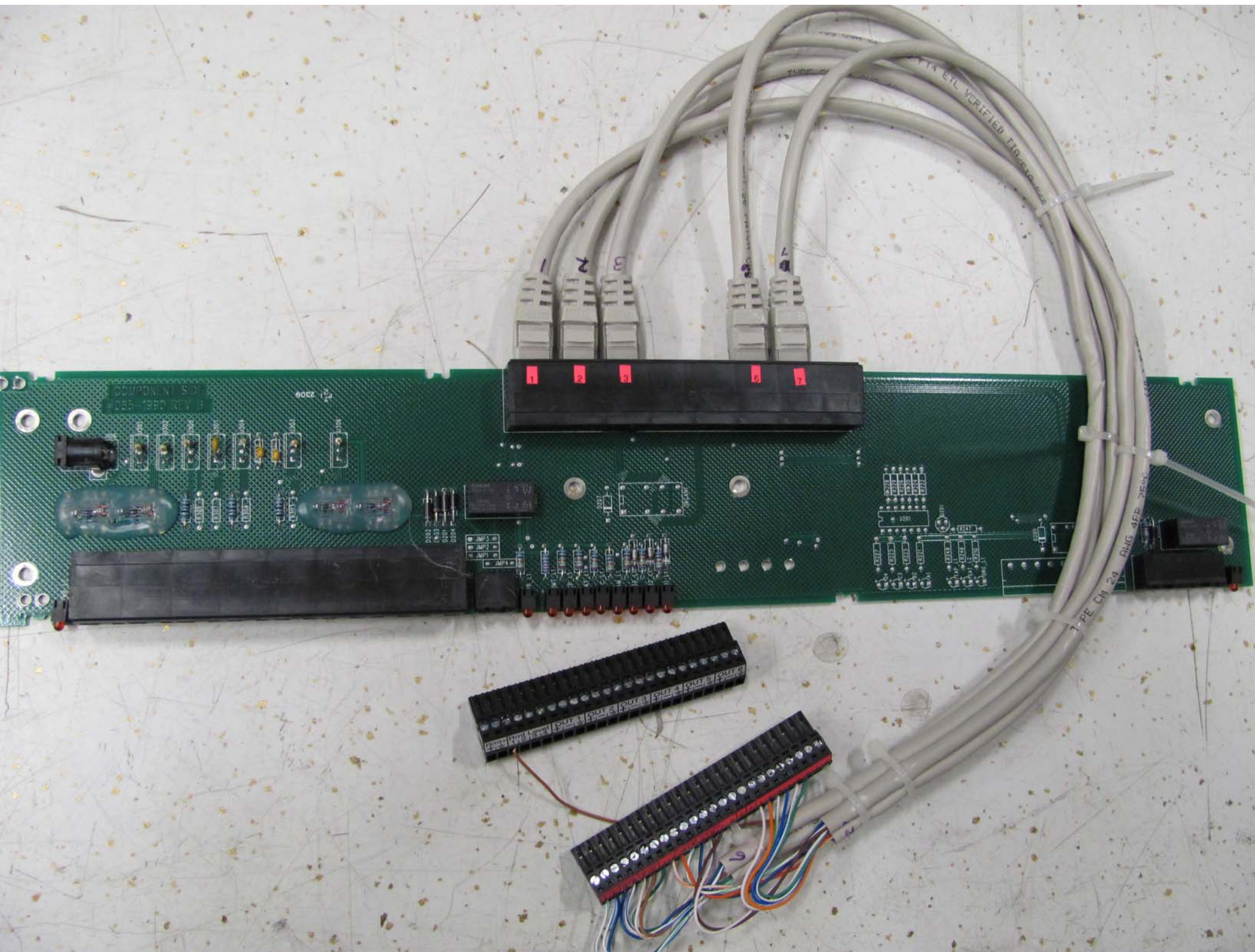


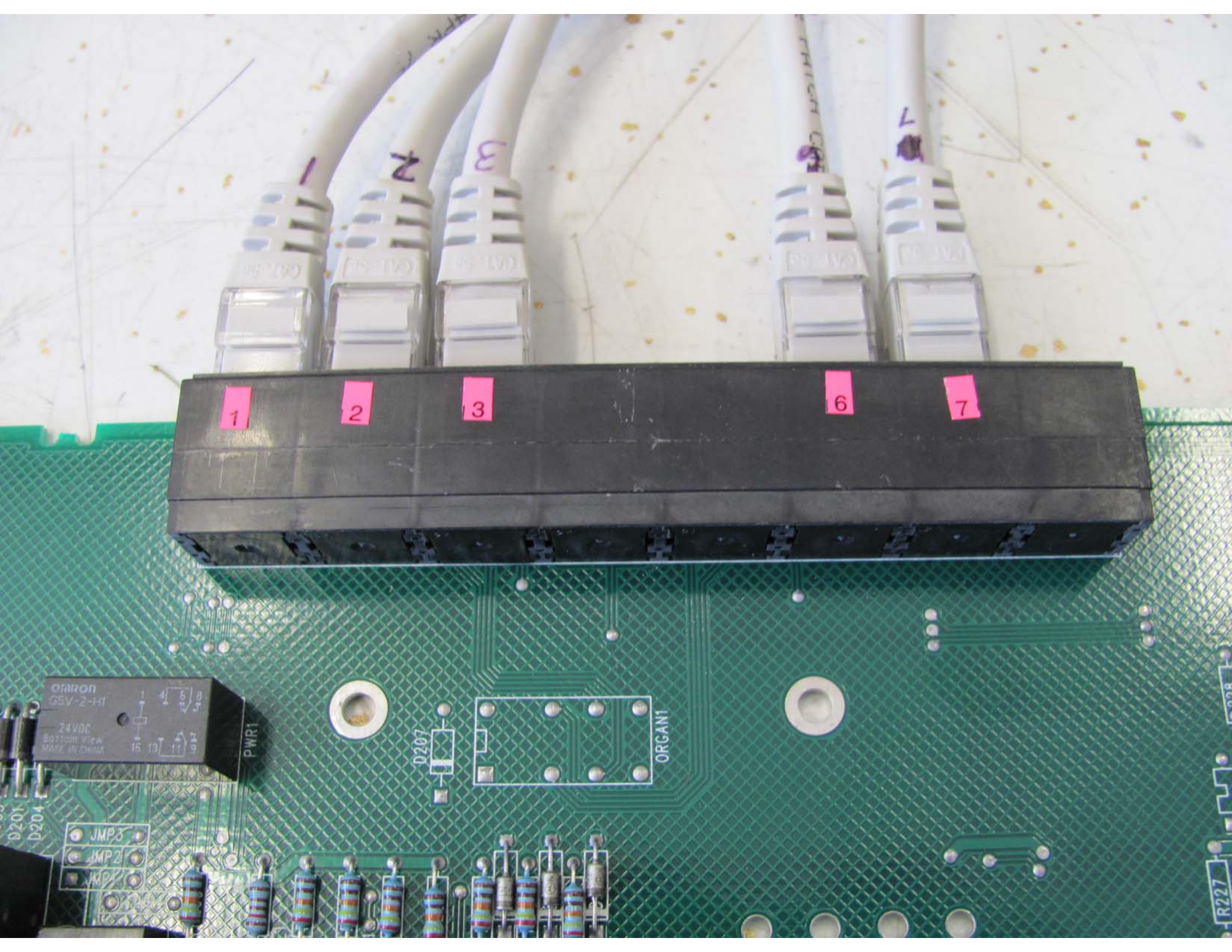
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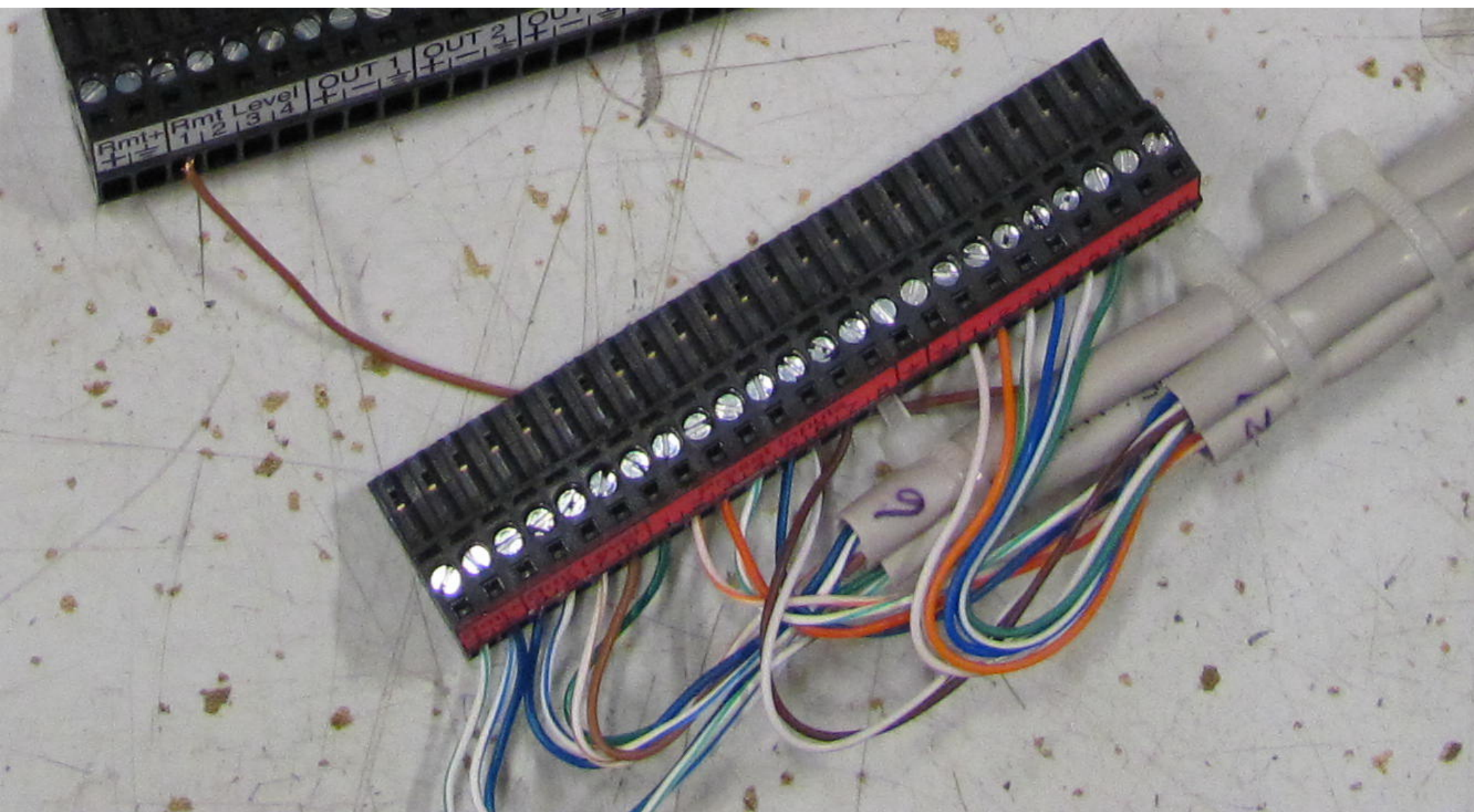
002-1990 Rev B 1026-IF Cable Harness

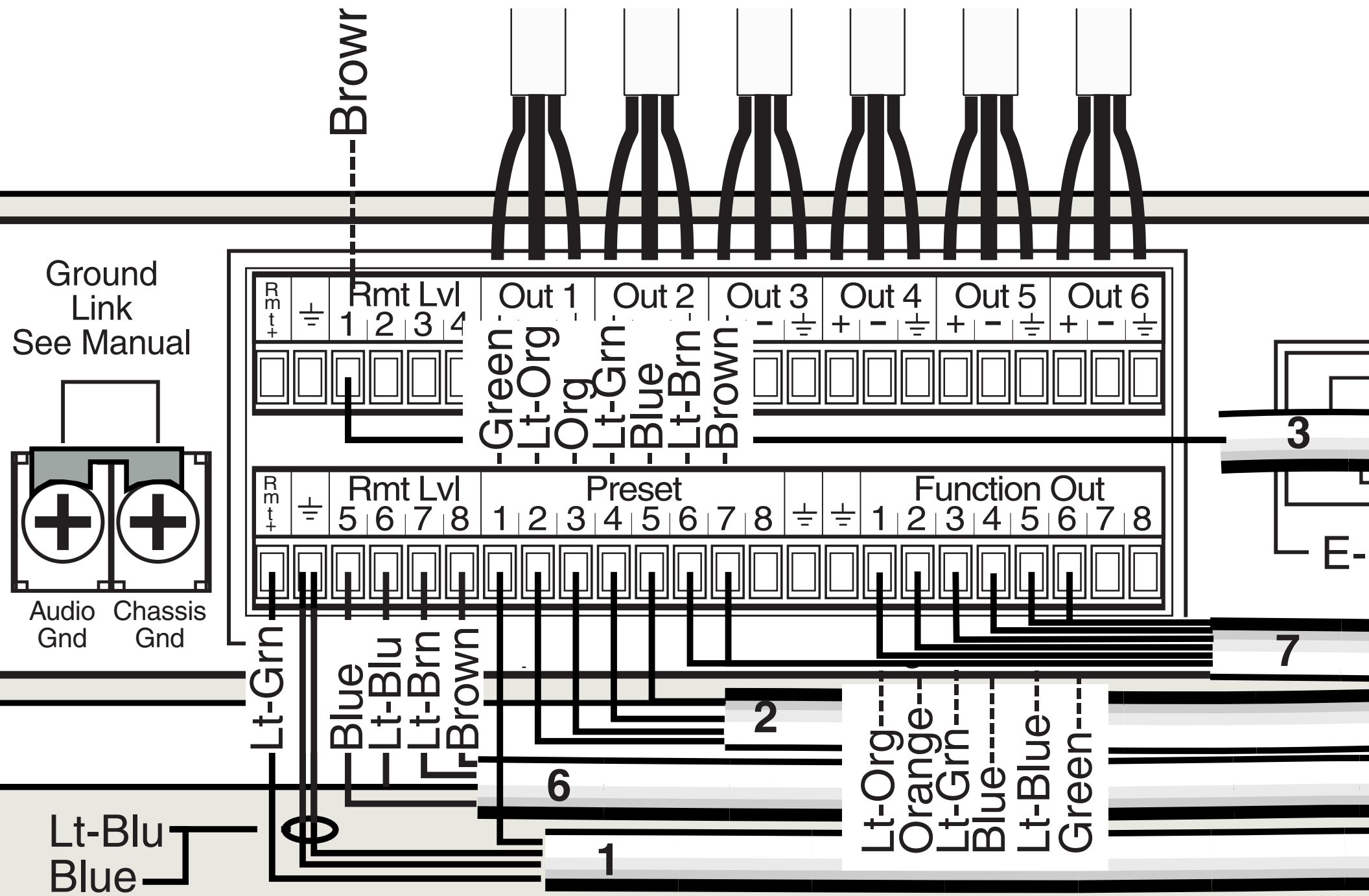
05/06/2004











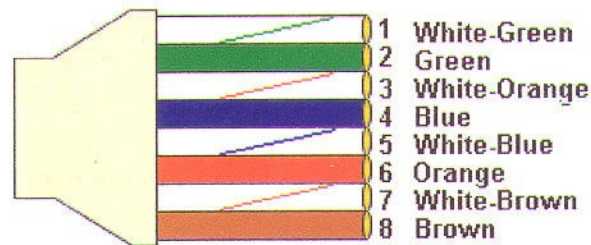
884 IF

1026 IF

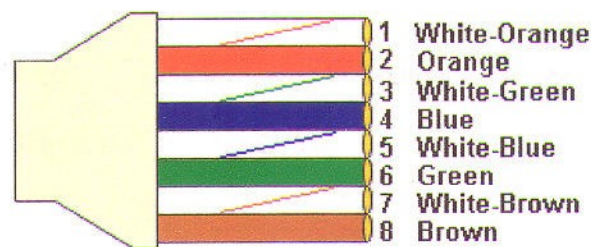
Electrically, the straight through and crossover cables look like the diagram below: The most common is the straight through cable. In a home or small office network you might only have one crossover cable perhaps from the cable or DSL modem to the distribution hub. How do you tell what sort of cable you have in your hand? You can tell by looking at the connectors, identifying the wiring from its colors, at both ends. See the next question on color codes.

Color Codes

The standards say that Ethernet connectors should be cabled with specific colors on specific pairs - there are two standard layouts - if a cable has the same layout on both ends it's a straight through cable, one layout on one end and the other layout on the other end then it's a crossover cable. While the color codes shown below are generally used on professional cables.



568A CABLE END



568B CABLE END

Acceptable for IF

Can't use this
Cable for IF

- If a cable has 568A color wiring on both ends then it's a straight through cable.
- If a cable has 568B color wiring on both ends then it's also a straight through cable.
- If a cable has 568A color wiring on one end and 568B color coded wiring on the other end, it's a crossover cable.

In fact, while the colors are standardized and usually followed, that's not the important part. What is important is that one "pair" (wires that are twisted together inside the cable sheath) is used for the transmit side and another pair for the receive side. If pairs aren't used then it's likely your cable will not be identified by the colors. The orange wire and the orange with white stripe (or sometimes white stripe) wire are a pair. The brown wire and the brown with white stripe wire are a pair. Etc.

Network Cables vs Patch Cables

A short lead with connectors on either end which is flexible and is used to plug one piece of equipment into another is generally referred to as a patch cable. To make them flexible, patch leads are made with stranded wire.

Cables with solid core wires are more often used in permanent wiring and terminate on wall outlets. They are sometimes referred to as network cables. These cables aren't so flexible (and will break if flexed).

Solid Core Cables vs Stranded Cables

Solid conductor uses 1 solid wire per conductor, so in a 4 pair (8 conductor) roll, there would be 8 solid wires. Stranded conductor uses multiple wires wrapped around each other in each conductor.

CABLES TO 884 / 626

Cable #1	Cable #2	Cable #3	Cable #4	Cable #5	Cable #6	Cable #7
J112	J112	J112	J112	J112	J112	J112
H 8 EGND	G 8 LOGIC_D4	F 8 MSTR_A	E 8 GND	D 8 AGND	C 8 RMTL_8	B 8 PSET_13
7 EGND	7 LOGIC_C3	7 MOUTB-	7 LOGIC_D4	7 626_INB-	7 RMTL_7	7 PSET_12
6 CMB_1+2	6 LOGIC_B2	6 MOUTA_GND	6 LOGIC_C3	6 MOUTA_GND	6 IN5_GND	6 FOUT6
5 GND	5 LOGIC_A1	5 AGND	5 LOGIC_B2	5 AGND	5 RMTL_6	5 FOUT5
4 GND	4 CMB_5+6	4 MOUTB+	4 LOGIC_A1	4 626_INB+	4 RMTL_5	4 FOUT4
3 RMT+	3 CMB_4+5	3 MOUTA-	3 EGND	3 MOUTA-	3 IN5-	3 FOUT3
2 ANET-	2 CMB_3+4	2 MOUTA_GND	2 ANET-	2 MOUTA_GND	2 IN5_GND	2 FOUT2
1 ANET+	1 CMB_2+3	1 MOUTA+	1 ANET+	1 MOUTA+	1 IN5+	1 FOUT1

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END OF DOCUMENT

