



# Wiring Standards Color Codes

## Engineering Specifications 6/1/05

### WIRING STANDARDS

Audio signal wiring typically involves three connections:

- SHIELD a/k/a common, ground, screen
- HOT a/k/a high, positive, phase
- COLD a/k/a low, negative, antiphase

In general, Pro Co regards a red conductor as HOT and a black conductor as COLD, and wires all connectors to accepted industry conventions:

- Two-pole connectors (1/4" phone, 3.5mm mini, RCA phono, etc.): HOT conductor to tip, COLD conductor and SHIELD to sleeve.
- Three-pole connectors (1/4" phone, 3.5mm mini, 'TT', etc.): HOT conductor to tip, COLD conductor to ring, SHIELD to sleeve.
- XLR-type connectors are wired in accordance with IEC 268 to suit all major brands of low-impedance microphones: HOT conductor to pin 2, COLD conductor to pin 3, SHIELD to pin 1.

Pro Co strives to maintain absolute signal polarity throughout a system whenever practical. This sometimes requires that wiring different than that given above be used. For example, some professional audio equipment manufacturers consider pin 3 to be 'hot' on XLR-type connectors. If we are aware that such equipment is being connected we will wire XLR-type connectors 'pin 3 hot' to suit it.

### COLOR CODES

1 All single twisted-pair Pro Co cable, shielded or unshielded, has the inner conductors color-coded red and black. (224F, 223B, 224B, 224S, 12-2, 14-2 and 16-2). Parallel cord has a ribbed conductor which is considered 'cold' and an unribbed (generally printed) conductor considered 'hot' (1 8-2).

2. All Ameriquad 4-conductor cable has the inner conductors color-coded red, red/white stripe, black, and black/white stripe. This simplifies wiring for either 2- or 4-conductor applications. (424B and 426B.) Older Ameriquad has inners color coded white and blue (2 each). White was considered 'hot'.

3 All Acculink and Helix multipair audio cable uses the following color code:

PR	HOT	COLD	PR	HOT	COLD	PR	HOT	COLD	PR	HOT	COLD
1	red	blk	17	brn	grn	33	blu	vio	49	red	pnk
2	wht	blk	18	orn	grn	34	yel	vio	50	grn	pnk
3	grn	blk	19	blu	wht	35	brn	vio	51	wht	pnk
4	blu	bik	20	yel	wht	36	blk	vio	52	blu	pnk
5	yel	blk	21	brn	wht	37	vio	gry	53	brn	pnk
6	brn	blk	22	orn	wht	38	orn	gry	54	orn	pnk
7	orn	blk	23	yel	blu	39	red	gry	55	tan	pnk
8	wht	red	24	brn	blu	40	wht	gry	56	gry	tan
9	grn	red	25	orn	blu	41	grn	gry	57	vio	tan
10	blu	red	26	yel	brn	42	blu	gry	58	blk	tan
11	yel	red	27	orn	brn	43	yel	gry	59	red	tan
12	brn	red	28	yel	orn	44	brn	gry	60	grn	tan
13	orn	red	29	orn	vio	45	blk	gry	61	wht	tan
14	wht	grn	30	red	vio	46	gry	pnk	62	blu	tan
15	blu	grn	31	wht	vio	47	vio	pnk	63	brn	tan
16	yel	grn	32	grn	vio	48	blk	pnk	64	orn	tan

4. All multiconductor speaker cable (11-4 and 13-8) uses the following color code:

PR	HOT	COLD
1	red	blk
2	grn	wht
3	orn	blu
4	yel	brn