

# GENERAL TRANSFORMER COLOR CODES

## IEEE

BLA - grounds, grounded elements, returns  
BRO - heaters/filaments, off ground  
RED - power supply B+  
ORA - screen grids (and base 2 of transistors)  
YEL - cathodes (and transistor emitters)  
GRN - control grids, diode plates (and base 1 of transistors)  
BLU - plates (and transistor collectors)  
VIO - power supply, minus leads  
GRA - AC power line leads  
WHI - bias supply, B or C minus, AGC

## POWER TRANSFORMERS

### From Orr's Radio Handbook:

Primary leads ----- black  
(if tapped)  
    Common ----- black  
    Tap ----- black/yellow  
    End ----- black/red

High voltage secondary ----- red  
    Center tap ----- red/yellow

Rectifier filament winding - yellow  
    Center tap ----- yellow/blue

Filament winding No. 1 ----- green  
    Center tap ----- green/yellow

Filament winding No. 2 ----- brown  
    Center tap ----- brown/yellow

Filament winding No. 3 ----- slate  
    Center tap ----- slate/yellow

## OUTPUT TRANSFORMERS

### ARRL Radio Amateur's Handbook:

#### Single-ended transformers:

Plate lead (pri.) ----- blue (or brown)  
B+ (power supply) lead ----- red  
speaker (typ. +) (sec.) ----- green (or yellow)  
speaker return (sec.) ----- black

#### Push-pull transformers:

Plate lead (pri.) ----- blue (start)  
B+ (power supply) lead ----- red (center tap)  
Plate lead (pri.) ----- brown (finish)  
speaker (typ. +) (sec.) ----- green (or yellow)  
speaker return (sec.) ----- black

## **standard scheme for interstage coupling transformer wire colors?**

From the ARRL Radio Amateur's Handbook:

Plate finish lead (pri.) ----- blue  
B+ (power supply) lead ----- red (whether center tap or not)  
Plate start lead (pri.) ----- brown  
Grid finish (sec.) ----- green  
speaker return (sec.) ----- black (whether center tap or not)  
Grid start (sec.) ----- yellow

Normally *finish* refers to lead connected to tube (or semiconductor) element.

Normally *start* refers to bias source i.e. b+, -bias or gnd.

**Remember** standards are standards only when manufacturers comply.