COLOR PRINT FILTRATION ADJUSTMENT

To color correct (reprint to adjust color bias):

- First, make an exposure series to achieve a reasonable density.
- Examine the print for color error. Next try and describe the error in terms of small = 5, medium = 10, large = 20 density units. Note filters are labeled in density units; omit the decimal point for simplicity.

- Identify color error in terms of only six colors. Red - Green - Blue - Cyan - Magenta - Yellow. RGB are knows as the primary colors, CMY are known as the subtractive primaries.

- Assume a print was made using a starting filter pack of 40M 80Y.

- **Too Much Yellow/Too Little Blue:** Let's assume the resulting print is too yellow by medium. In your mind, remove the excess yellow from the print and add value as a filter to the filter pack. Thus if the print is too yellow medium (10 units yellow), add 10Y to the filter pack. The filter pack becomes 40M 90Y.

- **Too Much Magenta/Too Little Green:** Assume the starting filter pack was 40M 80Y and the resulting print was too magenta by small. We use our imagination and take the excess magenta from the print and add this value (5M) to the filter pack. The revised filter pack becomes 45M 80Y.

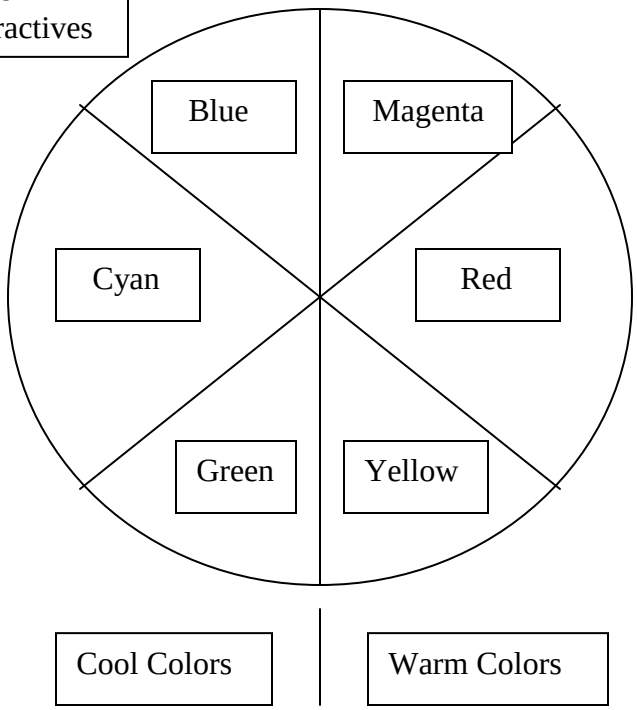
- Too Much Cyan/Too Little Red: Assume the starting filter pack was 40M 80Y and the resulting print was too cyan by medium. We take the excess cyan from the print (10 cyan) and add 10C to the filter pack. The revised filter pack becomes 10C 40M 80Y. Now we never allow a filter pack to contain all three subtractive filters, this induces unnecessary natural density increasing the required exposure time. Actually, ND in the filter pack is not as bad as most think, it causes no harm as to color but 10 ND will increase exposure time 1/3 stop. (20 ND = 2/3 stop - 30 ND = 1 full stop). We remove the ND by taking the lowest value and subtract it from all three. The result becomes a filter pack 30M 70Y.

- Too Much Red/Too Little Cyan: Assume the starting filter pack was 40M 80y and the resulting print was too red medium. Remove the excess red (10 units) from the print, in your mind, and induce 10 Red into the filter pack. Now we don't have any red filters. Thus we induce 10M and 10Y (M+Y=Red) instead. The revised filter pack now becomes 50M 90Y.

- Too Much Green/Too Little Magenta: Assume the starting filter pack was 40M and 80Y and the resulting print was too green medium. In our mind we remove 10 green from the print and induce the 10 green into the filter pack. We don't have any green filters. However C +Y = Green. Now we add 10C and 10Y to the filter pack. The revised filter pack becomes 10C 40M 90Y. If all three are present, we subtract the lowest value from all three. The result is 0C 30M 80Y.

- Too Much Blue/Too Little Yellow: Assume the staring filter pack was 40M and 80Y and the resulting print was too blue medium. In our mind we remove 10 blue from the print and induce 10 blue into the filter pack. We don't have any blue filters but M+C = blue. The filter pack becomes 10C 50M 80Y. Again, if three values are present, we subtract the lowest from all three. The revised filter pack becomes 40M 70Y.

RGB-Primary Colors
CMY-Primary Subtractives



Using Viewing Filters:	**Cast:**	**View Through:**
	Magenta	Green
	Yellow	Blue
	Red	Cyan
	Green	Magenta
	Blue	Yellow
	Cyan	Red