

ORGAN REGISTRATION BASICS

KNOWING YOUR WAY AROUND THE NUMBERS

32	two octaves below standard pitch	
16	one octave below standard pitch	
8	standard pitch	
4	one octave higher than standard pitch	Octave
2 2/3	one octave plus a fifth above standard pitch	Twelfth, Nazard, Quint
2	two octaves higher than standard pitch	Fifteenth, Super Octave
1 3/5	two octaves plus a third above standard pitch	Seventeenth, Terz
1 1/3	two octave plus a fifth above standard pitch	Nineteenth, Larigot, Quint Klein Nasat
1	three octaves above standard pitch	
II, III, IV, V	combinations of several high pitched ranks	Mixture, Scharf, Zimbel

FOUR FAMILIES (GENERAL TIMBRES) OF ORGAN SOUND

Principal	full, rich, strong, singing quality: Principal, Octave, Super Octave, Quint, Twelfth, Fifteenth, Diapason, Open Diapason, Prestant, Choralbass, Mixture, Scharf, Zimbel, Montre, Plein Jeu, Fourniture
Flute	stronger fundamental with weaker overtones, some are quite hollow or open sounding, much variety in this family, less strength than principals: Gedeckt, Gedackt, Stopped Flute, Quintade, Pommer, Bourdon, Subbass, ---flute, ---floete, ---pfeife, Melodia, Concert Flute, Nachthorn, Piccolo, Harmonic Flute, Gemshorn (may also be voiced as a string or principal)
String	thinner than principal, richer than flute, quiet to moderate loudness, rich in overtones: Salicional, Celeste (of many types, note special use), Unda Maris, Dulciana, Gamba, Viola, Violine, Cello, Aeoline
Reed	the "buzzies" of varying loudness and tone qualities, some have names of brass or reed instruments: Oboe, Trumpet, Bombarde, Trombone, Posaunne, Regal, Fagott, Krummhorn, Cromorne, Clarinet, Schalmei

SPECIAL DEVICES

- Couplers (16', 8', 4') - move the pitches or ranks to a new location
- Crescendo Pedal - adds stops in a predetermined order
- Expression Pedal - works the shutters in pipe organs (or loudness control in non-pipe organs)
- Combination Pistons - to preset registrations
- Tremulant - for use with solo registrations, not with ensemble registrations
- MIDI provisions
- Transposers, Tuners, Etc.

COMBINING STOPS

Plenum Used for music played in ensemble style (both hands on the same manual) such as hymns, liturgy, most polyphonic pieces in which all voice parts are equal (fugues, fugettas), and the "big chord" pieces

Start at 8' level, minimum of two pitch levels, at least the highest of which should be of the principal family. Flutes may be substituted for lower pitches when principals are not available at a particular level. Avoid a flute at the highest level. Do not skip octave pitches between the highest and lowest levels. 16' may be added in pedal.

Examples - good:

8' principal, 4' principal (octave)
8' flute/gemshorn/string, 4' principal (octave)
8' principal, 4' principal (octave), 2' principal (octave)
8' flute/string, 4' flute/gemshorn, 2' principal
8' principal, 4' principal (octave), 2 2/3' nasat, 2' principal (octave)
8' principal, 4' principal (octave), 2' principal (octave), mixture
16' principal/flute, 8' principal, 4' principal (octave)

Examples - not good:

8' principal, 4' flute
8' principal, 4' octave, 2' flute

reed ranks may be added to a plenum, or may substitute for lower pitched principal ranks when desired

Background used as an accompaniment to a solo or as a quieter ensemble registration (generally homophonic)
8' and 4' flutes as the starting point
add additional stops for color or stronger sounds
use 8' alone for softer sound
use strings (Salicional/Gambe with Celeste)

Manual solo 8' reed
8' principal
flute combination: 8' flute plus one or more stops higher than 4' pitch

8 + 2
8 + 2 2/3
8 + 2 2/3 + 2
8 + 2 2/3 + 1 3/5
8 + 2 2/3 + 2 + 1 3/5
8 + 4 + 2 2/3 + 2 + 1 3/5 (cornet)
8 + 1 1/3
8 + 4 + 1 1/3

Pedal solo when the solo melody is the tenor, alto, or soprano voice part
4' reed or 4' principal (Choral Bass)
when the solo melody is the bass voice part
moderate loudness - 8' reed or 8' principal
loud - strong plenum (include 16' or 8' reed)

Duo or Trio two or three balanced registrations of differing colors, one or more may be a solo registration (especially if one part is a hymn melody)