

Explanation of Standard Instrumentation Codes

The instrumentation of orchestral or ensemble music is shown as combinations of numbers and abbreviations.

e.g. you might see an orchestration notated as follows:

2.1.2.1 / 4.2.3.1 / T.2P.H.Cel / 10.8.6.6.4

The sections, separated by slashes, are in the order:

woodwind / brass / percussion & other / strings

Within each of these sections, the instruments are in the order:

Woodwind: Flutes . Oboes . Clarinets . Bassoon

Brass: Horns . Trumpets . Trombones . Tubas

The common abbreviations used in the percussion/other section are:

T	Timpani
P	Percussion
G	Guitar
H	Harp
Pno	Piano
Cel	Celeste
Org	Organ
HC	Harpsichord
Syn	Synthesiser (or electronic keyboard)
Voc	Voice
SATB	Mixed choir (and further breakdowns of this e.g. SSA, TTBB)

Other instruments, in any of the sections would be either written in full or indicated in any obvious abbreviated fashion. Individual required percussion instruments aren't habitually noted but are often made available on a separate list.

Therefore, the interpretation of the previous example would be that the piece requires:

2 flutes, 1 oboe, 2 clarinets, 1 bassoon

4 horns, 2 trumpets, 3 trombones*, 1 tuba

Timpani, 2 percussionists, harp, celeste

10 first violins, 8 second violins, 6 violas, 6 cellos, 4 double basses**

** It is often assumed that the lowest trombone part would be a bass trombone.*

***In most cases, numbers of strings players would not be indicated; we would usually just write at that section, "Strings."*

Additional Instruments and Doubling

In the woodwind section, there are some very common additional instruments that are very often present in addition to the four standard instruments. It is also common practice for some players in an orchestra to play two (or more) similar instruments - and to swap between these - over the course of a piece. This is known as doubling. Therefore, in the woodwind section there are some accepted additional instruments and doublings which get numbered without need of further explanation in the instrumentation code. These are:

Piccolo with the flutes

Cor Anglais with the oboes

Bass clarinet with the clarinets

Contrabassoon with the bassoons.

Additional instruments (played by a separate player) are added to the section with a "+" sign.

Doubled instruments (played as second instruments by players already numbered in the section) are shown in brackets (and the number of them)

(N.B. Whatever else is added, the full stops still separate the overall sections of flute.oboe.clarinet.bassoon)

e.g. If a woodwind coding was given as 2(2).2+1.2(1).2+1

This would mean that there are 2 flutes and both are doubling on piccolos, two oboes plus a cor anglais over-and-above (i.e. three players), two clarinets with one of them doubling bass clarinet, two bassoons plus a contrabassoon over-and-above. In total, 10 players.

N.B. The difference between () and + is crucial, as () doesn't indicate another player, but only another instrument, while "+" indicates an extra player to be present.

It is worth noting that, when there are two players of any instrument, it is standard to assume that the 2nd player will be the one who doubles.

Less standard doublings are either written in full or indicated by obvious abbreviations. (e.g. AltFl Alto Flute).

Saxophones, if forming a separate section, would be added between woodwind and brass, but their abbreviations make them obvious.
(e.g. 2AltSax.2TenSax.BarSax)

Other common doublings within the orchestra are piano doubling another keyboard instrument (e.g. celeste, synth or harpsichord), trumpet doubling flugelhorn etc.

Final Example

Here is a final example and breakdown.

2(1).2+1.2.2 / 4.3.3.0 / T.3P.H.Pno(Cel).SATB / Strings

2 Flutes, with one of them doubling on piccolo.

2 Oboes

1 Cor Anglais

2 Clarinets

2 Bassoons

4 Horns

3 Trumpets

3 Trombones

No Tuba

Timpani

3 percussion players

Harp

Piano, doubling on celeste

Mixed Choir

Strings

Final Note

Outside of my own library, you might see slight variations on these methods, not least that the use of brackets () for doubling may be replaced with the use of the letter “d”, i.e. 2d1 instead of 2(1).