

146 CODED DATA FIELD: MEDIUM OF PERFORMANCE (NEW)**Field definition**

This field gives details of the instruments and/or voices, devices and other performers which make up a musical work.

Occurrence

Optional. Repeatable.

Indicators

Indicator 1: Original or Arrangement Indicator

This indicator shows whether the field describes the original or the arranged medium of performance.

Not specified

0 Original

1 Arrangement

Indicator 2: Alternative Medium of Performance Indicator

This indicator shows whether the field describes a medium of performance that can be used in place of another medium recorded in the first occurrence of the field 146.

Not applicable

1 Alternative medium of performance (EX 12, 15, 19)

Subfields

\$a Type of Performance Medium

A one-character code defines the genre of the work based on the type of performance medium. Not repeatable.

a = vocal *a cappella* music (EX 14)

b = instrumental music (EX 1-2, 9-11, 15-20, 22)

c = vocal and instrumental music (EX 3, 5-8, 13, 21)

d = electroacoustic music

e = mixed media music (electroacoustic and other media) (EX 4, 12)

u = undefined, variable (e.g. Renaissance vocal or instrumental music)

z = other (e.g. ordinary objects or natural sounds)

\$b Instrument or Voice Soloist

A nine-character code indicating a voice or instrument category, the number of voices or instruments for that category and other details (EX 2-3, 5-7, 18-20). Repeatable.

The number of soloists in a voice or instrument category is recorded with a two-digit code (character positions 0-1), with leading 0 if necessary. If this number is not determined, use "uu".

For the voice or instrument category (character positions 2-4), use the codes listed in Code list A/1-9, A/13.

For other details (character positions 5-8), use the codes listed in Code list B-C.

Table of Subfield \$b Fixed-length Data Elements:

Name of Data Element	Number of Characters	Character Positions
Number of instruments or voices	2 (with leading 0)	0-1
Category of instrument or voice	3 (see Code list A)	2-4
Other details	4 (see Code list B-C)	5-8

\$c Instrument or Voice Non-soloist, Conductor, Other Performer or Device, Not Included in an Ensemble Recorded in Subfield \$d

A nine-character code indicating an instrument or voice, etc. category, the total number of instruments or voices, etc. for that category and other details (EX 1-4, 10-13, 15-17, 19-20, 22). Mandatory if no subfield \$d is entered. Repeatable.

The number of parts in a category is recorded with a two-digit code (character positions 0-1), with leading 0 if necessary. If this number is not determined, use "uu".

For the voice or instrument, etc. category (character positions 2-4), use the codes listed in Code list A/1-9, A/12-13.

For other details (character positions 5-8), use the codes listed in Code list B-C.

Instruments (e.g. continuo) or families of instruments (e.g. percussions) generically recorded in an occurrence of subfield \$c may be further specified in one or more immediately following occurrences of subfield \$f.

Table of Subfield \$c Fixed-length Data Elements:

Name of Data Element	Number of Characters	Character Positions
Number of instruments or voices, etc.	2 (with leading 0)	0-1
Category of instrument or voice, etc.	3 (see Code list A)	2-4
Other details	4 (see Code list B-C)	5-8

\$d Vocal or Instrumental Ensemble

A nine-character code indicating one category of vocal or instrumental ensemble, the total number of ensembles for that category, the number of real parts of that ensemble and other details (EX 2-9, 14, 18). Mandatory if no subfield \$c is entered. Repeatable.

The number of ensembles is recorded with a two-digit code (character positions 0-1), with leading 0 if necessary. If this number is not determined, use "uu".

For the category of ensemble (character positions 2-4), use the codes listed in Code list A/10-11.

The number of real parts (e.g. the number of voices for a choir) is recorded with a two-character code (character positions 5-6), with leading 0 if necessary. If the number is not determined, use "##".

For other details (character positions 7-8), use the codes listed in Code list B-C.

Instruments or voices, etc. included in ensembles recorded in subfield \$d may be specified in one or more immediately following occurrences of subfield \$e.

Table of Subfield \$d Fixed-Length Data Elements:

Name of Data Element	Number of Characters	Character Positions
Number of ensembles	2 (with leading 0)	0-1
Category of ensemble	3 (see Code list A)	2-4
Number of real parts	2 (with leading 0)	5-6
Other details	2 (see Code list B-C)	7-8

\$e Instrument or Voice Non-soloist, Conductor, Other Performer or Device, Included in an Ensemble Recorded in Preceding Subfield \$d

A nine-character code indicating a voice or instrument, etc. category included in an ensemble recorded in an immediately preceding occurrence of subfield \$d, the total number of instruments or voices, etc. for that category and other details (EX 4-9, 14, 21). Repeatable.

The number of parts in a category is recorded with a two-digit code (character positions 0-1), with leading 0 if necessary. If this number is not determined, use "uu".

For the voice or instrument, etc. category (character positions 2-4), use the codes listed in Code list A/1-9, A/12-13.

For other details (character positions 5-8), use the codes listed in Code list B-C.

Instruments (e.g. continuo) or families of instruments (e.g. percussions) generically recorded in an occurrence of subfield \$e may be further specified in one or more immediately following occurrences of subfield \$f.

Table of Subfield \$e Fixed-length Data Elements:

Name of Data Element	Number of Characters	Character Positions
Number of instruments or voices	2 (with leading 0)	0-1
Category of instrument or voice	3 (see Code list A)	2-4
Other details	4 (see Code list B-C)	5-8

\$f Specific Instrument Related to the Generic one Recorded in Preceding Subfield \$c or \$e

A nine-character code indicating a specific instrument recorded generically (e.g. electronic keyboards) or collectively as a family (e.g. percussions) in an immediately preceding occurrence of subfield \$c or \$e, the total number of instruments for that category and other details (EX 13, 21, 22, 23). Repeatable.

The number of parts in an instrument category is recorded with a two-digit code (character positions 0-1), with leading 0 if necessary. If this number is not determined, use "uu".

For the instrument category (character positions 2-4), use the codes listed in Code list A/2-9.

For other details (character positions 5-8), use the codes listed in Code list B-C.

Table of Subfield \$f Fixed-length Data Elements:

Name of Data Element	Number of Characters	Character Positions
Number of instruments	2 (with leading 0)	0-1
Category of instrument	3 (see Code list A)	2-4
Other details	4 (see Code list B-C)	5-8

\$h Number of Parts

A four-character code indicating the total number of real parts related to the category entered in position 3 (EX 2, 5-9, 14, 20). Repeatable.

The number of parts is recorded with a three-digit code (character positions 0-2), with leading 0 if necessary. Use \$h only if this number is determined.

For categories (character position 3), use the codes listed in Code list D.

Table of Subfield \$h Fixed-length Data Elements:

Name of Data Element	Number of Characters	Character Positions
Number of parts	3 (with leading 0)	0-2
Category	1 (see Code list D)	3

\$i Number of Players

A four-character code indicating the total number of players related to the category entered in position 3 (EX 1-4, 9-13, 15-17, 19). Repeatable.

The number of players is recorded with a three-digit code (character positions 0-2), with leading 0 if necessary. Use \$i only if this number is determined.

For categories (character position 3), use the codes listed in Code list D.

Table of Subfield \$i Fixed-length Data Elements:

Name of Data Element	Number of Characters	Character Positions
Number of players	3 (with leading 0)	0-2
Category	1 (see Code list D)	3

Notes on field contents

The order and occurrence of subfields is to some extent mandatory:

- at least one subfield \$c or \$d is mandatory if field is present;
- a subfield \$b may occur only if at least one subfield \$c or \$d is entered;
- a subfield \$e may occur only if at least one subfield \$d is entered;
- a subfield \$e may immediately follow only a subfield \$d, \$e or \$f;
- a subfield \$f may occur only if at least one subfield \$c or \$e is entered;
- a subfield \$f may immediately follow only a subfield \$c, \$e or \$f.

The degree of detail of the field may vary according to the local practice, e.g. all instruments employed in an orchestra may or may not be specified (EX 2-3, 9, 18). The most common example of non-detailed indication are percussion instruments in ensemble: sometimes only a close analysis of the score makes it possible to specify all instruments; in such cases the indication will more likely be limited to the number of percussion players (EX 13).

Subfield \$b should be used in place of subfield \$c to differentiate soloist(s) in opposition with accompanying voice(s)/instrument(s), etc. (entered in \$c) or ensemble(s) (entered in \$d) or their arranged version (EX 2-3, 5-7, 18-20).

If there is no distinction, enter all in \$c.

If detailed, instruments/voices, etc. being part of ensembles entered in \$d are always coded in \$e.

In subfield \$d, character positions 5-6 may be used to indicate the number of real parts of the ensemble. If used to code more than one ensemble, positions 5-6 may be used only if all the ensembles have the same parts (e.g. for two choirs for four mixed voices code 02cmi04##); if parts vary, code ## (EX 6).

As an alternative, field \$d may be repeated for each ensemble (EX 14).

In case of repeated subfield \$d, subfields \$e must be entered after each related subfield \$d (EX 4-9, 14, 21).

Subfield \$f may be used to specify individual instruments from a generic code used in \$c or \$e, e.g. the specific instruments coded as percussion in \$c. Each series of \$f must immediately follow the related subfield \$c or \$e. (EX 13, 21, 22).

It is recommended to use subfield \$h to specify the number of real parts only when it differs from that of players entered in \$i, or when the number of players cannot be determined (EX 2, 5-9, 14, 20).

In subfields \$h and \$i, the code "a" in position 3 must be used by default to indicate the total number of parts and players when the musical work is vocal a cappella music or when it is instrumental music (EX 1-2, 9-12, 14-17, 19-20).

Related fields

128 CODED DATA FIELD: FORM OF MUSICAL WORK AND KEY OR MODE

Field 146 replaces obsolete subfields 128 \$b and \$c.

145 CODED DATA FIELD: MEDIUM OF PERFORMANCE

Field 146 replaces obsolete field 145.

302 NOTES PERTAINING TO CODED INFORMATION

This note may contain details such as use of different instruments by one performer or pertinence of single instruments to different groups within larger ensembles, etc.

500 PREFERRED ACCESS POINT - TITLE

Examples

EX 1

146 0#\$ab\$c01svl####\$c01kpf####\$i002a
200 1#\$aSonata for violin and piano in D

In a more detailed way field 146 may be recorded as follows:

146 0#\$ab\$c01svl####\$c01kpf####\$i001s\$i001k\$i002a

EX 2¹

146 0#\$ab\$b01wfl####\$d01ost####\$e02svl####\$e01sva####\$e01svc####\$i001j\$h004s\$h005a
146 1#\$ab\$b01wfl####\$c01kpf####\$i001j\$i001k\$i002a
500 10\$aConcertos\$rfor flute and strings\$wArr.

A flute concerto arranged for flute and piano; note that flute remains coded as solo also in the arranged version of the field, unlike piano that plays the accompaniment.

In a less detailed way field 146 may be recorded as follows:

146 0#\$b01wfl####\$d01ost####
146 1#\$b01wfl####\$c01kpf####\$i002a

EX 3²

146 0#\$ac\$b02vso####\$d01oun####\$i0021\$i001o
146 1#\$ac\$b02vso####\$c01kpf####\$i0021\$i001k\$i003a
200 1#\$aNella Didone Duetto Sei vinto, e pur non sai Del Sig.r Ferdinando Paer Ridotto a due voci e pianoforte

A manuscript of a vocal opera duo arranged for voices and piano. In the first occurrence of field 146 the instruments of the orchestra are not listed because they are not in the cataloguer's hand.

EX 4

146 0#\$ae\$c01eta####\$d03oie####\$e02wfl####\$e02wob####\$e02wcl####\$e04wba####
\$e06bho####\$e04btr####\$e04btb####\$e24svl####\$e08sva####\$e08svc####\$e08sdb####\$i072a

Luigi Nono's Per Bastiana Tai-Yang Cheng, L'Oriente è rosso, pour bande magnétique et trois groupes instrumentaux (instruments in 3 groups, 72 performers). String instruments play in real parts, each one having a different line. Pertinence of every single instrument to each instrumental group is not defined.

¹ When the item is an arrangement, the cataloguing agency may choose to code also the medium of performance of the original work.

² When the item is an arrangement, the cataloguing agency may choose to code also the medium of performance of the original work.

EX 5

146 0#Sac\$b01vso####\$b01val####\$b01vte####\$b01vbs####\$d01cmi04##\$e01vso####
 \$e01val####\$e01vte####\$e01vbs####\$d01och####\$e02woa####\$e02svl####\$e01sva####
 \$e01mco####\$h004l\$h004x\$h002w\$h003s\$h001m\$h006y\$h014a

Johann Sebastian Bach's cantata Wohl dem, der sich auf seinen Gott BWV 139 for 4 solo voices, 4-voice choir, 2 oboe d'amore, 2 violins, viola and continuo. Number of instruments by family, total number of instruments and grand total coded only to detail the example in its highest degree.

EX 6

146 0#Sac\$b02vso####\$b02val####\$b02vte####\$b02vbs####\$b01vcs####\$d02cmi04##
 \$e02vso####\$e02val####\$e02vte####\$e02vbs####\$d02och####\$e02wrec####\$e04wfl####
 \$e04wob####\$e04woa####\$e02woh####\$e04svl####\$e02sva####\$e02svg####\$e02svc####
 \$e02sve####\$e02kor####\$e01khp###c\$e02mco####\$h009l\$h008x\$h010w\$h012s\$h002k\$h002m
 \$h026y\$h043a

Johann Sebastian Bach's Matthäuspassion BWV 244 according to the Bärenreiter BA5038 score. As the total number of parts is coded and oboists play also oboe d'amore and oboe da caccia, the total number of woodwinds in \$h is 10 instead of 16. A cembalo can be played instead of one organ.

In a less detailed way field 146 may be recorded as follows:

146 0#Sac\$b02vso####\$b02val####\$b02vte####\$b02vbs####\$b01vcs####\$d02cmi04##
 \$d02och####

EX 7

146 ##\$ac\$b02vso####\$b01val####\$b01vct####\$b02vte####\$b02vbr####\$b01vcs####
 \$d01cmi04##\$e01vso####\$e01val####\$e01vte####\$e01vbs####\$d01cch01##\$e01vcv####
 \$d01och####\$e04wfl####\$e02wre####\$e04wob####\$e04woa####\$e02woh####\$e02wba####
 \$e04svl####\$e02sva####\$e02svg####\$e02svc####\$e02sdb####\$e02kor####\$h009l\$h005x
 \$h012w\$h012s\$h002k\$h002q\$h026y\$h042a

Johann Sebastian Bach's Matthäuspassion BWV 244 according to the Archiv Produktion 427648-2 CD recording (with the English baroque soloists). The orchestra is a chamber orchestra. As in EX 6, the number of wind instruments does not match the number of players (oboes, oboe d'amore and oboe da caccia are played by the same 4 players).

In a less detailed way field 146 may be recorded as follows:

146 ##\$ac\$b02vso####\$b01val####\$b01vct####\$b02vte####\$b02vbr####\$b01vcs####
 \$d01cmi04##\$d01cch01##\$d01och####

EX 8

146 1#\$ac\$d01cun####\$e01vun####\$d01obi####\$e02wsac####\$e02wsad####\$e03btr####
 \$e03btb####\$e01kun#s##\$e01kpf#s##\$e01tgu#r##\$e01tgufr##\$e01pds####\$e01ptb####
 \$e01pag####\$e01pcg####\$h004w\$h006b\$h002k\$h002t\$h004p\$h001x\$h018y\$h019a

Cacao meraviglioso, a popular song as arranged for big band by Demo Morselli. According to what is written on the score, electronic keyboards are considered keyboard instruments. The number of choral parts is not defined.

EX 9

146 0#\$ab\$d01ofu####\$e02wfl####\$e02wob####\$e02wcl####\$e02wba####\$e02bho####
 \$e02btr####\$e01bop####\$e01pti####\$e02svl####\$e01sva####\$e01svc####\$e01sdb####
 \$h008w\$h005b\$h001p\$h005s\$h019a
 146 1#\$ab\$c01kpf#4###\$i002k\$i002a

Felix Mendelssohn-Bartholdy's Overture zu Shakespeare's Sommernachtstraum Op. 21, arranged for piano four hands.

In a less detailed way field 146 may be recorded as follows:

146 0#\$d01ofu####

146 1#Sc01kpf#4##

EX 10

146 ##\$ab\$Sc01wob####\$Sc01svl####\$Sc01sva####\$Sc01svc####\$i001w\$i003s\$i004a
200 1#\$aQuartetto per oboe e archi

EX 11

146 0#\$ab\$Sc01wflfcv#\$i001w\$i001a
200 1#\$aArsis et Thesis, ou La chanson du souffle \$epour flûte basse en Ut sonorisée \$fMichael
Levinas
302 ##\$aMicro

Total number is the total number of performers.

EX 12

146 0#\$ab\$Sc02wfl####\$i002w\$i002a
146 01\$a\$Sc01wfl####\$Sc01eta####\$i001w\$i001a
200 1#\$aVoices \$epour deux flûtes (ou flûte et bande magnétique)\$fLaszlo Sary

EX 13

146 0#\$ac\$Sc01vwol####\$Sc01wpi####\$Sc01wflf##d\$Sc01wsab####\$Sc01wsaf##d\$Sc01kpfm###
\$Sc01pun####\$f01ptl####\$f01pmd####\$f01ptil####\$f01pbd####\$f01ptel####\$f03pcr####
\$f01pcy####\$f01pvi####\$Sc01sdb####\$i001v\$i002w\$i001k\$i001p\$i001s\$i005i\$i006a

François Rossé's Cris de cerise; performers are: female low voice, flute (piccolo and bass), saxophone (soprano and bass), piano (prepared), percussion (1 low tom, 1 military drum, 1 low timpani, 1 bass drum, 1 low temple block, 3 crash cymbals, 1 cymbal, 1 vibraphone, 1 double bass bow), double bass. Highest possible coding. Double bass bow is not codified because it is used in place of percussion sticks. Instruments and performers are detailed.

In a less detailed way field 146 may be recorded as follows (single percussion instruments are not specified):

146 0#\$ac\$Sc01vwol####\$Sc01wpi####\$Sc01wflf##d\$Sc01wsab####\$Sc01wsaf##d\$Sc01kpfm###
\$Sc01pun####\$Sc01sdb####\$i001v\$i002w\$i001k\$i001p\$i001s\$i005i\$i006a

EX 14

146 0#\$aa\$d01cmi04##\$e01vso####\$e01val####\$e01vte####\$e01vbs####\$d01cme03##
\$e02vte####\$e01vbs####\$d01cch03##\$e03vcv####\$h010a\$h003c

A piece for three choirs: choir 1 for four voices (soprano, alto, tenor, bass); choir 2 for three male voices (two tenors and one bass), choir three for three boys voices. All voices and choirs are defined to make it possible to display the parts of each choir.

EX 15

146 0#\$ab\$Sc01wfl####\$Sc01mco####\$i002a
146 01\$ab\$Sc01svl####\$Sc01mco####\$i002a
146 01\$ab\$Sc01wob####\$Sc01mco####\$i002a

A piece for flute or violin or oboe and continuo. In this case field 146 is repeated and indicator 2 used to record the alternative medium of performance.

The same example may be recorded with code 'c' in position 8 to indicate the optional use of alternative instruments:

146 0#\$ab\$Sc01wfl####\$Sc01svl###c\$Sc01wob###c\$Sc01mco####\$i002a

EX 16 (converted from former 128-EX 1)

128 ##\$afg#
146 0#\$ab\$Sc03tgu####\$i003a
200 1#\$aFour fugues for guitar trio

Subfield 128 \$a (musical form) has been maintained, the other subfields converted.

EX 17 (converted from former 128-EX 2)

128 ##\$avr#
 146 0#\$ab\$c01kpf####\$i001a
 146 0#\$ab\$c01kpf####\$c01svl####\$c01svc####\$i003a
 146 0#\$ab\$c01kpf####\$c01svl####\$c01sva####\$c01svc####\$i004a
 200 1#\$aVariations for solo piano, piano trio and piano quartet

In the former 128-EX 2, violin, viola and cello were coded as solo instruments. Subfield 128 \$a (musical form) has been maintained, the other subfields converted.

EX 18 (converted from former 128-EX 3)

128 ##\$aco#\$ddm
 146 0#\$ab\$b02wfl####\$d01ost####
 200 1#\$aConcerto for two flutes & string orchestra in D minor

In the former 128 EX 3, the agency considered it unnecessary to state that there is only one orchestra; converting the example, the number 01 in 146 \$d has been added by default. Subfields 128 \$a (musical form) and \$d (key) have been maintained, the other subfields converted.

EX 19

146 0#\$ab\$c01wrec####\$c01mco####
 146 01#\$ab\$c01svl####\$c01mco####

Jean-Baptiste Loeillet de Gant's Sonaten op. 4, n° 4-6, für Altblockflöte oder Violine und Basso continuo (Heinrichshofen's Verlag).

or

146 0#\$ab\$c01wrec####\$c01svc####\$c01kun####\$i001w\$i001s\$i001k\$i003a
 146 01#\$ab\$c01svl####\$c01svc####\$c01kun####\$i002s\$i0001k\$i003a

or

146 0#\$ab\$c01wrec####\$c01svl####\$d01mco####\$f01svc####\$f01kun####\$i003a

The third solution indicates alternative instruments in one occurrence of the field and details continuo instruments. Continuo realised for unspecified keyboard, cello part added, thus total performers coded as 3.

EX 20

146 0#\$ab\$b01kpf####\$c02svl####\$c01sva####\$c01svc####\$c01mbs####\$c02wfl####
 \$c02bho####\$h006a\$h010a

200 1#\$aVariations pour le pianoforte avec accomp.t de deux violons, viola, violoncelle et basse (deux flûtes et cors ad libitum) op. 97\$I.J.N. Hummel

Subfield \$h repeated to match the use or not of ad libitum instruments. Piano coded as soloist in \$b to match the statement that other instruments have the function of accompaniment.

EX 21

146 0#\$ac\$b01vso####\$b01vms####\$b01vte####\$b01vbr####\$d01cve06##\$e01vso####
 \$e01vso####\$e01vms####\$e01vct####\$e01vte####\$e01vte####\$e01vbr####\$e01vbr####
 \$e01vbs####\$d01cmi05##\$e01vso####\$e01vms####\$e01val####\$e01vte####\$e01vbr####
 \$e01vbs####\$b01tgu####\$b01svc####\$d01owi####\$e03wfl####\$e02wob####\$e02wcl####
 \$e01wclb####\$e02wba####\$e01wdb####\$e04bho####\$e03btr####\$e03btb####\$e01btu####
 \$c01kpf####\$c01tha####\$c01pun####\$f01pti####\$f01pbd####\$f01pmd####\$f01ptr####
 \$f01pboh####\$f01ptt####\$c01pun####\$f01pbl####\$f01pcw####\$f01pab####\$f01ptl####
 \$f01pcth####\$f01pjj####\$f01mwh####\$f01pbpp####\$f01pbpg####\$f01phh####\$f01pclr####
 \$f02pgol####\$c01pun####\$f01ppl####\$f01pxy####\$f01pvi####\$f01pwh####\$f01pgu####
 \$f01pwo####\$f01pcv####\$f01pmcl####\$h004I\$h011x\$h015v\$h029i\$h044a\$i004I\$i054x\$i058v
 \$i002j\$i011w\$i011b\$i001k\$i001t\$i003p\$i027y\$i029i\$i087a

Sylvano Bussotti's *The Rara* requiem for four voices, ensemble of six vocal soloists, 5-voice choir (48 singers), solo guitar and cello, wind orchestra, piano, harp and percussions (3 or 5 players). Following the indications of the score, each smaller group in the ensemble is defined; the total number of choir singers and alternative solo voices are specified. Prescribed percussion players may be three or five, but the example is treated with the detail of three percussion groups, like in the score, defined as three separate groups.

EX 22

146 0# \$ab\$c02kpf####\$c01pun####\$f01pvi####\$f01pxy####\$c01pun####\$f01ptr####
\$f01pmb####\$i002p\$i002k\$i004a

Bartók Béla, *Sonata for two pianos and two percussions* (Boosey & Hawkes, 1942). Percussion instruments are detailed after each generic code, as specified by the composer.

EX 23

146 0# \$ac\$b01vso####\$b01vte####\$d01cmi03##\$e01vso####\$e01vte####\$e01vbs####
\$d01och####\$e01wob####\$e02svl####\$e01mco####\$f01svc####\$f01sve####\$f01wba####
\$f01kor####\$h0021\$h001c\$h003x\$h001o\$h001d\$h002s\$h001m\$h009a

Georg Philipp Händel's anthem *I will magnify thee* HWV 250a for soprano, tenor, 3-voice choir (soprano, tenor, bass), and chamber orchestra (oboe, violins and continuo); continuo is specified as played by cello, violone, bassoon and organ.

Optional (in case of a set of parts or of a sound recording where continuo is not mentioned):

146 01 \$ac\$b01vso####\$b01vte####\$d01cmi03##\$e01vso####\$e01vte####\$e01vbs####
\$d01och####\$e01wob####\$e02svl####\$e01svc####\$e01sve####\$e01wba####
\$e01kor####\$h0021\$h001c\$h003x\$h001o\$h002d\$h004s\$h001k\$h007i\$h012a

EX 24

146 0# \$ab\$b02kpf####\$d01ofu####\$e28svl####\$e12sva####\$e02sva##v#\$e12svc####
\$e02svc##v#\$e08sdb####\$e02sdb##v#\$e01kor##s#\$e01pci####\$e02tha####\$e01tgu##r#
\$e01khp####\$e01kce####\$e02pti####\$e06pun####\$e05qco####\$i087a

Brian Ferneyhough's *Firecycle beta*, symphonic torso for two pianos and orchestra with five conductors (1969-1971). Orchestra includes amplified instruments, harpsichord and celesta played by the same performer and six groups of percussions. Each string instrument plays a different [real] part, thus the number of players is specified. Conductors have been coded and are counted in the total number of performers. Instruments played by each percussionist are not detailed.

EX 25

146 0# \$ab\$d03ofu####\$e04wfl####\$e03wpi####\$e01wfl###\$e03wob####\$e02weh####
\$e01wclh####\$e02wcl####\$e01wclb####\$e01wsac####\$e01wcl####\$e01wsae####\$e03wba####
\$e08bho####\$e06btr####\$e05btb####\$e01btb###\$e01btbc###\$e01btub###\$e12pun####
\$e01kgl####\$e01kce####\$e01kpf####\$e01tgue####\$e02tha####\$e26svl####\$e10sva####
\$e08svc####\$e06sdb####\$e03qco####\$i019w\$i022b\$i012p\$i003k\$i003t\$i050s\$i112a

Karlheinz Stockhausen's *Gruppen* for three orchestras and three conductors. Conductors have been coded and are counted in the total number of performers.

It is possible to detail each orchestra and each percussion group:

146 0# \$ab\$d01ofu####\$e01wfl####\$e01wpi####\$e01wfl###\$e01wob####\$e01weh####
\$e01wclh####\$e01wba####\$e02bho####\$e02btr####\$e02btb####\$e01btub###\$e04pun####
\$f01pmb####\$f01pgl####\$f05pcw####\$f01pgo####\$f03pcy####\$f02psl####\$f04pdr####
\$f01pmd####\$f01ptr####\$e01kgl####\$e01tha####\$e10svl####\$e02sva####\$e04svc####
\$e02sdb####\$e01qco####\$d01ofu####\$e02wfl####\$e01wpi####\$e01wob####\$e01wclh###
\$e01wsaa####\$e01wcl####\$e01wsae####\$e01wba####\$e03bho####\$e02btr####\$e01btb####
\$e01btbf###\$e04pun####\$f01pvi####\$f04pbl####\$f04pcw####\$f01pgo####\$f03pcy####
\$f02psl####\$f04pdr####\$f01pmd####\$f01ptr####\$f01pra####\$f02ptl####\$e01kpf####
\$e01tgue####\$e08svl####\$e04sva####\$e02svc####\$e02sdb####\$e01qco####\$d01ofu####

\$e01wfl####\$e01wpi####\$e01wob####\$e01weh####\$e01wcl####\$e01wclf###\$e01wba####
 \$e03bho####\$e02btr####\$e02btb####\$e01btbg####\$e04pun####\$f01pxr####\$f04pcw####
 \$f01pgo####\$f03pcy####\$f02psl####\$f04pdr####\$f01pmd####\$f01ptr####\$e01kce####
 \$e01tha####\$e08svl####\$e04sva####\$e02svc####\$e02sdb####\$e01qco####\$i012p\$i112a

More simply:

146 0# \$ab\$d03ofu####\$e03qco\$i112a

CODE LISTS

Code lists are maintained and updated by IAML (International Association of Music Libraries, Archives and Music Documentation Centres).

The lists show a definition term and several other terms using the same code, without distinction between:

- similar instruments, voices or devices having the same code;
- definition in other language(s);
- orthographical variants.

Chronological, organological or language specifications are added in brackets if strictly necessary. The pitch of the instruments is specified when necessary (e.g.: A, Bb, F).

A: codes for subfields \$b-\$f, positions 2-4

Pertinence of instruments to “families” in code lists is specified by the first character of the three-letter code.

Instruments needing a code in pos. 5-8 are shown only when they have a specific name in any language.

1. Voices
2. Woodwinds
3. Brass instruments
4. Strings, bowed
5. Strings, plucked
6. Keyboard
7. Percussion
8. Electric / electronic instruments and devices
9. Miscellaneous, other, unspecified instruments
10. Choruses
11. Orchestras, ensembles
12. Conductors
13. Other performers

(Code lists updated by IAML are available on IAML website [<http://www.iaml.info/> (2009-11-10)])

B: codes for subfields \$b to \$f, positions 5-7

Note: positions 5-6 for \$d indicate number of parts in ensemble, with leading zero (## if not spec.).

1- Codes for position 5: tessitura, prepared (not applied to subfield \$d)

Code	Definition	Notes Other definitions, language terms, variants
#	not specified - position not required	
a	sopranino	
b	soprano	dessus

Code	Definition	Notes Other definitions, language terms, variants
		pardessus sopran treble
c	alto	alt contralto haute-contre quinte
d	tenor	taille ténor tenore
e	baritone	baritono baryton
f	bass	bajo bas

Code	Definition	Notes Other definitions, language terms, variants
		basse basso
g	contrabass	contrebasse contrabbasso kontrabass
h	sub-contrabass	basse grave basso grave octobasse sub-contrabbasso
i	sopracute	garklein sopracuto suraigu
j	high	acuto aigu hoch klein petit piccolo small
k	medium	medio mittel moyen
l	low	big grand grande grave gross large tief
m	prepared	préparé preparato

Code	Definition	Notes Other definitions, language terms, variants
b	B flat	B si bémol si bemolle
c	C	ut do
d	D	ré
e	E	mi
f	F	fa
g	G	sol
h	B	H si
i	E flat	Es mi bémol mi bemolle
j	A flat	As la bémol la bemolle
k	D flat	Des ré bémol re bemolle
l	F sharp	Fis fa diesis fa dièse
n	Instrument played in non standard way	instrument joué de manière non standard strumenti suonati in modo non standard
s	non standard string number	nombre de cordes non standard numero di corde non standard

2- Codes for position 6: number of hands / players; keys of pitched instruments (not applied to subfield \$d)

Code	Definition	Notes Other definitions, language terms, variants
#	not specified - position not required	
1	one hand	eine Hand une main una mano
2	two players on one instrument	deux exécutants sur un instrument due esecutori su uno strumento
3	three hands	drei Hände trois mains tre mani
4	four hands	vier Hände quatre mains quattro mani
6	six hands	sechs Hände six mains sei mani
8	eight hands	acht Hände huit mains otto mani
a	A	la

3- Codes for position 7: other

Code	Definition	Notes Other definitions, language terms, variants
#	not specified - position not required	
r	electric	électrique elettrico
s	electronic	électronique elettronico
t	midi	
v	amplified	amplifié amplificato
w	recorded	enregistré registrato
q	antiquity	antiquité antichità
y	ethnic, traditional	ethnique, traditionnel etnico, tradizionale

C: codes for subfields \$b to \$f, position 8

Code	Definition
#	not specified – position not required
b	ad libitum
c	may take place of the preceding code / alternative
d	used by the same player as the preceding code

D: codes for subfields \$h-\$i, position 3

Code	Definition
a	performers total
b	brass instruments
c	choirs
d	wind instruments
e	electro-acoustic instruments
i	instruments total
j	solo instruments
k	keyboard instruments
l	solo voices
m	miscellaneous, other instruments
o	orchestras
p	percussion instruments
q	conductors
s	bowed string instruments
t	plucked string instruments
v	voices total
w	woodwind instruments
x	choral voices
y	ensemble instruments
z	devices, other performers