TRUESOUND TRANSFERS

Speeds & Keys

A survey of recording speeds, musical keys, and pitch standards found on "78rpm" records

Volume I

Gramophone Co. (1898 - 1921)

by

Chris Zwarg

"Let me give you a warning. You think you are hearing my voice; but unless you know how to use your gramophone properly, what you are hearing may be something grotesquely unlike any sound that has ever come from my lips. [...] I have records of famous singers and speakers who are dead, but whose voices I can remember quite well: Adelina Patti, Sarah Bernhardt, Charles Santley, Caruso, Tamagno; but they sound quite horrible and silly until I have found the right speed for them."

George Bernard Shaw
(introducing a recording of his own voice in 1927)

First Edition

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Introduction

The main purpose of this book — the first in a series — is to provide the owner of so-called "78 rpm" gramophone records (in future instalments, phonograph cylinders as well) with a means to easily find the correct rpm speeds to give an authentic and musically satisfying reproduction. As George Bernard Shaw rightly observed in his 1927 talk on "How to operate a gramophone", a playback speed that differs substantially from the speed at which the recording was originally made can lead to a very distorted picture both of the recorded performance and, in case of recordings of the human voice, the personality and character of the person heard.

In the early days of recording — and frequently in the not-so-early days as well — there was no practicable technology to make sure that recording turntables always revolved at precisely the same speed. No matter whether electric motors, spring motors, or dropping weights were used to power the platter, all of them had to be stabilized by a so-called "governor": a mechanical speed regulator working by the balanced effects of centrifugal force and friction. This device had to be adjusted manually, facing the operator with the problem of how to count the revolutions of the turntable reliably with an error of far less than 1%. And the construction itself, relying on the friction of a greased leather pad on a rotating metal disc, was so prone to random shifts that one was lucky to get reasonably constant performance over a day of recording without having to re-adjust several times. If you then take into account the fact that cutting the outer grooves of a 12-inch record requires about three times as much torque compared to the innermost ones next to the label area, it becomes easy to imagine how wildly speeds varied in daily studio and field-recording work. Over the years, things improved with better motors, but just when disc recording had

finally stabilized in the 1940s, master recordings on film, wire and tape added another layer of uncertainty due to the peculiar mechanical frailties of these media, again mostly related to problems of varying torque and friction.

Luckily for the early record producers, average human hearing is quite insensitive to very slow changes in pitch (everybody who has ever listened to, or sung in, an amateur choir will know this: Over a couple of verses, pitch easily changes by a semitone or more without anybody even noticing, unless an instrumental accompaniment suddenly comes back in!). Those who have "absolute pitch", that is, an unusually good long-term memory for musical pitch, are not so lucky of course, and one is not surprised to find many musicians with this natural gift among the staunchest opponents of recorded music in its early days.

Not being aware that the absolute pitch is off-the-mark however does not save the average listener, *any* listener in fact, from sensing that *something* is wrong when a recording is played back at the wrong speed. Recordings of the human voice — no matter if speaking or singing — are most critical in this respect, likely because human hearing is naturally most sensitive when it comes to voices. Every language and dialect, but also each individual speaker, has a highly characteristic set of formants (i.e. distinct frequencies that are emphasized or suppressed) that in combination make up what we call vowel qualities, colouring and timbre. If you shift the whole sound spectrum up or down, the relative relations between these formants stay the same, so the playback remains recognizable unless the maladjustment is drastic, but we also register their absolute position, particularly in terms of individuality and expressiveness. Speeding up the playback by only a few percent produces the grotesque squeaky "chipmunk" effect sometimes exploited for humorous purposes, while a slowed down reproduction often resembles the halting and slurred

articulation associated with tiredness or drunkenness. Needless to say, one does not want either effect superimposed spuriously on the reproduction of the voice of a historical singer or speaker.

Shaw, in his 1927 talk, observes that it is usually easy to adjust a recording of a voice we know well in real life: He himself would have had little trouble to "find" the voices of Patti, Bernhardt, Caruso, and Tamagno on his records, after having heard them many times in the theatre. But he also stresses that once you don't have the living memory of the performer — and that is, some 130 years after the first recordings were made, sadly true for all of us today — it gets very difficult and subjective, and it is all too easy to end up with "phantoms that never existed", as he eloquently describes the "sham" voices and personalities that are created by wrong playback speed.

With purely instrumental recordings, the problems maybe less obvious to a casual listener, simply because an orchestra still sounds very much like an orchestra even if the speed is several percent off, but since the tempo chosen by the musicians, as well as details like attack and vibrato, are altered with any change in rpm speed, an off-speed reproduction will be just as distorted and unauthentic as with vocal recordings.

Facing these problems almost every day in his work as an audio transfer and sonic restoration specialist, the author has done much research into the matter, striving to reduce, if not completely eliminate, the subjectiveness of pitch adjustments. Traditionally, one employed a keyboard or similar instrument of known pitch, played along with the recording, and adjusted the speed in small increments, doing one's best to find the unison by ear. Naturally, this depends very much on listening conditions, musical talent, and alertness of the operator, and can be a near impossible task if there is a substantial difference between the pitch standard used during the recording session and that of the modern instrument, or if the tuning and

intonation of the recorded performance are poor. Electronic tuning tools, as used by guitarists and piano tuners, do not help much either, because most of them only recognize single notes, and they need a certain time of steady tone to give a reliable reading. However, such isolated held notes are rarely found on real-life musical recordings, and when they do appear (e.g. in a cadenza by a soloist), they are not necessarily representative of the average pitch of the whole piece — after all it is the exposed top notes of singers that most often go slightly sharp or flat! Not to mention the nasty habit of many early recordings to either speed up or slow down towards the end, so that, if you tune to the penultimate or final note, the speed can still be very wrong for much of the track.

A solution was finally found in a method that statistically determines the *average overall pitch* of the recording. The idea is that, in any piece played at standard concert pitch of A=440 Hz, the frequencies corresponding to the scale at that pitch (A=440, B-flat=466.2, B=493.9 etc., with their fractions and multiples in other octaves) will always figure very conspicuously as a group — longer, louder, and more often — compared to in-between frequencies, like 450 or 480 Hz, that are only accidentally present during glissandi, trills, heavy vibrato/tremolo, or moments of bad intonation. This statistical prevalence of the twelve frequencies of the equal-tempered scale holds true even where strings and wind instruments use "just" rather than "equal-tempered" intonation, a certain amount of wow-and-flutter is present, or the musicians occasionally play out-of-tune.

Now if a recording runs, for example, 2% fast, A=440 becomes 448.8, B=493.9 becomes 503.8, etc. At the same time, the standard pitches like 440 or 493.9 turn into "rare" between-the-notes frequencies. By analyzing the core musical spectrum in this way (circa 200 to 2000 Hz, i.e. the frequency range covered by the base frequencies of most instruments, and the

range that is usually recorded strongly even under very poor technical conditions), one can, with the spectrographical analysis methods employed, determine its average pitch with a precision of typically +/- 3 cents, or approximately 1/20th of a semitone; more precisely than industry specifications for the speed accuracy of Hi-Fi analogue audio gear demand.

With this data, it is then easy to calculate the reduction or increase in speed necessary to arrive at any desired standard pitch: Frequencies are directly proportional to rpm, and to turn, say, 450 Hz into 440 Hz, we simply need to slow down the record from 78.0 rpm to (78.0 / 450 * 440) = 76.3 rpm.

Obviously, it would have been very difficult if not impossible to gather digital copies of so many recordings made under controlled conditions at exactly 78.00 rpm. Even reputable archives — let alone commercial reissues and transfers by amateur collectors — rarely take precise notes about transfer speeds used, not least because older non-quartz-controlled turntables do not provide that data. To render such non-standardized transfers useful for the analysis, the author has developed a method to measure the rpm at which the record turned during the transfer process *from the transfer itself*. This relies on the low-frequency rumble that is part of every full-range disc or cylinder reproduction. It is caused both by imperfections in the surface of the matrix and the pressed record (warps, bumps, blisters) and the friction of both the recording and the playback turntables on their axles. These factors combine to create a noise that has a recurring structure with every revolution. On a badly warped or cracked record you can hear and count the rhythmic "thumps", but they are there even on a flawless copy, though much weaker and not as readily audible. The repeat rate of this recurring noise during successive turns of the record can be used to exactly determine the time one revolution takes; 60 divided by that figure gives the rpm speed.

Instructions for Use

The tables that form the main part of this book present three variables for every *musical* recording. Obviously, speech recordings have neither musical key nor pitch standards, neither have certain kinds of non-European music, while pitch standards have been deliberately left out for unaccompanied vocal music because of the inherent impossibility to stay on pitch with mathematical exactness in this musical style, though keys are generally given for these recordings.

• *Musical Key* as heard. The relation to the original score has been indicated by numbers on occasion: "0" describes score pitch, "+1" means one semitone higher than the score, etc.

• *Pitch Standard* as presumably used by instrumentalists, based wherever possible on historical data that however has turned out to be sadly incomplete and ambiguous, in many cases therefore approximated by choosing pitches from a range of possible standards that result in plausible speeds and natural vocal timbre for the whole of a session.

• *RPM Speed* that allows the original disc to reproduce in the key and pitch given. It must be noted however that many records slightly — sometimes not-so-slightly — shift or waver in speed between start and end. In that case, the given *average* speed naturally results in the pitch being slightly sharp in some places and flat in others. Any momentary fine-tuning is left to the discretion and responsibility of the user.

Recordings are listed by session in matrix number order (according to the numbering structure as researched and described by Alan Kelly), with artists' names and performance types given just briefly to facilitate identification. More complete data can be found in published discographies.

Naturally, only a fraction of all recordings made and published by the Gramophone Co. during the 23-year period covered by this volume was available for analysis. The author has made every effort to cover as wide a range as possible, but there are limits to even the most extensive archives available, especially since recordings outside the rather narrow field of classical and operatic music are apparently not considered "collectable" by many, and consequently rarely reissued or preserved.

Still, it is hoped the book proves useful even for records are not detailed yet: Adjacent or nearby matrix numbers usually share similar speeds, and the error will rarely be a grave one if you adjust your disc to the average of the two matrices going before and after it in the list. At the very least this will give you a "ballpark figure" from which to fine-tune by the traditional method (with instrument or tuning-fork and ear) to the pitch standard prevalent among the listed records of the same genre. If you have recordings in your possession that are missing, and that you should like to see covered in a future edition: All we need is a digital copy in reasonable quality to do the analysis!

With the figures given, speeds resulting in different keys and/or different pitch standards are easily calculated, for the benefit of those who prefer to rather not trust blindly in our decisions and want to do their own experimenting:

• To change the pitch standard (in Hz), divide the rpm speed by the current pitch standard and multiply the result with your preferred one.

• Each transposition by a semitone represents a change in speed by the factor of 1.0595 (the twelfth root of 2, to be precise). To raise the reproduction by a semitone, multiply the given rpm speed by that factor. To lower it, divide the given rpm speed by that factor. For changes of several semitones, repeat the process as needed.

London, 1901 (10-inch)

1252 b	Darnley, Herbert	band	F	452 Hz	72.8 rpm
1259 b	O'Sullivan, Denis	piano	G,A	452 Hz	71.0 rpm
1260 b	O'Sullivan, Denis	piano	D	452 Hz	72.3 rpm
1269 b	Green, William	piano	C	452 Hz	69.3 rpm
1274 b	Municipal Military	band	B♭	452 Hz	76.5 rpm
1291 b	Paull, William	piano	F	452 Hz	75.0 rpm
1292 b	Paull, William	piano	D	452 Hz	75.0 rpm
1296 b	Paull, William	piano	A	452 Hz	76.2 rpm
1298 b	Hallett, Wilson	piano	Dm	452 Hz	76.1 rpm

London, 1902 (10-inch)

1312 b	Paull, William	piano	E♭	452 Hz	75.1 rpm
1324 b	Paull, William	piano	B♭	452 Hz	74.8 rpm
1325 b	Paull, William	piano	F	452 Hz	75.6 rpm
1327 b	Paull, William	piano	D	452 Hz	75.5 rpm
1334 b	Paull, William	piano	C	452 Hz	74.7 rpm
1336 b	Paull, William	piano	E♭	452 Hz	75.8 rpm
1337 b	Davies, Belle	piano	F	452 Hz	74.7 rpm
1347 b	Paull, William	piano	Dm	452 Hz	73.8 rpm
1348 b	Paull, William	piano	E♭	452 Hz	74.8 rpm
1349 b	Paull, William	piano	C	452 Hz	73.8 rpm
1351 b	Paull, William	piano	A♭	452 Hz	75.1 rpm
1360 b	Paull, William	piano	E	452 Hz	74.2 rpm
1363 b	Paull, William	piano	E♭	452 Hz	74.3 rpm
1364 b	Paull, William	piano	B♭	452 Hz	71.7 rpm
1499 b	Green, William	piano	F	452 Hz	73.1 rpm
1593 b	Paull, William	piano	D	452 Hz	74.2 rpm
1595 b	Paull, William	piano	B♭	452 Hz	71.7 rpm
1612 b	Kirkby Lunn, Louise	piano	E♭	452 Hz	73.0 rpm
1613 b	Kirkby Lunn, Louise	piano	F	452 Hz	72.5 rpm
1618 b	Kirkby Lunn, Louise	piano	Em	452 Hz	73.7 rpm

Milano, 1902 (10-inch)

1628 b	Oxilia, Jose	piano	G	443 Hz	75.5 rpm
1630 b	Oxilia, Jose	piano	B♭/-1	443 Hz	75.9 rpm
1632 b	Oxilia, Jose	piano	A	443 Hz	75.2 rpm
1651 b	Caffetto, Carlo	piano	C	443 Hz	75.1 rpm
1654 b	Tebro, Ernestina	piano	G	443 Hz	75.2 rpm
1657 b	Tebro, Ernestina	piano	Fm	443 Hz	74.3 rpm
1662 b	Tebro, Ernestina	piano	B♭	443 Hz	72.1 rpm
1666 b	Municipale, Milano	band	A♭	430 Hz	74.3 rpm
1683 b	Caffetto, Carlo	piano	A♭	443 Hz	80.5 rpm

Milano, 1902 (10-inch)

1704 b	Municipale, Milano	band	E♭	430 Hz	74.0 rpm
1705 b	Sammarco, Mario	piano	D♭	443 Hz	72.8 rpm
1706 b	Sammarco, Mario	piano	C	443 Hz	72.9 rpm
1707 b	Sammarco, Mario	piano	D♭	443 Hz	72.8 rpm
1708 b	Sammarco, Mario	piano	F	443 Hz	73.7 rpm
1709 b	Sammarco, Mario	piano	C	443 Hz	72.4 rpm
1710 b	Gravina, Giovanni	piano	F	443 Hz	71.7 rpm
1711 b	Gravina, Giovanni	piano	Bm	443 Hz	72.9 rpm
1713 b	Gravina, Giovanni	piano	F♯m	443 Hz	72.4 rpm
1714 b	Gravina, Giovanni	piano	B♭	443 Hz	72.9 rpm
1724 b	Bruno, Elisa	piano	Em	443 Hz	71.6 rpm
1726 b	Bruno, Elisa	piano	D♭	443 Hz	71.4 rpm
1728 b	Bruno, Elisa	piano	Dm	443 Hz	71.3 rpm

Vaticano, 1902 (10-inch)

1747 b	Comandini, Antonio	piano	B♭	430 Hz	75.3 rpm
1750 b	Comandini, Antonio	piano	G	430 Hz	74.8 rpm
1751 b	Cappella Sistina	piano	C	430 Hz	76.3 rpm
1754 b	Vitti, Primo	piano	Am	430 Hz	74.3 rpm
1755 b	Moreschi, Alessandro	piano	A♭	430 Hz	74.9 rpm
1757 b	Cappella Sistina	piano	C	430 Hz	74.9 rpm
1758 b	Moreschi, Alessandro	piano	B♭	430 Hz	75.4 rpm
1759 b	Moreschi, Alessandro	piano	E♭/+1	430 Hz	76.3 rpm
1760 b	Cappella Sistina	piano	A♭	430 Hz	74.2 rpm
1762 b	Moreschi, Alessandro	piano	F,Fm	430 Hz	75.8 rpm

Milano, 1902 (10-inch)

1775 b	Pinto, Amelia	piano	C	443 Hz	76.2 rpm
1776 b	Pinto, Amelia	piano	Em	443 Hz	75.5 rpm
1777 b	Pinto, Amelia	piano	G♭	443 Hz	75.6 rpm
1780 b	Pinto, Amelia	piano	E♭	443 Hz	72.9 rpm
1781 b	Pinto, Amelia	piano	F♯m	443 Hz	73.5 rpm
1782 b	Pinto, Amelia	piano	E♭	443 Hz	72.3 rpm
1782a b	Caruso, Enrico	piano	B♭	443 Hz	73.8 rpm
1783 b	Caruso, Enrico	piano	A♭	443 Hz	73.6 rpm
1784 b	Caruso, Enrico	piano	B♭	443 Hz	73.6 rpm
1785 b	Caruso, Enrico	piano	D	443 Hz	73.3 rpm
1786 b	Caruso, Enrico	piano	B♭	443 Hz	73.7 rpm
1787 b	Caruso, Enrico	piano	A♭	443 Hz	73.4 rpm
1788 b	Caruso, Enrico	piano	A	443 Hz	72.6 rpm
1789 b	Caruso, Enrico	piano	F	443 Hz	73.1 rpm
1790 b	Caruso, Enrico	piano	Bm	443 Hz	73.3 rpm

Milano, 1902 (10-inch)

1791 b	Caruso, Enrico	piano	F	443 Hz	73.6 rpm

London, 1902 (10-inch)

1901 b	Black, Andrew	piano	Gm	452 Hz	68.6 rpm
1905 b	Black, Andrew	piano	D	452 Hz	69.6 rpm
1906 b	Black, Andrew	piano	A♭	452 Hz	71.7 rpm
1907 b	Black, Andrew	piano	D♭	452 Hz	73.4 rpm
1908 b	Lytton, Henry	piano	D	452 Hz	68.7 rpm
1921 b	Plancon, Pol	piano	B♭	452 Hz	76.0 rpm
1921[½] b	Plancon, Pol	piano	B♭	452 Hz	73.3 rpm
1922 b	Plancon, Pol	piano	A♭	452 Hz	75.8 rpm
1922[½] b	Plancon, Pol	piano	A♭	452 Hz	76.1 rpm
1923 b	Plancon, Pol	piano	G	452 Hz	75.7 rpm
1923[½] b	Plancon, Pol	piano	G	452 Hz	75.5 rpm
1924 b	Plancon, Pol	piano	G	452 Hz	76.0 rpm
1925 b	Plancon, Pol	piano	G	452 Hz	75.9 rpm
1925[½] b	Plancon, Pol	piano	G	452 Hz	75.5 rpm
1936 b	Plancon, Pol	piano	Cm	452 Hz	68.7 rpm
1937 b	Plancon, Pol	piano	A	452 Hz	68.8 rpm
1938 b	Plancon, Pol	piano	E	452 Hz	69.5 rpm
1938[½] b	Plancon, Pol	piano	E	452 Hz	70.1 rpm
1939 b	Plancon, Pol	piano	Cm	452 Hz	69.1 rpm
1940 b	Plancon, Pol	piano	A	452 Hz	69.4 rpm
1945 b	Rooy, Anton van	piano	D	452 Hz	71.6 rpm
1946 b	Rooy, Anton van	piano	B♭	452 Hz	71.6 rpm
1947 b	Rooy, Anton van	piano	E♭	452 Hz	73.6 rpm
1948 b	Rooy, Anton van	piano	D♭	452 Hz	72.2 rpm
1958 b	Power, Tyrone	speech	—	—	72.0 rpm
1959 b	Power, Tyrone	speech	—	—	72.0 rpm
1986 b	Lytton, Henry	piano	G	452 Hz	70.8 rpm
1992 b	Bispham, David	piano	A	452 Hz	67.4 rpm
1993 b	Bispham, David	piano	E♭	452 Hz	67.7 rpm
1994 b	Bispham, David	piano	A♭	452 Hz	70.9 rpm
1995 b	Bispham, David	piano	D	452 Hz	70.1 rpm
1998 b	Bispham, David	piano	Fm	452 Hz	69.6 rpm
2010 b	Rooy, Anton van	piano	G♭	452 Hz	79.4 rpm
2012 b	Rooy, Anton van	piano	G	452 Hz	80.6 rpm
2019 b	Scotti, Antonio	piano	E♭/-1	452 Hz	77.7 rpm
2020 b	Scotti, Antonio	piano	D,B♭	452 Hz	77.7 rpm
2021 b	Scotti, Antonio	piano	F	452 Hz	74.2 rpm
2022 b	Scotti, Antonio	piano	D	452 Hz	72.6 rpm
2023 b	Scotti, Antonio	piano	E	452 Hz	72.0 rpm

London, 1902 (10-inch)

2024 b	Scotti, Antonio	piano	F	452 Hz	72.2 rpm
2025 b	Scotti, Antonio	piano	A,E	452 Hz	68.8 rpm
2028 b	De Pasquali, Bernice	piano	D/-2	452 Hz	70.8 rpm
2029 b	Albert, Ben	piano	E♭	452 Hz	70.5 rpm
2035 b	Adams, Suzanne	piano	E	452 Hz	77.0 rpm
2036 b	Adams, Suzanne	piano	C	452 Hz	76.5 rpm
2037 b	Adams, Suzanne	piano	F	452 Hz	76.8 rpm
2058 b	Calve, Emma	piano	E♭	452 Hz	78.0 rpm
2059 b	Calve, Emma	piano	B♭	452 Hz	78.5 rpm
2060 b	Calve, Emma	piano	C	452 Hz	77.8 rpm
2061 b	Calve, Emma	piano	D	452 Hz	78.4 rpm
2062 b	Calve, Emma	piano	Cm	452 Hz	78.1 rpm
2062[½] b	Calve, Emma	piano	Bm	452 Hz	78.3 rpm
2063 b	Calve, Emma	piano	Em	452 Hz	77.8 rpm
2065 b	Shepard, Burt	piano	D	452 Hz	78.3 rpm
2100 b	Palliser, Esther	piano	A♭	452 Hz	77.1 rpm
2101 b	Palliser, Esther	piano	A	452 Hz	77.7 rpm
2102 b	Palliser, Esther	piano	D♭	452 Hz	74.6 rpm
2111 b	Renaud, Maurice	piano	F	452 Hz	77.3 rpm
2112 b	Renaud, Maurice	piano	B	452 Hz	76.7 rpm
2113 b	Renaud, Maurice	piano	G	452 Hz	75.9 rpm
2114 b	Renaud, Maurice	piano	E	452 Hz	76.7 rpm
2116 b	Renaud, Maurice	piano	E♭	452 Hz	77.4 rpm
2132 b	Haydn Quartet	piano	E	452 Hz	77.7 rpm
2149 b	Adams, Suzanne	piano	F	452 Hz	80.0 rpm
2151 b	Adams, Suzanne	piano	G	452 Hz	78.5 rpm
2176 b	Dudley, Samuel H.	piano	G	452 Hz	79.8 rpm
2184 b	Macdonough, Harry	piano	C	452 Hz	80.6 rpm
2188 b	Dudley, Samuel H.	piano	F	452 Hz	80.2 rpm
2203 b	Plancon, Pol	piano	C	452 Hz	76.8 rpm
2310 b	Logan, Pipe-Major	bagpipe	A	452 Hz	70.1 rpm
2344 b	Drew, Henry	piano	C	452 Hz	70.1 rpm
2384 b	De Vere, Florence	piano	F	452 Hz	68.2 rpm
2439 b	Oakley, Olly	piano	G	452 Hz	70.9 rpm
2473 b	Coldstream Guards	band	E♭	452 Hz	69.7 rpm
2491 b	Dons, Henri	piano	C	452 Hz	69.3 rpm
2565 b	Hallett, Wilson	piano	G	452 Hz	69.0 rpm
2585 b	Cantrell, Edgar	piano	B	452 Hz	69.7 rpm
2605 b	Temple, Richard	piano	A/o	452 Hz	67.7 rpm
2643 b	Greene, Evie	piano	D	452 Hz	68.3 rpm
2644 b	Greene, Evie	piano	D	452 Hz	69.0 rpm
2646 b	Greene, Evie	piano	E♭	452 Hz	69.3 rpm

London, 1902 (10-inch)

2700 b	Kubelik, Jan	piano	D	452 Hz	68.8 rpm
2701 b	Kubelik, Jan	piano	A	452 Hz	69.4 rpm
2703 b	Kubelik, Jan	piano	D	452 Hz	71.0 rpm
2704 b	Kubelik, Jan	piano	F	452 Hz	71.5 rpm
2720 b	Davies, Ben	piano	B♭	452 Hz	71.0 rpm
2722 b	Davies, Ben	piano	A♭	452 Hz	72.2 rpm
2724 b	Davies, Ben	piano	C	452 Hz	73.2 rpm
2725 b	Davies, Ben	piano	F	452 Hz	73.0 rpm
2727 b	Davies, Ben	piano	F	452 Hz	73.4 rpm
2735 b	Crichton, Madge	piano	F	452 Hz	69.1 rpm
2736 b	Crichton, Madge	piano	C	452 Hz	70.3 rpm
2737 b	Crichton, Madge	piano	D	452 Hz	72.1 rpm
2744 b	Olitzka, Rosa	piano	F	452 Hz	72.1 rpm
2764 b	Shepard, Burt	piano	E	452 Hz	73.2 rpm

Milano, 1902 (10-inch)

2800 b	Pagnoni, Gualtiero	piano	F	439 Hz	72.3 rpm
2801 b	Scattola, Carlo	piano	A♭	439 Hz	72.3 rpm
2806 b	Mauri, Aurelio	piano	A♭	439 Hz	70.7 rpm
2811 b	Mauri, Aurelio	piano	D/-1	439 Hz	69.6 rpm
2819 b	Giraldoni, Eugenio	piano	G♭	439 Hz	67.7 rpm
2820 b	Giraldoni, Eugenio	piano	B	439 Hz	68.2 rpm
2821 b	Giraldoni, Eugenio	piano	G	439 Hz	67.8 rpm
2822 b	Giraldoni, Eugenio	piano	E♭	439 Hz	68.2 rpm
2823 b	Giraldoni, Eugenio	piano	D♭	439 Hz	68.3 rpm
2824 b	Giraldoni, Eugenio	piano	F	439 Hz	68.5 rpm
2831 b	Galli, Eugenio	piano	E♭,A♭	439 Hz	69.5 rpm
2838 b	Garbin, Edoardo	piano	B♭	439 Hz	70.5 rpm
2839 b	Garbin, Edoardo	piano	F	439 Hz	70.8 rpm
2840 b	Garbin, Edoardo	piano	G	439 Hz	70.7 rpm
2843 b	Garbin, Edoardo	piano	A	439 Hz	70.8 rpm
2847 b	Tessari, Gino	piano	D	439 Hz	69.4 rpm
2853 b	Cantalamessa, Berardo	piano	F	439 Hz	70.9 rpm
2861 b	De Lucia, Fernando	piano	A	439 Hz	69.2 rpm
2862 b	De Lucia, Fernando	piano	Em/-2	439 Hz	69.6 rpm
2863 b	De Lucia, Fernando	piano	B♭/-1	439 Hz	69.7 rpm
2864 b	De Lucia, Fernando	piano	Gm/-2	439 Hz	70.0 rpm
2865 b	De Lucia, Fernando	piano	B/-1	439 Hz	69.7 rpm
2866 b	De Lucia, Fernando	piano	Dm	439 Hz	70.0 rpm
2867 b	De Lucia, Fernando	piano	Cm	439 Hz	70.5 rpm
2868 b	De Lucia, Fernando	piano	E/-1	439 Hz	70.1 rpm
2869 b	De Lucia, Fernando	piano	Fm	439 Hz	70.8 rpm

Milano, 1902 (10-inch)

2870 b	De Lucia, Fernando	piano	D/o	439 Hz	70.3 rpm
2871 b	Caruso, Enrico	piano	F	439 Hz	67.9 rpm
2872 b	Caruso, Enrico	piano	C	439 Hz	69.2 rpm
2873 b	Caruso, Enrico	piano	B♭	439 Hz	69.6 rpm
2874 b	Caruso, Enrico	piano	E♭	439 Hz	68.8 rpm
2875 b	Caruso, Enrico	piano	Em	439 Hz	69.3 rpm
2876 b	Caruso, Enrico	piano	Fm	439 Hz	69.0 rpm
2877 b	Caruso, Enrico	piano	E♭	439 Hz	68.9 rpm
2879 b	Caruso, Enrico	piano	A♭	439 Hz	68.4 rpm
2880 b	Caruso, Enrico	piano	F	439 Hz	69.0 rpm
2881 b	De Luca, Giuseppe	piano	G♭	439 Hz	69.9 rpm
2882 b	Caruso, Enrico	piano	A♭	439 Hz	69.6 rpm
2883 b	De Luca, Giuseppe	piano	E♭	439 Hz	69.3 rpm
2884 b	De Luca, Giuseppe	piano	G♭	439 Hz	69.9 rpm
2885 b	De Luca, Giuseppe	piano	A	439 Hz	70.2 rpm
2886 b	De Luca, Giuseppe	piano	F	439 Hz	70.1 rpm
2887 b	De Luca, Giuseppe	piano	G♭	439 Hz	69.5 rpm
2888 b	De Luca, Giuseppe	piano	G♭	439 Hz	69.5 rpm
2889 b	De Luca, Giuseppe	piano	D	439 Hz	69.2 rpm
2890 b	Baldassarri, Luigi	piano	G	439 Hz	67.4 rpm
2897 b	De Lucia, Fernando	piano	Em/-1	439 Hz	67.5 rpm
2898 b	De Lucia, Fernando	piano	E♭	439 Hz	67.7 rpm
2899 b	De Lucia, Fernando	piano	C/-1	439 Hz	68.1 rpm
2900 b	De Lucia, Fernando	piano	B♭	439 Hz	68.1 rpm
2905 b	De Lucia, Fernando	piano	A♭/-1	439 Hz	68.7 rpm
2906 b	Cantalamessa, Berardo	piano	F	439 Hz	67.9 rpm
2907 b	Cantalamessa, Berardo	piano	E	439 Hz	68.2 rpm
2909 b	Tisci-Rubini, Giuseppe	piano	F	439 Hz	67.4 rpm
2914 b	Ferrani, Cesira	piano	D	439 Hz	66.6 rpm
2915 b	Ferrani, Cesira	piano	D♭	439 Hz	66.9 rpm
2916 b	Ferrani, Cesira	piano	E♭	439 Hz	67.0 rpm
2923 b	Ceresoli, Elvira	piano	C	439 Hz	67.1 rpm
2927 b	Ferrani, Cesira	piano	Dm	439 Hz	66.1 rpm
2928 b	Ferrani, Cesira	piano	Fm	439 Hz	66.4 rpm
2930 b	Ferrani, Cesira	piano	G	439 Hz	66.3 rpm
2931 b	Ferrani, Cesira	piano	F	439 Hz	70.0 rpm
2932 b	Ceresoli, Elvira	piano	Bm	439 Hz	67.8 rpm
2933 b	De Luca, Giuseppe	piano	A	439 Hz	68.9 rpm
2935 b	De Luca, Giuseppe	piano	D♭	439 Hz	69.3 rpm

Ospedaletti, 1903 (10-inch)

3000 b	Tamagno, Francesco	piano	E	432 Hz	74.6 rpm

Ospedaletti, 1903 (10-inch)

3001 b	Tamagno, Francesco	piano	E	432 Hz	75.6 rpm
3002 b	Tamagno, Francesco	piano	G	432 Hz	76.5 rpm
3003 b	Tamagno, Francesco	piano	G	432 Hz	76.6 rpm
3004 b	Tamagno, Francesco	piano	A♭	432 Hz	76.8 rpm
3005 b	Tamagno, Francesco	piano	B♭	432 Hz	76.5 rpm
3006 b	Tamagno, Francesco	piano	B♭	432 Hz	76.3 rpm
3007 b	Tamagno, Francesco	piano	B♭	432 Hz	75.4 rpm
3008 b	Tamagno, Francesco	piano	B♭	432 Hz	75.5 rpm
3009 b	Tamagno, Francesco	piano	A♭	432 Hz	71.8 rpm
3010 b	Tamagno, Francesco	piano	B♭	432 Hz	72.1 rpm
3011 b	Tamagno, Francesco	piano	B♭	432 Hz	72.2 rpm
3012 b	Tamagno, Francesco	piano	C	432 Hz	75.1 rpm
3013 b	Tamagno, Francesco	piano	C	432 Hz	76.2 rpm
3014 b	Tamagno, Francesco	piano	B♭	432 Hz	75.4 rpm
3015 b	Tamagno, Francesco	piano	B♭	432 Hz	75.6 rpm
3016 b	Tamagno, Francesco	piano	F	432 Hz	75.5 rpm
3017 b	Tamagno, Francesco	piano	F	432 Hz	75.7 rpm
3018 b	Tamagno, Francesco	piano	E♭	432 Hz	76.0 rpm
3019 b	Tamagno, Francesco	piano	E♭	432 Hz	76.0 rpm
3020 b	Tamagno, Francesco	piano	E♭	432 Hz	75.9 rpm
3021 b	Tamagno, Francesco	piano	B	432 Hz	76.5 rpm
3022 b	Tamagno, Francesco	piano	Gm	432 Hz	76.5 rpm
3023 b	Tamagno, Giovanni	piano	F	432 Hz	76.4 rpm
3024 b	Tamagno, Francesco	piano	E	432 Hz	76.1 rpm
3025 b	Tamagno, Francesco	piano	A♭	432 Hz	76.9 rpm
3026 b	Tamagno, Francesco	piano	B	432 Hz	77.1 rpm
3027 b	Tamagno, Francesco	piano	Gm	432 Hz	77.2 rpm
3028 b	Tamagno, Francesco	piano	E♭m	432 Hz	73.0 rpm

Milano, 1903 (10-inch)

3053 b	Galvany, Maria	piano	D♭	439 Hz	64.3 rpm
3066 b	Biel, Julian	piano	Fm	439 Hz	63.6 rpm
3078 b	Biel, Julian	piano	B♭	439 Hz	71.4 rpm
3079 b	Biel, Julian	piano	B♭	439 Hz	70.3 rpm
3085 b	Theodorini, Elena	piano	Dm	439 Hz	69.6 rpm
3087 b	Theodorini, Elena	piano	E♭	439 Hz	69.1 rpm
3088 b	Theodorini, Elena	piano	E♭	439 Hz	69.0 rpm
3089 b	Theodorini, Elena	piano	E♭	439 Hz	68.7 rpm
3091 b	Theodorini, Elena	piano	D♭	439 Hz	68.4 rpm
3100 b	Biel, Julian	piano	A♭	439 Hz	62.5 rpm
3101 b	Biel, Julian	piano	Fm	439 Hz	62.2 rpm
3118 b	Zenatello, Giovanni	piano	B♭	439 Hz	56.8 rpm

Milano, 1903 (10-inch)

3119 b	Zenatello, Giovanni	piano	B♭	439 Hz	57.7 rpm
3120 b	Zenatello, Giovanni	piano	A♭	439 Hz	57.4 rpm
3139 b	Zenatello, Giovanni	piano	F	439 Hz	66.9 rpm
3140 b	Zenatello, Giovanni	piano	F	439 Hz	67.0 rpm
3141 b	Zenatello, Giovanni	piano	D	439 Hz	67.6 rpm

London, 1903 (10-inch)

3247 b	Bancroft, Lady	speech	—	—	80.0 rpm
3249 b	Bancroft, Lady	speech	—	—	80.0 rpm

Amsterdam, 1903 (10-inch)

3355 b	Schuermann, Jules	piano	D♭	435 Hz	79.4 rpm
3367 b	Lozin, Irma	piano	Dm	435 Hz	77.6 rpm

London, 1903 (10-inch)

3485 b	Leno, Dan	piano	A♭	452 Hz	79.2 rpm
3562 b	Campbell, Herbert	piano	G♭	452 Hz	80.6 rpm
3594 b	Lane-Wilson, Henry	piano	B	452 Hz	79.1 rpm
3612 b	Lloyd, Marie	piano	F	452 Hz	77.5 rpm
3614 b	Lloyd, Marie	piano	E	452 Hz	79.4 rpm
3669 b	Temple, Richard	piano	C/o	452 Hz	76.5 rpm
3672 b	Temple, Richard	piano	C/o	452 Hz	77.8 rpm
3735 b	Hudson, Eli	piano	Gm	452 Hz	83.2 rpm
3799 b	Rafferty, Pat	piano	F	452 Hz	80.8 rpm
3855 b	Lane-Wilson, Henry	piano	E/o	452 Hz	75.9 rpm
3860 b	Santley, Charles	piano	D	452 Hz	77.1 rpm
3861 b	Santley, Charles	piano	D	452 Hz	74.9 rpm
3862 b	Santley, Charles	piano	E/o	452 Hz	76.2 rpm
3898 b	Plancon, Pol	piano	D♭	452 Hz	80.6 rpm
3900 b	Plancon, Pol	piano	B♭	452 Hz	81.6 rpm
3901 b	Plancon, Pol	piano	Bm	452 Hz	81.4 rpm
3902 b	Plancon, Pol	piano	F	452 Hz	81.5 rpm
3914 b	Mozart, George	speech	—	—	80.0 rpm
3922 b	Valero, Fernando	piano	G	452 Hz	79.6 rpm
3924 b	Valero, Fernando	piano	Em/-1	452 Hz	80.8 rpm
3925 b	Valero, Fernando	piano	G/o	452 Hz	80.5 rpm
3926 b	Valero, Fernando	piano	F	452 Hz	80.4 rpm
4004 b	Randall, Harry	piano	E	452 Hz	79.7 rpm
4043 b	Victoria, Vesta	piano	E♭	452 Hz	80.2 rpm
4051 b	Carney, Kate	piano	G	452 Hz	80.7 rpm
4052 b	Carney, Kate	piano	E♭	452 Hz	81.1 rpm
4055 b	Costello, Tom	piano	G♭	452 Hz	82.1 rpm

London, 1903 (10-inch)

4104 b	Bispham, David	piano	C	452 Hz	80.2 rpm
4196 b	Anderson, Harry	piano	F	452 Hz	74.8 rpm
4232 b	Hill, Hamilton	orch	E♭	452 Hz	76.4 rpm
4601 b	Kubelik, Jan	piano	D	452 Hz	74.2 rpm
4602 b	Kubelik, Jan	piano	E	452 Hz	74.5 rpm
4605 b	Kubelik, Jan	violin	G	452 Hz	75.3 rpm
4649 b	Stratton, Eugene	orch	G♭	452 Hz	76.8 rpm
4693 b	Lauder, Harry	piano	F	452 Hz	76.6 rpm
4712 b	Eibenschütz, Ilona	piano	Gm	452 Hz	77.1 rpm
4717 b	Harrison, John	piano	B♭	452 Hz	77.0 rpm
4719½ b	Lauder, Harry	piano	G	452 Hz	76.4 rpm
4755 b	Eibenschütz, Ilona	piano	E,A♭	452 Hz	77.7 rpm
4760 b	Albani, Emma	piano	G	452 Hz	77.9 rpm
4763 b	Albani, Emma	piano	G♭	452 Hz	77.6 rpm

London, 1904 (10-inch)

4817 b	O'Gorman, Joe	piano	F	452 Hz	73.8 rpm
4830 b	Hurley, Alec	piano	C	452 Hz	73.6 rpm
4860 b	Martino, Nina	piano	C	452 Hz	73.8 rpm
4863 b	Hampton, Pete	piano	Fm	452 Hz	74.0 rpm
4871 b	Shepard, Burt	piano	A	452 Hz	73.8 rpm
4888 b	Albani, Emma	piano	B	452 Hz	74.0 rpm
4891 b	Plunket Greene, Harry	piano	B	452 Hz	73.7 rpm
4892 b	Plunket Greene, Harry	piano	C	452 Hz	73.6 rpm
4895 b	Plunket Greene, Harry	piano	A♭	452 Hz	73.7 rpm
4962 b	Parkina, Elizabeth	piano	B♭	452 Hz	72.6 rpm
4967 b	Black, Andrew	piano	C	452 Hz	73.5 rpm
4969 b	Black, Andrew	piano	A♭	452 Hz	73.3 rpm
4970 b	Black, Andrew	piano	F	452 Hz	73.0 rpm
5009 b	Lloyd, Edward	piano	A♭	452 Hz	74.2 rpm
5010 b	Lloyd, Edward	piano	E	452 Hz	74.7 rpm
5011 b	Lloyd, Edward	piano	D♭	452 Hz	74.6 rpm
5012 b	Lloyd, Edward	piano	C	452 Hz	74.5 rpm
5013 b	Lloyd, Edward	piano	D♭	452 Hz	74.7 rpm
5014 b	Lloyd, Edward	piano	C	452 Hz	74.2 rpm
5056 b	Parkina, Elizabeth	piano	E	452 Hz	75.9 rpm
5139 b	Lloyd, Edward	piano	A♭	452 Hz	76.9 rpm
5140 b	Lloyd, Edward	piano	Cm	452 Hz	76.8 rpm
5142 b	Lloyd, Edward	piano	D♭	452 Hz	76.8 rpm
5163 b	Lloyd, Edward	piano	G♭	452 Hz	77.0 rpm
5164 b	Lloyd, Edward	piano	E♭	452 Hz	76.9 rpm
5167 b	Lloyd, Edward	piano	C	452 Hz	76.8 rpm

London, 1904 (10-inch)

5168 b	Lloyd, Edward	piano	A♭	452 Hz	76.7 rpm
5227 b	Jay, Isabel	piano	E♭	452 Hz	75.6 rpm
5304 b	Scott, Malcolm	speech	—	—	77.0 rpm
5325 b	Hampton, Pete	orch	D♭	452 Hz	77.2 rpm
5331 b	Forde, Florrie	orch	G♭	452 Hz	76.8 rpm
5395 b	Harrison, John	piano	E	452 Hz	78.2 rpm
5397 b	Dulong, Henry von	piano	D	452 Hz	77.7 rpm
5402 b	Abramowicz, Leon	piano	Dm	452 Hz	77.7 rpm
5405 b	Abramowicz, Leon	piano	F	452 Hz	77.9 rpm
5530 b	Black, Andrew	piano	A	452 Hz	75.2 rpm
5532 b	Black, Andrew	piano	G	452 Hz	75.2 rpm
5533 b	Black, Andrew	piano	E♭	452 Hz	75.2 rpm
5534 b	Black, Andrew	piano	G♭	452 Hz	75.3 rpm
5561 b	Dawson, Peter	piano	F	452 Hz	75.1 rpm
5607 b	Kirkby, Stanley	piano	B	452 Hz	75.0 rpm
5722 b	Cove, Kate	organ	A♭	452 Hz	73.6 rpm
5742 b	Dawson, Peter	piano	A♭	452 Hz	73.7 rpm
5784 b	Carney, Kate	orch	G	452 Hz	75.0 rpm
5852 b	Jay, Isabel	orch	A/+1	452 Hz	75.5 rpm
5863 b	Black, Andrew	piano	G	452 Hz	74.2 rpm
5868 b	Black, Andrew	piano	G	452 Hz	74.4 rpm
5870 b	Black, Andrew	piano	B♭	452 Hz	74.2 rpm
5924 b	McCormack, John	piano	E	452 Hz	74.7 rpm
5925 b	McCormack, John	piano	B♭	452 Hz	74.7 rpm
5927 b	McCormack, John	piano	G	452 Hz	74.7 rpm
5928 b	McCormack, John	piano	E♭	452 Hz	74.5 rpm
5930 b	McCormack, John	piano	G	452 Hz	74.2 rpm
5931 b	McCormack, John	piano	F	452 Hz	74.2 rpm
5932 b	McCormack, John	piano	F	452 Hz	74.4 rpm
5933 b	McCormack, John	piano	G	452 Hz	74.4 rpm
5934 b	McCormack, John	piano	D	452 Hz	74.5 rpm
5938 b	McCormack, John	piano	B♭	452 Hz	75.5 rpm
5944 b	McCormack, John	piano	F	452 Hz	74.4 rpm
5945 b	McCormack, John	piano	F	452 Hz	74.3 rpm
5947 b	McCormack, John	piano	F	452 Hz	73.9 rpm
5983 b	Church Choir	organ	G	452 Hz	75.0 rpm
5987 b	Church Choir	organ	A♭	452 Hz	74.9 rpm
6003 b	Forde, Florrie	orch	A♭	452 Hz	75.2 rpm
6007 b	Forde, Florrie	orch	A♭	452 Hz	75.2 rpm
6142 b	Kirkby, Stanley	piano	A	452 Hz	78.5 rpm
6150 b	Melba, Nellie	piano	E♭	435 Hz	78.5 rpm
6151 b	Melba, Nellie	piano	G♭	435 Hz	78.5 rpm

Wien, 1902 (10-inch)

1104 x	Devrient, Max	speech	—	—	78.0 rpm
1105 x	Devrient, Max	speech	—	—	78.0 rpm
1106 x	Devrient, Max	speech	—	—	78.0 rpm
1113 x	Walker, Edyth	piano	E♭	452 Hz	79.1 rpm
1114½ x	Walker, Edyth	piano	E♭	452 Hz	79.7 rpm
1117 x	Witt, Lotte	speech	—	—	79.0 rpm

Budapest, 1902 (10-inch)

1129 x	Eöry-Szabo, Jozsef	piano	F,Fm	452 Hz	73.8 rpm
1141 x	Honved Gyalog Ezred 1	band	E♭	461 Hz	74.5 rpm
1149 x	Takats, Mihaly	piano	Am	452 Hz	76.0 rpm
1152 x	Takats, Mihaly	piano	Dm	452 Hz	76.9 rpm
1161 x	Alberti, Werner	piano	Em/o	452 Hz	76.1 rpm
1162 x	Alberti, Werner	piano	C	452 Hz	76.6 rpm
1163 x	Magyar Kiralyi Opera	voice	E♭	—	76.5 rpm
1170 x	Vasquez, Italia	piano	A♭	452 Hz	76.7 rpm
1173 x	Vasquez, Italia	piano	A♭/o	452 Hz	76.8 rpm
1174 x	Vasquez, Italia	piano	B/o	452 Hz	76.1 rpm
1177 x	Honved Gyalog Ezred 1	band	Gm	461 Hz	76.2 rpm
1180 x	Honved Gyalog Ezred 1	band	F	461 Hz	73.7 rpm

Berlin, 1902 (10-inch)

1222½ x	Leonhardt, Robert	piano	D	443 Hz	75.2 rpm
1231 x	Runge, Gertrud	piano	E♭	443 Hz	75.8 rpm
1232 x	Runge, Gertrud	piano	A♭	443 Hz	76.3 rpm
1270 x	Leonhardt, Robert	piano	G	443 Hz	80.6 rpm
1271 x	Leonhardt, Robert	piano	Cm/o	443 Hz	77.8 rpm
1286 x	Leonhardt, Robert	orch	C	443 Hz	83.8 rpm
1287 x	Leonhardt, Robert	orch	B/o	443 Hz	81.6 rpm
1307 x	Leonhardt, Robert	piano	F/o	443 Hz	78.6 rpm
1370 x	Leonhardt, Robert	piano	B♭	443 Hz	77.1 rpm
1372 x	Leonhardt, Robert	piano	E	443 Hz	77.1 rpm
1382½ x	Merker, Richard	speech	—	—	77.0 rpm
1396 x	Knüpfer-Egli, Marie	piano	A♭/o	443 Hz	77.5 rpm
1398 x	Knüpfer-Egli, Marie	piano	D♭/-2	443 Hz	79.1 rpm
1401 x	Josephi, Josef	piano	F	443 Hz	73.7 rpm
1403 x	Josephi, Josef	piano	G	443 Hz	74.9 rpm
1406 x	Josephi, Josef	piano	D/o	443 Hz	74.1 rpm
1412 x	Alma, Marian	piano	A♭	443 Hz	79.5 rpm
1414 x	Alma, Marian	piano	C	443 Hz	79.1 rpm
1435 x	Weiss, Pawel	piano	F	443 Hz	79.4 rpm
1450 x	Weiss, Pawel	piano	G	443 Hz	79.6 rpm

Berlin, 1903 (10-inch)

1486 x	Augustin, Poldi	piano	D♭	443 Hz	80.4 rpm
1495 x	Reutter, Otto	piano	E♭	443 Hz	79.7 rpm
1507 x	Lieban, Julius	piano	A♭	443 Hz	77.5 rpm
1509 x	Lieban, Julius	piano	Bm	443 Hz	76.0 rpm
1514 x	Nebe, Carl	piano	B♭	443 Hz	74.0 rpm
1517 x	Knüpfer, Paul	piano	F/o	443 Hz	80.0 rpm
1518 x	Knüpfer, Paul	piano	C/o	443 Hz	80.6 rpm
1519 x	Knüpfer, Paul	piano	F/o	443 Hz	80.8 rpm
1524 x	Nebe, Carl	piano	C	443 Hz	79.0 rpm
1529 x	Dessau, Bernhard	piano	Dm/o	443 Hz	73.5 rpm
1532 x	Herzog, Emilie	piano	E/o	443 Hz	74.2 rpm
1535 x	Herzog, Emilie	piano	Fm/o	443 Hz	74.6 rpm
1545 x	Steidl, Robert	piano	C	443 Hz	77.3 rpm
1548½ x	Schönwald, Gustav	piano	A	443 Hz	75.1 rpm
1571½ x	Nebe, Carl	orch	E♭	443 Hz	74.7 rpm
1578 x	Steidl, Robert	speech	—	—	76.0 rpm
1587 x	Dessau, Bernhard	piano	D/o	443 Hz	73.0 rpm
1589 x	Böhme, Albert	piano	C	443 Hz	72.5 rpm
1592 x	Jörn, Karl	piano	Fm/o	443 Hz	73.8 rpm
1599 x	Nebe, Carl	piano	E♭	443 Hz	75.6 rpm
1601 x	Nebe, Carl	piano	G	443 Hz	76.2 rpm
1611 x	Dirkens, Aennie	piano	E♭	443 Hz	74.1 rpm
1614 x	Dirkens, Aennie	piano	A♭	443 Hz	74.1 rpm
1645 x	Josephi, Josef	piano	D♭	443 Hz	71.0 rpm
1652 x	Steidl, Robert	piano	C	443 Hz	74.7 rpm
1666½ x	Jörn, Karl	piano	F	443 Hz	75.2 rpm
1675 x	Josephi, Josef	piano	D♭	443 Hz	77.5 rpm
1676 x	Josephi, Josef	piano	D♭	443 Hz	78.5 rpm
1677 x	Josephi, Josef	piano	E♭/o	443 Hz	78.3 rpm
1702 x	Nebe, Carl	piano	D	443 Hz	79.2 rpm
1703 x	Dietrich, Marie	piano	Fm	443 Hz	80.6 rpm

Petersburg, 1903 (10-inch)

1712 x	Alchevskij, Ivan	piano	G/o	439 Hz	71.4 rpm

Berlin, 1903 (10-inch)

1714 x	Meistersänger-4	voice	C	—	80.0 rpm
1723 x	Lieban, Siegmund	piano	E♭	443 Hz	79.2 rpm
1727 x	Meistersänger-4	voice	C	—	78.3 rpm
1733 x	Meistersänger-4	voice	A♭	—	78.4 rpm
1745 x	Lieban, Siegmund	piano	F	443 Hz	73.9 rpm
1753 x	Jörn, Karl	piano	D♭	443 Hz	75.1 rpm

Berlin, 1903 (10-inch)

1754 x	Dietrich, Marie	piano	B♭	443 Hz	75.9 rpm
1755 x	Dietrich, Marie	piano	G	443 Hz	75.9 rpm
1758½ x	Dietrich, Marie	piano	D♭	443 Hz	69.2 rpm
1761 x	Dietrich, Marie	piano	A♭	443 Hz	68.4 rpm
1763 x	Lieban, Siegmund	piano	E	443 Hz	71.1 rpm
1770 x	Leonhardt, Robert	piano	E♭	443 Hz	74.6 rpm
1781 x	Lincke, Paul	band	E♭	443 Hz	73.7 rpm
1843½ x	Semfke, Johannes	piano	G	443 Hz	78.3 rpm
1853 x	Nebe, Carl	orch	D♭/-1	443 Hz	73.4 rpm
1854 x	Nebe, Carl	orch	E♭/-2	443 Hz	73.1 rpm
1855 x	Nebe, Carl	orch	Dm	443 Hz	73.7 rpm
1856 x	Nebe, Carl	orch	F/0	443 Hz	73.7 rpm
1876 x	Semfke, Johannes	piano	A♭	443 Hz	77.0 rpm

Prag, 1903 (10-inch)

1881 x	Haydter, Alexander	piano	E♭	435 Hz	76.1 rpm
1883 x	Haydter, Alexander	piano	F	435 Hz	76.5 rpm
1884 x	Haydter, Alexander	piano	F	435 Hz	76.8 rpm
1886 x	Hunold, Erich	piano	Fm	435 Hz	77.5 rpm
1887 x	Hunold, Erich	piano	D	435 Hz	77.4 rpm
1889 x	Hunold, Erich	piano	F	435 Hz	77.3 rpm
1894 x	Aranyi, Desider	piano	B/-1	435 Hz	76.4 rpm
1898 x	Aranyi, Desider	piano	B♭	435 Hz	76.6 rpm
1900 x	Aranyi, Desider	piano	Fm	435 Hz	76.1 rpm
1902 x	Förstel, Gertrude	piano	Dm	435 Hz	76.9 rpm
1903 x	Förstel, Gertrude	piano	E	435 Hz	76.5 rpm
1905 x	Smidova, Cilka	piano	E	435 Hz	76.0 rpm
1907 x	Marak, Otakar	piano	G♭	435 Hz	75.2 rpm
1912 x	Marak, Otakar	piano	D♭	435 Hz	74.5 rpm
1914 x	Marak, Otakar	piano	Fm	435 Hz	74.7 rpm
1915 x	Haydter, Alexander	piano	E♭/-3	435 Hz	74.5 rpm
1917 x	Siems, Margarethe	piano	E♭	435 Hz	75.3 rpm
1918 x	Siems, Margarethe	piano	D♭	435 Hz	75.8 rpm
1919 x	Förstel, Gertrude	piano	F♯	435 Hz	75.1 rpm
1920 x	Zador, Desider	piano	Bm	435 Hz	76.2 rpm
1921 x	Zador, Desider	piano	C	435 Hz	76.4 rpm
1923 x	Marak, Otakar	piano	F	435 Hz	76.0 rpm
1924 x	Marak, Otakar	piano	G	435 Hz	75.8 rpm
1925 x	Marak, Otakar	piano	D	435 Hz	75.0 rpm
1926 x	Förstel, Gertrude	piano	Dm	435 Hz	74.9 rpm
1927 x	Siems, Margarethe	piano	Em	435 Hz	75.3 rpm
1928 x	Siems, Margarethe	piano	Fm	435 Hz	74.9 rpm

Prag, 1903 (10-inch)

1940 x	Aranyi, Desider	piano	C/o	435 Hz	74.3 rpm
1941 x	Hunold, Erich	piano	E♭	435 Hz	74.5 rpm
1948 x	Bobkova, Amalie	piano	G	435 Hz	74.4 rpm
1950 x	Fellwock, Ottilie	piano	Em	435 Hz	74.7 rpm
1951 x	Fellwock, Ottilie	piano	D♭	435 Hz	74.5 rpm

Wien, 1903 (10-inch)

1966 x	Merviola, Helene	piano	D	443 Hz	76.1 rpm
1969 x	Zwerenz, Mizzi	piano	F	443 Hz	76.5 rpm

Bucarest, 1904 (10-inch)

2033 x	Corfescu, Nicolae	piano	Dm	435 Hz	76.5 rpm
2036 x	Bajenaru, Ioan	piano	Em	435 Hz	75.8 rpm
2051 x	Eliade, Aurel	piano	E♭	435 Hz	76.2 rpm
2053 x	Eliade, Aurel	piano	A♭	435 Hz	75.5 rpm

Berlin, 1904 (10-inch)

2084 h	Kreisler, Fritz	piano	F	443 Hz	75.5 rpm
2085 h	Kreisler, Fritz	piano	D,Em	443 Hz	75.9 rpm
2086 h	Kreisler, Fritz	piano	E/o	443 Hz	76.3 rpm
2087 h	Kreisler, Fritz	piano	C/-2	443 Hz	78.0 rpm
2090 h	Ottemar, Karl	piano	B♭	443 Hz	75.3 rpm
2093½ h	Ottemar, Karl	orch	D♭	443 Hz	75.8 rpm
2101 h	Philipp, Robert	piano	D♭	443 Hz	78.1 rpm
2102 h	Philipp, Robert	piano	G	443 Hz	78.2 rpm
2106 h	Philipp, Robert	piano	E♭	443 Hz	75.6 rpm
2107 h	Philipp, Robert	piano	E♭	443 Hz	75.7 rpm
2110 h	Haller, Eva	piano	D	443 Hz	75.6 rpm
2146 h	Horsten, Hans	orch	D	443 Hz	75.6 rpm
2147½ h	Horsten, Hans	orch	G	443 Hz	75.3 rpm
2151 h	Sieder, Adolf	piano	G	443 Hz	76.0 rpm
2157 h	Steidl, Robert	speech	—	—	76.0 rpm
2160 h	Goetze, Marie	piano	G	443 Hz	75.5 rpm
2161 h	Goetze, Marie	piano	E♭	443 Hz	75.3 rpm
2163 h	Bender, Henry	orch	A♭/-1	443 Hz	75.3 rpm
2168 h	Berger, Rudolf	orch	F	443 Hz	75.7 rpm
2169 h	Josephi, Josef	orch	A♭	443 Hz	75.8 rpm
2172 h	Farrar, Geraldine	piano	F	443 Hz	75.8 rpm
2173 h	Farrar, Geraldine	piano	A♭	443 Hz	75.8 rpm
2174 h	Farrar, Geraldine	piano	D♭	443 Hz	75.9 rpm

Milano, 1904 (10-inch)

2181 h	Caruso, Enrico	piano	E/o	435 Hz	74.7 rpm

Roma, 1904 (10-inch)

2182 h	Moreschi, Alessandro	piano	A♭/o	443 Hz	73.7 rpm
2183 h	Moreschi, Alessandro	piano	Gm	443 Hz	73.8 rpm
2184 h	Moreschi, Alessandro	piano	F	443 Hz	73.6 rpm
2185 h	Moreschi, Alessandro	piano	E♭	443 Hz	73.5 rpm
2187 h	Moreschi, Alessandro	piano	G	443 Hz	75.1 rpm
2188 h	Giraud, Fiorello	piano	F♯m/o	443 Hz	73.0 rpm
2190 h	Giraud, Fiorello	piano	D♭/o	443 Hz	76.2 rpm
2191 h	Giraud, Fiorello	piano	D/o	443 Hz	76.2 rpm
2192 h	Giraud, Fiorello	piano	A	443 Hz	76.4 rpm
2193 h	Cantori Romani	voice	B♭	—	76.0 rpm
2195 h	Banda del Vaticano	band	B♭	443 Hz	75.7 rpm
2196 h	Banda del Vaticano	band	E♭	443 Hz	75.8 rpm
2197 h	Moreschi, Alessandro	voice	—	—	76.0 rpm
2198 h	Cantori Romani	piano	D	443 Hz	76.1 rpm
2199 h	Moreschi, Alessandro	piano	F	443 Hz	76.1 rpm
2200 h	Mililotti, Bice	piano	E♭/o	443 Hz	76.1 rpm
2201 h	Mililotti, Bice	piano	A	443 Hz	76.2 rpm
2202 h	Cantori Romani	voice	F♯	—	76.0 rpm
2219 h	Padri Agostiniani	voice	—	—	76.0 rpm
2220 h	Padri Agostiniani	voice	—	—	76.0 rpm
2221 h	Padri Agostiniani	voice	—	—	76.0 rpm
2222 h	Padri Agostiniani	voice	—	—	76.0 rpm
2223 h	Cantori Romani	voice	—	—	76.0 rpm
2224 h	Benedictini St. Anselmo	voice	—	—	76.0 rpm
2225 h	Cantori Romani	voice	G	—	76.0 rpm
2226 h	Seminario Francese	voice	—	—	76.0 rpm

Milano, 1904 (10-inch)

2235 h	Frascani, Nini	piano	F	435 Hz	75.7 rpm

Berlin, 1904 (10-inch)

2246 h	Behr, Therese	piano	C	443 Hz	76.9 rpm
2247 h	Behr, Therese	piano	Am	443 Hz	77.0 rpm
2250 h	Farrar, Geraldine	piano	G	443 Hz	76.8 rpm
2251 h	Farrar, Geraldine	piano	A♭	443 Hz	76.9 rpm
2252 h	Farrar, Geraldine	piano	G	443 Hz	77.0 rpm
2253 h	Farrar, Geraldine	piano	F	443 Hz	77.0 rpm
2261 h	Runge, Gertrud	orch	G	443 Hz	75.1 rpm
2263 h	Runge, Gertrud	orch	G	443 Hz	75.0 rpm

Berlin, 1904 (10-inch)

2268 h	Runge, Gertrud	orch	D♭	443 Hz	75.7 rpm
2270 h	Runge, Gertrud	orch	D	443 Hz	75.0 rpm
2273 h	Kaiser-Franz-Regt.	band	B♭	443 Hz	75.9 rpm
2324 h	Runge, Gertrud	piano	E♭	443 Hz	76.0 rpm
2325 h	Runge, Gertrud	piano	A	443 Hz	75.9 rpm
2326 h	Runge, Gertrud	piano	E♭	443 Hz	76.1 rpm
2327 h	Runge, Gertrud	piano	E	443 Hz	76.0 rpm
2328 h	Runge, Gertrud	piano	G	443 Hz	75.8 rpm
2329 h	Runge, Gertrud	piano	B♭	443 Hz	76.0 rpm
2360 h	Nebe, Carl	orch	E♭	443 Hz	74.8 rpm
2396 h	Nebe, Carl	orch	F	443 Hz	74.5 rpm
2397 h	Nebe, Carl	orch	C	443 Hz	74.6 rpm

Wien, 1904 (10-inch)

2401 h	Preuss, Arthur	piano	E	443 Hz	76.2 rpm
2404 h	Schmedes, Erik	piano	A♭	443 Hz	76.4 rpm
2405 h	Schmedes, Erik	piano	D♭/o	443 Hz	76.5 rpm
2406 h	Schmedes, Erik	piano	A♭	443 Hz	76.4 rpm
2409 h	Deutschmeister-Regt.	band	B♭	461 Hz	75.8 rpm
2412 h	Deutschmeister-Regt.	band	E♭	461 Hz	75.7 rpm
2421 h	Türk-Rohn, Olga	piano	A	443 Hz	76.2 rpm
2423 h	Walter, Gustav	piano	G	443 Hz	76.2 rpm
2424 h	Walter, Gustav	piano	B♭	443 Hz	76.2 rpm
2426 h	Hofbauer, Rudolph	piano	D	443 Hz	76.3 rpm
2436 h	Weidemann, Friedrich	piano	B♭	443 Hz	76.0 rpm
2437 h	Weidemann, Friedrich	piano	E	443 Hz	75.9 rpm
2438 h	Weidemann, Friedrich	piano	D♭	443 Hz	75.9 rpm
2440 h	Thimig, Hugo	speech	—	—	76.0 rpm
2443 h	Böhm, Carlo	piano	B♭	443 Hz	75.9 rpm
2444 h	Elizza, Elise	piano	D♭	443 Hz	76.1 rpm
2445 h	Schmedes, Erik	piano	D♭	443 Hz	76.0 rpm
2446 h	Elizza, Elise	piano	B♭	443 Hz	76.0 rpm
2447 h	Weidemann, Friedrich	piano	D	443 Hz	76.1 rpm
2450 h	Elizza, Elise	piano	E♭	443 Hz	76.0 rpm
2467 h	Böhm, Carlo	piano	C	443 Hz	75.7 rpm
2469 h	Hartmann, Ernst	speech	—	—	75.5 rpm
2470 h	Weidt, Lucie	piano	E	443 Hz	75.5 rpm

Calcutta, 1905 (10-inch)

2771 h	Talim Hussain	sanai	F	439 Hz	78.7 rpm
2772 h	Talim Hussain	sanai	F	439 Hz	78.6 rpm
2773 h	Talim Hussain	sanai	F	439 Hz	78.9 rpm

Hayes, 1919 (12-inch)

HO 3733 af	Elgar, Edward	orch	F,E♭	439 Hz	77.2 rpm
HO 3734 af	Elgar, Edward	orch	G,Am	439 Hz	77.0 rpm
HO 3735 af	Elgar, Edward	orch	G,Am	439 Hz	77.1 rpm
HO 3737 af	Elgar, Edward	orch	G	439 Hz	77.6 rpm
HO 3743 af	Gange, Fraser	orch	F	439 Hz	77.6 rpm
HO 3749 af	Gange, Fraser	orch	B♭	439 Hz	77.9 rpm
HO 3755 af	Holbrooke, Joseph	piano	G	435 Hz	77.8 rpm
HO 3757 af	Holbrooke, Joseph	piano	A♭	435 Hz	77.5 rpm
HO 3767 af	CPL-Gondoliers	orch	E♭	439 Hz	78.5 rpm
HO 3769 af	CPL-Gondoliers	orch	C	439 Hz	78.4 rpm
HO 3772 af	CPL-Gondoliers	orch	C,E♭	439 Hz	78.2 rpm
HO 3773 af	CPL-Gondoliers	orch	E♭,C	439 Hz	77.8 rpm
HO 3776 af	CPL-Gondoliers	orch	F,G♭	439 Hz	78.3 rpm
HO 3777 af	CPL-Gondoliers	orch	G,F	439 Hz	78.3 rpm
HO 3779 af	CPL-Gondoliers	orch	F	439 Hz	78.1 rpm
HO 3782 af	CPL-Gondoliers	orch	D	439 Hz	78.0 rpm
HO 3793 af	CPL-Gondoliers	orch	D	439 Hz	79.9 rpm
HO 3794 af	CPL-Gondoliers	orch	F	439 Hz	80.1 rpm
HO 3797 af	CPL-Gondoliers	orch	F	439 Hz	79.7 rpm
HO 3799 af	CPL-Gondoliers	orch	G,D	439 Hz	79.4 rpm
HO 3800 af	CPL-Gondoliers	orch	B♭,F	439 Hz	78.9 rpm
HO 3802 af	CPL-Gondoliers	orch	A♭	439 Hz	79.2 rpm
HO 3805 af	CPL-Gondoliers	orch	D♭,F	439 Hz	79.0 rpm
HO 3815 af	Woodman, Flora	orch	D	439 Hz	77.6 rpm
HO 3816 af	Woodman, Flora	orch	A	439 Hz	77.7 rpm
HO 3828 af	Mayfair Orchestra	orch	E♭	439 Hz	77.8 rpm
HO 3829 af	Mayfair Orchestra	orch	G	439 Hz	77.9 rpm
HO 3858 af	Ansseau, Fernand	orch	B♭/-1	439 Hz	79.5 rpm
HO 3860 af	Ansseau, Fernand	orch	D♭/0	439 Hz	79.2 rpm
HO 3862 af	Ansseau, Fernand	orch	Em/0	439 Hz	79.4 rpm
HO 3863 af	Ansseau, Fernand	orch	D	439 Hz	79.6 rpm
HO 3878 af	CPL-Gondoliers	orch	D	439 Hz	77.5 rpm
HO 3881 af	CPL-Gondoliers	orch	F	439 Hz	76.8 rpm
HO 3883 af	CPL-Gondoliers	orch	D	439 Hz	77.0 rpm
HO 3885 af	CPL-Gondoliers	orch	B♭,G	439 Hz	77.0 rpm
HO 3889 af	CPL-Gondoliers	orch	B♭/0	439 Hz	76.7 rpm
HO 3898 af	Ansseau, Fernand	orch	D/0	439 Hz	77.6 rpm
HO 3901 af	Ansseau, Fernand	orch	G	439 Hz	79.6 rpm
HO 3902 af	Ansseau, Fernand	orch	A♭	439 Hz	79.2 rpm
HO 3933 af ②	Hyde, Walter	orch	D♭	439 Hz	77.3 rpm
HO 3935 af	Hyde, Walter	orch	E♭/-2	439 Hz	78.3 rpm
HO 3937 af	Lamond, Frederic	piano	Gm/0	435 Hz	78.4 rpm

Hayes, 1919 (12-inch)

HO 4084 af	Edvina, Marie Louise	piano	A	435 Hz	79.4 rpm
HO 4087 af	Edvina, Marie Louise	orch	G	439 Hz	79.6 rpm
HO 4089 af	Edvina, Marie Louise	orch	E♭/o	439 Hz	79.2 rpm
HO 4194 af	Harrison, Beatrice	orch	Em	439 Hz	79.0 rpm
HO 4196 af	Harrison, Beatrice	orch	Em	439 Hz	79.3 rpm
HO 4197 af	Harrison, Beatrice	orch	Em	439 Hz	79.2 rpm
HO 4198 af	Harrison, Beatrice	orch	Em	439 Hz	79.0 rpm

Hayes, 1920 (12-inch)

HO 4275 af	Elgar, Edward	orch	G	439 Hz	80.4 rpm
HO 4276 II af	Elgar, Edward	orch	G	439 Hz	80.4 rpm
HO 4282 af	CPL-Yeomen	orch	E♭	439 Hz	80.6 rpm
HO 4283 II af	CPL-Yeomen	orch	G,E♭	439 Hz	80.7 rpm
HO 4284 II af	CPL-Yeomen	orch	B♭,D	439 Hz	80.6 rpm
HO 4285 II af	CPL-Yeomen	orch	E♭	439 Hz	80.7 rpm
HO 4287 af	CPL-Yeomen	orch	Fm,D♭	439 Hz	80.5 rpm
HO 4292 af	Dawson, Peter	orch	C/o	439 Hz	80.9 rpm
HO 4299 II af	CPL-Yeomen	orch	E♭	439 Hz	80.7 rpm
HO 4300 II af	CPL-Yeomen	orch	C	439 Hz	80.5 rpm
HO 4301 II af	CPL-Yeomen	orch	E♭	439 Hz	80.5 rpm
HO 4302 II af	CPL-Yeomen	orch	D	439 Hz	80.6 rpm
HO 4303 af	CPL-Yeomen	orch	B♭	439 Hz	80.4 rpm
HO 4313 af	Buckman, Rosina	orch	C	439 Hz	80.3 rpm
HO 4314 II af	Buckman, Rosina	orch	A♭	439 Hz	81.1 rpm
HO 4325 af	Sheffield Choir	organ	G	439 Hz	80.5 rpm
HO 4327 af	Sheffield Choir	organ	E♭	439 Hz	80.7 rpm
HO 4333 II af	Harrison, Beatrice	piano	D	435 Hz	79.6 rpm
HO 4342 af	Dawson, Peter	orch	D	439 Hz	79.6 rpm
HO 4343 af	Dawson, Peter	orch	G	439 Hz	79.9 rpm
HO 4344 af	Hyde, Walter	orch	C	439 Hz	81.2 rpm
HO 4345 af	Hyde, Walter	orch	A♭/o	439 Hz	80.9 rpm
HO 4346 af	Hyde, Walter	orch	F	439 Hz	81.0 rpm
HO 4348 af	Hambourg, Mark	piano	G♭	435 Hz	80.7 rpm
HO 4349 af	Hambourg, Mark	piano	E	435 Hz	80.8 rpm
HO 4354 af	De Greef, Arthur	piano	Dm	435 Hz	80.8 rpm
HO 4371 II af	Dearth, Harry	orch	B♭	439 Hz	78.2 rpm
HO 4372 af	Dearth, Harry	orch	F	439 Hz	78.5 rpm
HO 4389 af	Thornton, Edna	orch	Fm	439 Hz	78.7 rpm
HO 4391 af	Kirkby Lunn, Louise	piano	E♭	435 Hz	78.9 rpm
HO 4392 af	Dawson, Peter	orch	C/o	439 Hz	79.5 rpm
HO 4397 II af	CPL-Yeomen	orch	A♭	439 Hz	80.7 rpm
HO 4399 II af	CPL-Yeomen	orch	G	439 Hz	80.0 rpm

Hayes, 1920 (12-inch)

HO 4400 II af	CPL-Yeomen	orch	D♭,D♭	439 Hz	80.1 rpm
HO 4405 II af	Dawson, Peter	orch	E♭	439 Hz	79.5 rpm
HO 4409 II af	CPL-Yeomen	orch	G	439 Hz	79.8 rpm
HO 4410 II af	CPL-Yeomen	orch	F	439 Hz	79.8 rpm
HO 4411 af	CPL-Yeomen	orch	Cm	439 Hz	79.6 rpm
HO 4414 af	Pareto, Graziella	orch	F	439 Hz	79.3 rpm
HO 4415 II af	Pareto, Graziella	orch	D	439 Hz	79.5 rpm
HO 4416 af	Pareto, Graziella	orch	B♭	439 Hz	79.7 rpm
HO 4419 af	Dawson, Peter	orch	C	439 Hz	79.6 rpm
HO 4428 II af	Ansseau, Fernand	orch	F	439 Hz	80.3 rpm
HO 4429 af	Pareto, Graziella	orch	F/o	439 Hz	80.7 rpm
HO 4430 II af	Pareto, Graziella	orch	F	439 Hz	80.6 rpm
HO 4431 II af	Pareto, Graziella	orch	A♭/o	439 Hz	80.1 rpm
HO 4432 af	Pareto, Graziella	orch	G	439 Hz	80.2 rpm
HO 4435 II af	Ronald, Landon	orch	D♭	439 Hz	79.4 rpm
HO 4436 af	Ronald, Landon	orch	A♭	439 Hz	79.5 rpm
HO 4447 II af	Ansseau, Fernand	orch	A	439 Hz	80.5 rpm
HO 4450 af	CPL-Pirates	orch	D♭	439 Hz	79.9 rpm
HO 4451 II af	CPL-Pirates	orch	C,Gm	439 Hz	79.8 rpm
HO 4452 af	CPL-Pirates	orch	G	439 Hz	79.8 rpm
HO 4453 af	CPL-Pirates	orch	E♭	439 Hz	79.1 rpm
HO 4454 II af	CPL-Pirates	orch	D	439 Hz	78.1 rpm
HO 4455 II af	CPL-Pirates	orch	G	439 Hz	79.7 rpm
HO 4456 af	CPL-Pirates	orch	E♭	439 Hz	79.3 rpm
HO 4457 af	CPL-Pirates	orch	F	439 Hz	79.4 rpm
HO 4474 II af	CPL-Pirates	orch	C	439 Hz	81.4 rpm
HO 4476 II af	CPL-Pirates	orch	A♭	439 Hz	81.6 rpm
HO 4477 af	CPL-Pirates	orch	B	439 Hz	81.3 rpm
HO 4479 af	CPL-Pirates	orch	B	439 Hz	81.0 rpm
HO 4480 II af	Ansseau, Fernand	orch	A	439 Hz	80.8 rpm
HO 4481 af	CPL-Pirates	orch	E♭,C	439 Hz	81.3 rpm
HO 4482 af	CPL-Pirates	orch	B♭	439 Hz	81.4 rpm
HO 4484 II af	CPL-Pirates	orch	D	439 Hz	81.5 rpm
HO 4486 II af	CPL-Pirates	orch	A♭	439 Hz	81.3 rpm
HO 4488 II af	CPL-Pirates	orch	C	439 Hz	78.9 rpm
HO 4489 II af	CPL-Pirates	orch	C	439 Hz	79.0 rpm
HO 4516 II af	CPL-Yeomen	orch	D♭	439 Hz	82.6 rpm
HO 4517 II af	CPL-Pirates	orch	G/o	439 Hz	82.3 rpm
HO 4518 II af	CPL-Yeomen	orch	A	439 Hz	81.9 rpm
HO 4519 af	CPL-Pirates	orch	F,B♭	439 Hz	79.2 rpm
HO 4520 II af	CPL-Pirates	orch	B,Gm	439 Hz	78.9 rpm
HO 4521 II af	CPL-Yeomen	orch	E♭	439 Hz	80.1 rpm

Hayes, 1920 (12-inch)

HO 4522 af	CPL-Yeomen	orch	C	439 Hz	80.0 rpm
HO 4548 II af	CPL-Pirates	orch	C,F	439 Hz	76.5 rpm
HO 4549 af	CPL-Yeomen	orch	D	439 Hz	79.3 rpm
HO 4550 af	CPL-Gondoliers	orch	B♭,E♭	439 Hz	77.1 rpm
HO 4553 af	Millett, Ben	orch	Dm	439 Hz	79.2 rpm
HO 4555 af	Millett, Ben	orch	D	439 Hz	79.2 rpm
HO 4566 af	Buckman, Rosina	orch	G/o	439 Hz	81.4 rpm
HO 4567 af	Buckman, Rosina	orch	F♯/o	439 Hz	81.4 rpm
HO 4571 af	Dawson, Peter	orch	F/o	439 Hz	77.4 rpm
HO 4572 af	Dawson, Peter	orch	B♭/-2	439 Hz	76.4 rpm
HO 4607 II af	Harrison, Beatrice	orch	F	439 Hz	80.6 rpm
HO 4609 II af	Elgar, Edward	orch	Cm	439 Hz	80.4 rpm
HO 4620 af	Elgar, Edward	orch	G	439 Hz	80.3 rpm
HO 4642 af	Radford, Robert	orch	C	439 Hz	78.8 rpm
HO 4644 II af	Dawson, Peter	orch	C/o	439 Hz	79.0 rpm
HO 4656 af	CPL-Beggars Opera	orch	C,F,A	439 Hz	78.9 rpm
HO 4657 af	CPL-Beggars Opera	orch	A,F,Cm	439 Hz	78.5 rpm
HO 4658 II af	CPL-Beggars Opera	orch	F,F,F	439 Hz	79.1 rpm
HO 4659 II af	CPL-Beggars Opera	orch	G,C,A	439 Hz	78.8 rpm
HO 4660 III af	CPL-Beggars Opera	orch	A,A,Cm	439 Hz	78.9 rpm
HO 4661 af	CPL-Beggars Opera	orch	G,A,B♭	439 Hz	79.3 rpm
HO 4682 af	Hyde, Walter	orch	Em/o	439 Hz	78.5 rpm

Hayes, 1921 (12-inch)

HO 4690 af	Thornton, Edna	piano	E♭	435 Hz	78.8 rpm
HO 4708 af	CPL-Patience	orch	D	439 Hz	79.8 rpm
HO 4709 II af	CPL-Patience	orch	G	439 Hz	80.0 rpm
HO 4711 II af	CPL-Patience	orch	E♭	439 Hz	80.3 rpm
HO 4712 II af	CPL-Patience	orch	D,G	439 Hz	80.2 rpm
HO 4713 II af	CPL-Patience	orch	B♭	439 Hz	80.1 rpm
HO 4714 af	CPL-Patience	orch	E♭	439 Hz	79.3 rpm
HO 4722 af	CPL-Patience	orch	B♭	439 Hz	79.3 rpm
HO 4725 II af	CPL-Patience	orch	C	439 Hz	79.5 rpm
HO 4726 II af	CPL-Patience	orch	F/o	439 Hz	79.8 rpm

Wien, 1904 (7-inch Zono)

G 1011 a	Seidl, Betty	piano	F/o	443 Hz	69.6 rpm
G 1026 a	Breuer, Hans	piano	Fm	443 Hz	68.8 rpm
G 1027 a	Breuer, Hans	piano	C/o	443 Hz	69.5 rpm
G 1030 a	Seidl, Betty	piano	F	443 Hz	69.7 rpm

Wien, 1904 (10-inch Zono)

G 7 b	Stehmann, Gerhard	piano	E♭/o	443 Hz	69.2 rpm
G 8 b	Stehmann, Gerhard	piano	A♭/-2	443 Hz	69.3 rpm
G 22 b	Breuer, Hans	piano	B♭/o	443 Hz	69.3 rpm
G 33½ b	Waldemar, Richard	piano	A♭	443 Hz	69.5 rpm
G 45 b	Fuchs, Don	piano	D/o	443 Hz	69.5 rpm
G 46 b	Fuchs, Don	piano	Fm/o	443 Hz	69.3 rpm
G 81 b	Frauscher, Moritz	piano	G	443 Hz	69.3 rpm
G 82 b	Frauscher, Moritz	piano	E♭m/o	443 Hz	69.4 rpm

Milano, 1903 (10-inch Zono)

A 518 e	Siebanech, Lina	piano	D	439 Hz	72.2 rpm
A 552 e	Gabbi-Paini, Leonilda	piano	A♭	439 Hz	73.6 rpm
A 557 e	Gabbi-Paini, Leonilda	piano	F♯m/o	439 Hz	73.1 rpm

Wien, 1904 (10-inch Zono)

A 593 e	Schubert, Betty	piano	E♭m/o	443 Hz	78.3 rpm
A 596 e	Schubert, Betty	piano	A♭/o	443 Hz	78.0 rpm

Berlin, 1903 (7-inch Zono)

D 2 g	Semfke, Johannes	piano	F	443 Hz	78.1 rpm
D 3 g	Semfke, Johannes	piano	F	443 Hz	78.2 rpm
D 4 g	Semfke, Johannes	piano	D/-3	443 Hz	78.0 rpm
D 8 g	Kaiser-Franz-Regt.	band	B♭	443 Hz	77.7 rpm
D 11 g	Kaiser-Franz-Regt.	band	A♭	443 Hz	78.0 rpm
D 12 g	Schönwald, Gustav	speech	—	—	78.0 rpm
D 33 g	Semfke, Johannes	piano	F	443 Hz	79.0 rpm
D 34 g	Semfke, Johannes	piano	F	443 Hz	80.9 rpm
D 45 g	Kaiser-Franz-Regt.	band	E♭	443 Hz	75.8 rpm
D 58 g	Schönwald, Gustav	band	E♭	443 Hz	75.9 rpm

Berlin, 1904 (7-inch Zono)

D 66 g	Horsten, Hans	piano	C/o	443 Hz	75.8 rpm
D 67 g	Horsten, Hans	piano	G/o	443 Hz	75.9 rpm
D 68 g	Horsten, Hans	piano	E♭	443 Hz	75.9 rpm
D 73 g	Kaiser-Franz-Regt.	band	F	443 Hz	76.8 rpm
D 74 g	Horsten, Hans	orch	D	443 Hz	75.8 rpm
D 100 g	Leonhardt, Robert	piano	B	443 Hz	76.1 rpm
D 114 g	Krüger, Wilhelm	orch	F	443 Hz	74.9 rpm
D 115 g	Krüger, Wilhelm	orch	C	443 Hz	75.0 rpm

Berlin, 1903 (10-inch Zono)

D 3 h	Semfke, Johannes	piano	F	443 Hz	77.7 rpm