

ISO

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

**ISO RECOMMENDATION
R 16**

**STANDARD TUNING FREQUENCY
(STANDARD MUSICAL PITCH)**

**1st EDITION
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BRIEF HISTORY

This ISO Recommendation R 16 was prepared by Technical Committee ISO/TC 43 — Acoustics, the Secretariat of which is held by the British Standards Institution.

At the suggestion of the International Federation of the National Standardizing Associations (ISA), now superseded by the International Organization for Standardization (ISO), the British Standards Institution convened, in May 1938, a Conference to discuss the question of trying to secure an international standard musical pitch. This Conference adopted 440 c/s as an international standard of pitch.

Similar developments were also taking place in other countries, the outcome of which was that an international Conference under the auspices of the ISA was held in London in May 1939. Five countries (France, Germany, Italy, Netherlands and the United Kingdom) sent delegates and the views of other countries, as well as those of interested organizations, were placed before the Conference. The Conference endorsed the proposal that the international standard for musical pitch should be 440 c/s for A in the treble stave. Shortly after that decision was made, however, war intervened, and the report of the Conference did not reach the musical bodies and authorities in some countries, with the result that after the war some musical bodies, in ignorance of the 1939 decision, proposed that an international Conference should be convened to agree on a standard musical pitch. It was for this reason that the ISO took the matter up and a further Conference was held in London in October 1953 with the object of endorsing or, if necessary, amending the decisions reached in 1939.

The delegates at this Conference endorsed the previous proposals, and a Draft ISO Recommendation was circulated to all Member Bodies in March 1954. This was approved by the following 17 Member Bodies (out of a total of 33):

Austria	Netherlands	Switzerland
Chile	New Zealand	Union of South Africa
Denmark	Norway	United Kingdom
France	Pakistan	U.S.S.R.
Ireland	Spain	Yugoslavia
Italy	Sweden	

On the other hand, Japan approved items 1 and 2 of the Draft and Mexico approved provided that the frequency of 440 c/s was accepted by other countries of Latin culture.

No Member Bodies voted against the approval of the Draft Recommendation.

As a result of this voting the Draft Recommendation was accepted by the ISO Council at its meeting in Stockholm in June, 1955, as an ISO RECOMMENDATION (Resolution No. 3, Council 1955).

STANDARD TUNING FREQUENCY (STANDARD MUSICAL PITCH)

1. The "*standard tuning frequency*" is the frequency for the note *A* in the treble stave and shall be 440 Hz *.
2. This frequency shall be observed as closely as possible when tuning musical instruments.
3. Tuning and re-tuning shall be effected with the aid of instruments producing the standard tuning frequency within an accuracy of ± 0.5 Hz or enabling the frequency of musical sounds to be measured to the same relative accuracy.
4. Musical instruments shall be so constructed that, under the temperature and other working conditions specified by the manufacturer, they are capable of being tuned in accordance with the standard frequency of 440 Hz. (To this end instrument manufacturers may find it desirable to use tuning devices having an accuracy equal to or better than ± 0.25 Hz.)

• 1 Hz (hertz) = 1 c/s (cycle per second).