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1972 a 4

UNITED STATES TARIFF COMMISSION

RECORD CHANGERS, PHONOGRAPHS, RADIO-PHONOGRAPH  
COMBINATIONS, AND TAPE RECORDERS, PLAYERS, AND DECKS:  
V-M CORP., BENTON HARBOR, MICH.

Report to the President  
on Investigation No. TEA-F-40  
Under Section 301(c)(2) of the Trade Expansion Act of 1962



TC Publication 499  
Washington, D. C.  
July 1972

UNITED STATES TARIFF COMMISSION

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Address all communications to  
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Washington, D. C. 20436

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REPORT TO THE PRESIDENT

U.S. Tariff Commission,  
July 17, 1972.

To the President:

In accordance with section 301(f)(1) of the Trade Expansion Act of 1962 (TEA) (76 Stat. 885), the U.S. Tariff Commission herein reports the results of an investigation made, under section 301(c)(1) of that act, in response to a petition filed by a firm.

On May 18, 1972, V-M Corp., Benton Harbor, Mich., filed a petition for a determination of its eligibility to apply for adjustment assistance. On May 30, 1972, the Commission instituted an investigation (TEA-F-40) to determine whether, as a result in major part of concessions granted under trade agreements, articles like or directly competitive with record changers, automatic turntables, phonographs, and record players (TSUS item 685.32); solid-state radio receivers (TSUS item 685.23); radio receivers other than solid-state (TSUS item 685.25); loudspeakers and audio-frequency electric amplifiers (TSUS item 684.70); radio-phonographs (TSUS item 685.30); and tape recorders (TSUS item 685.40) of the type produced by the aforementioned firm are being imported into the United States in such increased quantities as to cause, or threaten to cause, serious injury to such firm.

Public notice of this investigation was given in the Federal Register of June 3, 1972 (37 F.R. 11217). A public hearing was requested and notice thereof was given in the Federal Register of June 21, 1972 (37 F.R. 12260). The hearing was held on June 27, 1972; all interested parties were afforded the opportunity to be present, to produce evidence, and to be heard.

In the course of its investigation, the Commission obtained information in the field, from data provided by domestic producers and industrial consumers of the products under investigation, and from its files.

#### Finding of the Commission

On the basis of its investigation, the Commission finds unanimously 1/ that articles like or directly competitive with record changers produced by V-M Corp., Benton Harbor, Mich., are, as a result in major part of concessions granted under trade agreements, being imported into the United States in such increased quantities as to cause serious injury to such firm.

Because record changers are by far the predominant product produced by the firm, the Commission finds it is unnecessary to make determinations as to the other products included in the investigation.

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1/ Commissioner Leonard did not participate in the determination.



## Views of the Commission

This investigation relates to a petition for adjustment assistance under section 301 of the Trade Expansion Act of 1962 filed by V-M Corp., Benton Harbor, Mich. Since 1944 the firm's most important product line has been record changers. They have been the mainstay of the firm's operations, and over the years, V-M Corp. has established itself as one of the leaders in this product. V-M Corp. also manufactures other products, including phonographs, record players, radio receivers, loudspeakers, audio frequency amplifiers, radio phonographs, and tape recorders. However, record changers have been by far the firm's predominant product. Therefore, the Commission has limited its finding and views to a consideration of the impact of the relevant imports on the firm's production of record changers.

Section 301 of the Trade Expansion Act provides that, in order for the Tariff Commission to make an affirmative determination in a case with respect to a firm, the following four conditions must be met:

- (1) Imports of an article like or directly competitive with an article produced by the firm must be increasing;
- (2) The increased imports must be a result in major part of concessions granted under trade agreements;
- (3) The firm must be seriously injured, or threatened with serious injury; and
- (4) The increased imports resulting in major part from trade-agreement concessions must be the major factor in causing or threatening to cause the serious injury to the firm.

In our judgment, each of the four conditions outlined above has been met with respect to record changers. Therefore, we have made an affirmative determination.

Increased imports

Annual imports of record changers have increased steadily (except in 1967) from 2.0 million units in 1964 (the first full year after the Dillon Round reductions) to 5.0 million units in 1971. The value of imports increased from \$18.5 million in 1964 to \$53.9 million in 1971. The share of record changers supplied to the U.S. market by imports increased each year (except 1965 and 1967), rising from 45 percent in 1964 to about 89 percent in 1971, in terms of quantity. Since 1969 the growth in imports has occurred, moreover, concomitantly with a decline in the quantity of U.S. consumption.

In major part

The second requirement of the Act is that the increased imports must have resulted in major part from trade-agreement concessions. Record changers were made in the United States prior to World War II. The rate of duty applicable to record changers has been reduced from 35 percent ad valorem in 1930 to 5.5 percent in 1972; since June 30, 1962, the rate has been reduced 8.25 percentage points (from 13.75 percent ad valorem to 5.5 percent). All of the reductions in the duty resulted from trade-agreement concessions. Each of the two most recent trade-agreement concessions have been followed by a substantial increase in imports of record changers.

Although definitive information on imports of record changers is not available for the years prior to 1963, it is believed that imports began sometime after World War II--probably in the early 1950's following the significant duty reductions in 1948 and 1951. Information available to the Commission indicates that imports significantly increased following the duty reductions of 1962 and 1963. During 1968-71, while the duty on record changers was being reduced by almost 50 percent, imports increased 60 percent in volume from the level they attained during the pre-Kennedy-Round period (1964-67). As this record would show, statistical measurements indicate a high degree of correlation between duty reductions and increased imports.

The duty savings realized as a result of trade-agreement concessions--particularly those pursuant to the Dillon and Kennedy Rounds--gave the importers of record changers a decisive advantage in pricing over most domestically produced record changers manufactured for sale.

\* \* \*

Considering a large number of price comparisons, the Commission found that in \* \* \* percent of the comparisons the prices of the foreign-produced articles were lower than those of the domestically produced articles in 1971. However, if the June 30, 1962, rate of duty had applied, the prices of the foreign-produced articles would have been lower than the prices of the domestically produced articles in only \* \* \* percent of the comparisons.

It is our view, therefore, that the increase in imports of record changers has been the result in major part of concessions granted under trade agreements.

#### Serious injury

The third requirement of the statute is that the Commission must find that the firm has been seriously injured.

Beginning with fiscal year 1967, V-M Corp.'s history reveals a company experiencing declining sales, \* \* \* losses, idling of capacity, and unemployment. Aggregate net sales by the firm declined from \* \* \* million in 1966 to \* \* \* million in 1971. \* \* \*.

On record changers during the same period, the firm experienced a \* \* \* decline in sales, \* \* \* net losses \* \* \*, and a drop in the utilization of productive capacity \* \* \*.

These facts clearly constitute serious injury \* \* \*.

#### Major factor

The final requirement of the statute is that concession-generated increased imports must have been the major factor in causing the serious injury to the firm involved. In the instant case, a direct relationship exists.

Traditionally, the U.S. market for record changers--the major product line of V-M Corp.--has been highly price competitive. According to a V-M Corp. official, differences in prices as small as 15 cents per record changer have been decisive as to which firm consummated the sale.

The V-M Corp., in addition to its successful efforts in recent years to keep its unit manufacturing costs from rising significantly, began to reduce its prices on record changers \* \* \*. This reduction in prices was in direct response to the lower prices and rising volume of imported record changers, and was an attempt by the firm to maintain its volume of sales. The reduced prices, however, resulted in unprofitable operations \* \* \* imports continued to rise significantly (aided in major part by the reductions in the duty), and V-M Corp.'s sales continued to decline, causing the serious overall impairment of the firm's financial position.

We find that such evidence overwhelmingly supports our conclusion that concession-generated increased imports are the major factor in causing serious injury to V-M Corp.

#### Conclusion

For the foregoing reasons, we find that, as a result in major part of concessions granted under trade agreements, an article like or directly competitive with an article produced by the V-M Corp. is being imported into the United States in such increased quantities as to cause serious injury to such firm.



INFORMATION OBTAINED IN THE INVESTIGATION

Description of Articles Under Investigation

The principal articles produced in the V-M Corp.'s plants in Benton Harbor, Mich., have been record changers (automatic turntables) and phonographs and combinations. Other articles produced in these facilities--tape decks, tape recorders, tape players (reproducers), radio receivers, audio-frequency electric amplifiers, and loudspeakers--\* \* \*.

A record changer is a subassembly of a phonograph or a combination instrument containing a phonograph. The record changer consists of a turntable, motor, gears, a tone arm, switching mechanisms, and a device for changing records automatically after a record is played. A phonograph or record player consists of a record changer or turntable, and electronic circuits to amplify the electronic signal (by means of an audio-frequency electric amplifier) picked up from a record by the stylus on the tone arm to energize the loudspeaker. Loudspeakers may be contained in the phonograph or may be separate. A combination instrument, such as a radio-phonograph, radio-TV-phonograph, or radio-TV-phonograph-tape recorder, frequently utilizes the same electronic circuits to amplify the electronic signal from the stylus to energize the loudspeaker as to amplify the electronic signal from the radio, TV, or tape recorder.

A tape deck is a subassembly common to a tape recorder, tape player, or combination instrument. A tape deck moves tape past the recording or reproducing head. <sup>1/</sup> It contains a base plate, a takeup and rewind spindle (or a single spindle in the cartridge configuration), motor(s), gears, recording and/or reproducing heads, devices such as pinch rollers to guide tape past the heads, and switching mechanisms. A tape player (or reproducer) includes a tape deck, and, in addition, electronic circuits to amplify the electronic signal picked up from the magnetic tape by the reproducing head to energize the loudspeaker. A tape recorder, in addition to being a tape player, has electronic circuits to amplify the signal from a microphone to orient the magnetic tape pulled past the recording head. Loudspeakers may be contained in a tape recorder or reproducer or may be separate. Microphone(s) may be contained in a tape recorder or may be separate.

Tape players for automotive use, which are not produced by V-M Corp., are not included in the investigation owing to the difference in mechanical configuration.

A complete radio receiver is an instrument consisting of a tuner, amplifier, and speaker or speaker system, usually combined in one cabinet, that reproduces sound transmitted by a radio station. A tuner and amplifier may also be considered a radio receiver for tariff purposes. The tuner accepts the radio waves and converts them into electrical impulses which are then amplified and fed into

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<sup>1/</sup> The head of a tape recorder is analogous to the stylus of a phonograph. The recording head records on tape; the reproducing head reproduces the sound stored on the tape.



a speaker or speaker system. This investigation considers only home-type radio receivers. Such receivers may be solid state or may contain electron tubes.

A loudspeaker emanates sound when energized by an audio signal. It consists, generally, of a cone and armature. The armature receives the audio signal and commences to vibrate, causing the cone to do likewise. The vibrations, principally of the cone, set up sound waves in space to be detected by the ear. Loudspeakers may be contained in products such as radios, televisions, or phonographs, or may be supplied separately.

#### U.S. Tariff Treatment

Under the Tariff Act of 1930, radio-phonographs, phonographs, record changers, radios, loudspeakers, audio-frequency electric amplifiers, and tape recorders, players, and decks were classified in a group of electrical articles under paragraph 353 and were dutiable at 35 percent ad valorem from June 18, 1930, through December 31, 1938. Pursuant to successive trade-agreement concessions, the rates have been reduced as shown in the following table.

Certain consumer electronic products: Effective date of U.S. rates of duty, June 18, 1930-Jan. 1, 1972

(Percent ad valorem)

Effective date	Radio receivers		Loudspeakers (TSUS item 684.70)	Radio-phonograph combinations (TSUS item 685.30)
	Solid- state (TSUS item: 685.23)	Tube- type (TSUS item: 685.25)		
June 18, 1930-----		35	35	35
Jan. 1, 1939-----		25	25	25
Jan. 1, 1948-----		15	15	15
June 6, 1951-----		12.5	13.75	13.75
July 1, 1963-----	12.5	12.5	<u>1/</u> 15	13.75
Jan. 1, 1968-----	12	11	13	12
Jan. 1, 1969-----	11.5	10	12	11
Jan. 1, 1970-----	11	8.5	10	9.5
Jan. 1, 1971 <u>2/</u> --	10.4	7	9	8
Jan. 1, 1972-----	10.4	6	7.5	6.5
	Audio- frequency electric amplifiers (TSUS item: 684.70)	Phono- graphs and record changers (TSUS item: 685.32)	Tape recorders and parts <u>3/</u> (TSUS item 685.40)	Tape players and parts <u>3/</u> (TSUS item 678.50)
June 18, 1930-----	35	35	35	35
Jan. 1, 1939-----	25	25	27.5	25
Jan. 1, 1948-----	15	15	15	15
June 6, 1951-----	13.75	13.75	13.75	13.75
July 1, 1962-----	12.5	12.5	12.5	12.5
July 1, 1963-----	11.5	11.5	11.5	11.5
Aug. 31, 1963-----	<u>1/</u> 15	11.5	11.5	<u>1/</u> 10
Jan. 1, 1968-----	13	10	10	9
Jan. 1, 1969-----	12	9	9	8
Jan. 1, 1970-----	10	8	8	7
Jan. 1, 1971 <u>2/</u> --	9	6.5	6.5	6
Jan. 1, 1972-----	7.5	5.5	5.5	5

1/ This rate was a result of combining several different rates.  
2/ An additional 10-percent import duty was imposed from Aug. 16, 1971, to Dec. 19, 1971 (Presidential Proclamations 4074 and 4098).  
3/ Parts of tape recorders and tape players include tape decks which are parts of the respective items.

## U.S. Producers

The number of major U.S. firms producing record changers has declined in recent years to three--V-M Corp. \* \* \*. Large producers of phonographs incorporating record changers--there are about 19, many of which formerly made changers--purchase from V-M, \* \* \* or from foreign producers, principally three based in the United Kingdom (BSR-MacDonald, Ltd., Garrard, Ltd., and Collaro, Ltd.). Another British firm, Glenburn, Inc., has recently commenced production and is offering to sell record changers to U.S. producers of phonographs.

The number of major U.S. firms producing home-type tape decks has declined to four--V-M Corp. \* \* \*. Most U.S. firms (about 15) formerly producing tape recorders or players either purchase completed units from Japanese firms or purchase tape decks from Japan and assemble required electronic circuits in their U.S. plants.

## U.S. Consumption, Shipments, and Exports

Phonographs, radio-phonographs, and record changers

Consumption of record changers is directly related to consumption of phonographs, whether or not in combination. U.S. consumption of phonographs as such declined irregularly from 5.3 million units in 1966 to an estimated 4.1 million in 1971 (table 1). This decline is attributable in part to the increased consumption of such articles as tape recorders and tape players.

During 1966-71, shipments of domestically produced phonographs, which accounted for the great bulk of U.S. consumption, ranged between a high of 5.0 million in 1969 and an estimated low of 3.8 million in 1971. U.S. exports of phonographs have been small, accounting for less than 2.1 percent of U.S. producers' total shipments (in terms of quantity) in each of the years 1967-71.

U.S. consumption of radio-phonograph combinations rose from 2.5 million units in 1966 to 3.6 million units in 1968 before declining to an estimated 3.2 million units in 1971 (table 2). U.S. shipments rose to nearly 2 million units in 1968 before declining to an estimated 1.7 million units in 1971. The share of U.S. consumption provided by domestic producers diminished (in terms of quantity) from about 70 percent in 1966 to about 50 percent in 1971 and (in terms of value) from about 95 percent to about 85 percent. U.S. exports accounted for less than 2 percent of shipments.

Assuming each phonograph contains only one record changer, the total new U.S. supply of record changers (equated to shipments of domestically produced phonographs, radio-phonographs, and radio-TV-phonographs <sup>1/</sup>) increased irregularly from 4.6 million units in 1964 to 7.0 million units in 1969 before declining to an estimated 5.6 million in 1971 (table 3). Domestic production of record changers

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<sup>1/</sup> Equation of record changers to shipments results in an overstatement in consumption since some phonographs and combinations use turntables rather than record changers. Such overstatement is more than offset by the number of record changers incorporated in combination devices other than radio-phonographs and radio-TV-phonographs.

peaked in 1967 at more than 4 million units, then declined to an estimated 0.6 million in 1971. Domestic production accounted for about one-half of new supply from 1964 to 1968, but that share decreased rapidly to an estimated one-tenth in 1971.

#### Tape recorders, players, and decks

New supply of home-type tape recorders increased during 1966-71 from 3.7 million to 7.4 million (table 4). The value of new supply increased during the same years from \$113 million to \$196 million. New supply of tape players (excluding automobile tape players) and of combinations which include tape players is approximately equal to U.S. imports. Such new supply increased from 1.3 million units, valued at \$26.9 million, in 1968 to 5.2 million units, valued at \$145.3 million, in 1971. U.S. producers' shipments of tape recorders and players, which have never been large, declined in quantity by over 50 percent, from 868,000 recorders in 1966 to an estimated 350,000 in 1971 (U.S. production of tape players of the type that is being imported is negligible). U.S. exports of the tape recorders and players considered here have been negligible.

Consumption of tape decks is not separately reported; however, like tape recorders and players, the great bulk of consumption consists of units imported from Japan. In 1971 Japan exported 2.2 million tape decks, valued at about \$64 million (or about \$28 per deck), to the United States. U.S. exports of tape decks of the type considered here have been negligible.

Consumption of home-type radio receivers, such as those made by V-M Corp., increased in quantity from 32.7 million units in 1967 to approximately 34.8 million units in 1971 and in value from \$311 million to an estimated \$378 million (table 5). Domestic shipments declined in quantity from 9.4 million units in 1967 to an estimated 4.0 million units in 1971 and in value from \$151 million to an estimated \$74 million during the same period.

Consumption of audio-frequency electric amplifiers increased from \$19.6 million in 1967 to an estimated \$24.5 million in 1971 (table 6). The value of domestic shipments declined from \$21.6 million to an estimated \$17.7 million during the same period.

Consumption of loudspeakers rose from \$99.7 million in 1967 to an estimated \$125.1 million in 1971 (table 7). Domestic shipments increased from \$94.5 million in 1967 to \$113.0 million in 1969 before declining to about \$100.0 million in 1971.

#### U.S. Imports

##### Phonographs, radio-phonographs, and record changers

U.S. imports of phonographs declined, irregularly from 695,000 units in 1966 to 395,000 in 1971. The annual value of such imports varied between \$7.7 and \$8.9 million, and the unit value increased from about \$12 in 1966 to \$21 in 1971. Imports have accounted for about 10 percent of domestic consumption since 1967.

Imports under TSUS item 807.00 1/ consisted mostly of units containing a U.S.-produced pickup cartridge and were small in the context of total value of imports (table 8).

U.S. imports of radio-phonograph combinations rose from 828,000 units in 1966 to 1,658,000 in 1969 before declining to 1,531,000 in 1971; however, the value of such imports rose rapidly from \$16.8 million in 1966 to \$53.6 million in 1971. The average unit value of imports has increased from \$18 in 1967 to \$35 in 1971.

U.S. imports of record changers increased from 2.0 million units in 1964 to 5.0 million units in 1971, and the annual value increased from \$18.5 to \$53.9 million in the same period (table 9). Imports accounted for about one-half of new U.S. supply in terms of quantity during 1964-67 and that share increased to nine-tenths in 1971.

Imports under item 807.00 consisted mostly of record changers incorporating U.S.-made cartridges. The total value of 807.00 imports declined from 55.4 percent of the total value of record changers in 1967 to 32.4 percent in 1970. The share of the total value of 807.00 imports represented by U.S. goods returned declined from 19.4 percent to 16.8 percent during the same period.

#### Tape recorders and players

Imports of tape recorders rose from 2.8 million units in 1966 to 7.0 million units in 1971. In 1971, imports accounted for 95 percent

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1/ TSUS item 807.00 provides a duty exemption for U.S.-fabricated components returned to the United States after foreign assembly. (See Tariff Schedules of the United States Annotated (1972).)

of new supply in terms of quantity and 81 percent in terms of value. Imports of tape players increased from 1.3 million units in 1968 to 5.2 million units in 1971. In each of the 4 years, imports accounted for nearly all of new U.S. supply. Imports under item 807.00 have been negligible.

#### Home-type radio receivers

Imports increased from 23.6 million units in 1967 to 34.7 million in 1969, but declined thereafter to 31.0 million in 1971, 31 percent more than in 1967. The value of imports rose during 1967-69 from \$164 million to \$306 million and remained at that level through 1971, reflecting higher unit prices (table 10). By 1971, imports had increased to an estimated 89 percent of U.S. consumption in terms of quantity and 81 percent in terms of value, the result of increased imports combined with greatly diminished U.S. shipments.

A small but increasing share of U.S. imports of radio receivers enter the United States under the provisions of tariff item 807.00. The value of the U.S. components contained in imported radio receivers increased by 340 percent during 1967-70; these duty-free components, however, represented only 4 percent of the total value of all home-type radio receiver imports in 1970.

#### Audio-frequency electric amplifiers

U.S. imports of audio-frequency electric amplifiers increased from \$3.6 million in 1967 to \$16.7 million in 1971 (table 11). Their share of apparent consumption increased from 18.3 percent to



approximately 68.0 percent during the period. Imports under item 807.00 were generally small.

Loudspeakers

U.S. imports of loudspeakers increased from \$10.6 million in 1967 to \$40.3 million in 1971. The share of apparent consumption represented by such imports increased from 10.6 percent in 1967 to an estimated 32.2 percent in 1971. Imports under item 807.00 were generally small.

Foreign Producers of Record Changers

The three major foreign producers of record changers imported into the United States are BSR-MacDonald, Ltd., Garrard, Ltd., and Collaro, Ltd. \* \* \*.

\* \* \* \* \*

The total quantity of record changers imported into the United States from the United Kingdom in 1971, as reported in official Government statistics, was 4,581,985. \* \* \*

#### Price Comparison

Questionnaires requesting data for price comparisons were sent to \* \* \* distributors of phonographs, \* \* \* consumers (OEMS <sup>1/</sup>) of record changers, and \* \* \* consumers (OEMS) of tape decks. \* \* \*

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<sup>1/</sup> OEMS is an acronym for "original-equipment manufacturers."

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\* \* \* \* \*



Wages

Expenditures for labor at V-M Corp. in 1971 included an average wage of \* \* \* per hour for production and related workers and fringe benefits amounting to \* \* \*. \* \* \*. In the United Kingdom the average wage, not including fringe benefits for production and related workers in the consumer products industries (SIC 3651), was \$1.26 in 1970, the latest year for which such data is available. Including fringe benefits, the total wage in the United Kingdom for such workers was \$1.49. \* \* \*.

V-M Corp.

V-M Corp. is a privately held firm which has produced record changers for approximately 27 years. \* \* \*. The principal product of the firm has been record changers for OEMS. \* \* \*.

Plants and facilities

The plants and facilities are located in Benton Harbor, Mich.  
\* \* \*.

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STATISTICAL APPENDIX





Table 1.--Phonographs: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1966-71

(Quantity in thousands of units; value in thousands of dollars)

Year	Producers' shipments	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity					
1966-----	4,686	695	64	5,317	13.1
1967-----	4,478	648	61	5,065	12.8
1968-----	4,748	518	71	5,195	10.0
1969-----	4,990	405	70	5,325	7.6
1970-----	3,959	461	66	4,354	10.6
1971-----	<u>1/</u> 3,800	395	79	<u>1/</u> 4,116	<u>1/</u> 9.6
Value					
1966-----	219,657	8,243	16,981	210,919	3.9
1967-----	202,474	8,905	17,128	194,251	4.6
1968-----	222,696	7,744	20,817	209,623	3.7
1969-----	214,193	8,088	18,088	204,193	4.0
1970-----	174,062	7,770	23,162	158,670	4.9
1971-----	<u>1/</u> 170,000	8,336	22,735	<u>1/</u> 155,601	<u>1/</u> 5.4

1/ Estimated by the staff of the U.S. Tariff Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 2.--Radio-phonograph combinations: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1966-71

(Quantity in thousands of units; value in thousands of dollars)

Year	Producers' shipments	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity					
1966-----	1,702	828	17	2,513	32.9
1967-----	1,730	1,315	18	3,027	43.4
1968-----	1,982	1,611	19	3,574	45.1
1969-----	1,842	1,658	28	3,472	47.8
1970-----	1,661	1,579	20	3,220	49.0
1971-----	<u>1/</u> 1,700	1,531	27	<u>1/</u> 3,204	<u>1/</u> 47.8
Value					
1966-----	311,509	16,771	2,288	325,992	5.1
1967-----	324,185	25,731	2,606	347,310	7.4
1968-----	378,682	29,712	3,008	405,386	7.3
1969-----	326,405	36,313	3,819	358,899	10.1
1970-----	274,703	44,686	2,513	316,876	14.1
1971-----	<u>1/</u> 280,000	53,616	3,657	<u>1/</u> 329,959	<u>1/</u> 16.2

1/ Estimated by the staff of the U.S. Tariff Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 3.--Record changers: U.S. production, imports for consumption, and new supply, 1966-71

Year	Production <u>1/</u>	Imports	New supply <u>1/</u>	Ratio of imports to new supply <u>1/</u>
	<u>1,000</u> <u>units</u>	<u>1,000</u> <u>units</u>	<u>1,000</u> <u>units</u>	Percent
1964-----	2,506	2,047	4,553	45.0
1965-----	3,648	2,660	6,308	42.2
1966-----	3,351	<u>2/</u> 3,395	6,746	50.3
1967-----	4,373	<u>2/</u> 2,171	6,544	33.2
1968-----	3,693	3,302	6,995	47.2
1969-----	3,171	3,855	7,026	54.9
1970-----	1,880	3,990	5,870	68.0
1971-----	<u>3/</u> 644	4,981	<u>3/</u> 5,625	<u>3/</u> 88.6

1/ New supply of record changers is equated to domestic production of phonographs, radio-phonographs, and radio-TV-phonographs. New supply is, therefore, understated by the number of record changers supplied for consumption in radio-TV-tape player-phonographs and other combination devices and overstated by the number of phonographs, radio-phonographs, and radio-TV-phonographs containing turntables rather than changers. \* \* \*. The effect on the ratio of imports to consumption would be to lower the percentage. The trend would remain the same. The minimum percentage of imports as a share of consumption would be as follows:

\* \* \*

2/ Includes a quantity of turntables believed to be small.

3/ Estimated by the staff of the U.S. Tariff Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 4.--Audio home magnetic tape recorders and players: <sup>1/</sup> U.S. producers' shipments, imports for consumption, and apparent consumption, 1966-71

(Quantity in thousands of units; value in thousands of dollars)

Year	Producers' shipments	Imports	New supply	Ratio
				(percent) of imports to new supply
Quantity				
1966-----	868	2,807	3,675	76.4
1967-----	783	3,780	4,563	82.8
1968-----	659	4,914	5,573	88.2
1969-----	676	6,253	6,929	90.2
1970-----	381	6,580	6,961	94.5
1971-----	<u>2/</u> 350	7,018	<u>2/</u> 7,368	<u>2/</u> 95.3
Value				
1966-----	65,621	47,733	113,354	42.1
1967-----	56,719	72,583	129,302	56.1
1968-----	49,552	110,262	159,814	69.0
1969-----	55,723	142,743	198,466	71.9
1970-----	41,585	144,459	186,044	77.6
1971-----	<u>2/</u> 38,000	158,171	<u>2/</u> 196,171	<u>2/</u> 80.6

<sup>1/</sup> The data in this table, extracted from the Electronic Industries Association Yearbook, 1971, do not include the quantity and value of imported tape players and of combinations which include tape players, shown below. To obtain total imports of tape recorders and players, aggregate the data in the imports column above with those shown below on U.S. imports of tape players and combinations which include tape players, excluding those designed for use in automobiles:

Year	Quantity (1,000 units)	Value (1,000 dollars)
1968-----	1,254	26,863
1969-----	2,505	61,117
1970-----	3,655	113,612
1971-----	5,158	145,298

The quantity and the value of shipments of domestically produced tape players are small, except for those designed for automobiles, and are not separately reported in official statistics. U.S. exports are negligible.

<sup>2/</sup> Estimated by the staff of the U.S. Tariff Commission.

Source: The Electronic Industries Association and the U.S. Department of Commerce.

Note.--Data on exports are not shown here because they are not comparable with those on shipments and imports; the annual exports of products like those shipped or imported are believed to have been nil or negligible during 1966-71.

Table 5.--Home-type radio receivers: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1967-71

(Quantity in thousands of units; value in millions of dollars)

Year	Producers' shipments	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity					
1967-----	9,362	23,579	254	32,687	72.1
1968-----	7,455	28,346	385	35,416	80.0
1969-----	5,941	34,677	329	40,289	86.1
1970-----	4,341	31,150	245	35,246	88.4
1971-----	<u>1/</u> 4,000	30,988	224	<u>1/</u> 34,764	<u>1/</u> 89.1
Value					
1967-----	151	164	4	311	52.7
1968-----	127	225	5	347	64.8
1969-----	102	306	5	403	75.9
1970-----	79	305	4	380	80.3
1971-----	<u>1/</u> 74	307	3	<u>1/</u> 378	<u>1/</u> 81.2

1/ Estimated by the staff of the U.S. Tariff Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 6.--Audio-frequency electric amplifiers: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1967-71

Year	Producers' shipments	Imports	Exports	Apparent consumption	Ratio of imports to consumption
	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>Percent</u>
1967-----	21,617	3,591	5,585	19,623	18.3
1968-----	23,319	5,495	7,494	21,320	25.8
1969-----	18,354	11,429	7,381	22,402	51.0
1970-----	18,157	13,467	6,671	24,953	54.0
1971-----	<u>1/</u> 17,700	16,686	9,854	<u>1/</u> 24,532	<u>1/</u> 68.0

1/ Estimated by the staff of the U.S. Tariff Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 7.--Loudspeakers: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1967-71

Year	Producers' shipments	Imports	Exports	Apparent consumption	Ratio of imports to consumption
	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>Percent</u>
1967-----	94,472	10,557	5,281	99,748	10.6
1968-----	101,749	16,298	6,337	111,710	14.6
1969-----	113,028	26,086	9,138	129,976	20.1
1970-----	105,684	32,908	10,496	128,096	25.7
1971-----	<u>1/</u> 100,000	40,348	15,211	<u>1/</u> 125,137	<u>1/</u> 32.2

1/ Estimated by the staff of the U.S. Tariff Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 8.--Radio-phonographs, phonographs, record changers, tape recorders, tape players and combinations, radio receivers, loudspeakers, and audio-frequency electric amplifiers: 1/ Total U.S. imports, and 807.00 imports, 1967-71

(In millions of dollars)					
Item	1967	1968	1969	1970	1971
Radio-phonographs:					
Total imports-----	25.7	29.7	36.3	44.7	53.6
807.00 imports, total-----	3.1	3.6	1.8	2.9	<u>2/</u>
U.S. value-----	.2	.3	.1	.3	<u>2/</u>
Foreign value added-----	2.9	3.3	1.7	2.6	<u>2/</u>
Phonographs:					
Total imports-----	8.3	7.7	8.1	7.8	5.3
807.00 imports, total-----	.3	1.1	2.3	.3	<u>2/</u>
U.S. value-----	.1	.1	.1	<u>3/</u>	<u>2/</u>
Foreign value added-----	.2	1.0	2.2	.3	<u>2/</u>
Record changers:					
Total imports-----	22.4	34.9	42.5	42.3	53.9
807.00 imports, total-----	12.4	17.5	18.2	13.7	<u>2/</u>
U.S. value-----	2.4	3.2	3.2	2.3	<u>2/</u>
Foreign value added-----	10.0	14.3	15.0	11.4	<u>2/</u>
Tape recorders:					
Total imports-----	104.7	110.3	142.7	144.5	158.2
807.00 imports, total-----	.3	1.1	.4	.2	<u>2/</u>
U.S. value-----	.1	.1	<u>3/</u>	<u>3/</u>	<u>2/</u>
Foreign value added-----	.2	1.0	.4	.2	<u>2/</u>
Tape players and combinations:					
Total imports-----	<u>2/</u>	26.9	61.1	113.2	145.2
807.00 imports-----	<u>2/</u>	.7	1.3	1.9	<u>2/</u>
U.S. value-----	<u>2/</u>	<u>3/</u>	.1	.3	<u>2/</u>
Foreign value added-----	<u>2/</u>	.7	1.2	1.6	<u>2/</u>
Radio receivers, home-type:					
Total imports-----	163.4	225.1	305.5	305.2	306.8
807.00 imports, total-----	18.7	27.9	51.1	47.9	<u>2/</u>
U.S. value-----	3.8	4.5	8.5	13.0	<u>2/</u>
Foreign value added-----	14.9	23.4	42.6	34.9	<u>2/</u>
Loudspeakers:					
Total imports-----	10.6	16.3	26.1	32.9	40.3
807.00 imports-----	.3	.3	1.1	1.0	<u>2/</u>
U.S. value-----	.1	<u>3/</u>	.3	.3	<u>2/</u>
Foreign value added-----	.2	.3	.8	.7	<u>2/</u>
Audio-frequency electric amplifiers:					
Total imports-----	3.6	5.5	11.4	13.5	16.9
807.00 imports-----	.1	.2	3.2	1.3	<u>2/</u>
U.S. value-----	<u>3/</u>	<u>3/</u>	1.1	.3	<u>2/</u>
Foreign value added-----	<u>3/</u>	.2	2.1	1.0	<u>2/</u>

1/ Tape decks are not included in this table since no data are available on imports into the United States. However, imports of tape decks under item 807.00, like those of tape recorders and players, are believed to be negligible.

2/ Not available.      3/ Negligible.

Source: Compiled from official statistics of the U.S. Department of Commerce.



Table 9.--Record changers and tape recorders and players: U.S. imports for consumption and rates of duty, 1963-71

Year	Record changers <sup>1/</sup>			Tape recorders			Tape players and combinations		
	Quantity	Value	Rate of duty	Quantity	Value	Rate of duty	Quantity	Value	Rate of duty
	1,000 units	1,000 dollars	Percent ad valorem	1,000 units	1,000 dollars	Percent ad valorem	1,000 units	1,000 dollars	Percent ad valorem
1963 <sup>2/</sup>	1,737	15,474	11.5	3,060	41,877	11.5	3/	3/	10
1964	2,047	18,485	11.5	3,260	46,011	11.5	3/	3/	10
1965	2,660	26,693	11.5	2,847	49,689	11.5	3/	3/	10
1966	3,395	38,808	11.5	2,807	47,733	11.5	3/	3/	10
1967	2,171	22,443	11.5	3,780	72,583	11.5	3/	3/	10
1968	3,302	34,859	10	4,914	110,262	10	1,254	26,863	9
1969	3,855	42,524	9	6,253	142,743	9	2,505	61,117	8
1970	3,990	42,265	8	6,580	144,459	8	3,655	113,212	7
1971	4,981	53,876	6.5	7,081	158,171	6.5	5,158	145,298	6

<sup>1/</sup> Data on quantity and value for years prior to 1968 include some imports of turntables believed to be small.

<sup>2/</sup> The rate of duty on all articles was 12.5 percent ad valorem until July 1, 1963, when it was reduced to 11.5 percent ad valorem. The rate on tape players was further reduced to 10 percent ad valorem on Aug. 31, 1963.

Data on imports for the year are estimated on the basis of statistics for 4 months.  
<sup>3/</sup> Not available.

Source: Compiled by the staff of the U.S. Tariff Commission from official Government statistics.

Table 10.--Phonographs and radio receivers: U.S. rates of duty and imports for consumption, 1930-71

Year	Phonographs		Radio receivers		Year	Phonographs		Radio receivers	
	Rate of duty	Imports	Rate of duty	Imports		Rate of duty	Imports	Rate of duty	Imports
	Percent	1,000 dollars	Percent	1,000 dollars		Percent	1,000 dollars	Percent	1,000 dollars
	ad valorem	ad valorem	ad valorem	ad valorem		ad valorem	ad valorem	ad valorem	ad valorem
1930	30	9	35	1/	1951	15	9	12.5	3/ 5,042
1931	30	5	35	1/	1952	15	26	12.5	3/ 6,035
1932	30	4	35	1/	1953	15	96	12.5	3/ 3,208
1933	30	7	35	1/	1954	15	39	12.5	3/ 2,562
1934	30	11	35	1/	1955	15	153	12.5	3/ 3,351
1935	30	19	35	1/	1956	15	101	12.5	3/ 8,492
1936	30	26	35	1/	1957	15	187	12.5	3/ 15,394
1937	30	34	35	1/	1958	15	138	12.5	3/ 28,171
1938	30	18	35	1/	1959	15	1,813	12.5	3/ 72,798
1939	30	17	25	4	1960	15	1,321	12.5	3/ 67,663
1940	30	329	25	4	1961	15	616	12.5	81,564
1941	30	2	25	3	1962	13.5	281	12.5	88,462
1942	30	2/	25	2,459	1963	4/ 12.0	492	12.5	86,458
1943	30	2/	25	4,421	1964	11.5	2,064	12.5	92,964
1944	30	126	25	1/	1965	11.5	4,436	12.5	125,017
1945	30	106	25	35	1966	11.5	8,243	12.5	141,543
1946	30	224	25	3/ 986	1967	11.5	8,257	12.5	163,551
1947	30	160	25	3/ 295	1968	10	7,744	5/ 12 6/ 11	5/ 217,585 6/ 7,563
1948	15	4	15	3/ 658	1969	9	8,088	5/ 11.5 6/ 10	5/ 302,985 6/ 2,559
1949	15	10	15	3/ 771	1970	8	7,770	5/ 11 6/ 8.5 5/ 5	5/ 303,276 6/ 1,951
1950	15	20	15	3/ 2,897	1971	6.5	8,336	5/ 10.4 6/ 7	5/ 305,363 6/ 1,462

1/ Not available.

2/ Less than \$500.

3/ For 1946-59, data on imports of radio receivers were combined with data on imports of radio tubes and other radio apparatus and parts. Imports in 1960, of such articles (other than radio receivers) were valued at about \$25 million; thus, an import figure for 1960 comparable with that for 1959 above would be 92,656 thousand dollars, representing a marked increase over 1959 imports.

4/ The rate was reduced to 12.0 percent ad valorem effective July 1, 1963, and to 11.5 percent ad valorem effective Aug. 31, 1963, with the adoption of the TSUS.

5/ Solid state.

6/ Other than solid state.

Source: Compiled from data in official publications of the U.S. Department of Commerce and the U.S. Tariff Commission.

Table 11.--Audio-frequency electric amplifiers, radio-phonographs, and loudspeakers: U.S. imports for consumption and rates of duty, 1960-71

Year	Audio-frequency electric amplifiers			Radio-phonographs			Loudspeakers		
	Quantity	Value	Rate of duty	Quantity	Value	Rate of duty	Quantity	Value	Rate of duty
	<u>1,000</u> units	<u>1,000</u> dollars	<u>Percent</u> ad valorem	<u>1,000</u> units	<u>1,000</u> dollars	<u>Percent</u> ad valorem	<u>1,000</u> units	<u>1,000</u> dollars	<u>Percent</u> ad valorem
1960	1/	1/	13.75	104	8,643	13.75	601	1,747	13.75
1961	1/	1/	13.75	166	12,940	13.75	809	2,320	13.75
1962	1/	1/	2/ 12.5	180	14,284	13.75	1,738	2,994	13.75
1963	3/ 198	3/ 2,701	4/ 11.5	159	11,282	13.75	3,045	3,496	15
1964	203	2,763	15	141	9,287	13.75	8,164	4,744	15
1965	315	3,261	15	275	11,890	13.75	11,759	6,757	15
1966	305	3,413	15	828	16,771	13.75	19,593	10,358	15
1967	405	3,591	15	1,315	25,731	13.75	15,585	10,557	15
1968	681	5,495	13	1,611	29,712	12	23,061	16,298	13
1969	1,296	11,429	12	1,656	36,313	11	30,787	26,086	12
1970	1,319	13,467	10	1,579	44,686	9.5	30,802	32,908	10
1971	1,884	16,686	9	1,531	53,616	8	34,697	40,348	9

1/ Not available.

2/ Effective July 1, 1962.

3/ Estimated on the basis of statistics for 4 months.

4/ Effective July 1, 1963; the rate was changed to 15 percent ad valorem on Aug. 31, 1963.

Source: Compiled by the staff of the U.S. Tariff Commission from official government statistics.

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