A Special Supplement to



World Radio History

Audio Production '89

A Benchmark Survey of U.S. Audio Production Facilities

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Background photograph by David Bishop

This year's survey consists of four parts: statistics on Equipment Brands in Facilities, drawn from an analysis of the *Mix* Directories during 1988 and 1989; U.S. Music and Recording Industry Data; U.S. Consumer Audio Electronic Sales Data; and the results of *Mix*'s own Audio Production Facilities Survey 1989.

The information contained in Part 1, Equipment Brands in Facilities, was compiled from a facility-by-facility analysis of the directories published by *Mix* during 1988 and 1989. The sample size for each category is indicated by the symbol " Σ " in each graph. This sample size represents the *total number of units* in a specific equipment category and should not be confused with the total universe of facilities reporting specific brands. Some discretion should be read into those few cases where the sample size is relatively small, as the margin of error increases as sample size decreases. Businesses surveyed for this data include those companies identified by *Mix* as Recording Studios, Tape/Disc Mastering Studios, Tape Duplication Facilities and Video/Film Production and Post-Production Facilities.

We would like to acknowledge the contributions of the Recording Industry Association of America (RIAA), New York, N.Y., and the American Music Conference, Wilmette, Ill., for information included in Part 2 of Audio Production '89, which contains a wealth of pertinent information to *Mix* readers, including annual sales figures for prerecorded music and musical instruments.

Part 3 of Audio Production '89, U.S. Consumer Audio Electronic Sales Data, consists of annual sales information on consumer products relevant to the pro audio industry. For this information we wish to acknowledge the contributions of the Consumer Electronics Group, Washington, D.C.

The final part of this year's survey, Audio Production Facilities Survey 1989, concentrates on important trends in revenue sources. Additionally, it includes past acquisitions and future equipment purchase plans. Of the 1,000 questionnaires mailed to obtain the specific information contained in this portion of the survey, an impressive 42% were returned, indicative of an active, concerned industry. We would like to acknowledge the contributions of the individuals at the participating facilities who helped to make this component of Audio Production '89 a success.

Taken together, this information confirms the existence of a continued healthy professional audio industry. Results are generally consistent with basic demographic information contained in previous *Mix* surveys, indicating a general trend toward diversification and an expanding market.

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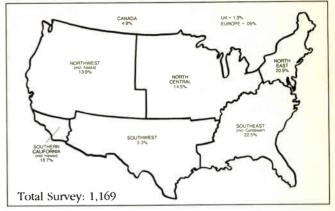
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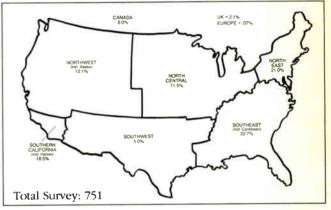
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• Survey Database:
Audio Production Facilities by Region
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All Facilities



24+Track Recording Studios



16-Track Recording Studios



2/4/8-Track Recording Studios



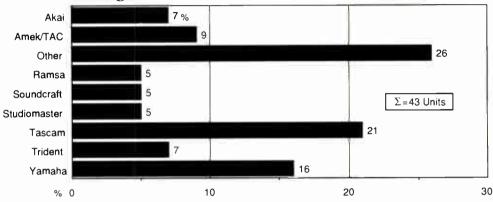
Note: The Survey Database for this analysis is taken directly from *Mix* Directories records of facilities and services in the professional production marketplace. These records are compiled and published monthly by category and/or region. All *Mix* records are fully paid listing advertisements by clients who offer detailed and brand-specific data in advertising copy questionnaires.

Recording Studios

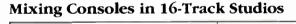
Studio & Control Room Dimensions & Square Footage

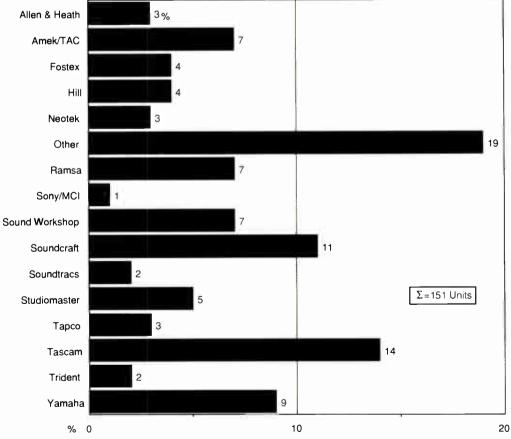
0	Studio	Control Room
24+Track	25.68' x 25.63'	18.76' x 19.25'
Facilities	(767.97 sq. ft.)	(375.95 sq. ft.)
16-Track	17.98' x 19.27'	14.82' x 16.20'
Facilities	(397.31 sq. ft.)	(244.88 sq. ft.)
8-Track	19.07' x 19.20'	13.20' x 14.93'
Facilities	(361.60 sq. ft.)	(206.47 sq. ft.)

The figures reported in the above chart do not include additional rooms in facilities, such as vocal, isolation or drum rooms; all figures are averages, by indicated category.

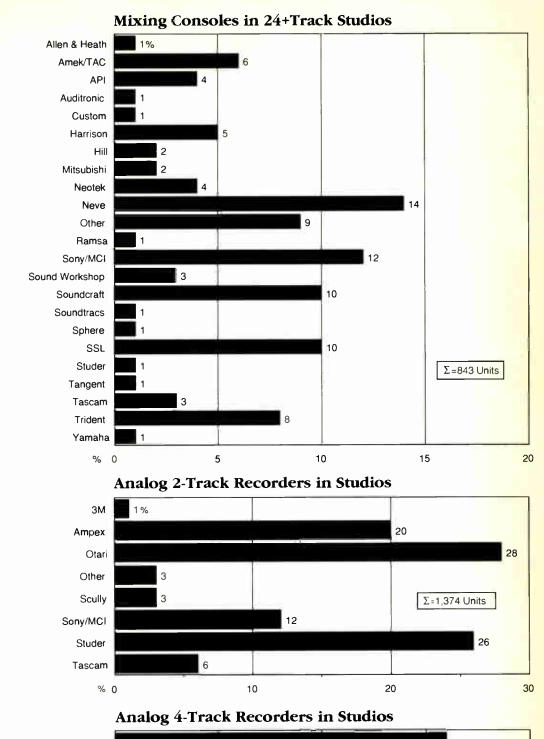


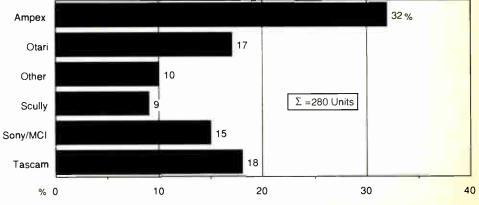
Mixing Consoles in 8-Track Studios



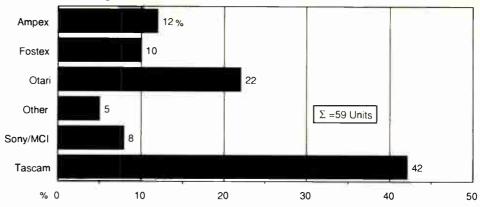


A Benchmark Survey of U.S. Audio Production Facilities 3 World Radio History Recording Studios



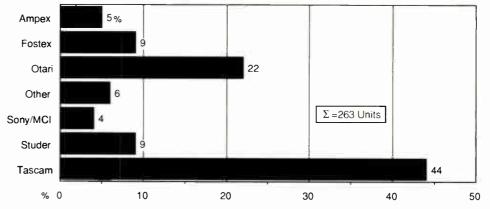


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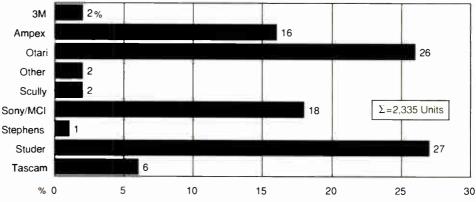


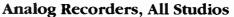
Analog 8-Track Recorders in Studios

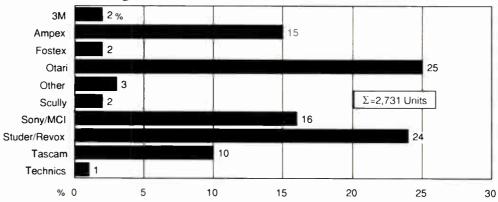








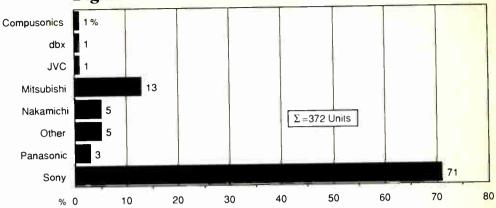




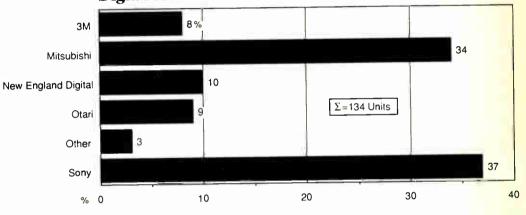
World Radio Histery Benchmark Survey of U.S. Audio Production Facilities 5

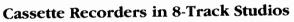
Recording Studios

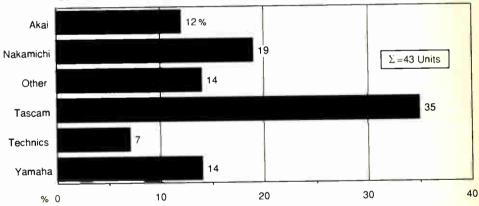
Digital 2-Track Recorders/Processors in Studios

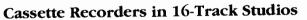


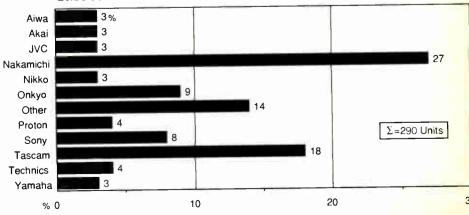
Digital Multitrack Recorders in Studios





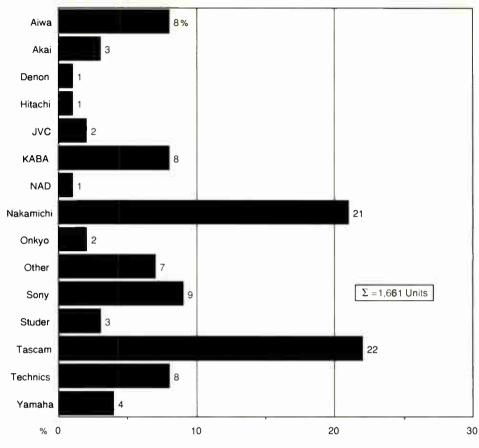






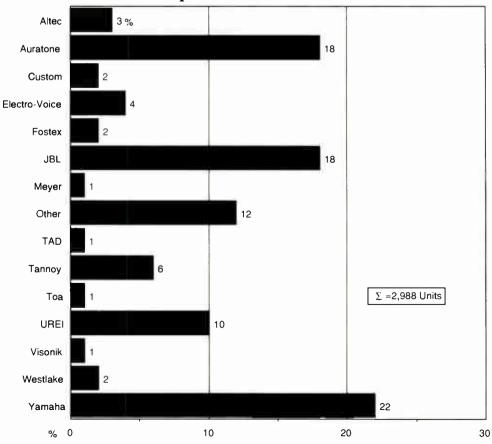
World Radio History

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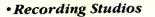
Cassette Recorders in 24+Track Studios

Monitor Loudspeakers in Studios*

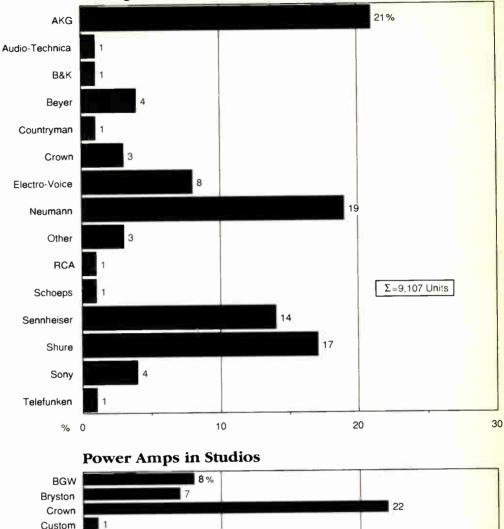


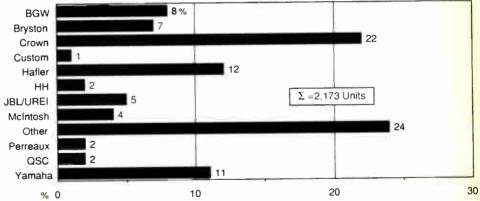
*Includes main and reference monitors

World Radio History World Radio History

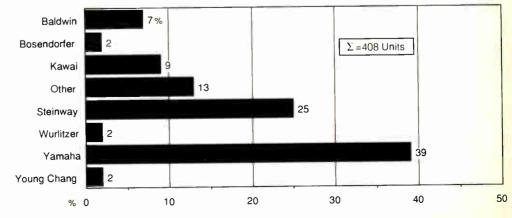




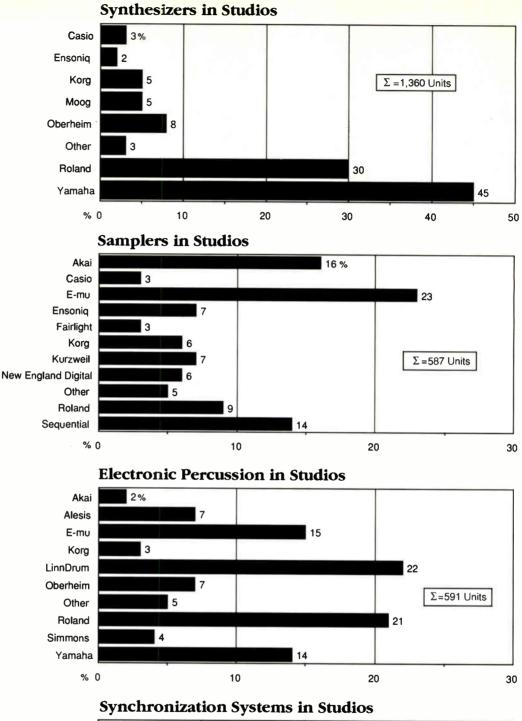


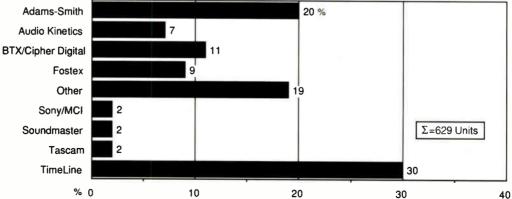






QUIPMENT BRANDS IN FACILITIES





A Benchmark Survey of U.S. Audio Production Facilities 9

C

EQUIPMENT BRANDS IN FACILITIES

Other

% 0

Echo, Reverb & Delay Systems in Studios • Recording Studios AKG 1% 2 Alesis AMS 5 DeltaLab 5 $\Sigma = 5,040$ Units EMT Eventide 6 Korg 2 28 Lexicon 17 Other 7 Roland TC Electronic 2 20 Yamaha 20 30 10 % 0 **Computers for Music Production in Studios** Apple II 4% 15 Atari Σ=309 Units 8 Commodore 14 IBM 56 Macintosh 3

20

10

• Post-Production Facilities

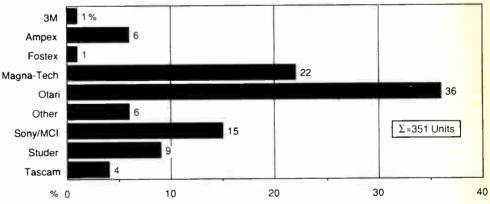
Audio Recorders in Video/Post-Production Facilities

30

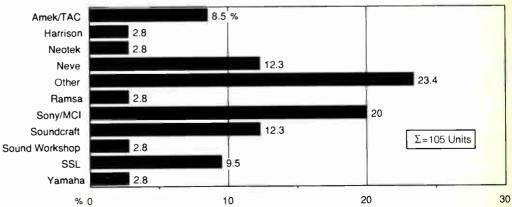
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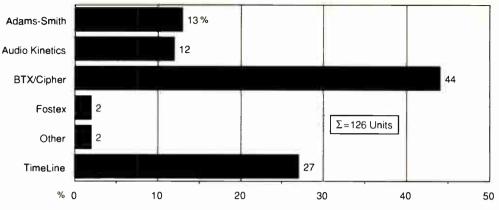
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Audio Mixers in Video/Post-Production Facilities

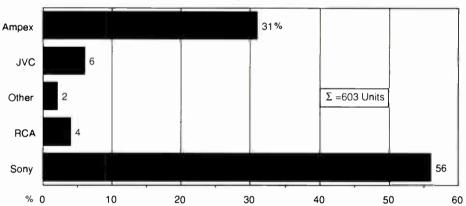


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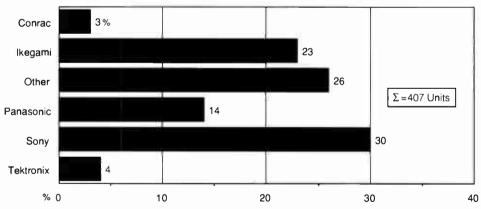


Audio Synchronizers in Video/Post-Production Facilities

Video Recorders in Video/Post-Production Facilities

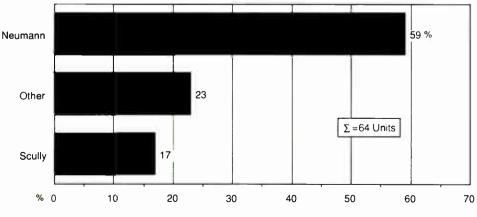


Video Monitors in Video/Post-Production Facilities





Cutting Lathes in Disc Mastering Facilities



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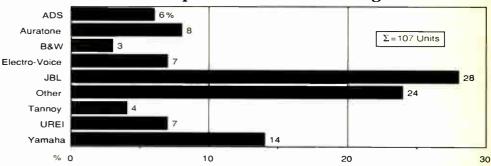
EQUIPMENT BRANDS FACILITIES I N

Disc Mastering Facilities

15 % Custom Neumann 31 Σ=54 Units Neve 30 Other Sony/MCI 13 % 0 20 30 10 40

Audio Consoles in Disc Mastering Facilities

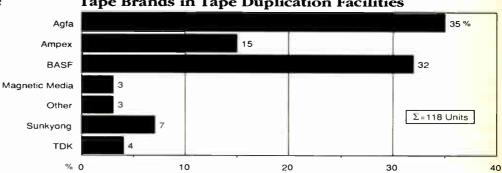
Monitor Loudspeakers in Disc Mastering Facilities*



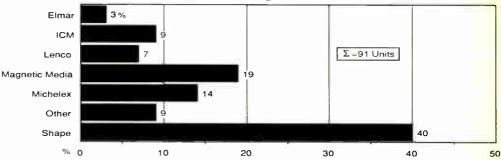
• Tape Duplication Facilities

Tape Brands in Tape Duplication Facilities

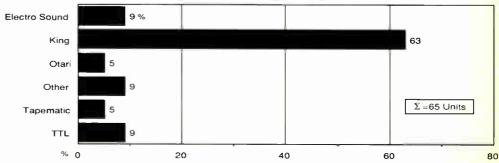












'Includes main and reference monitors

Annual Shipments of Prerecorded Music by Format: 1974-1987 (units in millions)

															% Chg.
	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83	'84	'85	'86	'87	'86-'87
Single	204.0	164.0	1 90. 0	190.0	190.0	195.5	164.3	154.7	137.2	124.8	131.5	120.7	93.9	87.1	- 13%
LP/EP	276.0	257.0	273.0	344.0	341.3	318.3	322.8	295.2	243.9	209.6	204.6	167.0	125.2	107.0	- 15%
CD	-	-	-	-	-	-	-	-	-	.8	5.8	22.6	53.0	102.1	+93%
Cassette	15.3	16.2	21.8	36.9	61.3	82.8	110.2	137.0	182.3	236.8	332.0	339.1	344.5	410.0	+19%
8-Track	96.7	94.6	106.1	127.3	133.6	104.7	86.4	48.5	14.3	6.0	5.9	3.5	1.7		NA

Total	592.0	531.8	590.9	698.2	726.2	701.1	583.7	635.4	577.7	578.0	679.8	653.0	618.3	706. 8	+14.3%
	C	A day a taken when				0	1000 / 1								

Source: RIAA, Inside the Recording Industry: A Statistical Overview- 1988 Update.

Dollar Value of Prerecorded Music Shipments: 1974-1987 (\$ millions)

															% Chg.
	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83	'84	'85	'86	'87	'86-'87
Single	\$ 194.0	211.5	245.1	245.1	260.3	275.4	269.3	256.4	283 .0	269.3	298.7	281.0	228.1	217.6	- 11%
LP/EP	\$ 1,356.0	1,485.0	1,663.0	2,195.1	2,473.3	2,136.0	2,290.3	2,341.7	1,925.1	1,689.0	1,548.8	1,280.5	983.0	793.1	- 19%
CD	\$ -	-	-	-	-	-	-	-	-	17.2	103.3	389.5	930.1	1,593.6	+71.3%
Cassette	\$ 87.2	98.8	145.7	249.6	449.8	604.6	776.4	1,062.8	1,384.5	1,810.9	2,383.9	2,411.5	2,499.5	2,959.7	+18.4%
8-Track	\$ 549.2	583 .0	678.2	811.0	948.0	669.4	526.4	30 9.0	49.0	27.9	35.7	25.3	10.5	-	NA
Total	\$ 2,186.4	2,378.3	2,732.0	3,500.8	4,131.4	3,685.4	3,862.4	3,969.9	3,641.6	3,814.3	4,370.4	4,387.8	4,651.1	5,567.5	+19.7%

Source: RIAA, Inside the Recording Industry: A Statistical Overview-1988.

Sales of P.A. Systems and Components

(mics, mixers, power amplifiers, speaker systems and components, signal processors)

	Units	Dollars ¹
1988	NA	\$227,000
1987	NA	215,100
1986	NA	203,900
1985	NA	192,000
1984	NA	181,000
1983	NA	171,000
1982	NA	157,500
1981	NA	175,0003
1980	NA	121,0004
1979	NA	121,000
1978	NA	108,000
1977	NA	100,000
1976	NA	60,000
1975	71,000	53,000
1974	60,000	45,000
1973	18,900	11,246
1972	18,000	10,318
1971²	16,000	9,903

¹ In thousands of dollars.

² Previous years' totals are combined with fretted instrument sales. 1971 was the first year breakouts of amplifier and PA system sales were available. ³ Includes \$18 million of electronic devices previously included in the "Accessories" category. ⁴ Low estimate according to industry sources. *Source: American Music Conference*, 303 East Wacker Drive, Ste. 1214, Chicago, IL 60601.

Sales of Amplifiers (Musical Instrument)

	Units	Dollars
1988	212,350	\$61,454
1987	200,300	58,250
1986	188,700	55,228
1985	170, 000	51,500
1984	166,000	51,500
1983	157,000	50,000
1982	177,000	57,500
1981	177,000	63,860
1980	177,000	62,000
1979	177,000	68,200
1978	177,000	62,000
1977	161,000	48,000
1976	158,000	48,000
1975	154,000	50,000
1974	140,000	55,000
1973	133,980	53,592
1972	110,000	43,245
1971²	96,000	35,643

1 In thousands of dollars.

² Previous years' totals are combined with fretted instrument sales. 1971 was the first year breakouts of amplifier and P.A. system sales were

available

Source: American Music Conference, 303 East Wacker Drive, Ste. 1214, Chicago, IL 60601.

Sales of Music Software

	Units	Dollars ¹
1988	NA	\$25,000
1987	NA	20,000

1 In thousands of dollars.

Source: Industry Estimates, American Music Conference, 303 East Wacker Drive, Ste. 1214, Chicago, IL 60601.

Prerecorded Music Configuration Purchases: 1985-1987

Configuration	1985	1986	1987
7" Singles	2.0%	2.0%	1.0%
12" Singles	2.0%	2.0%	2.0%
LPs	34.0%	28.0%	18.0%
Compact Discs	3.0%	10.0%	20.0%
Cassette Tapes	5 9 .0%	57.0%	59 .0%

Source: RIAA, Inside the Recording Industry: A Statistical Overview— 1988 Update.

Sales of Electric **Pianos/Electronic** Keyboards

	Units	Dollars ¹
1988	108,255	\$181,868
1987	103,100	173,208
1986	84 <mark>,0</mark> 00	134,400
1985	60 <mark>,0</mark> 00	107,000
1984	50 <mark>,0</mark> 00	50,000
1983	44 <mark>,00</mark> 0	44,000
1982	40,000	40,000
1981	37,000	40,700
1980	40,000	40,000
1979	38,737	38,737
1978	25,000	25,500
1977	25,000	24,500
1976	23, <mark>30</mark> 0	19,600
1975	22,000	17,600
1974	21, <mark>00</mark> 0	14,700
1973	19,000	11,400
1972 ²	15,000	9,000

1 In thousands of dollars

² First year for inclusion of this category. Source Industry estimates

Sales of Synthesizers

	Units	Dollars ¹
1988	361,800	\$303,040
1987	378, <mark>50</mark> 0	299,900
1986	350, <mark>50</mark> 0	275,000
1985	220, <mark>00</mark> 0	173,200
1984	134,<mark>70</mark>0	136,000
1983	66, <mark>00</mark> 0	80,000
1982	43,000	50,000
1981	34, <mark>50</mark> 0	33,000
1980	36, <mark>60</mark> 6	32,300
1979	24, <mark>17</mark> 2	24,172
1978	24, <mark>05</mark> 0	24,050
1977	23, <mark>50</mark> 0	23,500
1976	18,000	17,100
1975	15, <mark>00</mark> 0	13,500
1974	10,000	11,000
1973 ²	7,000	8,000

1 In thousands of dollars

² First year for inclusion of this category Source Industry estimates

Sales of Portable Keyboards

	Units	Dollars
1988	4,255,400	\$401,158
1987	4,798,000	548,750
1986	2,500,000	526,500
1985	1,300,500	253,285
1984	534,000	193,000
1983	282,000	150,000
1982	NA	98,200
1981	NA	53,900 ²
1980	NA	7,586 ³

1 In thousands of dollars

² Included in "Miscellaneous Other Instruments" and in "Portable Keyboards" in 1981

3 Included in "Miscellaneous Other Instruments" in 1980

1988 Retail Value of New Musical Instruments, Sheet Music and Musical Accessories up 1 Percent to \$3.7 Billion

	Music Industry Sales Retail Value	Personal Consumption	% of Personal Consumption ³	Gross National Product	Cost Living Index
		(Billions)		(Billions)	1967=100
1988	\$3,716,140,000	\$3,227.5	0.115%	\$4,864.3	354.3
1987	3,677,747,000	3,012.16	0.122%	4,526.77	<mark>340.4</mark>
1986	3,348,957,000	2,762.5	0.121%	4,206.1	328.4
1985	2,697,900,0005	2,582.1	0.104%	3,989.1	322.2
1984	2,496,333,000	2,342.3	0.107%	3,661.3	311.1
1983	2,346,247,000	2,157.0	0.109%	3,310.8	298.4
1982	2,207,745,000	1,971.1	0.112%	3,059.3	289.1
1981	2,375,610,0004	1,857.8	0.128%	2,924.8	272.4
1980	2,180,800,000	1,672.8	0.130%	2,626.1	246.8
1979	2,353,609,000	1,509.8	0.156%	2,368.8	217 <mark>.4</mark>
1978	2,299,690,000	1,340.1	0.172%	2,107.6	195.4
1977	2,090,204,000	1,260.2	0.166%	1,963.7	181 <mark>.5</mark>
1976	1,919,010,000	1,079.7	0.178%	1,691.6	170 <mark>.5</mark>
1975	1,741,977,000	963.8	0.180%	1,498.9	161.2
1974	1,821,353,000	877.0	0.207%	1,396.7	147.7
1973	1,524,427,000 ¹	804.0	0.189%	1,289.1	133 <mark>.1</mark>
1972	1,306,179,000 ²	721.0	0.181%	1,151.8	12 <mark>5</mark> .3
1971	1,106,339,000	662.1	0.167%	1,046.8	1 <mark>21.3</mark>
1970	1,005,239,000	616.7	0.163%	976.5	116.3
1969	957,020,000	577.5	0.167%	931.4	109 <mark>.8</mark>
1968	954,138,000	536.6	0.177%	865.7	104.2
1967	924,000,000	491.7	0.187%	785.0	100.0
1966	955,000,000	469.9	0.205%	739.6	97.2
1965	887,000,000	428.7	0.206%	676.3	94.5
1964	731,000,000	398.9	0.183%	628.7	92.9
1963	661,000,000	373.8	0.177%	589.2	91.7
1962	608,000,000	355.1	0.170%	500.3	90.6
1961	538,000,000	335.1	0.160%	520.1	89.6
1960	500,000,000	325.2	0.154%	503.8	88.7
1959	490,000,000	311.2	0.157%	483.7	87.3
1958	441,000,000	290.1	0.152%	447.3	86.6
1957	438,000,000	281.4	0.156%	441.1	84.3
1955	380,000,000	254.4	0.150%	398.0	80.2
1950	235,000,000	191.0	0.124%	284.8	72.1
1949	220,000,000	176.8	0.124%	256.5	71. <mark>4</mark>
1941	90,000,000	80.6	0.111%	124.5	44.1

1 For comparable figure in 1972, add \$8,000,000 for non-reporting piano manufacturers previously not recorded, and \$21,881,000 for higher sheet music sales. Includes a new category-synthesizers.

2.Includes a new category-electric pianos

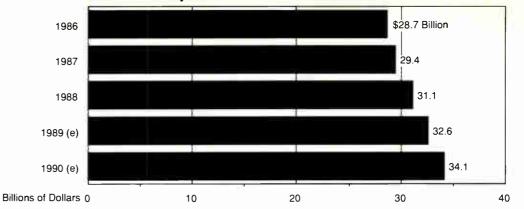
3.To be read as a fraction of 1%

Includes a new category—portable keyboards—plus revised estimates for several categories.

5. Figure adjusted to reflect final printed music data from survey results not available at 1985 press time. 6. & 7. Figures adjusted to reflect U.S. Commerce Department revisions made in Personal Consumption and Gross National Product after 1988 publication of Music USA.

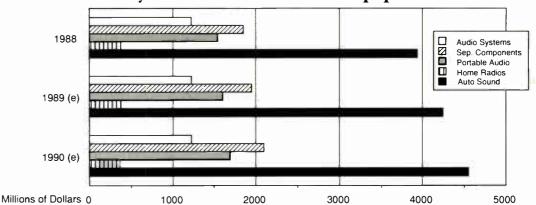
Note: Government statistics on gross national product, personal consumption are revised annually. The figures noted on this chart are those available in May of every year when Music USA is compiled.

Source for all data this page American Music Conference, 303 East Wacker Drive, Ste. 1214, Chicago, IL 60601

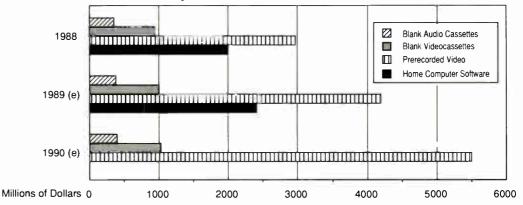


Total Factory Sales of Consumer Electronic Products

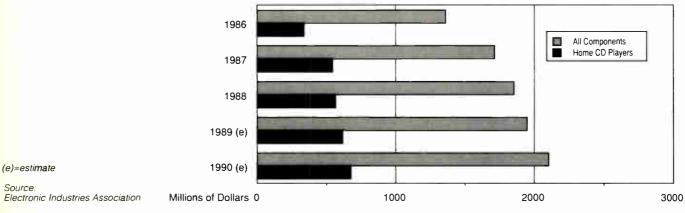
Factory Sales of Consumer Audio Equipment



Total Factory Sales of Consumer Software Products



Factory Sales of Separate Consumer Audio Components



A Benchmark Survey of U.S. Audio Production Facilities 15

Source:

Audio Production Facilities Survey 1989: An Overview

he Mix Audio Production Facilities Survey 1989 was designed to gather information on trends in the audio production industry. Areas of focus include a profile of facility revenue sources, expenditures, personnel, employee hiring practices and staff education.

The survey asked respondents to compare revenue sources from three years ago to present revenue and to anticipate revenue over the next three years. Among the facilities surveyed, audio recording and mixing continues to be a major source of income, with an anticipated upward trend in all areas except recording for demos. Recording for TV/video and for film appears to be the area of fastest growth: studios expect as much money from TV/video work over the next three years as from records. One of the respondents commented, "I'm moving into sound for video because of the needs of the stereo TV industry and video/film industry. It will double or triple my annual income!" However, earnings from records, the traditional revenue source for audio recording, are expected to remain at present levels over the next three years.

Audio post-production, editing and A/V sound production contribute equal amounts to the bulk of income over the six-year period covered by the survey. A downward trend in disc-cutting and a simultaneous upward trend in compact disc mastering confirm the industry movement away from vinyl and toward CDs.

For those facilities involved in film and video postproduction work, audio sweetening provides the lion's share of revenue. While the film and video industry has experienced significant growth in the last three years, the share occupied by audio sweetening has increased even more dramatically: of the 416 respondents, 70 report significant revenue from audio sweetening three years ago, it more than doubled to 162 who report it today, and 187 anticipate significant activity in the future.

Those studios engaging in manufacturing operations report that while real-time and high-speed audio duplicating will continue to comprise most of their business, the most significant growth is expected in the area of DAT duplicating. A continued gradual decline in disc pressing again emphasizes the eroding popularity of vinyl, as in the area of post-production.

Some interesting observations can be made from evidence gathered concerning other activities, particularly MIDI production. Following a three-fold increase in activity over the last three years, studios report that they expect to be doing slightly less MIDI production three years from now. Respondents also reported significant income from creative services; i.e., producer services, systems design and talent brokering, almost at the same level as for MIDI production. And finally, there is a trend toward offering education as a source of revenue.

When asked to describe their single most significant

revenue source, facilities confirmed their continued commitment to the record industry. More than twice as many studios consider audio recording and mixing of records as their bread and butter over any other single category, not only today, but through the next three years. Evidence also indicates that the industry has seen demo work decline over the last three years, with an anticipated continued future decline. This last conclusion, together with observations on MIDI production, could indicate that demo work is migrating to the home environment, where cost-effective equipment makes quality demos possible.

FACILITY CONFIGURATIONS

When asked to describe their facility, respondents were divided almost equally between private recording/postproduction and commercial recording/post-production companies.

Regarding studio configurations, 21% have a single control room/sound studio. In addition, half of those surveyed report having a designated music/MIDI production room. The average number of separate sound studios per facility was 1.1, with an average sound studio/ scoring stage capable of handling two to ten musicians. This corroborates data found elsewhere in the survey, which indicates the average studio size for 24-track facilities is approximately 768 square feet (397 square feet for 16-track establishments).

BUSINESS PROFILE

More than 60% of the facilities surveyed have been in business at least four years, with the majority between four and six years old. Thirty-one percent never use freelance (non-payroll) staff. Another 20% use freelance for 10% or less of their work. Only 15% use non-payroll employees for more than half of their production work.

Almost three-fourths of the facilities report a full-time production staff of between one and four employees. In addition, 29% employ a full-time maintenance staff. Survey participants saw themselves as performing 4.6 jobs: 69% described themselves as facility owners or partners, 77% as engineer/mixers, and 51% as managers. These figures are consistent with previous *Mix* research.

For many it's still a small business, with 27.5% reporting less than \$25,000 in annual revenues, and another 13% reporting between \$25,000 and \$50,000 annually. However, it is interesting to note that 11% report annual sales in excess of \$1 million, and another 28% report sales figures between \$100,000 and \$500,000.

EQUIPMENT PURCHASES: PAST, PRESENT AND FUTURE

There was a tendency to spend more money on equipment than on acoustic improvements: 11% of the facilities surveyed spent more than \$250,000 on equipment over the last 12 months, while a scant 2.2% spent more than \$250,000 on acoustic improvements over the same period.

While 20% didn't make any major capital equipment purchases in the past year, of those who did, 77% bought consoles and 50% bought digital audio workstations. It seems manufacturers generally regard digital audio workstations as self-contained units, but evidence from the survey indicates that facilities don't necessarily accept such a narrow definition. Respondents interpreted that phrase to mean a number of broader configurations, predominantly consisting of a general-purpose personal computer and accompanying third-party hardware and software.

The number of purchases of digital multitrack recorders literally equaled that of analog multitrack machines—in each case, 48% of the total. Those facilities that purchased capital equipment made an average of three such purchases in the past year. Regarding financing methods, 73% chose to pay cash for their major purchases. Installment purchases accounted for 23% of the total, and 15% of the equipment was leased. (Figures total more than 100% because of multiple purchases by facilities.)

When they went shopping for equipment, studios preferred new over used goods. Almost half purchased only new equipment in the last year, while only 10% of those surveyed reported spending more than half their budget on used equipment in that period.

Anticipated purchases for the next 12 months appear to be slightly above that of the previous 12 months, especially in the \$25,000 to \$100,000 category. More than 35% expect to buy equipment in that range during the upcoming year, compared to 29% in the last 12-month period. However, the number of respondents expecting to spend under \$25,000 remains constant.

Of the 416 responses, 387 (93%) expect to buy at least one major equipment item in the next 12 to 18 months. The digital audio workstation appears to be a hot item on the wish lists of many studios, with 37% anticipating such a purchase in the near future. The only equipment item deemed more desirable was the ubiquitous recording/mixing console, planned for purchase by 44% of surveyed facilities. And again, studios expected to pay for these purchases with cash, by a 2 to 1 margin over installment plans and lease methods. It is significant to note that the vast majority of those who filled out the survey (75%) described themselves as authorizing purchases for their facility.

Rental does not appear to be a very popular option among studios. Only 40% of survey participants rent their facility's equipment to others, and 64% spent less than \$1,000 on rentals in the last six months. When asked how they promote and acquire new business, studios report an average of 3.8 different approaches. Seventy percent respond that they use brochure/direct mail methods, and 64% use Yellow Pages ads. Roughly half advertise in local trade publications, while one-fifth included word-of-mouth as a means for acquiring business.

Studios show a broad range of client profiles. The average studio draws 65% of its business from local clients, with the remainder in equal proportions among state, regional, national and international clients. Twentysix percent indicate that they serviced 10 to 25 different clients over the past 12 months. However, a significant number (24%) claimed to see more than 100 clients in that period.

The use of computers for creative/musical/production activities in studios is widespread and reflects a bias toward Macintosh. Eighty percent of studios report using some kind of computer for such tasks, with 51% of those computer-equipped facilities using Macs. IBM PCs and compatibles were runners-up at 45%. However, only 22% use some sort of online communication service. Compu-Serve was named as the most preferred among those who use such services, with a 33% market share.

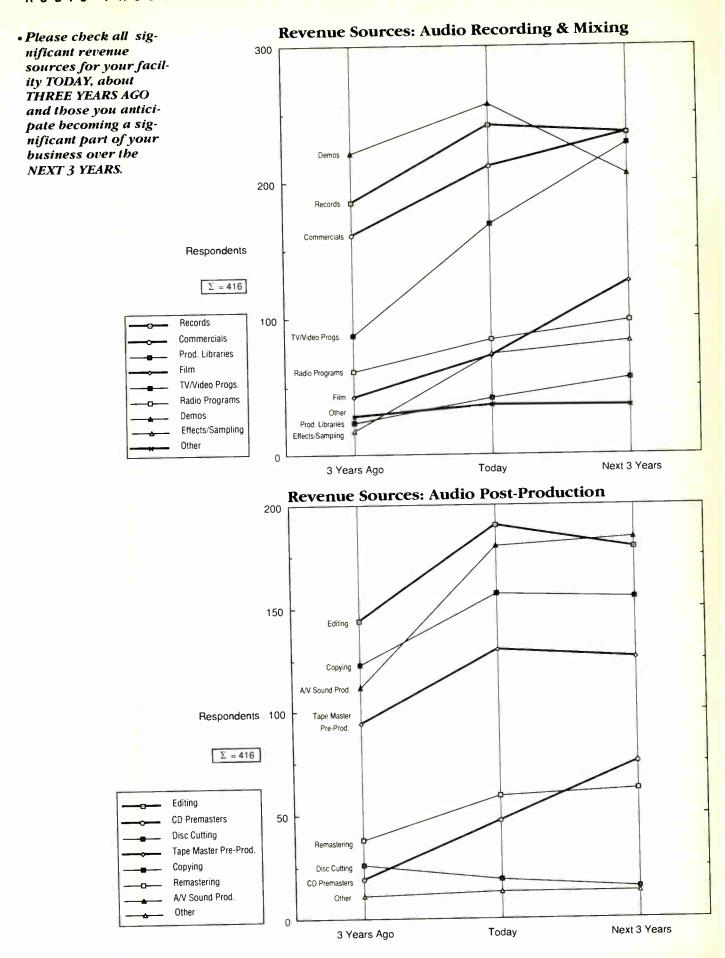
EMPLOYEE HIRING

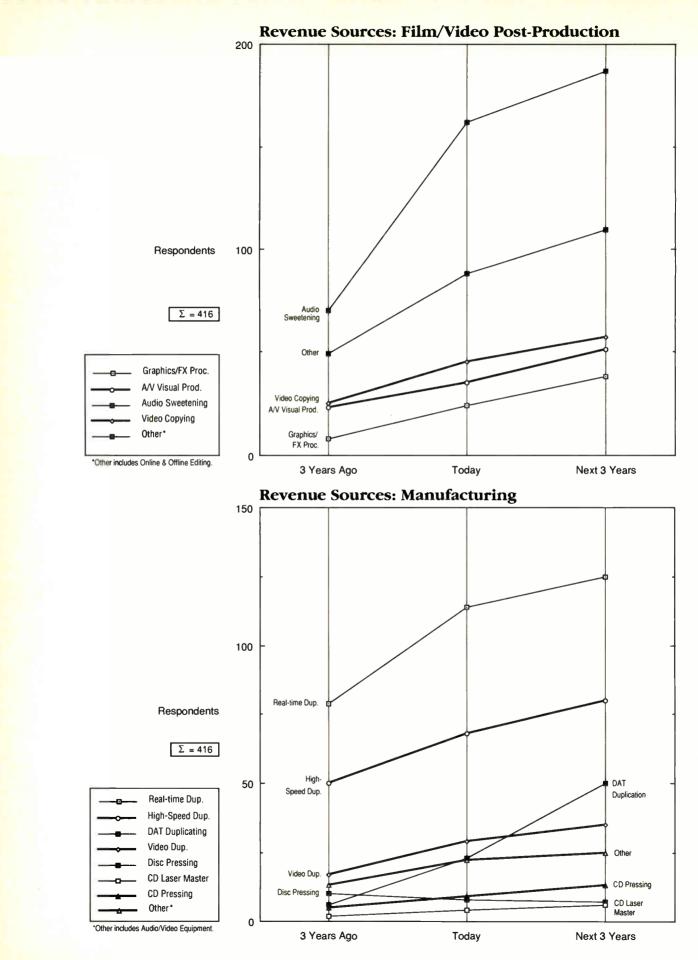
Of those facilities that hired technical staff employees over the last 12 months, the largest percentage of new employees came from other studios (52%), with recording school graduates filling an additional 31% of available positions. When asked how they found new staff members to hire, studios reveal that they relied on personal recommendations by a wide margin. The second most preferred method was through previous applicant files and/or letters.

Of those studios that have hired graduates of recording schools (70%), 38% claim to have done so in the last 12 months, and more than half of those have hired only one employee. When studio managers receive an unsolicited job application, they "reply whenever possible" 53% of the time. From the data, it would appear that breaking into the recording business, as much as in any other field, is a long-term process.

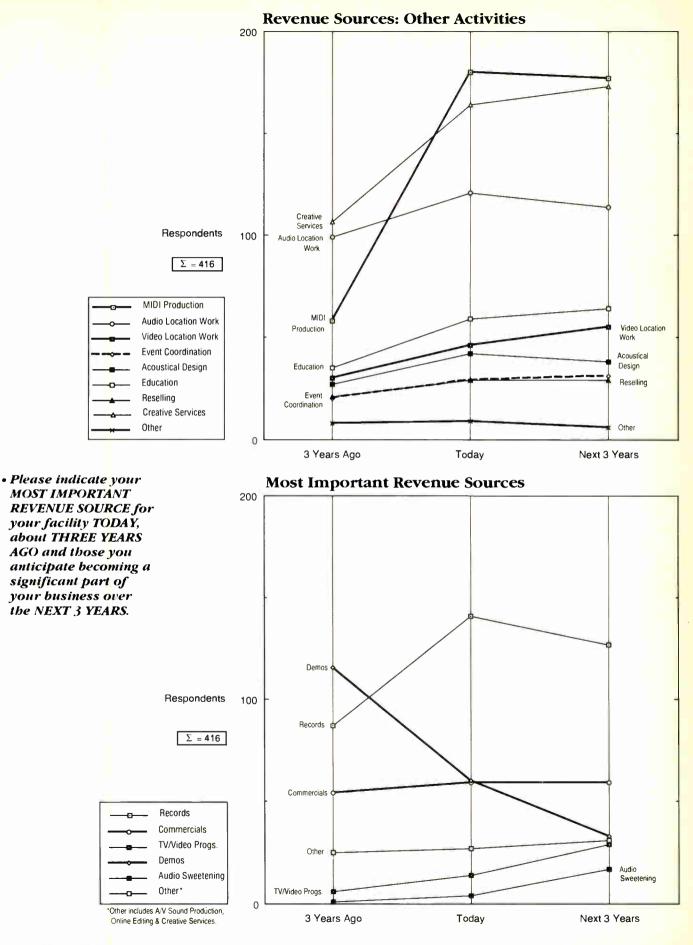
Eighty-two percent of facilities report that they encourage their staffs to attend training and seminars, but only 51% provide financial assistance for their staffs to do so.

As might be expected, the U.S. AES Convention is the most popular trade show/convention, with 81% of survey participants expecting to send a representative to that event this year. NAMM and NAB vie for second place on the coming year's travel budgets.

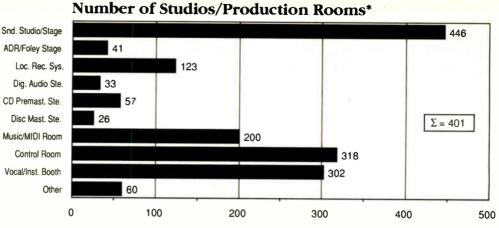




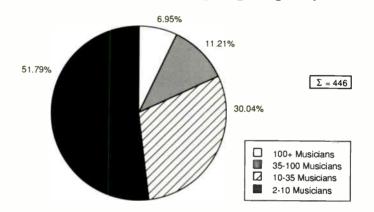
World Radio History (World Radio History)



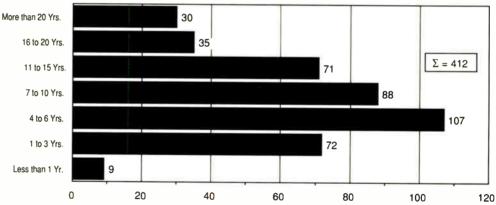
• How many of the following types of studios/production rooms are associated with your facility?



Sound Studio/Scoring Stage Capacity



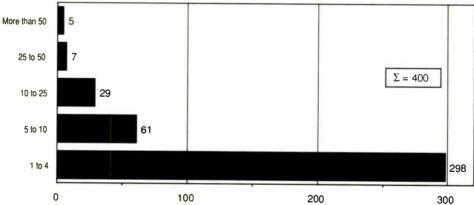
Years in Operation



• How long bas your facility been in operation?

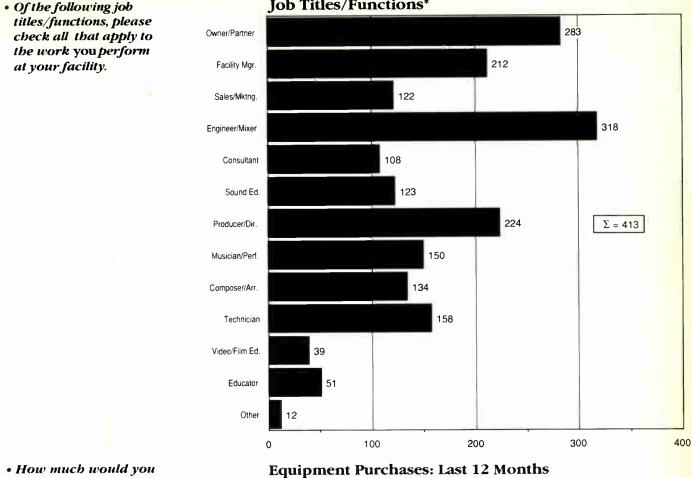
• How many full-time staff are involved in production activities at your facility (or locations)?





*Note: Total number exceeds sample size due to multiple choice response.

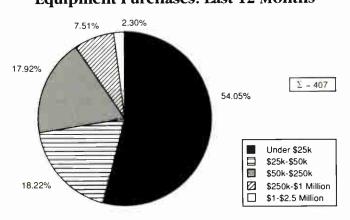
> A Benchmark Survey of U.S. Audio Production Facilities 21 World Radio History



Job Titles/Functions*

estimate your facility bas spent on equipment purchases over

the last 12 months?



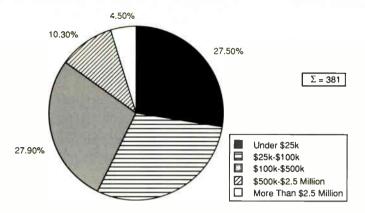
Facility Improvements: Last 12 Months

- 4.30% 0.7% 7 01% 8.31% 79.6% Σ =398 Under \$25k , \$25k-\$50k 10 \$50k-\$100k Ø \$100k-\$1 Million More than \$1 Million
- How much would you estimate your facility bas spent on acoustic improvements or new rooms and/or stages over the last 12 montbs?

*Average number of Job Titles/Functions indicated by respondents was 4.6.

• What was the approximate sales volume/ turnover of your facility over the past 12 months?

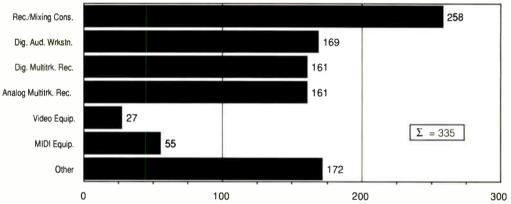
Sales Volume/Turnover: Last 12 Months



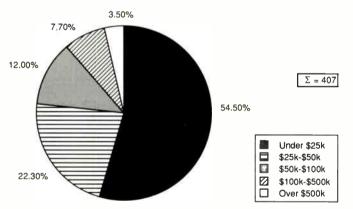
• What were your facility's major items of capital equipment expenditure in the past year?

• What would you estimate your facility will spend on equipment purchases, new and used, over the next 12 months?

Equipment Purchases: Last 12 Months

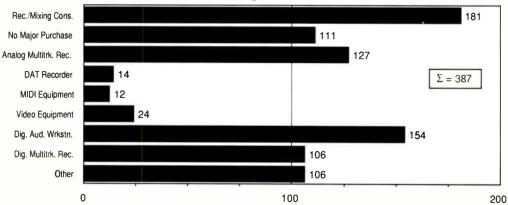


Capital Equipment Spending*



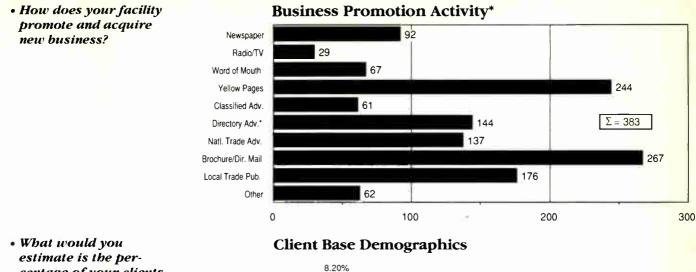
• Please indicate the major equipment items you plan to buy over the next 12 to 18 months.

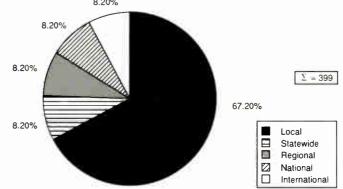
Equipment Purchasing Plans: Next 12-18 Months



*Next 12 months

A Benchmark Survey of U.S. Audio Production Facilities 23 World Radio History

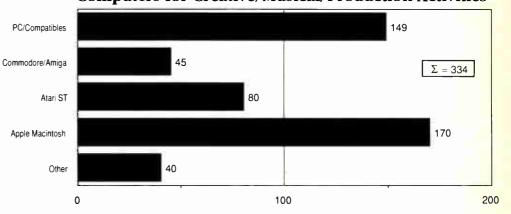




centage of your clients from the following?

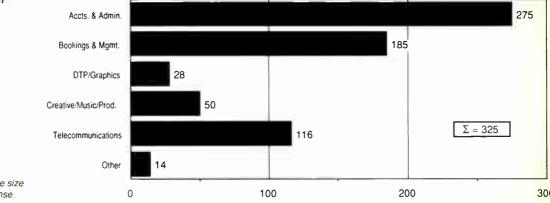
• Which of the following personal computers do you use for creative/musical/production activities?

Computers for Creative/Musical/Production Activities



• Do you use computers

for... (please check all that apply)



Computer Applications**

*Non-telephone.

"Total number exceeds sample size due to multiple choice response.

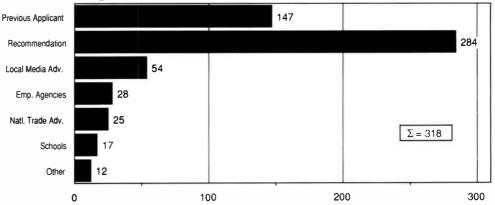
24 Audio Production '89

World Radio History

300

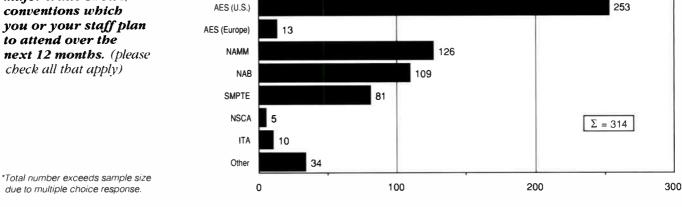
• How do you acquire new staff members?

Employee Hiring Methods*



• Please indicate the major trade shows/ conventions which you or your staff plan to attend over the next 12 months. (please check all that apply)

Major Trade Event Attendance: Next 12 Months*



Research Methodology

sample of 1,000 Mix subscribers, with job titles in the categories of Corporate Management, Technical & Engineering and Production & Direction, was selected on an Nth name basis from the circulation galley of BPAaudited, U.S. subscribers. This list of names was limited to include the following business activity categories:

• Studios: 2/4-track, 8/16-track, 24+ track, Digital

• Video/Film: Post-Production Company

 Record/Tape Manufacturing: Mastering Only

The initial APFS '89 mailing consisted of a cover letter, an eight-page questionnaire, a postage-paid return envelope and a \$1.00 incentive. The survey was mailed on June 3,

1989, to the subscribers. On July 5, 1989, a second mailing (without an incentive) was mailed to all non-respondents.

All returns were received directly by *Mix* for tabulation. When the survey closed on July 17, 1989, 416 usable questionnaires had been received. This represents a response rate of 42.1% (after deducting 27 questionnaires-22 undeliverable by the post office and five that arrived after the survey deadline).

All tabulations, percentages and other calculations published herein were compiled by Mix in strict accordance with established research standards. Copies of the questionnaire are available from Mix.

