



# HDTV

## Summary of Results

*Prepared for:*

**NATIONAL CONSUMERS LEAGUE**

**MAY 31-JUNE 14, 2000**

# SUMMARY OF RESULTS

HDTV

Prepared for:

NATIONAL CONSUMERS LEAGUE

MAY 31-JUNE 14, 2000

Prepared by:

OPINION RESEARCH CORPORATION INTERNATIONAL  
Princeton, New Jersey

Study #33077

## **BACKGROUND AND PURPOSE**

---

The purpose of this research is to evaluate consumer satisfaction with digital/high definition television.

Topics addressed include:

- ◆ Background on digital TV households
  - Type of digital TV owned
  - Number of television sets in the household
  - Primary signal source for the digital TV
  - Digital TV viewing habits
  
- ◆ Attitudes toward digital TV
  - Perceived advantages and disadvantages of digital TV
  - Satisfaction levels with digital TV features
  - Satisfaction with available digital TV programming
  - Consumers' priorities for new programming

---

## METHODOLOGY

---

This report presents the findings of a telephone survey conducted among a sample of 200 high definition/digital television owners. The client, National Consumers League, supplied the sample for this study.

Interviewing for this survey was completed during the period May 31-June 14, 2000. All data collection efforts took place at Opinion Research Corporation's Central Telephone Facility in Tucson, Arizona. The core of our telephone center is the interviewer. All Opinion Research Corporation's interviewers complete an intensive training and test period. Additionally, they attend follow-up training classes that cover advanced screening techniques, in-depth probing and the art of refusal avoidance. Interviewers are continuously supervised, monitored and reviewed in order to maintain the highest quality interviewing standards.

All interviews are conducted using Opinion Research Corporation's computer assisted telephone interviewing (CATI) system. The system is state-of-the-art and offers several distinct advantages such as: full-screen control which allows multi-question screens, fully-programmable help and objection screens to aid interviewing, an extremely flexible telephone number management system and powerful data checking facilities. CATI ensures that interviews are conducted in the most efficient manner and allows interviewers easy response recording. This interviewing method also allows for the most accurate form of data entry by guiding the interviewer through the programmed question flow and by providing on-screen interviewer instructions.

As required by the Code of Standards of the Council of American Survey Research Organizations, we will maintain the anonymity of our respondents. No information will be released that in any way will reveal the identity of a respondent. Our authorization is required for any publication of the research findings or their implications.

Opinion Research Corporation has exercised its best efforts in the preparation of this information. In any event, Opinion Research Corporation assumes no responsibility for any use that is made of this information or any decisions based upon it.

## METHODOLOGY (continued)

---

### Sampling Error

Sampling error is a function of sample size and the desired confidence level. The 95% confidence level is usually used in most general public surveys. In general, a sample of 200 (used in this study) yields a sampling error of plus or minus 7 percentage points at the 95% confidence level.

The proportions analyzed also have an impact on sampling error. The overall error margin cited above is the one that obtains when responses are at 50%. As the response levels become more extreme, the error margin drops. The table below illustrates the typical margins for a sample of 200.

<u>Survey percentage</u>	<u>Sampling error</u>
50%	+/-7%
40% or 60%	+/-7%
30% or 70%	+/-6%
20% or 80%	+/-6%
10% or 90%	+/-4%

---

## **EXECUTIVE SUMMARY**

---

### DIGITAL TV OWNERS

- ◆ Nearly all digital TV owners surveyed (95%) have more than one television set in the household. Forty-eight percent report having 4 or more household television sets. In households with digital television, digital TV viewing constitutes, on average, 51% of household television viewing time.
- ◆ Satellite is the primary signal source for nearly half (48%) of the digital TV owners surveyed, with cable in second place (28%). Fewer than 2 in 10 primarily depend on an over the airwaves signal. The majority of owners (59%) have HDTV direct view or projection sets.
- ◆ Asked to identify the kind of digital programming household members watch the most, 40% of owners choose movies, 23% say sports, 21% cite network programming (situation comedies, dramas and talk shows), and 6% say it is the news.

### ATTITUDES TOWARD DIGITAL TV

Overall, digital TV owners appear to be satisfied with the technology, but are unhappy with the amount of digital programming available. While troublesome to a small proportion of owners, signal quality/consistency does not appear to be a serious issue for most digital TV owners.

- ◆ Most (82%) digital TV owners see picture quality as the primary advantage of a digital television.
- ◆ Twenty-seven percent of owners say that they see no disadvantages to digital television, while a little over two-thirds (68%) were able to name any disadvantage. Price (27%) and the lack of programming (25%) are the most frequently mentioned disadvantages.

## EXECUTIVE SUMMARY (continued)

---

### ATTITUDES TOWARD DIGITAL TV (continued)

- ◆ Asked to rate their satisfaction overall along with four various digital TV features on a 1 to 5 scale (5 being very satisfied, 1 being not satisfied at all) 58% of digital TV owners say that they are very satisfied overall. In addition, more than three-quarters of owners say they are satisfied (a 4 or 5 rating) overall (92%) and satisfied with picture quality (96%), audio quality (89%), digital TV features (86%), and signal reception (79%).
- ◆ Most HDTV owners are clearly dissatisfied with the amount of digital programming currently available. While 20% place their satisfaction level at a 4 or 5 (on a 5 point scale), 56% say they are not satisfied with programming availability.
- ◆ The trend that digital TV owners are basically satisfied with the technology (price aside) and primarily want more digital programming is further illustrated by the responses to two questions about improving digital TV. Respondents were asked what one thing they would tell broadcasters to do, and what one thing they would tell manufacturers to do, to improve digital television.
- When it comes to broadcasters, one-quarter (26%) say they have nothing to offer and/or are satisfied, while 42% mention “more programming.” Twelve percent mention signal issues such as strength, quality or consistency.
- On the manufacturers’ side, 34% of owners say they have nothing to offer and/or are satisfied and 26% mention price. Nine percent each cite more features or greater simplicity of use, while eight out of the 200 respondents (4%) mention reception.
- Asked to answer the question, “What kind of programming do you want to see more of?” the most common mention is music/musicals/ music videos, cited by 40% of respondents. Football is in second place, mentioned by 26% of owners.

## DETAILED FINDINGS

### Digital TV Owners

---

- ◆ Nearly all digital TV owners surveyed (95%) have more than one television set in the household, and nearly one half (48%) report having 4 or more sets.
- ◆ The majority of owners (59%) have HDTV direct view or projection sets, while 20% each report having an integrated digital tuner and a set top box.

## Digital TV Households

---

Q13 How many television sets are in your household, including your HDTV?

(n) =	(200)
	%
1	6
<i>More than one (net)</i>	95
2-3	47
4 or more	48
Mean	3.9

---

Q1 What kind of digital TV or HDTV set do you have? — Aided (multiple responses accepted)

(n) =	(200)
	%
HDTV direct view or projection view set	59
A digital tuner integrated into your set	20
A set top box	20
Other	3
Don't know	10

## Primary Signal Source

---

- ◆ Satellite is the primary signal source for nearly half (48%) of the digital TV owners surveyed, with cable in second place (28%). Fewer than 2 in 10 digital TV owners primarily depend on an over the airwaves signal, received either through a rooftop antenna (16%) or an indoor antenna (2%).
- ◆ There is no clear preference for additional signal sources – 40% are unable to name a desired digital signal source other than what they already have.

## Primary Signal Source

---

Q2 What is the MAIN signal source for your set. Is it . . . – Aided

(n) =	(200)
	%
Satellite	48
Cable	28
Roof top antenna	16
DVD	5
Indoor antenna	2
Don't know	3

---

Q3 What other signal sources would you like? — Unaided (multiple responses permitted)

(n) =	(200)
	%
Satellite	20
Roof top antenna	18
Cable	13
DVD	8
Indoor antenna	1
Over the air (unspecified)	3
Other	5
Don't know	40

## Digital TV Viewing Habits

---

- ◆ Asked to identify the kind of digital programming household members watch the most, 40% of owners choose movies, 23% say sports, 21% cite network programming (situation comedies, dramas and talk shows), and 6% say it is the news.
- Over half (55%) of owners say they have viewed digitally broadcast sporting events, with 48% having watched (digital) Monday Night Football and 35% having watched digital concerts on public television.

## Digital TV Viewing Habits

---

Q9 What kind of HDTV programming does your family watch the MOST? — Aided

(n) =	(200)
	%
Movies	40
Sports	23
Network programming, such as sit coms, dramas, talk shows	21
News	6
Other	3
Don't know/Nothing	8

---

Q10 Have you or your family seen any of the following in digital programming? Aided (multiple responses permitted)

(n) =	(200)
	%
Monday Night Football	48
Other sporting events	55
Concerts on public television	35
Other	2
Don't know/None	22

## Digital TV Viewing Habits (continued)

---

- ◆ In households with digital television, digital TV viewing constitutes, on average, 51% of household television viewing time.
- ◆ One-third (34%) of digital TV owners report that they and/or members of their family spend 25% or less of their TV viewing time watching digital television. Thirty-one percent report that from 76% to 100% of family TV time is digital.

---

## Digital TV Viewing Habits (continued)

---

Q14 What percentage of the time your family watches TV is spent watching digital TV?

(n) =	(200)
	%
25% or less	34
26%-50%	17
51%-75%	14
76% - 100% ( <i>net</i> )	31
76%-99%	23
100%	8
Don't know	6
Mean	50.8

---

## Perceived Advantages and Disadvantages of Digital Television

- ◆ HDTV owners see picture quality as the primary advantage of a digital television.
- Picture quality was volunteered as an advantage by 82% of owners, while the next most frequent mention is surround sound (19%).
- ◆ Twenty-seven percent of owners say that they see no disadvantages to digital television, while a little over two-thirds (68%) were able to name any disadvantage.
- Price (27%) and the lack of programming (25%) are the most frequently mentioned disadvantages.

---

## Perceived Advantages and Disadvantages of Digital Television

Q4 What are the advantages of owning a digital TV? — Unaided (multiple responses permitted)

	Total (200) %
<i>Any (net)</i>	92
Quality of picture	82
Surround sound	19
Size of screen	11
Programming	6
Future applications like data casting	4
Shape of screen	3
Other	6
None	5
Don't know	3

---

Q5 What are the disadvantages to a digital TV? — Unaided (multiple responses permitted)

	Total (200) %
<i>Any (net)</i>	68
Price	27
Lack of programming	25
Bad signal	15
Too big/Too heavy	3
It's not as good as the hype	0
Other	7
None	27
Don't know	6

---

## Satisfaction with Digital TV Features

---

- ◆ Overall, the HDTV owners interviewed are satisfied with the technology.
- Asked to rate their satisfaction overall along with four various digital TV features on a 1 to 5 scale (5 being very satisfied, 1 being not satisfied at all), 58% say that they are very satisfied overall.
- More than three-quarters of owners say they are satisfied (a 4 or 5 rating) overall (92%) and satisfied with picture quality (96%), audio quality (89%), digital TV features (86%), and signal reception (79%).
- Majorities also give a very satisfied (5) rating to picture quality (77%), audio quality (72%), digital TV features (59%), and signal reception (55%).

---

## Satisfaction with Digital TV Features

Q6 On a scale of 1 to 5 with 5 being very satisfied and 1 being not satisfied at all, what is your level of satisfaction with each of the following features of your set?

(n)=	<u>Top 2 Box (4,5)</u> (200) %	<u>Top Box (5)</u> (200) %	<u>Mean Rating</u> (200) %
Picture quality	96	77	4.7
Overall satisfaction	92	58	4.5
Audio quality	89	72	4.6
Digital TV features	86	59	4.5
Signal reception	79	55	4.3

## Satisfaction with Digital TV Programming

---

- ◆ Most HDTV owners are clearly dissatisfied with the amount of digital programming currently available.
- Only 11% of owners rate their satisfaction with the amount of programming at a 5 (on a 5-point scale). Twenty percent place their satisfaction level at a 4 or 5.
- In contrast, a majority (56%) say they are not satisfied with programming availability (ratings of 1 or 2), with 35% giving programming availability the lowest possible satisfaction rating.

---

## Satisfaction with Digital TV Programming

Q11 On a scale of 1 to 5, with 5 being the most satisfied and 1 being the least satisfied, how satisfied are you with the amount of digital programming being broadcast?

	<u>Total</u> (200) %
(n) =	
Most Satisfied (5)	11
(4)	9
(3)	20
(2)	21
Least satisfied (1)	35
Don't know	5
<i>Top 2 Box (4,5)</i>	<i>20</i>
<i>Bottom 2 Box (1,2)</i>	<i>56</i>
Mean	2.4

---

## Consumers' Digital TV Additional Programming Priorities

- ◆ As the following table illustrates, the answer to the question, “What kinds of digital programming consumers want?” is, simply put, more.
- The most common additional programming mention is music/musicals, cited by 40% of respondents, while football is in second place, mentioned by 26% of these respondents.
- Only 10% of respondents are fail to mention any kind of digital programming that they would like to see more of.

---

## Consumers' Digital TV Additional Programming Priorities

Q12 What kind of programming do you want to see more of? — Unaided

(n)=	(200)
	%
Music/Musicals	40
Football	26
<i>Documentaries/Educational/History (net)</i>	<i>10</i>
Discovery Channel	4
History	3
Documentation	2
Educational	2
National Geographic	1
Nature	1
Public TV/PBS	7
Science Fiction	4
Travel	4
Everything (unspecified)	4
Sports (unspecified)	3
Primetime TV (unspecified)	2
Network TV (unspecified)	2
Family entertainment	2
Drama	2
News	1
Concerts	1
Sitcoms	1
Children's shows	1
Other	15
None/Don't know	10

---

## Consumer Priorities for Improving Digital TV

---

- ◆ The trend that digital TV owners are basically satisfied with the technology (price aside) and primarily want more digital programming is further illustrated by the responses to two questions about improving digital TV. Respondents were asked what one thing they would tell broadcasters to do, and what one thing they would tell manufacturers to do, to improve digital television.
- When it comes to broadcasters, one-quarter (26%) say they have nothing to offer and/or are satisfied, while 42% mention “more programming.” Twelve percent mention signal issues such as strength, quality or consistency.
- When it comes to the one thing they would tell manufacturers to do, 34% of owners say they have nothing to offer and/or are satisfied, while 26% mention price. Nine percent each cite more features and greater simplicity of use, while eight out of the 200 respondents (4%) mention reception – the same proportion that said they would tell manufacturers to increase available digital channels and/or programming available.

---

## Consumer Priorities for Improving Digital TV

Q7 If you could tell BROADCASTERS ONE thing about how to improve digital TV, what would it be? — Unaided

(n) =	(200)
	%
<i>Programming (net)</i>	45
More programming	42
Programming on cable	3
More prime time programming	1
.	
Increase signal strength/quality/consistency	12
Lower prices	3
Other	16
Don't know/Nothing/Satisfied	26

---

Q8 If you could tell MANUFACTURERS ONE thing about how to improve digital TV, what would it be? — Unaided

(n) =	(200)
	%
Lower prices	26
More features	9
More user friendly/easier to use	9
More channels/programs	4
Better reception	4
Greater standardization/compatibility	4
Other	11
Don't know/Nothing/Satisfied	34

## Demographics

---

The following table outlines the demographic characteristics of the respondents to this study. Note that percentages may not add to 100% due to rounding and due to non-response to the relevant questions.

(n) =	(200)
	%
<u>GENDER</u>	
Male	65
Female	36
<u>AGE OF RESPONDENT</u>	
18-34	23
35-54	49
55 AND OLDER	25
<u>HOUSEHOLD INCOME (1999 PRE-TAX)</u>	
Under \$100,000	39
\$100,000 or higher	36
<u>CHILDREN UNDER 18 IN HOUSEHOLD</u>	
Any	32
None	67

# QUESTIONNAIRE

MAY 31, 2000

HDTV

33077

TELEPHONE NUMBER: (\_\_\_\_)

TIME ENDED

TIME STARTED

LENGTH:(MINUTES)

DATE:

INTERVIEWER:

I.D. #:

Hello, I'm with Opinion Research International. We are conducting a brief survey on behalf of the National Consumers League about consumer's views of digital television and High Definition Television —HDTV sets. We would very much like to include your household's opinions in this important study.

May I speak to an adult 18 years old or older who lives in this household?

SA First of all, do you have a digital TV or HDTV set?

- |          |                |  |
|----------|----------------|--|
| <u>1</u> | <u>YES</u>     | —>CONTINUE                             |
| <u>2</u> | <u>NO</u>      | —>THANK AND RECORD AS INELIGIBLE       |
| <u>3</u> | <u>REFUSED</u> | —>TERMINATE AND RECORD AS REFUSED (SA) |

SEX OF RESPONDENT:

- |   |        |
|---|--------|
| 1 | MALE   |
| 2 | FEMALE |

All of these questions concern your digital TV or HDTV set.

Q1 What kind of digital TV or HDTV set do you have? (READ LIST. ACCEPT MULTIPLE RESPONSES IF GIVEN)

- |    |  |
|----|--|
| 1  | A set top box                            |
| 2  | HDTV direct view or projection view set  |
| 3  | A digital tuner integrated into your set |
| 95 | OTHER (SPECIFY)                          |
| 99 | DON'T KNOW                               |

Q2 What is the MAIN signal source for your set. Is it . . . (READ LIST. RECORD ONE ANSWER)

- 1 Roof top antenna
- 2 Indoor antenna
- 3 Cable
- 4 Satellite
- 5 DVD
- 95 OTHER (SPECIFY)
- 99 DON'T KNOW

Q3 What other signal sources would you like? (DO NOT READ LIST. RECORD AS MANY AS APPLY)

- 1 ROOF TOP ANTENNA
- 2 INDOOR ANTENNA
- 3 CABLE
- 4 SATELLITE
- 5 DVD
- 95 OTHER (SPECIFY)
- 99 DON'T KNOW

Q4 What are the advantages of owning a digital TV? (DO NOT READ LIST. RECORD AS MANY AS APPLY)

- 1 QUALITY OF PICTURE
- 2 PROGRAMMING
- 3 SIZE OF SCREEN
- 4 SHAPE OF SCREEN
- 5 SURROUND SOUND
- 6 FUTURE APPLICATIONS LIKE DATA CASTING
- 95 OTHER (SPECIFY)
- 96 NONE
- 99 DON'T KNOW

Q5 What are the disadvantages to a digital TV? (DOT NOT READ LIST. RECORD AS MANY AS APPLY)

- 1 IT'S NOT AS GOOD AS THE HYPE
- 2 BAD SIGNAL
- 3 LACK OF PROGRAMMING
- 4 PRICE
- 95 OTHER (SPECIFY)
- 96 NONE
- 99 DON'T KNOW

Q6 On a scale of 1 to 5 with 5 being very satisfied and 1 being not satisfied at all, what is your level of satisfaction with each of the following features of your set? (READ AND ROTATE ITEMS)

- 1 Not satisfied at all
- 2
- 3
- 4
- 5 Very satisfied
- 6 DON'T KNOW

Picture quality

Audio quality

Signal reception

Digital TV features

OVERALL satisfaction (READ LAST)

Q7 If you could tell BROADCASTERS ONE thing about how to improve digital TV, what would it be? (DO NOT READ LIST. RECORD ONE ANSWER)

- 1 MORE PROGRAMMING
- 2 MORE PRIMETIME PROGRAMMING
- 3 PROGRAMMING ON CABLE
- 95 OTHER (SPECIFY)
- 99 DON'T KNOW

Q8 If you could tell MANUFACTURERS ONE thing about how to improve digital TV, what would it be? (DO NOT READ LIST. RECORD ONE ANSWER)

- 1 LOWER PRICES
- 2 BETTER RECEPTION
- 3 MORE FEATURES
- 95 OTHER (SPECIFY)
- 99 DON'T KNOW

Q9 What kind of HDTV programming does your family watch the MOST? (READ LIST. RECORD ONE ANSWER)

- 1 Sports
- 2 News
- 3 Movies
- 4 Network programming, such as sit coms, dramas, talk shows
- 95 OTHER (SPECIFY)
- 99 DON'T KNOW

Q10 Have you or your family seen any of the following in digital programming? (READ LIST. RECORD AS MANY AS APPLY)

- 1 Monday Night football
- 2 Other sporting events
- 3 Concerts on public television
- 95 OTHER (SPECIFY)
- 99 DON'T KNOW

Q11 On a scale of 1 to 5, with 5 being the most satisfied and 1 being the least satisfied, how satisfied are you with the amount of digital programming being broadcast?

- 1 LEAST SATISFIED
- 2
- 3
- 4
- 5 MOST SATISFIED
- 6 DON'T KNOW

Q12 What kind of programming do you want to see more of? (PROBE FULLY FOR SPECIFICS)

Q13 How many televisions sets are in your household, including your HDTV? (RECORD NUMBER)

Q14 What percentage of the time your family watches TV is spent watching digital TV? (RECORD PERCENTAGE)

Just for background purposes . . .

S1A Are you currently . . . ?

Employed full time  
Employed part time  
Retired  
Not employed  
REFUSED/NR

S2 What is your occupation? (REFER TO OCCUPATION CODE.)

- 1 WHITE COLLAR -- PROFESSIONAL, MANAGERIAL, OWNER
- 2 WHITE COLLAR -- SALES, CLERICAL
- 3 BLUE COLLAR -- CRAFTSMEN/FOREMEN
- 4 BLUE COLLAR -- SEMISKILLED, UNSKILLED
- 5 SERVICE WORKER
- 6 OTHER (SPECIFY)
- 7 REFUSED/NR

S4 Altogether, including you and any others, how many people regularly live in this household?

- 1 ONE
- 2 TWO
- 3 THREE
- 4 FOUR
- 5 FIVE — > CONTINUE
- 6 SIX
- 7 SEVEN
- 8 EIGHT
- 9 NINE
- 10 TEN OR MORE
- 11 REFUSED/NR — > SKIP TO S8

S5A Are there any children living in your household under 6 years of age?

- 1 YES
- 2 NO
- 3 REFUSED/NR

S5B Are there any children living in your household aged 6 through 11?

- 1 YES
- 2 NO
- 3 REFUSED/NR

S6 Are there any children living in your household aged 12 through 17?

- 1 YES
- 2 NO
- 3 REFUSED/NR

S8 What is your age?

- 1 18-20
- 2 21-24
- 3 25-29
- 4 30-34
- 5 35-39
- 6 40-44
- 7 45-49
- 8 50-54
- 9 55-59
- 10 60-64
- 11 65 OR OLDER
- 12 REFUSED/NR

SS10 Was your TOTAL household income BEFORE taxes for 1999 less than \$50,000 or \$50,000 or more?

- 1 LESS THAN \$50,000
- 2 \$50,000 OR MORE
- 3 DON'T KNOW/REFUSED/NR

(ASK IF SS10(1))

SS10A Was that . . . (READ CHOICES)

- 1 Under \$25,000
- 2 \$25,000 but less than \$40,000
- 3 \$40,000 but less than \$50,000
- 4 REFUSED (UNSPECIFIED AFTER LESS THAN \$50,000)

(ASK IF SS10(2))

SS10B Was that . . . (READ CHOICES.)

- 1 \$50,000 but less than \$75,000
- 2 \$75,000 but less than \$100,000
- 3 \$100,000 but less than \$150,000
- 4 \$150,000 or more
- 5 REFUSED (UNSPECIFIED AFTER \$50,000 OR MORE)

That concludes the survey. Thank you very much for your time.