

02V0772

STATE OF NEW YORK, SS  
COUNTY OF OTSEGO

Orig-Files  
C 02-V-0772

Copies:  
MR. S. Shaep  
MS. N. Tague  
MS. A. Dalton

**LEGAL NOTICE**  
PLEASE TAKE NOTICE that Time Warner Entertainment Advance/Newhouse Partnership d/b/a Time Warner Cable, has filed an Application for Renewal of its Certificate of Confirmation and Cable Television Franchise in the Town of Pittsfield, Otsego County, New York, with the New York State Public Service Commission. The Application is available for public inspection at the offices of the New York State Public Service Commission and at the office of the Town Clerk, Town of Pittsfield, 366 State Highway 80, New Berlin, NY, during normal business hours. Any interested persons may file comments on the application with the New York State Public Service Commission, Three Empire State Plaza, Albany, New York.

Tanya Shalor of the City of Oneonta in said County, being duly sworn, deposes and says that she is the Comptroller for the newspaper called The Daily Star, printed and published at Oneonta, NY aforesaid, and that the advertisement of which the annexed is a printed copy, has been published in the said newspaper on the 12<sup>th</sup> of 19<sup>th</sup> day(s) of June 2002

Tanya Shalor

Sworn to before me the 20<sup>th</sup>  
Day of June 2002.

Debra A. Balanti  
Notary Public

Municipal Assistance Section

JUL 08 2002

DEBRA A. BALANTIC  
Notary Public, State of New York  
No. 01BA4852171  
Qualified in Otsego County  
Commission Expires February 18, 2006

PENDING PETITION MEMO

Date: 6/13/2002

*Files*  
TO : Office of ~~Communications~~  
FROM: CENTRAL OPERATIONS  
UTILITY: TIME WARNER ENTERTAINMENT-ADVANCE/NEWHOUSE  
SUBJECT: 02-V-0772

Petition of Time Warner Entertainment-Advance/Newhouse for Approval of the Renewal of its Franchise with the Town of Pittsfield, Otsego County initial franchise docket #10899.

COUGHLIN & GERHART, L.L.P.

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OLIVER N. BLAISE III  
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\*ALSO ADMITTED IN PENNSYLVANIA

June 10, 2002

Hon. Janet Hand Deixler, Secretary  
NYS Public Service Commission  
Three Empire State Plaza  
Albany, New York 12223-1350

**Re: Franchise Renewal - Time Warner Cable with Town of Pittsfield, NY**

Dear Secretary Deixler:

As the attorneys for the Binghamton Division of Time Warner Cable in connection with the above-referenced matter, we are herewith filing an original and four (4) copies of the following:

1. Municipal Resolution granting renewal, dated May 14, 2002, with attached copy of Affidavit at Publication of Notice of Public Hearing;
2. Fully-executed copy of Franchise Renewal Agreement, dated May 14, 2002; and
3. Copy of latest annual test data compiled for this part of the Division's CATV system.

We hereby request approval by the Commission of this application pursuant to Section 222 of the Public Service Law.

Respectfully,

  
Gordon E. Thompson

GET/kad  
Enclosures

cc: (w/Encs.) Hon. Darlene Labrie, Town Clerk  
Town of Pittsfield

2002 JUN 13 PM 1:49  
RECEIVED  
PUBLIC SERVICE  
COMMISSION  
OSEC-FILES-ALBANY

STATE OF NEW YORK  
Town of Pittsfield  
County of Otsego

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In the Matter of the Renewal of the Cable Television Franchise Held by  
**TIME WARNER ENTERTAINMENT-ADVANCE/NEWHOUSE**  
**PARTNERSHIP** in the Town of Pittsfield, Otsego County, New York

---

**RESOLUTION**

An application has been duly made to the Board of the Town of Pittsfield, Otsego County, New York, by **TIME WARNER ENTERTAINMENT-ADVANCE/NEWHOUSE PARTNERSHIP** ("**Time Warner**"), a partnership organized under the laws of the State of New York doing business at 120 Plaza Drive, Suite D, Vestal, New York 13850, and holder of a cable television franchise in the Town of Pittsfield for the approval of an agreement to renew Time Warner's cable television franchise for an additional eleven (11) years commencing may 14, 2002. The Franchise Renewal Agreement would bring the franchise into conformity with certain provisions of the Federal Cable Communications Policy Act of 1984, as amended, and certain court rulings.

A public hearing was held in the Town of Pittsfield, New York on may 14, 2002 at 7:15 P.M. and notice of the hearing was published in the Daily Star on 5/1/02.

**NOW, THEREFORE**, the Board of the Town of Pittsfield finds that:

1. Time Warner has substantially complied with the material terms and conditions of its existing franchise and with applicable law; and
2. The quality of the Time Warner service, including signal quality, response to customer complaints and billing practices has been in light of community needs; and

3. Time Warner has the financial, legal and technical ability to provide these services, facilities and equipment as set forth in its proposal attached; and
4. Time Warner can reasonably meet the future cable-related community needs and interests, taking into account the cost of meeting such needs and interests.

**BE IT FURTHER RESOLVED** that the Board of the Town of Pittsfield hereby renews the cable television franchise of Time Warner in the Town of Pittsfield for eleven (11) years commencing may 14, 2002 and expiring may 13, 2013.

**BE IT FURTHER RESOLVED** that the Board of the Town of Pittsfield hereby confirms that this Franchise Renewal Agreement replaces the original franchise last amended on 9/30, 94.

The foregoing having received a unanimous vote was thereby declared adopted.

Dated: may 14, 2002.

  
\_\_\_\_\_  
Town of Pittsfield Clerk

STATE OF NEW YORK, SS  
COUNTY OF OTSEGO

NOTICE OF

Time Warner Cable Franchise Renewal for Town of Pittsfield

PLEASE TAKE NOTICE that preliminary to negotiations between the Board of the Town of Pittsfield and Time Warner Cable for the renewal of the existing franchise to operate a cable television system in the Town of Pittsfield, the Board will conduct a public hearing at: The Pittsfield Fire House, Pittsfield, New York on May 14, 2002, at 7:15 PM for the purpose of

1. Identifying the future cable-related community needs and interests; and
2. Reviewing the performance of Time Warner Cable under its franchise during the current franchise.

Dated: April 18, 2002  
Darlene LaBrie  
Town of Pittsfield, Clerk

Diane Belsky of the City of Oneonta in said County, being duly sworn, deposes and says that she is the Credit Manager for the newspaper called The Daily Star, printed and published at Oneonta, NY aforesaid, and that the advertisement of which the annexed is a printed copy, has been published in the said newspaper on the \_\_\_\_\_

15  
day(s) of May 2002

Diane Belsky

Sworn to before me the 3rd  
Day of May 2002.

Debra A. Balantio  
Notary Public

DEBRA A. BALANTIO  
Notary Public, State of New York  
No. 01841952171  
Qualified in Otsego County  
Commission Expires February 18, 2006

# CABLE TELEVISION FRANCHISE RENEWAL AGREEMENT

## Town of Pittsfield

This agreement made this 14<sup>th</sup> day of may, 2002 between the Town of Pittsfield, a municipal subdivision of the State of New York, situated in Otsego County and TIME WARNER ENTERTAINMENT-ADVANCE/NEWHOUSE PARTNERSHIP, a partnership organized and existing under the laws of the State of New York, doing business at 120 Plaza Drive, Suite D, Vestal, New York 13850, hereinafter called "Time Warner".

WHEREAS, Time Warner currently provides cable television service within the Town of Pittsfield under authority of a franchise last amended .

WHEREAS, the Town of Pittsfield and Time Warner desire to renew the aforesaid franchise and amendments thereto, and to restate the terms and conditions of Time Warner's franchise to provide cable television service within the Town of Pittsfield;

WHEREAS, the technical ability, financial condition and character of Time Warner and its principals have been considered and approved by the Board in the Town of Pittsfield, in full public proceeding affording due process; and

WHEREAS, this franchise agreement is subject to and complies with all applicable federal and state laws and regulations, including without limitation, the rules of the New York State Public Service Commission concerning franchise standards.

February 28, 2002

# INDEX

Grant .....	Page 2
Term .....	Page 2
Franchise Area .....	Page 2
Line Extension .....	Page 3
Construction .....	Page 5
Rates .....	Page 6
Customer Service .....	Page 6
Prohibition of Abandonment .....	Page 7
Indemnification .....	Page 7
Repair of Property .....	Page 8
Municipal Approval of Sale/Transfer .....	Page 8
Equal Employment .....	Page 8
Responsible Municipal Officer .....	Page 8
Powers Reserved .....	Page 9
Severability .....	Page 9
Approval .....	Page 9
Access to Easements .....	Page 10
Free Service Drops .....	Page 10
PEG .....	Page 11
Previous Franchise .....	Page 11
Operating Authority .....	Page 11
Customer Service Protection Standards .....	Page 11



IT IS MUTUALLY AGREED AS FOLLOWS:

Section 1 Grant

The Town of Pittsfield hereby grants to Time Warner, its successors and assigns, the non-exclusive right and privilege to erect, place in the Town of Pittsfield and to construct, maintain and operate in, over and under the present and future streets, sidewalks, alleys, public land and places and highways in or of the Town of Pittsfield, towers, poles, lines, cables, necessary wiring and the other apparatus for the purpose of transmitting, receiving, amplifying and distributing telephone, telegraph, television and radio signals and other video and aural programming and other communication services within the Town of Pittsfield and to the inhabitants thereof. The Town of Pittsfield reserves the right to award subsequent franchises to other parties, provided that; any grant of subsequent franchise shall be on terms and conditions which are not more favorable or less burdensome than those imposed on Time Warner hereunder.

Section 2 Term

The initial term of this franchise shall be eleven (11) years, commencing on 5/14/02 and expiring on 5/13/2013. Time Warner may, by notice to the Town of Pittsfield and the New York State Public Service Commission, extend the term for an additional five (5) years until 5/13/2018, subject to any application requirement for approval by the New York State Public Service Commission. Such notice shall be given prior to 7/13/2010 (42 months prior to the end of the initial eleven (11) year term).

Section 3 Franchise Area

The franchise rights and obligations set forth in this agreement shall be applicable to the Town of Pittsfield. The area to be served shall include those areas as indicated by the map, Attachment A, herein referred to as the Primary Service Area.

Section 4 Line Extension Policy

- 1) Primary service area shall include each of the following within the franchised area;
  - (a) those areas where cable television plant has been built without a contribution in aid of construction by subscribers;
  - (b) those areas, if any, where Time Warner is obligated by the terms of its franchise to provide cable television service without a contribution in aid of construction by subscribers;
  - (c) any area adjoining an area described in subparagraph "a" or "b" of this paragraph which contains dwelling units at minimum rate of 20 dwelling units per linear mile of aerial cable;
  - (d) if the average number of dwelling unites per linear mile of aerial cable in areas described in subparagraphs "a" and "b" of this paragraph (the average is to be determined by dividing the sum of the dwelling units in areas described in subparagraphs "a" and "b" of this paragraph by the number of linear miles of cable in the same areas) is less than 20, then any area adjoining an area described in subparagraphs "a" and "b" of this paragraph and which contains at least the same number of dwelling units per linear mile of aerial cable in areas described in subparagraphs "a" and "b" of this paragraph.
- 2) Line extension area shall be any area within the franchised area which is not the primary service area.
  - (a) Within one (1) year after receipt of all necessary operating authorizations, cable television service will be offered throughout the authorized area to all subscribers requesting service in any primary service area;

(b) Cable television service will not be denied to potential subscribers located in line extension areas who are willing to contribute to the cost of construction in accordance with the following formula:

$$\frac{C}{LE} \quad (-) \quad \frac{CA}{P} \quad = \quad SC$$

"C" equals the cost of construction of new plant, "CA" equals the average cost of construction per mile in the primary service area. "P" equals the lower of 20 or the average number of dwelling units per linear mile of "a" and "b" of paragraph 1 of this section. "LE" equals the number of dwelling units requesting service in the line extension area. "SC" equals subscriber contribution in the line extension area.

- (3) Whenever, subsequent to the date which the company is obligated to provide service throughout the primary service area, a potential subscriber located in a line extension area requests service, Time Warner will, within thirty (30) days of the request, conduct a survey to determine the number of potential subscribers located in the line extension area and shall inform each of the potential subscribers of the contribution in aid of construction that may be charged. Time Warner shall apply for pole attachment agreements within thirty (30) days of its receipt of contribution in aid of construction. Cable television services must be made available to those who made a contribution in aid within ninety (90) days from the receipt of pole attachments by the company.
- (4) The contribution aid of construction shall be in addition to the installation rate set forth in this franchise in Attachment B.

- (5) During a ten (10) year period commencing at the completion of a particular line extension, a pro-rate refund shall be paid to previous subscribers as new subscribers are added to the particular line extension; the amount of the refund, if any, shall be determined by application of the formula annually. The refunds shall be paid annually to subscribers, or former subscribers, entitled to receive them. The company shall not be required to provide refunds to any previous subscriber otherwise entitled to a refund who is no longer at the same address and who has not informed the company of the subscriber's new address.
- (6) Cable television service will be provided to any subscriber who demands service and who is located within 200 feet of aerial feeder cable, and that the charge for the installation for any subscriber so situated will not be in excess of the installation charge specified in the franchise in Attachment B.
- (7) The company shall review line extensions in May of each year to reflect the number of subscribers per mile so that adjustments or rebates for line extension contribution in aid of construction may be established.

#### Section 5 Construction

(a) Time Warner shall construct, continue to operate and maintain acceptable service in a safe and reliable manner. Throughout the term of this franchise, Time Warner's cable television system shall have a minimum capacity of 750 MHz. Time Warner shall exercise efforts, in good faith, to maximize the number of energized channels available to subscribers.

(b) Time Warner shall construct its cable system using materials of good and durable quality, and all work involved in construction, installation, maintenance and repair of the cable system shall be performed in a safe, thorough and reliable manner.

### Section 6 Rates

The rates and charges imposed by Time Warner for cable television services shall be subject to the approval of the Town of Pittsfield and the New York State Public Service Commission to the extent consistent with applicable state and federal law. The rates for any cable television service for which such approval is required shall be deemed part of the franchise. A required approval of a change in rates in accordance with the appropriate procedures for such approval shall be deemed to amend the franchise with the respect to rates, any other requirements with respect to amendments to the franchise to the contrary notwithstanding.

### Section 7 Customer Service

(a) Time Warner shall maintain an office and toll-free number for the purpose of receiving and responding to cable television subscriber complaints. In addition, a maintenance service staff will be available at this location.

(b) All subscriber complaints or trouble calls shall receive investigative action on the same day such complaint or call is received at the local office, if possible, but in no case later than the following business day. Time Warner shall give credit for any service outage in excess of four (4) continuous hours. Subscriber complaints and trouble calls shall be processed in compliance with the standards set forth, and in compliance with, the rules and regulations of the New York State Public Service Commission.

(c) Time Warner provides notice to its subscribers of its billing practices, subscriber information, availability of parental control devices, the procedure for reporting and resolving subscriber billing and technical complaints and equipment compatibility. (Such notice maybe written or by such other means as the FCC or the New York State Public Service Commission may from time-to-time approve.)

Notice is given in writing to each subscriber at the time of initial subscription, reconnection, semi-annually or annually and as required by the rules and regulations of the New York State Public Service Commission. Time Warner also provides Subscriber Privacy Notices in accordance with the Federal Cable Communications Policy Act of 1984, as amended (47U.S.C.551).

(d) Time Warner will comply with the rules and regulations of the New York State Public Service Commission regarding Customer Service Consumer Protective Standards parts 590 and 596.

Section 8 Prohibition of Abandonment

Time Warner shall continue to provide cable service to all subscribers who meet their obligations to Time Warner with respect to such service. Time Warner shall not, abandon its cable television system or any portion thereof without written consent of the Town of Pittsfield and the Public Service Commission.

Section 9 Indemnification - Insurance

(a) Time Warner shall indemnify and hold harmless the Town of Pittsfield from all liability, damage and cost or expense arising from claims of injury to persons or damage to property occasioned by reason of any conduct of Time Warner, its employees or agents undertaken pursuant to this franchise. The Town of Pittsfield shall promptly notify Time Warner of any claim for which it seeks indemnification; afford Time Warner the opportunity to fully control the defense of such claim and any compromise, settlement, resolution or other disposition of such claim; and fully cooperate with Time Warner in the defense of such claim, including making available to Time Warner, all relevant information under its control.

For this purpose, Time Warner shall obtain and carry a general comprehensive liability policy naming the Town of Pittsfield as an additional insured, written by an insurance company or companies qualified to do business in the State of New York. The amounts of such insurance shall not be less than \$500,000 for liability due to damage to property, not less than \$1,000,000 for liability due to

bodily injury or death of any person, and not less than \$2,000,000 for liability due to any one occurrence. The Town of Pittsfield shall notify Time Warner with thirty (30) days after the presentation of any claim or demand either by suit or otherwise made against the Town of Pittsfield on account of any negligence or other conduct on the part of Time Warner.

(b) A certificate evidencing the insurance coverage required by paragraph "a" above shall be delivered by Time Warner to the Town of Pittsfield Clerk within sixty (60) days of the date of this franchise. Such certificate shall state that the Town of Pittsfield be given at least thirty (30) days prior written notice of any cancellation or material change in coverage.

#### Section 10 Repair of Property

Time Warner shall promptly repair or replace any municipal property damage or destroyed by Time Warner so as to restore it to serviceable conditions.

#### Section 11 Municipal Approval of Sale or Transfer

Time Warner shall not sell or transfer this franchise without prior approval by resolution of the Board of the Town of Pittsfield, except that, Time Warner may transfer this franchise to an entity under common control upon notice to the Town of Pittsfield.

#### Section 12 Equal Employment

As required by law, Time Warner shall not refuse to hire or employ nor bar or discharge from employment, nor discriminate against any person in compensation or in terms, conditions, or privileges or employment because of age, race, creed, color, national origin, sex, or handicap.

#### Section 13 Responsible Municipal Officer

The Supervisor of the Town of Pittsfield shall be responsible for the continuing administration of this franchise.

Section 14 Powers Reserved to the Town of Pittsfield

The Town of Pittsfield reserves the right to adopt, in addition to the provisions of this franchise and existing applicable ordinances, such additional regulations as it shall find necessary in the exercise of its police power; provided, however, that such regulations are and not materially in conflict with the privileges granted in this franchise.

Section 15 Severability

Should any provision of this franchise be held invalid by a court or regulatory agency of competent jurisdiction, the remaining provisions of this franchise shall remain in full force and effect.

Section 16 Approval

The terms and provisions of this franchise are subject to the approval of the New York State Public Service Commission.

Section 17 Municipal Approval

The Town of Pittsfield, upon notice and during normal business hours, shall have the right to inspect all books, records, maps, plans, financial statements and other like materials of Time Warner which are pertinent to Time Warner's compliance with the terms and conditions of this franchise.

The Town of Pittsfield and Time Warner agree that Time Warner's obligations hereunder are subject to any applicable law, including laws regarding the privacy of information regarding subscribers.

The Town of Pittsfield will maintain the confidentiality of any information obtained pursuant to this provision to the extent permitted by law, provided Time Warner has advised the Town of Pittsfield of the confidential nature of the information.



In the event that the Town of Pittsfield receives a request for disclosure of such information with it, in good faith, believes it must under law comply, the Town of Pittsfield will give Time Warner notice of such request as soon as possible prior to disclosure in order to allow Time Warner to take such steps as it may deem appropriate to seek judicial or other remedies to protect the confidentiality of such information.

Section 18 Access to and Easements in New Subdivisions

(a) Time Warner shall locate its facilities underground in areas of the Town of Pittsfield where all electric and telephone utilities are so located. In the event that it is not feasible for Time Warner to locate its facilities underground, it may petition the Town of Pittsfield for permission to locate such facilities above ground.

(b) For the purpose of providing for the future growth and development of cable television and to afford future residents the comfort and convenience of cable television service, the Town of Pittsfield Planning Board shall require all future subdivides to grant Time Warner access to and necessary easements in new subdivisions for the purpose of installing cable television lines. Such access and easements shall be similar to those granted public utilities such as telephone and power companies.

Section 19 Free Service Drops

Time Warner shall provide one (1) outlet of basic and standard cable service, at no charge, to any elementary or secondary, public, parochial or private school, as defined by, and which receives funding pursuant to Title 1 of the Elementary and Secondary Education Act of 1965, 20 U.S.C. § 24 la et seq. Free service shall apply only in areas served and where site is within 200 feet of existing cable.

Time Warner will provide one (1) outlet of basic and standard cable service, at no charge, to any building owned by the Town of Pittsfield, situated in areas served and located within 200 feet of existing cable.

Time Warner will also provide one (1) modem, at no charge, for the purpose of supplying high-speed Internet access to one (1) computer in any two municipally owned locations that qualify for cable service, at no charge, as defined above.

Section 20 Public, Educational and Government Access

Time Warner shall provide public, educational and governmental access channels according to the rules and regulations of the New York State Public Service Commission and/or the Federal Communications Commission.

Section 21 Previous Franchise

All previous franchises shall no longer be of any force and effect as of the effective date of this franchise as set forth in Section 2 above.

Section 22 Operating Authority

Time Warner shall file requests for any necessary operating authorization with the New York State Public Service Commission and the Federal Communications Commission within sixty (60) days from the date the franchise is awarded by the Town of Pittsfield.

Section 23 Customer Service Protection Standards

Time Warner shall comply with the Customer Service Standards as set forth in the Customer Service and Consumer Protection Standards of the Public Service Commission Law.

IN WITNESS WHEREOF, the parties have executed this agreement this 14<sup>th</sup> day of may, 2002.

Time Warner Entertainment-  
Advance/Newhouse Partnership

By: [Signature]  
Jon C. Scott  
Binghamton Division President

Town of Pittsfield

By: [Signature]  
Supervisor ~~Donna Wells~~ Edward Logan  
Town of Pittsfield

# Oneonta Channel Guide

Effective August 2001

## STANDARD CABLE (Includes Lifeline)

- 2 WKTV - 2 (Utica, NBC)\*
- 3 WBNG - 12 (Binghamton, CBS)\*
- 4 Pax TV\*
- 6 WPNY - 31 (Utica, UPN)\*
- 7 WUTR - 20 (Utica, ABC)\*
- 8 WSKG - 46 (Binghamton, PBS)\*
- 9 WEXY - 33 (Utica, FOX)\*
- 10 WICZ - 40 (Binghamton, FOX)\*
- 11 WBU - (Utica, WB)\*
- 12 WCNY - 24 (Syracuse PBS)\*
- 13 WIXT - 9 (Syracuse, ABC)\*
- 14 ESPN: 24 Hour Sports
- 15 CNN: 24 Hour News
- 16 Fox Family Channel
- 17 USA Network
- 18 MTV: Music Television
- 19 QVC: Home Shopping
- 20 HGTV: Home & Garden Television
- 21 TNN: The National Network
- 22 TNT: Turner Network Television
- 23 Public Access\*
- 24 HSN: Home Shopping Network
- 25 WGN 9 (Chicago, IND)\*
- 26 WRGB - 6 (Schenectady, CBS)\*
- 27 WISF - 15 (Oneonta, IND)/WPIX News\*
- 28 The Golf Channel
- 29 Bravo
- 30 CMT: Country Music Television
- 31 TCM: Turner Classic Movies
- 32 Comedy Central
- 33 Odyssey
- 35 VH-1: Video Hits 1
- 36 Nickelodeon
- 37 Lifetime Network
- 38 TBS
- 39 CNBC: Business News
- 40 The Weather Channel
- 41 The Discovery Channel
- 42 A&E
- 43 FX
- 44 E!
- 45 CNN: Headline News
- 46 Court TV
- 47 C-SPAN: Government Channel
- 48 The Food Network
- 49 TV Guide Channel
- 51 Disney Channel
- 53 Pay Per View Previews
- 55 SoapNet
- 56 MTV2
- 57 History Channel
- 58 The Learning Channel
- 59 Cartoon Network
- 60 MSG: Madison Square Garden
- 61 WE: Women's Entertainment
- 62 MoviePlex
- 63 ESPN2
- 64 CNN-Si: Sports News
- 65 Fox Sports New York
- 66 AMC: American Movie Classics

- 67 Animal Planet
- 68 PIN/C-Span 2
- 69 MSNBC
- 71 TV Land
- 73 Sci Fi Channel
- 74 The Travel Channel
- 75 Oxygen
- 76 Valuevision
- 77 Fox News
- 78 Outdoor Life Network

## PREMIUM CHANNELS

- 5 HBO
- 72 Cinemax
- 50 HBO Plus
- 33 HBO Signature
- 52 More Max
- 70 Showtime

## PAY-PER-VIEW

- 54 INDEMAND

\*Denotes Lifeline

# Oneonta Monthly Service Fees

## Rates & Services

	Total Channels	Per Month
<b>A. Cable Service:</b>		
Lifeline:	15	\$ 9.15
Standard Cable (includes Lifeline):	70	\$31.84
Additional Outlet:		No Charge
Additional Outlet/Digital Services:		\$0-\$2.99
<b>B. Premium Singles:</b>		
Home Box Office:	Analog 3	Digital 14 \$10.25
Cinemax:	2	12 \$ 9.00
Showtime:	1	8 \$ 9.00
STARZ!:	N/A	5 \$ 8.00
<b>C. Premium Packages*:</b>		
Premium Double: HBO, Cinemax, Showtime or STARZ!	5	26 \$12.95
Premium Triple: HBO, Cinemax, Showtime or STARZ!	6	31 \$18.00
Premium Home Run: HBO, Cinemax, Showtime and STARZ!	N/A	39 \$23.25
Note: Above packages include a free installation of one additional outlet.		
<b>D. Equipment Charges: (plus tax as applicable):</b>		
Non Addressable Converter:		\$ .88
Addressable Converter:		\$ 3.99
Hand-Held Remote (requires converter):		\$ .37
Service Protection Plan:		\$ .79
<b>E. Installation Charges** (plus tax as applicable):</b>		
New Installation, Standard Cable/Lifeline:		\$38.02
New Installation, Wire-in, Standard Cable:		\$24.70
Installation of Additional Sets:		\$24.16 (each)
Installation of Additional Set with Primary Install:		\$13.84 (each)
Upgrades, Downgrades, Reconnects, Relocates, Maintenance/Service Calls or Any Other Service Requiring a Truck Roll:		\$22.14
Change of Service (addressable change):		\$ 1.99
Hourly Service Charge:		\$35.19
(For non-standard installation and non-system related service calls) (plus materials)		

The foregoing rates do not include franchise fees which can range from 0 to 5% depending on the community in which you live, FCC regulatory fees of several cents per month, or state sales tax (where applicable)

\*Package requires an Addressable Converter.

\*\*Charges apply to standard residential installations. Downgrade charges are generally assessed when a customer changes from Standard to Lifeline service. Other Downgrade Service charges and Maintenance Service Call charges may be assessed when a trip to the subscriber's premises is requested or required due to damages caused by customer or neglect or non-cable related problems or service.

**Lifeline required for all service levels.**

Rates apply to Standard Residential Accounts only

**Time Warner Cable - Oneonta**  
 123 Corporate Drive, Oneonta, NY 13820  
 (607) 432-0500  
 (800) 426-3336

ATTACHMENT B

# Oneonta Channel Guide *continued*

Effective August 2001

## Digital Cable Service

### PRIME CHOICE

- 100 CNN/IN
- 101 Style
- 102 Discovery Health
- 103 Discovery Wings
- 104 Discovery Science
- 105 BBC America
- 106 ESPNEWS
- 107 Trio
- 108 Newsworld International
- 109 Bloomberg Television
- 110 CSPAN III
- 111 Tech TV
- 125 ESPN Classic
- 126 Outdoor Channel
- 127 Speedvision
- 128 The Health Network
- 129 Fox Sports World
- 132 Lifetime Movie Network
- 149 Noggin
- 150 Discovery Kids
- 151 Ovation
- 152 BET Jazz
- 156 Toon Disney
- 165 Much Music
- 166 IFC/Independent Film Channel

### MOVIE CHOICE

- 153 WAM
- 175 Love Stories
- 176 True Stories
- 177 Mysteries
- 178 Action
- 179 Westerns
- 180 Encore
- 181 Fox Movies

### HBO

- 200 HBO East
- 154 HBO Family East
- 157 HBO Family West
- 201 HBO Plus East
- 202 HBO Signature East
- 203 HBO Zone East
- 204 HBO Comedy East
- 205 HBO Latino East
- 206 HBO West
- 207 HBO Plus West
- 208 HBO Signature West
- 209 HBO Zone West
- 210 HBO Comedy West
- 211 HBO Latino West
- 215 HBO HDTV East

### MAX

- 225 Cinemax East
- 226 More Max East
- 227 Action Max East
- 228 Thriller Max East
- 229 Women Max
- 230 @ Max
- 231 5 Star Max
- 232 Outer Max
- 233 Cinemax West
- 234 More Max West
- 235 Action Max West
- 236 Thriller Max West

### SHOWTIME

- 250 Showtime
- 251 Showtime 2
- 252 Showtime 3
- 253 Showtime Extreme
- 254 Showtime Beyond
- 255 The Movie Channel
- 256 The Movie Channel 2
- 257 Flix
- 260 Showtime HDTV

### STARZ!

- 275 STARZ!
- 155 STARZ! Family
- 276 STARZ! Theater
- 277 STARZ! Cinema
- 278 Black Starz!

### PAY-PER-VIEW

- 300 PPV Guide
- 301 thru 334  
34 channels of  
iNDEMAND

### ADULT PPV

- 335 Hot Choice
- 350 Playboy
- 351 Spice
- 352 Spice 2
- 353 Pleasure Channel

### SPORTS PACKAGES

- 510 thru 521 NBA League Pass  
& WNBA League Pass
- 500 thru 508 ESPN Full Court  
& ESPN Game Plan
- 531 thru 538 NHL Center Ice  
/MLB Extra Innings

### MUSIC CHOICE

#### Digital Music

- 400 Digital Music Guide
- 401 Classical Masterpieces
- 402 Light Classical
- 403 Classic Country
- 404 Today's Country
- 405 Dance
- 406 Origenes
- 407 Mexicana
- 408 Musica Latina
- 409 Tejano
- 410 Tropical
- 411 Atmospheres
- 412 Big Band
- 413 Blues
- 414 Jazz
- 415 Light Jazz
- 416 70's
- 417 80's
- 418 Solid Gold Oldies
- 419 Hit List
- 420 Soft Rock
- 421 Body & Soul
- 422 Classic R&B
- 423 Rap
- 424 R&B Hits
- 425 Contemporary Christian
- 426 Gospel
- 427 Alternative Rock
- 428 Classic Rock
- 429 Metal
- 430 Progressive Mix
- 431 Rock Hits
- 432 American Originals
- 433 Easy Listening
- 434 For Kids Only
- 435 New Releases
- 436 Showcase 1
- 437 Showcase 2
- 438 Singers & Standards
- 439 Sounds Of The Season
- 440 World Beat

# TIME WARNER CABLE BINGHAMTON DIVISION

CATV

## Proof - of - Performance Tests

System Name: ONEONTA

Plant Mileage: 716.81 As of February 1, 2001

Basic Subscribers: 23103 As of February 1, 2001

System Bandwidth: 750 MHz As of February 1, 2001

Number of Channels Tested: 11

Number of Test Points: 7

Test Start Date: Feb 12, 2001

Test Completion Date: Feb 20, 2001

# TIME WARNER CABLE--BINGHAMTON DIVISION

SYSTEM NAME: ONEONTA DATE: Feb 06, 2001

## FCC TESTING SUMMARY

### Changes Since Last Proof of Performance:

- 1.) Addition of digital channels (550-750).
- 2.) Addition of channels 75,76,77 and 78 to lineup.
- 3.) Channel 56 no longer PPV, now MTV2.
- 4.) Max no longer channel mapped ChA-1 to Ch72.
- 5.) Two feeds out of headend defined as Otsego and Delaware feeds.

### Test Results:

The requirement to drop and insert channels at remote hub sites due to distant signal copyright issues and FCC "must carry" rules has created a situation making it only marginally possible to comply with the maximum 3 dBmv difference in video carriers between adjacent channels in isolated instances, despite our best efforts to obtain or retune channel dropping traps to the sharpest cutoff possible.

### Miscellaneous:

Note that the system was being upgraded from 550 MHz to 750 MHz during the last testing period. No comparison can be determined between then and now because of the temporary rigging of the system during that time period. Apr 2000-Jan 2001.

TIME WARNER CABLE-BINGHAMTON DIVISION

SYSTEM NAME: Oneonta-Otsego Feed

DATE: 02/06/2001

ACTUAL CHAN	CARRIER FREQ	CONV CHAN	TYPE	SCRAM 'Y'	VITS 'Y'	CALL LTR	PROG SOURCE
2	55.2500	2	TV			WKTU-2	OFF-AIR
3	61.2500	3	TV			WBNG-12	OFF-AIR
4	67.2500	4	TV			PAX	SATELLITE
5	77.2500	5	TV	Y		HBO	SATELLITE
6	83.2500	6	TV			WPNY-31	OFF-AIR
A-5	91.2500						
A-4	97.2500						
A-3	103.2500						
A-2	109.2750						
A-1	115.2750						
A	121.2625	14	TV			ESPN	SATELLITE
B	127.2625	15	TV			CNN	SATELLITE
C	133.2625	16	TV			FAM	SATELLITE
D	139.2500	17	TV			USA	SATELLITE
E	145.2500	18	TV			MTV	SATELLITE
F	151.3210	19	TV			QVC	SATELLITE
G	157.2500	20	TV			HGTV	SATELLITE
H	163.2500	21	TV			TNN	SATELLITE
I	169.2500	22	TV			TNT	SATELLITE
7	175.2500	7	TV			WUTR-20	OFF-AIR
8	181.2500	8	TV			WSKG-46	OFF-AIR
9	187.2500	9	TV			WFXV-33	OFF-AIR
10	193.2500	10	TV			WICZ-40	OFF-AIR
11	199.2500	11	TV			WBU	SATELLITE
12	205.2500	12	TV			WCNY-24	OFF-AIR
13	211.2500	13	TV			WIXT-9	OFF-AIR
J	217.2500	23	TV			CBB/PA	SUNY - FIBER
K	223.2500	24	TV			HSN	SATELLITE
L	229.2625	25	TV			WGN	SATELLITE
M	235.2625	26	TV			WRGB-6	OFF-AIR
N	241.2625	27	TV			WISF-15	OFF-AIR
O	247.2625	28	TV	Y		GOLF	SATELLITE
P	253.2625	29	TV	Y		ESPN Classic	SATELLITE
Q	259.2625	30	TV	Y		CMT	SATELLITE
R	265.2625	31	TV	Y		TCM	SATELLITE
S	271.2625	32	TV	Y		COMEDY CENT	SATELLITE
T	277.2625	33	TV	Y		HBO Signature	SATELLITE
U	283.2625	34	TV			ODYSSEY	SATELLITE
V	289.2625	35	TV			VH-1	SATELLITE
W	295.2625	36	TV			NICK	SATELLITE
AA	301.2625	37	TV			LIFETIME	SATELLITE
BB	307.2625	38	TV			TBS	SATELLITE
CC	313.2625	39	TV			CNBC	SATELLITE
DD	319.2625	40	TV			TWC	SATELLITE
EE	325.2625	41	TV			DISCOVERY	SATELLITE
FF	331.2750	42	TV			A&E	SATELLITE
GG	337.2625	43	TV			FX	SATELLITE
HH	343.2625	44	TV			E!	SATELLITE
II	349.2625	45	TV			CNN HN	SATELLITE
JJ	355.2625	46	TV			COURT	SATELLITE
KK	361.2625	47	TV			C-SPAN	SATELLITE
LL	367.2625	48	TV			TV FOOD	SATELLITE
MM	373.2625	49	TV			TV GUIDE	SATELLITE
NN	379.2625	50	TV	Y		HBO Plus	SATELLITE
OO	385.2625	51	TV	Y		DISNEY	SATELLITE
PP	391.2625	52	TV	Y		More MAX	SATELLITE
QQ	397.2625	53	TV			SNEAKPREVUE	SATELLITE
RR	403.2500	54	TV	Y		in-DEMAND 1	SAT PPV
SS	409.2500	55	TV	Y		in-DEMAND 2	SAT PPV
TT	415.2500	56	TV			MTV2/The Box	SATELLITE
UU	421.2500	57	TV			HISTORY	SATELLITE
VV	427.2500	58	TV			TLC	SATELLITE
WW	433.2500	59	TV			CARTOON	SATELLITE
XX	439.2500	60	TV			MSG	SATELLITE
YY	445.2500	61	TV	Y		FXM	SATELLITE
ZZ	451.2500	62	TV			ENCORE PLEX	SATELLITE
63	457.2500	63	TV			ESPN2	SATELLITE
64	463.2500	64	TV	Y		CNN / SI	SATELLITE
65	469.2500	65	TV			FOX Sports NY	SATELLITE
66	475.2500	66	TV			AMC	SATELLITE
67	481.2500	67	TV			ANIMAL PLANET	SATELLITE
68	487.2500	68	TV			PINSAH/CSPAN2	SATELLITE
69	493.2500	69	TV			MSNBC	SATELLITE
70	499.2500	70	TV	Y		SHOWTIME	SATELLITE
71	505.2500	71	TV			TV Land	SATELLITE
72	511.2500	72	TV	Y		Cinemax	SATELLITE
73	517.2500	73	TV			SCI FI	SATELLITE
74	523.2500	74	TV			TRAVEL	SATELLITE
75	529.2500	75	TV	Y		BRAVO	SATELLITE
76	535.2500	76	TV			Valuevision	SATELLITE
77	541.2500	77	TV			FoxNews	SATELLITE
78	547.2500	78	TV			Outdoor Life Net	SATELLITE

TIME WARNER CABLE--BINGHAMTON DIVISION

SYSTEM NAME: Oneonta-Delaware Feed DATE: 02/06/2001

ACTUAL CHAN	CARRIER FREQ	CONV CHAN	TYPE	SCRAM Y	VITS Y	CALL LTR	PROG SOURCE
2	55.2500	2	TV			WBGH-8	MICROWAVE
3	61.2500	3	TV			WBNG-12	OFF-AIR
4	67.2500	4	TV			PAX	SATELLITE
5	77.2500	5	TV			HBO	SATELLITE
6	83.2500	6	TV			WPNY-31	OFF-AIR
A-5	91.2500						
A-4	97.2500						
A-3	103.2500						
A-2	109.2750						
A-1	115.2750						
A	121.2625	14	TV			ESPN	SATELLITE
B	127.2625	15	TV			CNN	SATELLITE
C	133.2625	16	TV			FAM	SATELLITE
D	139.2500	17	TV			USA	SATELLITE
E	145.2500	18	TV			MTV	SATELLITE
F	151.3210	19	TV			QVC	SATELLITE
G	157.2500	20	TV			HGTV	SATELLITE
H	163.2500	21	TV			TNN	SATELLITE
I	169.2500	22	TV			TNT	SATELLITE
7	175.2500	7	TV			WVY-34	OFF-AIR
8	181.2500	8	TV			WSKG-46	OFF-AIR
9	187.2500	9	TV			WFXV-33	OFF-AIR
10	193.2500	10	TV			WICZ-40	OFF-AIR
11	199.2500	11	TV			WBXI	SATELLITE
12	205.2500	12	TV			WCNY-24	OFF-AIR
13	211.2500	13	TV			WIXT-9	OFF-AIR
J	217.2500	23	TV			CBB/PA	SUNY - FIBER
K	223.2500	24	TV			HSN	SATELLITE
L	229.2625	25	TV			WGN	SATELLITE
M	235.2625	26					
N	241.2625	27	TV			WISF-15	OFF-AIR
O	247.2625	28	TV	Y		GOLF	SATELLITE
P	253.2625	29	TV	Y		ESPN Classic	SATELLITE
Q	259.2625	30	TV	Y		CMT	SATELLITE
R	265.2625	31	TV	Y		TCM	SATELLITE
S	271.2625	32	TV	Y		COMEDY CENT	SATELLITE
T	277.2625	33	TV	Y		HBO Signature	SATELLITE
U	283.2625	34	TV			ODYSSEY	SATELLITE
V	289.2625	35	TV			VH-1	SATELLITE
W	295.2625	36	TV			NICK	SATELLITE
AA	301.2625	37	TV			LIFETIME	SATELLITE
BB	307.2625	38	TV			TBS	SATELLITE
CC	313.2625	39	TV			CNBC	SATELLITE
DD	319.2625	40	TV			TWC	SATELLITE
EE	325.2625	41	TV			DISCOVERY	SATELLITE
FF	331.2750	42	TV			A&E	SATELLITE
GG	337.2625	43	TV			IX	SATELLITE
HH	343.2625	44	TV			E!	SATELLITE
I	349.2625	45	TV			CNN HN	SATELLITE
JJ	355.2625	46	TV			COURT	SATELLITE
KK	361.2625	47	TV			C-SPAN	SATELLITE
LL	367.2625	48	TV			TV FOOD	SATELLITE
MM	373.2625	49	TV			TV GUIDE	SATELLITE
NN	379.262	50	TV	Y		HBO Plus	SATELLITE
OO	385.262	51	TV	Y		DISNEY	SATELLITE
PP	391.2625	52	TV	Y		More MAX	SATELLITE
QQ	397.2625	53	TV	Y		SNEAKPREVIEW	SATELLITE
RR	403.2500	54	TV	Y		in-DEMAND 1	SAT PPV
SS	409.2500	55	TV	Y		in-DEMAND 2	SAT PPV
TT	415.2500	56	TV			MTV2/The Box	SATELLITE
UU	421.2500	57	TV			HISTORY	SATELLITE
VV	427.2500	58	TV			TLC	SATELLITE
WW	433.2500	59	TV			CARTOON	SATELLITE
XX	439.2500	60	TV			MSG	SATELLITE
YY	445.2500	61	TV	Y		IXM	SATELLITE
ZZ	451.2500	62	TV			ENCORE PLEX	SATELLITE
63	457.2500	63	TV			ESPN2	SATELLITE
64	463.2500	64	TV	Y		CNN / SI	SATELLITE
65	469.2500	65	TV			FOX Sports NY	SATELLITE
66	475.2500	66	TV			AMC	SATELLITE
67	481.2500	67	TV			ANIMAL PLANET	SATELLITE
68	487.2500	68	TV			PINSAH/CSPAN2	SATELLITE
69	493.2500	69	TV			MSNBC	SATELLITE
70	499.2500	70	TV	Y		SHOWTIME	SATELLITE
71	505.2500	71	TV			TV Land	SATELLITE
72	511.2500	72	TV	Y		Cinemax	SATELLITE
73	517.2500	73	TV			SCI FI	SATELLITE
74	523.2500	74	TV			TRAVEL	SATELLITE
75	529.2500	75	TV	Y		BRAVO	SATELLITE
76	535.2500	76	TV			Valuevision	SATELLITE
77	541.2500	77	TV			FoxNews	SATELLITE
78	547.2500	78	TV			Outdoor Life Net	SATELLITE



TIME WARNER CABLE--BINGHAMTON DIVISION

SYSTEM NAME: Oneonta-Delaware Feed @ Sidney

DATE: 02/06/2001

ACTUAL CHAN	CARRIER FREQ	CONV CHAN	TYPE	SCRAM *Y*	VITS *Y*	CALL LTR	PROG SOURCE
2	55.2500						
3	61.2500						
4	67.2500						
5	77.2500						
6	83.2500						
A-5	91.2500						
A-4	97.2500						
A-3	103.2500						
A-2	109.2750						
A-1	115.2750						
A	121.2625						
B	127.2625						
C	133.2625						
D	139.2500						
E	145.2500						
F	151.3210						
G	157.2500						
H	163.2500						
I	169.2500						
7	175.2500						
8	181.2500						
9	187.2500						
10	193.2500						
11	199.2500						
12	205.2500						
13	211.2500						
J	217.2500						
K	223.2500						
L	229.2625	25	TV			WGN	dropped to Oxford
M	235.2625	26	Channel dropper			CBB/PA	Fiber
N	241.2625						
O	247.2625						
P	253.2625						
Q	259.2625						
R	265.2625						
S	271.2625						
T	277.2625						
U	283.2625						
V	289.2625						
W	295.2625						
AA	301.2625						
BB	307.2625						
CC	313.2625						
DD	319.2625						
EE	325.2625						
FF	331.2750						
GG	337.2625						
HH	343.2625						
II	349.2625						
JJ	355.2625						
KK	361.2625						
LL	367.2625						
MM	373.2625						
NN	379.2625						
OO	385.2625						
PP	391.2625						
QQ	397.2625						
RR	403.2500						
SS	409.2500						
TT	415.2500						
UU	421.2500						
VV	427.2500						
WW	433.2500						
XX	439.2500						
YY	445.2500						
ZZ	451.2500						
63	457.2500						
64	463.2500						
65	469.2500						
66	475.2500						
67	481.2500						
68	487.2500						
69	493.2500						
70	499.2500						
71	505.2500						
72	511.2500						
73	517.2500						
74	523.2500						
75	529.2500						
76	535.2500						
77	541.2500						
78	547.2500						

TIME WARNER CABLE--BINGHAMTON DIVISION

SYSTEM NAME: Oneonta-Delaware Feed @ Delhi

DATE: 02/06/2001

ACTUAL CHAN	CARRIER FREQ	CONV CHAN	TYPE	SCRAM 'Y'	VITS 'Y'	CALL LTR	PROG SOURCE
2	55.2500						
3	61.2500						
4	67.2500						
6	83.2500						
A-5	91.2500						
A-4	97.2500						
A-3	103.2500						
A-2	109.2750						
A-1	115.2750						
A	121.2625						
B	127.2625						
C	133.2625						
D	139.2500						
E	145.2500						
F	151.3210						
G	157.2500						
H	163.2500						
I	169.2500						
7	175.2500						
8	181.2500						
9	187.2500						
10	193.2500						
11	199.2500						
12	205.2500						
13	211.2500						
J	217.2500	23	Channel dropper			CBB/PA	SUNY D - FIBER
K	223.2500						
L	229.2625						
M	235.2625						
N	241.2625						
O	247.2625						
P	253.2625						
Q	259.2625						
R	265.2625						
S	271.2625						
T	277.2625						
U	283.2625						
V	289.2625						
W	295.2625						
AA	301.2625						
BB	307.2625						
CC	313.2625						
DD	319.2625						
EE	325.2625						
FF	331.2500						
GG	337.2625						
HH	343.2625						
II	349.2625						
JJ	355.2625						
KK	361.2625						
LL	367.2625						
MM	373.2625						
NN	379.2625						
OO	385.2625						
PP	391.2625						
QQ	397.2625						
RR	403.2500						
SS	409.2500						
TT	415.2500						
UU	421.2500						
VV	427.2500						
WW	433.2500						
XX	439.2500						
YY	445.2500						
ZZ	451.2500						
63	457.2500						
64	463.2500						
65	469.2500						
66	475.2500						
67	481.2500						
68	487.2500						
69	493.2500						
70	499.2500						
71	505.2500						
72	511.2500						
73	517.2500						
74	523.2500						
75	529.2500						
76	535.2500						
77	541.2500						
78	547.2500						

TIME WARNER CABLE--BINGHAMTON DIVISION

SYSTEM NAME: Oneonta-Otsego Feed @ New Berlin

DATE: 02/06/2001

ACTUAL CHAN	CARRIER FREQ	CONV CHAN	TYPE	SCRAM Y	VITS Y	CALL LTR	PROG SOURCE
2	55.2500						
3	61.2500						
4	67.2500						
5	77.2500						
6	83.2500						
A-5	91.2500						
A-4	97.2500						
A-3	103.2500						
A-2	109.2750						
A-1	115.2750						
A	121.2625						
B	127.2625						
C	133.2625						
D	139.2500						
E	145.2500						
F	151.3210						
G	157.2500						
H	163.2500						
I	169.2500						
7	175.2500						
8	181.2500						
9	187.2500						
10	193.2500						
11	199.2500						
12	205.2500						
13	211.2500						
J	217.2500						
K	223.2500						
L	229.2625		Channel dropper				
M	235.2625	26	Channel dropper			CBB/PA	Character Generator
N	241.2625						
O	247.2625						
P	253.2625						
Q	259.2625						
R	265.2625						
S	271.2625						
T	277.2625						
U	283.2625						
V	289.2625						
W	295.2625						
AA	301.2625						
BB	307.2625						
CC	313.2625						
DD	319.2625						
EE	325.2625						
FF	331.2750						
GG	337.2625						
HH	343.2625						
I	349.2625						
JJ	355.2625						
KK	361.2625						
LL	367.2625						
MM	373.2625						
NN	379.2625						
OO	385.2625						
PP	391.2625						
QQ	397.2625						
RR	403.2500						
SS	409.2500						
TT	415.2500						
UU	421.2500						
VV	427.2500						
WW	433.2500						
XX	439.2500						
YY	445.2500						
ZZ	451.2500						
63	457.2500						
64	463.2500						
65	469.2500						
66	475.2500						
67	481.2500						
68	487.2500						
69	493.2500						
70	499.2500						
71	505.2500						
72	511.2500						
73	517.2500						
74	523.2500						
75	529.2500						
76	535.2500						
77	541.2500						
78	547.2500						



TIME WARNER CABLE  
BINGHAMTON DIVISION

DATE: 02/06/2001

Proof - of - Performance Test

System Name: ONEONTA

Statement of Qualifications

Employee Name:	<u>GERALD R. HENRY</u>	Title:	<u>REGIONAL ENGINEER</u>
System:	<u>ONEONTA</u>		
Qualifications:	<u>Education: High School, A.A.S. Electrical, Various trade related schools and seminars.</u>		
	<u>Work: Lockheed Electronics-2 Yrs., Raycomm-2Way- 2Yrs., CATV</u>		
	<u>30 years experience all aspects of coaxial / fiber CATV</u>		

Employee Name:	<u>DAVID A. KULZE</u>	Title:	<u>ENGINEERING TECH</u>
System:	<u>ONEONTA</u>		
Qualifications:	<u>Education: High School, U.S. Navy Avionics School, Various trade related schools and seminars.</u>		
	<u>Work: U.S. Navy Aviation Electronics - 4 Yrs., CATV 28 Yrs.</u>		
	<u>experience all aspects of coaxial / fiber CATV</u>		

Employee Name:	<u>BRIAN MILLER</u>	Title:	<u>ENGINEERING TECH</u>
System:			
Qualifications:	<u>Education: High School, U.S. Navy Avionics School, Hartwick College -2Yrs., Various trade related schools and seminars.</u>		
	<u>Work: U.S. Navy Aviation Electronics -4Yrs., CATV 17 Yrs.</u>		
	<u>experience all aspects of coaxial / fiber CATV</u>		

Employee Name:	<u>Donald Reed</u>	Title:	<u>ENGINEERING TECH</u>
System:	<u>ONEONTA</u>		
Qualifications:	<u>Education: High School, U.S. Air Force, Various trade related schools and seminars.</u>		
	<u>Work: CATV 19 Yrs.</u>		
	<u>experience all aspects of coaxial / fiber CATV</u>		



# TIME WARNER CABLE BINGHAMTON DIVISION

## Terminal Isolation Test

System Name: ONEONTA

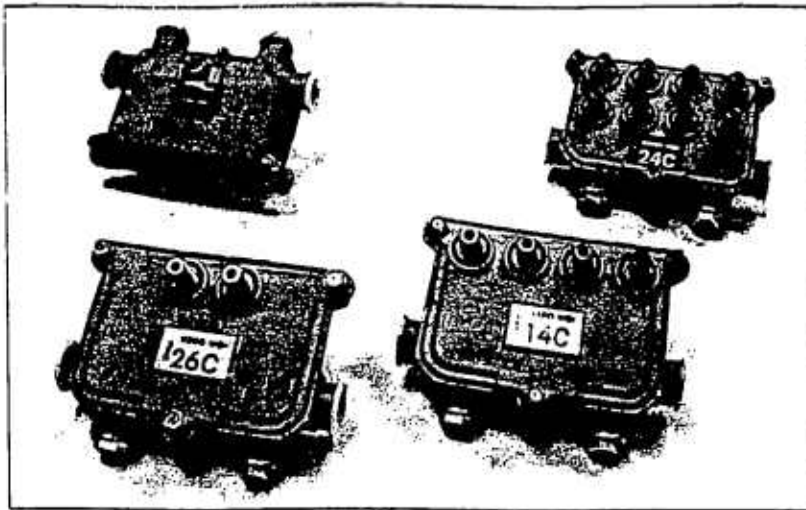
Date: 02/06/2001

*The terminal isolation provided to each subscriber terminal shall not be less than 18 decibels. In lieu of periodic testing, the cable operator may use specifications provided by the manufacturer for the terminal isolation equipment to meet this standard.*

### Instructions:

Attach a copy of the manufacturer's specifications covering all directional taps used in the system. The specification sheet must show the minimum tap-to-tap isolation. In lieu of a specification sheet, attach a letter from the manufacturer(s) certifying that the directional taps used in the system do exhibit a minimum tap-to-tap isolation of 18dB.

# Conventional Multi-Taps



## 9000-C Series

The 9000-C series 1 GHz conventional multi-tap taps off part of its input RF signal but allows the rest of that signal to pass through. It divides the tapped-off signal into multiple outputs.

- Optional continuous AC and RF power passing circuits eliminate downstream service interruptions when face plates are removed.
- 90° rotating seizure mechanism makes installation easy.
- F-port capacitors eliminate hum modulation that can originate at the subscriber home.
- Environmental coating provides excellent corrosion resistance.
- Dual gaskets keep RF signals pure and protect the circuitry from extreme environments.

A multi-tap is a combination of a directional coupler and splitters arranged to produce a specific value or signal loss, from the multi-tap's input to its tap ports.

Philips' 9000-C series 1 GHz multi-taps are available in two-way, four-way, and eight-way models, offering two, four, and eight tap ports respectively. We've created a compact tap which fits easily into a 6-inch pedestal.

Our 9000-C series multi-taps all share these standard features:

- 1 GHz bandwidth capacity,
- brass SCTE F-ports with drip lips and rubber boots,
- RFI and weather gaskets,
- network power capacity of 90 VAC, 0 to 60 Hz,
- strip gauges and heat-shrink ridges for easy installation,

- numbered ports for easier subscriber audits,
- 5 KV surge resistance meets ANSI/IEEE C62.41-1991 Class B, 1500 V surge and 12-amp current handling capability,
- interchangeable face plates, and
- face plates fit in 8000 series housings for easy upgrade to 1 GHz.

The aluminum die-cast housing is pressure tested to 10 psi and is coated with a protective finish, which provides excellent corrosion resistance. Rubber boots inside the brass SCTE F-ports help keep the 9000-C series multi-taps water-resistant. A single alloy at contact points eliminates the galvanic couple and corrosion that accompanies aluminum-to-brass

connections. So, by connecting the brass SCTE F-port to a brass F-connector, you can eliminate a weak link in your network.

All F-ports have a capacitor that blocks hum modulation that can originate in the subscriber home. This capacitor also provides additional protection from transients traveling on subscriber drop cables.

Order the 9000T-PWR-FI power bypass assembly option to prevent interruptions in power and RF service when face plates are removed. Also, order the 9000-USB-PBT for easy aerial to underground interconnections.



# Conventional Multi-Taps

## Worst Case Specifications\*

## 9800-C Eight-Way Series

	9812	9815	9818	9821	9824	9827	9830	9833	9836	Units
Tap Value	12.0	15.5	18.0	21.0	24.0	27.0	30.0	33.0	36.0	dB
Bandwidth	10-1000									MHz
Color Code	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown	
Tolerance										
10-19 MHz	1.7	2.0	1.5	2.5	2.5	2.5	2.5	2.5	2.5	± dB
20-899 MHz	1.8	2.0	1.5	1.5	1.5	1.5	1.5	1.8	1.8	± dB
900-1000 MHz	2.3	2.5	1.9	2.4	2.1	2.1	1.9	2.1	2.3	± dB
Insertion Loss (max.)										
10 MHz	—	3.8	1.9	1.2	1.0	0.8	0.5	0.5	0.5	dB
30 MHz	—	3.5	1.5	1.0	0.9	0.7	0.4	0.4	0.4	dB
54 MHz	—	3.5	1.6	1.0	0.8	0.7	0.4	0.4	0.4	dB
112 MHz	—	4.0	1.9	1.2	0.9	0.8	0.6	0.6	0.6	dB
150 MHz	—	4.0	1.9	1.2	0.9	0.8	0.6	0.6	0.6	dB
186 MHz	—	4.1	2.0	1.3	1.0	0.8	0.6	0.6	0.6	dB
222 MHz	—	4.1	2.0	1.3	1.0	0.8	0.6	0.6	0.6	dB
330 MHz	—	4.2	2.1	1.4	1.0	0.8	0.6	0.6	0.6	dB
400 MHz	—	4.3	2.2	1.4	1.0	0.8	0.7	0.7	0.7	dB
450 MHz	—	4.4	2.2	1.4	1.0	0.8	0.7	0.7	0.7	dB
550 MHz	—	4.5	2.3	1.3	1.1	0.9	0.8	0.8	0.8	dB
600 MHz	—	4.7	2.4	1.4	1.1	1.0	0.9	0.9	0.9	dB
750 MHz	—	5.1	2.8	1.6	1.3	1.2	1.2	1.2	1.2	dB
862 MHz	—	5.3	3.2	1.8	1.6	1.3	1.4	1.4	1.4	dB
1000 MHz	—	5.4	3.9	2.3	1.8	1.4	1.4	1.4	1.4	dB
Flatness (max.)										
10-1000 MHz	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	± dB
Tap-to-Out Isolation (min.)										
10-29 MHz	—	21	24	27	30	34	34	36	38	dB
30-749 MHz	—	27	30	32	34	38	40	42	44	dB
750-899 MHz	—	25	28	30	33	36	38	40	41	dB
900-1000 MHz	—	25	28	28	33	34	36	38	39	dB
Tap-to-Tap Isolation (min.)										
10-29 MHz	20	20	20	20	20	20	20	20	20	dB
30-449 MHz	25	25	25	25	25	25	25	25	25	dB
450-749 MHz	23	23	23	23	23	23	23	23	23	dB
750-1000 MHz	20	20	20	20	20	20	20	20	20	dB
Return Loss In (min.)										
10-29 MHz	17	17	17	17	17	17	17	17	17	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	dB
600-899 MHz	17	17	17	17	17	17	17	17	17	dB
900-1000 MHz	16	16	16	16	16	16	16	16	16	dB
Return Loss Out (min.)										
10-29 MHz	—	17	17	17	17	17	17	17	17	dB
30-599 MHz	—	18	18	18	18	18	18	18	18	dB
600-899 MHz	—	17	17	17	17	17	17	17	17	dB
900-1000 MHz	—	16	16	16	16	16	16	16	16	dB
Return Loss Tap (min.)										
10-29 MHz	16	16	16	16	16	16	16	16	16	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	dB
600-1000 MHz	16	16	16	16	16	16	16	16	16	dB
Hum Modulation @ 8 amps (max.)										
10-49 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	dB
50-599 MHz	—	-70	-70	-70	-70	-70	-70	-70	-70	dB
600-749 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	dB
750-1000 MHz	—	-60	-60	-60	-60	-60	-60	-60	-60	dB
RFI Isolation										
Current (max.)	0	2	12	12	12	12	12	12	12	amps
Voltage Passing Capacity (min.)	Exceeds FCC requirements									
0 to 60 MHz	90	90	90	90	90	90	90	90	90	VAC
Surge Rating	ANSI/IEEE C62.41-1991, Class B, 2500 Volts									

\*All specifications are subject to change without notice.

# Conventional Multi-Taps

## Nominal Performance\*

## 9800-C Eight-Way Series

	9812	9815	9818	9821	9824	9827	9830	9833	9836	Units
Tap Value	12.0	15.5	18.0	21.0	24.0	27.0	30.0	33.0	36.0	dB
Bandwidth	10-1000									MHz
Color Code	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown	
Insertion Loss (Input/Output)										
10 MHz	—	3.5	1.4	1.1	0.9	0.7	0.3	0.3	0.3	dB
30 MHz	—	3.4	1.3	0.9	0.7	0.6	0.3	0.3	0.3	dB
54 MHz	—	3.4	1.3	0.9	0.7	0.5	0.3	0.3	0.3	dB
112 MHz	—	3.8	1.7	1.0	0.8	0.7	0.4	0.5	0.4	dB
150 MHz	—	3.8	1.7	1.0	0.8	0.7	0.4	0.5	0.4	dB
186 MHz	—	3.9	1.8	1.0	0.8	0.7	0.4	0.5	0.4	dB
222 MHz	—	3.9	1.8	1.1	0.8	0.7	0.4	0.5	0.4	dB
330 MHz	—	4.0	1.9	1.1	0.8	0.7	0.5	0.5	0.5	dB
400 MHz	—	4.1	2.0	1.1	0.8	0.7	0.5	0.5	0.5	dB
450 MHz	—	4.1	2.0	1.1	0.9	0.7	0.6	0.6	0.5	dB
550 MHz	—	4.2	2.0	1.1	0.9	0.7	0.6	0.6	0.6	dB
600 MHz	—	4.5	2.2	1.2	0.9	0.8	0.7	0.7	0.6	dB
750 MHz	—	4.9	2.6	1.3	1.0	0.9	0.8	0.8	0.8	dB
862 MHz	—	5.0	2.9	1.5	1.2	1.1	1.0	1.0	1.0	dB
1000 MHz	—	5.2	3.5	1.7	1.2	1.1	1.1	1.1	1.1	dB
Tap Loss										
10-19 MHz	10.7	13.8	17.8	19.4	22.3	25.5	28.8	32.2	34.5	dB
20-899 MHz	11.3	14.7	18.4	20.6	24.3	26.7	30.4	32.8	35.6	dB
900-1000 MHz	13.0	16.7	18.8	20.7	25.1	27.8	30.4	33.2	36.3	dB

\*All specifications are subject to change without notice.

# Conventional Multi-Taps

## Worst Case Specifications\*

## 9400-C Four-Way Series

	9408	9411	9414	9417	9420	9423	9426	9429	9432	9435	Units
Tap Value	8.0	11.5	14.5	17.0	20.0	23.0	26.0	29.0	32.0	35.0	dB
Bandwidth	10-1000										MHz
Color Code	Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown	
Tolerance											
10-19 MHz	1.5	1.5	1.5	2.1	1.9	2.2	2.5	2.5	2.3	1.9	± dB
20-899 MHz	1.5	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	± dB
900-1000 MHz	1.5	2.5	2.3	2.2	2.0	1.9	1.7	1.6	1.8	2.0	± dB
Insertion Loss (max.)											
10 MHz	—	3.6	1.9	1.2	1.0	0.8	0.5	0.4	0.4	0.4	dB
30 MHz	—	3.5	1.5	0.9	0.8	0.7	0.4	0.3	0.3	0.3	dB
54 MHz	—	3.5	1.5	0.9	0.8	0.7	0.4	0.3	0.3	0.3	dB
112 MHz	—	4.0	1.8	1.0	1.0	0.8	0.6	0.6	0.6	0.6	dB
150 MHz	—	4.1	1.8	1.0	1.0	0.8	0.6	0.6	0.6	0.6	dB
186 MHz	—	4.1	1.8	1.0	1.0	0.8	0.6	0.6	0.6	0.6	dB
222 MHz	—	4.2	1.8	1.0	1.0	0.8	0.6	0.6	0.6	0.6	dB
330 MHz	—	4.3	1.9	1.0	1.0	0.9	0.6	0.6	0.6	0.6	dB
400 MHz	—	4.3	2.0	1.1	1.1	0.9	0.7	0.7	0.7	0.7	dB
450 MHz	—	4.3	2.0	1.1	1.1	0.9	0.7	0.7	0.7	0.7	dB
550 MHz	—	4.4	2.1	1.2	1.1	0.9	0.7	0.7	0.7	0.7	dB
600 MHz	—	4.7	2.4	1.4	1.1	1.0	0.8	0.8	0.8	0.8	dB
750 MHz	—	5.1	2.9	1.6	1.4	1.3	1.1	1.1	1.1	1.1	dB
862 MHz	—	5.2	3.3	1.8	1.6	1.5	1.2	1.2	1.2	1.2	dB
1000 MHz	—	5.4	4.0	2.2	1.8	1.6	1.4	1.3	1.3	1.3	dB
Flatness (max.)											
10-1000 MHz	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	± dB
Tap-to-Out Isolation (min.)											
10-29 MHz	—	20	21	22	27	30	34	34	36	38	dB
30-749 MHz	—	24	27	30	33	36	38	40	42	44	dB
750-899 MHz	—	22	25	28	31	34	36	38	40	42	dB
900-1000 MHz	—	22	25	28	31	34	36	38	40	42	dB
Tap-to-Tap Isolation (min.)											
10-29 MHz	20	20	20	20	20	20	20	20	20	20	dB
30-449 MHz	25	25	25	25	25	25	25	25	25	25	dB
450-749 MHz	23	23	23	23	23	23	23	23	23	23	dB
750-1000 MHz	20	20	20	20	20	20	20	20	20	20	dB
Return Loss In (min.)											
10-29 MHz	17	17	17	17	17	17	17	17	17	17	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	18	dB
600-899 MHz	17	17	17	17	17	17	17	17	17	17	dB
900-1000 MHz	16	16	16	16	16	16	16	16	16	16	dB
Return Loss Out (min.)											
10-29 MHz	—	17	17	17	17	17	17	17	17	17	dB
30-599 MHz	—	18	18	18	18	18	18	18	18	18	dB
600-899 MHz	—	17	17	17	17	17	17	17	17	17	dB
900-1000 MHz	—	16	16	16	16	16	16	16	16	16	dB
Return Loss Tap (min.)											
10-29 MHz	16	16	16	16	16	16	16	16	16	16	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	18	dB
600-1000 MHz	16	16	16	16	16	16	16	16	16	16	dB
Hum Modulation @ 8 amps (max.)											
10-49 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	-64	dB
50-599 MHz	—	-70	-70	-70	-70	-70	-70	-70	-70	-70	dB
600-749 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	-64	dB
750-1000 MHz	—	-60	-60	-60	-60	-60	-60	-60	-60	-60	dB
RFI Isolation	Exceeds FCC requirements										
Current (max.)	0	2	12	12	12	12	12	12	12	12	amps
Voltage Passing Capacity (min.)											
0-60 Hz	90	90	90	90	90	90	90	90	90	90	VAC
Surge Rating	ANSI/IEEE C62.41-1991, Class B, 2500 Volts										

\*All specifications are subject to change without notice.

# Conventional Multi-Taps

## Nominal Performance\*

## 9400-C Four-Way Series

	9408	9411	9414	9417	9420	9423	9426	9429	9432	9435	Units
Tap Value	8.0	11.5	14.5	17.0	20.0	23.0	26.0	29.0	32.0	35.0	dB
Bandwidth	10-1000										MHz
Color Code	Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown	
Insertion Loss (In/Out)											
10 MHz	—	3.5	1.3	1.0	0.9	0.6	0.3	0.3	0.3	0.3	dB
30 MHz	—	3.4	1.3	0.7	0.7	0.6	0.3	0.3	0.3	0.3	dB
54 MHz	—	3.4	1.3	0.7	0.7	0.6	0.3	0.3	0.3	0.3	dB
112 MHz	—	3.8	1.7	0.9	0.8	0.7	0.5	0.5	0.5	0.5	dB
150 MHz	—	3.8	1.7	0.9	0.8	0.7	0.5	0.5	0.5	0.5	dB
186 MHz	—	3.9	1.8	0.9	0.9	0.7	0.5	0.5	0.5	0.5	dB
222 MHz	—	3.9	1.8	0.9	0.9	0.7	0.5	0.5	0.5	0.5	dB
330 MHz	—	4.0	1.8	0.9	0.9	0.7	0.5	0.5	0.5	0.5	dB
400 MHz	—	4.1	1.8	1.0	0.9	0.8	0.5	0.6	0.6	0.5	dB
450 MHz	—	4.1	1.8	1.0	0.9	0.8	0.5	0.6	0.6	0.5	dB
550 MHz	—	4.2	1.9	1.0	0.9	0.8	0.6	0.6	0.6	0.6	dB
600 MHz	—	4.4	2.1	1.1	0.9	0.8	0.6	0.6	0.7	0.6	dB
750 MHz	—	4.7	2.6	1.3	1.1	1.0	0.9	0.8	0.8	0.8	dB
862 MHz	—	4.8	3.0	1.6	1.3	1.1	1.1	1.0	1.0	1.0	dB
1000 MHz	—	4.9	3.6	1.8	1.3	1.1	1.1	1.0	1.0	1.0	dB
Tap Loss											
10-19 MHz	6.9	10.3	14.5	15.8	19.4	22.1	24.9	27.9	31.0	34.2	dB
20-899 MHz	7.2	10.7	14.7	17.6	21.0	23.6	26.3	29.2	32.2	35.3	dB
900-1000 MHz	8.2	12.8	15.0	18.2	20.7	23.2	26.0	29.1	32.0	35.2	dB

\*All specifications are subject to change without notice.

# Conventional Multi-Taps

## Worst Case Specifications\*

## 9200-C Two-Way Series

	9204	9208	9211	9214	9217	9220	9223	9226	9229	9232	Units
Tap Value	4.0	8.5	11.0	14.0	17.0	20.0	23.0	26.0	29.0	32.0	dB
Bandwidth	10-1000										MHz
Color Code	Black	Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	
Tolerance											
10-19 MHz	1.5	1.5	1.5	1.5	2.5	2.5	2.5	2.5	2.5	2.5	± dB
20-899 MHz	1.5	2.0	1.5	1.5	1.5	1.6	1.5	1.5	2.0	1.8	± dB
900-1000 MHz	2.0	2.0	1.5	2.0	1.6	1.7	1.7	2.0	2.0	2.0	± dB
Insertion Loss (max.)											
10 MHz	—	3.6	1.9	1.0	1.0	0.8	0.5	0.5	0.4	0.4	dB
30 MHz	—	3.1	1.5	0.8	0.8	0.7	0.5	0.4	0.3	0.3	dB
54 MHz	—	3.3	1.5	0.8	0.8	0.7	0.4	0.4	0.3	0.3	dB
112 MHz	—	3.3	1.8	1.0	0.9	0.8	0.5	0.5	0.5	0.5	dB
150 MHz	—	3.3	1.8	1.0	0.9	0.8	0.5	0.5	0.5	0.5	dB
186 MHz	—	3.4	1.9	1.0	0.9	0.8	0.5	0.5	0.5	0.5	dB
222 MHz	—	3.5	1.9	1.0	1.0	0.8	0.5	0.5	0.5	0.5	dB
330 MHz	—	3.6	2.0	1.0	1.0	0.8	0.6	0.6	0.6	0.6	dB
400 MHz	—	3.7	2.1	1.1	1.0	0.9	0.7	0.7	0.6	0.6	dB
450 MHz	—	3.8	2.1	1.1	1.0	0.9	0.7	0.7	0.6	0.6	dB
550 MHz	—	3.9	2.1	1.2	1.1	0.9	0.7	0.7	0.7	0.7	dB
600 MHz	—	4.1	2.4	1.4	1.2	1.0	0.8	0.8	0.8	0.8	dB
750 MHz	—	4.7	3.0	1.6	1.4	1.2	1.0	1.0	0.9	0.9	dB
862 MHz	—	5.0	3.5	1.8	1.6	1.4	1.2	1.2	1.1	1.1	dB
1000 MHz	—	5.5	4.1	2.0	1.8	1.6	1.4	1.3	1.3	1.3	dB
Flatness (max.)											
10-1000 MHz	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	± dB
Tap-to-Out Isolation (min.)											
10-29 MHz	—	20	20	20	24	29	30	34	34	36	dB
30-749 MHz	—	22	24	26	30	33	36	38	40	42	dB
750-899 MHz	—	20	22	25	28	31	34	36	38	40	dB
900-1000 MHz	—	20	22	24	28	31	34	36	38	40	dB
Tap-to-Tap Isolation (min.)											
10-29 MHz	20	20	20	20	20	20	20	20	20	20	dB
30-449 MHz	25	25	25	25	25	25	25	25	25	25	dB
450-749 MHz	23	23	23	23	23	23	23	23	23	23	dB
750-1000 MHz	20	20	20	20	20	20	20	20	20	20	dB
Return Loss In (min.)											
10-29 MHz	17	17	17	17	17	17	17	17	17	17	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	18	dB
600-899 MHz	17	17	17	17	17	17	17	17	17	17	dB
900-1000 MHz	16	16	16	16	16	16	16	16	16	16	dB
Return Loss Out (min.)											
10-29 MHz	—	17	17	17	17	17	17	17	17	17	dB
30-599 MHz	—	18	18	18	18	18	18	18	18	18	dB
600-899 MHz	—	17	17	17	17	17	17	17	17	17	dB
900-1000 MHz	—	16	16	16	16	16	16	16	16	16	dB
Return Loss Tap (min.)											
10-29 MHz	16	16	16	16	16	16	16	16	16	16	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	18	dB
600-1000 MHz	16	16	16	16	16	16	16	16	16	16	dB
Hum Modulation @ 8 amps (max.)											
10-49 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	-64	dB
50-599 MHz	—	-70	-70	-70	-70	-70	-70	-70	-70	-70	dB
600-749 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	-64	dB
750-1000 MHz	—	-60	-60	-60	-60	-60	-60	-60	-60	-60	dB
RFI Isolation	Exceeds FCC requirements										
Current (max.)	0	0	12	12	12	12	12	12	12	12	amps
Voltage Passing Capacity (min.)											
0-60 MHz	90	90	90	90	90	90	90	90	90	90	VAC
Surge Rating	ANSI/IEEE C62.41-1991, Class B, 2500 Volts										

\*All specifications are subject to change without notice.

# Conventional Multi-Taps

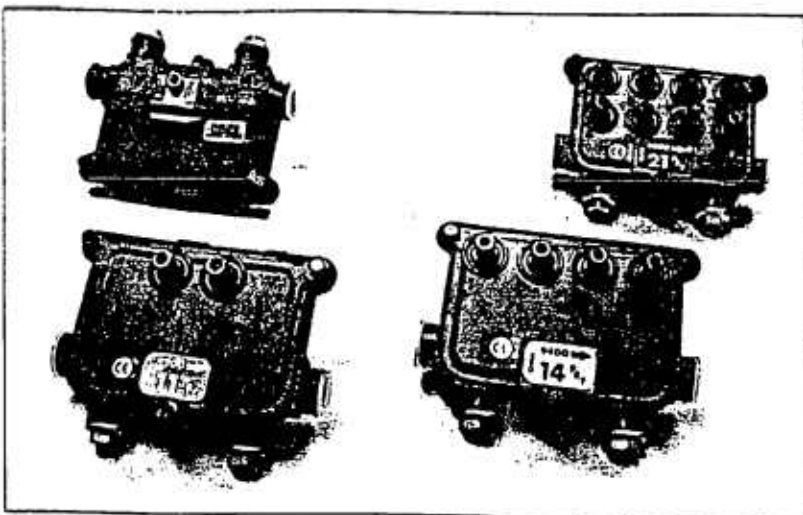
## Nominal Performance\*

## 9200-C Two-Way Series

	9204	9208	9211	9214	9217	9220	9223	9226	9229	9232	Units
Tap Value	4.0	8.5	11.0	14.0	17.0	20.0	23.0	26.0	29.0	32.0	dB
Bandwidth	10-1000										MHz
Color Code	Black	Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	
Insertion Loss (In/Out)											
10 MHz	—	2.8	1.3	1.0	0.9	0.7	0.3	0.3	0.3	0.3	dB
30 MHz	—	2.8	1.3	0.8	0.7	0.6	0.3	0.3	0.3	0.3	dB
54 MHz	—	2.8	1.3	0.7	0.7	0.6	0.3	0.3	0.3	0.3	dB
112 MHz	—	3.2	1.7	0.9	0.8	0.7	0.5	0.5	0.4	0.4	dB
150 MHz	—	3.2	1.7	0.9	0.8	0.7	0.5	0.5	0.4	0.4	dB
186 MHz	—	3.2	1.7	0.9	0.8	0.7	0.5	0.5	0.4	0.4	dB
222 MHz	—	3.3	1.7	0.9	0.9	0.8	0.5	0.5	0.5	0.5	dB
330 MHz	—	3.4	1.8	0.9	0.9	0.8	0.5	0.5	0.5	0.5	dB
400 MHz	—	3.4	1.9	1.0	0.9	0.8	0.6	0.6	0.5	0.5	dB
450 MHz	—	3.4	1.9	1.0	0.9	0.8	0.6	0.6	0.5	0.5	dB
550 MHz	—	3.5	1.9	1.0	0.9	0.8	0.6	0.6	0.5	0.6	dB
600 MHz	—	3.8	2.1	1.1	1.0	0.9	0.6	0.6	0.6	0.6	dB
750 MHz	—	4.3	2.5	1.2	1.2	1.0	0.8	0.8	0.7	0.8	dB
862 MHz	—	4.5	2.8	1.4	1.3	1.1	0.9	0.9	0.9	1.0	dB
1000 MHz	—	4.8	3.5	1.6	1.3	1.1	1.0	1.0	1.0	1.1	dB
Tap Loss											
10-19 MHz	3.4	7.7	10.8	13.7	15.7	18.4	21.2	24.4	27.2	30.5	dB
20-899 MHz	3.7	8.0	11.1	14.9	17.4	20.0	22.6	25.5	28.1	31.2	dB
900-1000 MHz	5.2	9.6	11.0	15.2	17.0	20.0	23.2	26.5	29.1	32.8	dB

\*All specifications are subject to change without notice.

# Power Bypass Multi-Taps



## 9000-PBT Series

The 9000-PBT series 1 GHz multi-tap taps off part of its input RF signal but allows the rest of that signal to pass through. It divides the tapped-off signal into multiple outputs.

- Continuous RF signal and AC power bypass circuit eliminates downstream service interruptions when face plates are removed.
- 90° rotating seizure mechanism makes installation easy.
- F-port capacitors eliminate hum modulation that can originate at the subscriber home.
- Environmental coating provides excellent corrosion resistance.
- Dual gaskets keep RF signals pure and protect the circuitry from extreme environments.

A multi-tap is a combination of a directional coupler and splitters arranged to produce a specific value or signal loss, from the multi-tap's input to its tap ports.

Philips 9000-PBT series 1 GHz multi-taps are available in two-way, four-way and eight-way models, offering two, four, and eight tap ports respectively. We've created a compact tap which fits easily into a 6-inch pedestal.

Our 9000-PBT series multi-taps all share these standard features:

- 1 GHz bandwidth capacity,
- brass SCTE F-ports with drip lips and rubber boots,
- interchangeable face plates
- strip gauges and heat-shrink ridges for easy installation.

- 5 KV surge resistance meets ANSI/IEEE 2.41-1991 Class B, 2500 surge and 10-amp current-handling capability,
- network power capacity of 1000 VA, 0 to 60 Hz,
- easily upgraded to telephony with F-port powered 9000T-FP or twisted pair 9000T-TP face plates, and
- face plates fit in 8000 series housings for easy upgrade to 1 GHz.

The aluminum die-cast housing is pressure tested to 10 psi and coated with a protective finish, which provides excellent corrosion resistance. Rubber boots inside the brass SCTE F-ports help keep the 9000 series multi-taps water resistant. A single alloy at contact

points eliminates the galvanic couple and corrosion that accompanies aluminum-to-brass connections. So, by connecting the brass SCTE F-port to a brass F-connector, you can eliminate a weak link in your network.

All F-ports have a capacitor that blocks hum modulation that can originate in the subscriber home. This capacitor also provides additional protection from transients traveling on subscriber drop cables.

The power bypass assembly, located in the housing, prevents interruptions in power and RF service when face plates are removed. The 10-amp current rating (for assembly) meets future system requirements.

# Power Bypass Multi-Taps

## Worst Case Specifications\*

## 9800-PBT Eight-Way Series

	9812	9815	9818	9821	9824	9827	9830	9833	9836	Units
Tap Value	12.0	15.5	18.0	21.0	24.0	27.0	30.0	33.0	36.0	dB
Bandwidth	10-1000									MHz
Color Code	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown	
Tolerance										
10-19 MHz	1.7	2.0	1.5	2.5	2.5	2.5	2.5	2.5	2.5	± dB
20-899 MHz	1.8	2.0	1.5	1.5	1.5	1.5	1.5	1.8	1.8	± dB
900-1000 MHz	2.3	2.5	1.9	2.4	2.1	2.1	1.9	2.1	2.3	± dB
Insertion Loss (max.)										
10 MHz	—	3.8	1.9	1.2	1.0	0.8	0.5	0.5	0.5	dB
30 MHz	—	3.5	1.5	1.0	0.9	0.7	0.4	0.4	0.4	dB
54 MHz	—	3.5	1.6	1.0	0.8	0.7	0.4	0.4	0.4	dB
112 MHz	—	4.0	1.9	1.2	0.9	0.8	0.6	0.6	0.6	dB
150 MHz	—	4.0	1.9	1.2	0.9	0.8	0.6	0.6	0.6	dB
186 MHz	—	4.1	2.0	1.3	1.0	0.8	0.6	0.6	0.6	dB
222 MHz	—	4.1	2.0	1.3	1.0	0.8	0.6	0.6	0.6	dB
330 MHz	—	4.2	2.1	1.4	1.0	0.8	0.6	0.6	0.6	dB
400 MHz	—	4.3	2.2	1.4	1.0	0.8	0.7	0.7	0.7	dB
450 MHz	—	4.4	2.2	1.4	1.0	0.8	0.7	0.7	0.7	dB
550 MHz	—	4.5	2.3	1.3	1.1	0.9	0.8	0.8	0.8	dB
600 MHz	—	4.7	2.4	1.4	1.1	1.0	0.9	0.9	0.9	dB
750 MHz	—	5.1	2.8	1.6	1.3	1.2	1.2	1.2	1.2	dB
862 MHz	—	5.3	3.2	1.8	1.6	1.3	1.4	1.4	1.4	dB
1000 MHz	—	5.4	3.9	2.3	1.8	1.4	1.4	1.4	1.4	dB
Flatness (max.)										
10-1000 MHz	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	± dB
Tap-to-Out Isolation (min.)										
10-29 MHz	—	21	24	27	30	34	34	36	38	dB
30-749 MHz	—	27	30	32	34	38	40	42	44	dB
750-899 MHz	—	25	28	30	33	36	38	40	41	dB
900-1000 MHz	—	25	28	28	33	34	36	38	39	dB
Tap-to-Tap Isolation (min.)										
10-29 MHz	20	20	20	20	20	20	20	20	20	dB
30-449 MHz	25	25	25	25	25	25	25	25	25	dB
450-749 MHz	23	23	23	23	23	23	23	23	23	dB
750-1000 MHz	20	20	20	20	20	20	20	20	20	dB
Return Loss In (min.)										
10-29 MHz	17	17	17	17	17	17	17	17	17	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	dB
600-899 MHz	17	17	17	17	17	17	17	17	17	dB
900-1000 MHz	16	16	16	16	16	16	16	16	16	dB
Return Loss Out (min.)										
10-29 MHz	—	17	17	17	17	17	17	17	17	dB
30-599 MHz	—	18	18	18	18	18	18	18	18	dB
600-899 MHz	—	17	17	17	17	17	17	17	17	dB
900-1000 MHz	—	16	16	16	16	16	16	16	16	dB
Return Loss Tap (min.)										
10-29 MHz	16	16	16	16	16	16	16	16	16	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	dB
600-1000 MHz	16	16	16	16	16	16	16	16	16	dB
Hum Modulation @ 8 amps (max.)										
10-49 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	dB
50-599 MHz	—	-70	-70	-70	-70	-70	-70	-70	-70	dB
600-749 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	dB
750-1000 MHz	—	-60	-60	-60	-60	-60	-60	-60	-60	dB
RFI Isolation	Exceeds FCC requirements									
Current (max.)	0	10	10	10	10	10	10	10	10	amps
Voltage Passing	90	90	90	90	90	90	90	90	90	VAC
Capacity (min) 0 to 60 Hz.										
Surge Rating	ANSI/IEEE C62.41-1991, Class B, 2500 Volts									

\*All specifications are subject to change without notice.



# Power Bypass Multi-Taps

## Nominal Specifications\*

## 9800-PBT Eight-Way Series

	9812	9815	9818	9821	9824	9827	9830	9833	9836	Units
Tap Value	12.0	15.5	18.0	21.0	24.0	27.0	30.0	33.0	36.0	dB
Bandwidth	10-1000									MHz
Color Code	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown	
Insertion Loss (input/output)										
10 MHz	—	2.6	1.4	0.8	0.5	0.5	0.4	0.3	0.4	dB
30 MHz	—	2.5	1.3	0.7	0.4	0.4	0.3	0.3	0.3	dB
54 MHz	—	2.4	1.2	0.6	0.4	0.3	0.3	0.3	0.3	dB
70 MHz	—	2.6	1.4	0.8	0.6	0.4	0.3	0.3	0.3	dB
112 MHz	—	2.9	1.7	1.0	0.8	0.5	0.4	0.4	0.4	dB
150 MHz	—	2.9	1.7	1.0	0.8	0.5	0.4	0.4	0.4	dB
186 MHz	—	2.9	1.8	1.0	0.8	0.5	0.4	0.4	0.4	dB
222 MHz	—	3.0	1.8	1.1	0.8	0.5	0.4	0.4	0.4	dB
330 MHz	—	3.0	1.9	1.1	0.8	0.5	0.4	0.4	0.4	dB
400 MHz	—	3.1	1.9	1.2	0.8	0.6	0.5	0.5	0.5	dB
450 MHz	—	3.1	1.9	1.2	0.8	0.6	0.5	0.5	0.5	dB
550 MHz	—	3.3	2.0	1.2	0.9	0.6	0.5	0.5	0.5	dB
600 MHz	—	3.5	2.1	1.3	0.9	0.7	0.7	0.7	0.7	dB
750 MHz	—	3.9	2.4	1.5	1.1	0.8	0.7	0.8	0.7	dB
862 MHz	—	4.1	2.7	1.7	1.3	0.9	0.8	0.8	0.8	dB
1000 MHz	—	4.3	3.0	2.2	1.7	1.1	1.0	1.0	1.0	dB
Tap Loss										
10-29 MHz	11.0	15.3	17.9	21.4	24.1	25.9	28.8	31.7	34.7	dB
20-899 MHz	11.3	15.1	17.6	21.1	23.7	26.9	30.1	32.5	35.6	dB
900-1000 MHz	12.5	16.2	18.7	21.9	24.2	27.4	30.3	33.0	36.3	dB

\*All specifications are subject to change without notice.

# Power Bypass Multi-Taps

## Worst Case Specifications\*

## 9400-PBT Four-Way Series

	9408	9411	9414	9417	9420	9423	9426	9429	9432	9435	Units
Tap Value	8.0	11.5	14.5	17.0	20.0	23.0	26.0	29.0	32.0	35.0	dB
Bandwidth	10-1000										MHz
Color Code	Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown	
Tolerance											
10-19 MHz	1.5	1.5	1.5	2.1	1.9	2.2	2.5	2.5	2.3	1.9	± dB
20-899 MHz	1.5	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	± dB
900-1000 MHz	1.5	2.5	2.3	2.2	2.0	1.9	1.7	1.6	1.8	2.0	± dB
Insertion Loss (max.)											
10 MHz	—	3.6	1.9	1.2	1.0	0.8	0.5	0.4	0.4	0.4	dB
30 MHz	—	3.5	1.5	0.9	0.8	0.7	0.4	0.3	0.3	0.3	dB
54 MHz	—	3.5	1.5	0.9	0.8	0.7	0.4	0.3	0.3	0.3	dB
112 MHz	—	4.0	1.8	1.0	1.0	0.8	0.6	0.6	0.6	0.6	dB
150 MHz	—	4.1	1.8	1.0	1.0	0.8	0.6	0.6	0.6	0.6	dB
186 MHz	—	4.1	1.8	1.0	1.0	0.8	0.6	0.6	0.6	0.6	dB
222 MHz	—	4.2	1.8	1.0	1.0	0.8	0.6	0.6	0.6	0.6	dB
330 MHz	—	4.3	1.9	1.0	1.0	0.9	0.6	0.6	0.6	0.6	dB
400 MHz	—	4.3	2.0	1.1	1.1	0.9	0.7	0.7	0.7	0.7	dB
450 MHz	—	4.3	2.0	1.1	1.1	0.9	0.7	0.7	0.7	0.7	dB
550 MHz	—	4.4	2.1	1.2	1.1	0.9	0.7	0.7	0.7	0.7	dB
600 MHz	—	4.7	2.4	1.4	1.1	1.0	0.8	0.8	0.8	0.8	dB
750 MHz	—	5.1	2.9	1.6	1.4	1.3	1.1	1.1	1.1	1.1	dB
862 MHz	—	5.2	3.3	1.8	1.6	1.5	1.2	1.2	1.2	1.2	dB
1000 MHz	—	5.4	4.0	2.2	1.8	1.6	1.4	1.3	1.3	1.3	dB
Flatness (max.)											
10-1000 MHz	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	± dB
Tap-to-Out Isolation (min.)											
10-29 MHz	—	20	21	22	27	30	34	34	36	38	dB
30-749 MHz	—	24	27	30	33	36	38	40	42	44	dB
750-899 MHz	—	22	25	28	31	34	36	38	40	42	dB
900-1000 MHz	—	22	25	28	31	34	36	38	40	42	dB
Tap-to-Tap Isolation (min.)											
10-29 MHz	20	20	20	20	20	20	20	20	20	20	dB
30-449 MHz	25	25	25	25	25	25	25	25	25	25	dB
450-749 MHz	23	23	23	23	23	23	23	23	23	23	dB
750-1000 MHz	20	20	20	20	20	20	20	20	20	20	dB
Return Loss In (min.)											
10-29 MHz	17	17	17	17	17	17	17	17	17	17	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	18	dB
600-899 MHz	17	17	17	17	17	17	17	17	17	17	dB
900-1000 MHz	16	16	16	16	16	16	16	16	16	16	dB
Return Loss Out (min.)											
10-29 MHz	—	17	17	17	17	17	17	17	17	17	dB
30-599 MHz	—	18	18	18	18	18	18	18	18	18	dB
600-899 MHz	—	17	17	17	17	17	17	17	17	17	dB
900-1000 MHz	—	16	16	16	16	16	16	16	16	16	dB
Return Loss Tap (min.)											
10-29 MHz	16	16	16	16	16	16	16	16	16	16	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	18	dB
600-1000 MHz	16	16	16	16	16	16	16	16	16	16	dB
Hum Modulation @ 8 amps (max.)											
10-49 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	-64	dB
50-599 MHz	—	-70	-70	-70	-70	-70	-70	-70	-70	-70	dB
600-749 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	-64	dB
750-1000 MHz	—	-60	-60	-60	-60	-60	-60	-60	-60	-60	dB
RFI Isolation	Exceeds FCC requirements										
Current (max.)	0	10	10	10	10	10	10	10	10	10	amps
Voltage Passing											
Capacity (min.) 0 to 60 Hz	90	90	90	90	90	90	90	90	90	90	VAC
Surge Rating	ANSI/IEEE C62.41-1991, Class B, 2500 Volts										

\*All specifications are subject to change without notice.

# Power Bypass Multi-Taps

## Nominal Performance\*

## 9400-PBT Four-Way Series

	9408	9411	9414	9417	9420	9423	9426	9429	9432	9435	Units
Tap Value	8.0	11.5	14.5	17.0	20.0	23.0	26.0	29.0	32.0	35.0	dB
Bandwidth	10-1000										MHz
Color Code	Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown	
Insertion Loss (input/output)											
10 MHz	—	3.2	1.4	0.7	0.5	0.4	0.4	0.3	0.3	0.3	dB
30 MHz	—	3.2	1.3	0.6	0.4	0.4	0.3	0.3	0.3	0.3	dB
55 MHz	—	3.2	1.2	0.6	0.4	0.4	0.3	0.3	0.3	0.3	dB
70 MHz	—	3.5	1.4	0.8	0.6	0.6	0.3	0.3	0.3	0.3	dB
112 MHz	—	3.7	1.6	0.9	0.8	0.7	0.4	0.4	0.4	0.4	dB
150 MHz	—	3.7	1.6	0.9	0.8	0.7	0.4	0.4	0.4	0.4	dB
186 MHz	—	3.8	1.6	0.9	0.8	0.7	0.4	0.4	0.4	0.4	dB
222 MHz	—	3.8	1.6	0.9	0.8	0.7	0.4	0.4	0.4	0.4	dB
330 MHz	—	3.9	1.7	1.0	0.8	0.7	0.5	0.5	0.5	0.5	dB
400 MHz	—	4.0	1.8	1.0	0.8	0.7	0.5	0.5	0.5	0.5	dB
450 MHz	—	4.0	1.8	1.0	0.8	0.7	0.5	0.5	0.5	0.5	dB
550 MHz	—	4.1	1.9	1.1	0.9	0.8	0.6	0.5	0.5	0.6	dB
600 MHz	—	4.4	2.0	1.2	0.9	0.8	0.6	0.6	0.6	0.6	dB
750 MHz	—	4.6	2.4	1.4	1.1	1.0	0.8	0.8	0.7	0.8	dB
862 MHz	—	4.5	2.8	1.5	1.3	1.1	0.9	0.9	0.8	0.9	dB
1000 MHz	—	4.4	3.4	2.0	1.7	1.6	1.1	1.0	0.9	1.1	dB
Tap Loss											
10-19 MHz	6.8	10.7	14.9	17.5	20.2	23.3	25.4	28.3	31.4	34.4	dB
20-899 MHz	7.2	10.5	14.9	17.2	19.8	22.8	26.1	29.1	32.0	35.0	dB
900-1000 MHz	8.6	13.3	15.7	17.7	20.7	23.8	25.9	29.5	32.2	34.9	dB

\*All specifications are subject to change without notice.

# Power Bypass Multi-Taps

## Worst Case Specifications\*

## 9200-PBT Two-Way Series

	9204	9208	9211	9214	9217	9220	9223	9226	9229	9232	Units
Tap Value	4.0	8.5	11.0	14.0	17.0	20.0	23.0	26.0	29.0	32.0	dB
Bandwidth	10-1000										MHz
Color Code	Black	Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	
Tolerance											
10-19 MHz	1.5	1.5	1.5	1.5	2.5	2.5	2.5	2.5	2.5	2.5	±dB
20-899 MHz	1.5	2.0	1.5	1.5	1.5	1.6	1.5	1.5	2.0	1.8	±dB
900-1000 MHz	2.0	2.0	1.5	2.0	1.6	1.7	1.7	2.0	2.0	2.0	±dB
Insertion Loss (max.)											
10 MHz	—	3.6	1.9	1.0	1.0	0.8	0.5	0.5	0.4	0.4	dB
30 MHz	—	3.1	1.5	0.8	0.8	0.7	0.5	0.4	0.3	0.3	dB
54 MHz	—	3.3	1.5	0.8	0.8	0.7	0.4	0.4	0.3	0.3	dB
112 MHz	—	3.3	1.8	1.0	0.9	0.8	0.5	0.5	0.5	0.5	dB
150 MHz	—	3.3	1.8	1.0	0.9	0.8	0.5	0.5	0.5	0.5	dB
186 MHz	—	3.4	1.9	1.0	0.9	0.8	0.5	0.5	0.5	0.5	dB
222 MHz	—	3.5	1.9	1.0	1.0	0.8	0.5	0.5	0.5	0.5	dB
330 MHz	—	3.6	2.0	1.0	1.0	0.8	0.6	0.6	0.6	0.6	dB
400 MHz	—	3.7	2.1	1.1	1.0	0.9	0.7	0.7	0.6	0.6	dB
450 MHz	—	3.8	2.1	1.1	1.0	0.9	0.7	0.7	0.6	0.6	dB
550 MHz	—	3.9	2.1	1.2	1.1	0.9	0.7	0.7	0.7	0.7	dB
600 MHz	—	4.1	2.4	1.4	1.2	1.0	0.8	0.8	0.8	0.8	dB
750 MHz	—	4.7	3.0	1.6	1.4	1.2	1.0	1.0	0.9	0.9	dB
862 MHz	—	5.0	3.5	1.8	1.6	1.4	1.2	1.2	1.1	1.1	dB
1000 MHz	—	5.5	4.1	2.0	1.8	1.6	1.4	1.3	1.3	1.3	dB
Flatness (max.)											
10-1000 MHz	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	±dB
Tap-to-Out Isolation (min.)											
10-29 MHz	—	20	20	20	24	29	30	34	34	36	dB
30-749 MHz	—	22	24	26	30	33	36	38	40	42	dB
750-899 MHz	—	20	22	25	28	31	34	36	38	40	dB
900-1000 MHz	—	20	22	24	28	31	34	36	38	40	dB
Tap-to-Tap Isolation (min.)											
10-29 MHz	20	20	20	20	20	20	20	20	20	20	dB
30-449 MHz	25	25	25	25	25	25	25	25	25	25	dB
450-749 MHz	23	23	23	23	23	23	23	23	23	23	dB
750-1000 MHz	20	20	20	20	20	20	20	20	20	20	dB
Return Loss In (min.)											
10-29 MHz	17	17	17	17	17	17	17	17	17	17	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	18	dB
600-899 MHz	17	17	17	17	17	17	17	17	17	17	dB
900-1000 MHz	16	16	16	16	16	16	16	16	16	16	dB
Return Loss Out (min.)											
10-29 MHz	—	17	17	17	17	17	17	17	17	17	dB
30-599 MHz	—	18	18	18	18	18	18	18	18	18	dB
600-899 MHz	—	17	17	17	17	17	17	17	17	17	dB
900-1000 MHz	—	16	16	16	16	16	16	16	16	16	dB
Return Loss Tap (min.)											
10-29 MHz	16	16	16	16	16	16	16	16	16	16	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	18	dB
600-1000 MHz	16	16	16	16	16	16	16	16	16	16	dB
Hum Modulation @ 8 amps (max.)											
10-49 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	-64	dB
50-599 MHz	—	-70	-70	-70	-70	-70	-70	-70	-70	-70	dB
600-749 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	-64	dB
750-1000 MHz	—	-60	-60	-60	-60	-60	-60	-60	-60	-60	dB
RFI Isolation	Exceeds FCC requirements										
Current (max.)	0	10	10	10	10	10	10	10	10	10	amps
Voltage Passing	90	90	90	90	90	90	90	90	90	90	VAC
Capacity (min) 0 to 60 Hz.	90	90	90	90	90	90	90	90	90	90	VAC
Surge Rating	ANSI/IEEE C62.41-1991, Class B, 2500 Volts										

\*All specifications are subject to change without notice.

# Power Bypass Multi-Taps

## Nominal Performance\*

## 9200-PBT Two-Way Series

	9204	9208	9211	9214	9217	9220	9223	9226	9229	9232	Units
Tap Value	4.0	8.5	11.0	14.0	17.0	20.0	23.0	26.0	29.0	32.0	dB
Bandwidth	10-1000										MHz
Color Code	Black	Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	
Insertion Loss (input/output)											
10 MHz	—	2.7	1.3	0.6	0.5	0.4	0.3	0.3	0.3	0.3	dB
30 MHz	—	2.7	1.2	0.6	0.4	0.4	0.3	0.3	0.3	0.3	dB
55 MHz	—	2.6	1.2	0.6	0.4	0.3	0.3	0.3	0.3	0.3	dB
70 MHz	—	2.9	1.4	0.7	0.6	0.4	0.3	0.3	0.3	0.3	dB
112 MHz	—	3.1	1.6	0.9	0.8	0.5	0.4	0.4	0.4	0.4	dB
150 MHz	—	3.3	1.6	0.9	0.8	0.5	0.4	0.4	0.4	0.4	dB
186 MHz	—	3.3	1.6	0.9	0.8	0.5	0.4	0.4	0.4	0.4	dB
222 MHz	—	3.3	1.6	0.9	0.8	0.5	0.4	0.4	0.4	0.4	dB
330 MHz	—	3.3	1.6	1.0	0.8	0.5	0.5	0.4	0.4	0.5	dB
400 MHz	—	3.4	1.7	1.0	0.8	0.6	0.5	0.5	0.5	0.5	dB
450 MHz	—	3.4	1.7	1.0	0.8	0.6	0.5	0.5	0.5	0.5	dB
550 MHz	—	3.5	1.8	1.0	0.8	0.6	0.5	0.5	0.5	0.5	dB
600 MHz	—	3.6	1.9	1.1	0.9	0.7	0.6	0.6	0.6	0.6	dB
750 MHz	—	3.9	2.2	1.3	1.1	0.9	0.8	0.7	0.8	0.8	dB
862 MHz	—	4.1	2.4	1.4	1.3	1.0	0.8	0.8	0.8	0.9	dB
1000 MHz	—	4.0	2.9	1.8	1.7	1.1	1.0	0.9	0.9	1.0	dB
Tap Loss											
10-19 MHz	3.4	7.6	11.3	14.8	17.1	19.6	22.3	25.2	28.3	31.3	dB
20-899 MHz	3.6	7.5	11.2	14.7	16.6	20.3	23.0	25.9	28.8	31.7	dB
900-1000	4.5	9.2	12.1	15.0	17.0	21.0	23.7	27.2	29.7	32.9	dB

\*All specifications are subject to change without notice.

# TIME WARNER CABLE BINGHAMTON DIVISION

## Converter Specifications

System Name: ONEONTA

Date: 02/06/2001

*All testing done at the end of a 100ft drop cable (RG-6) without a converter.  
Converter specification sheets are attached for "After Converter" numbers,  
if so desired.*

### Instructions:

Attach a copy of the manufacturer's specifications covering all converters used in the system. The specification sheet must show the converters carrier- to- noise (C/N) and distortion figures.

# Infrared Programmable Set-Top Terminal

## Model 8529

### Easy Set-Up

The Model 8551-555 Subscriber Options Transmitter (SOT) is used to program the Model 8529 Set-Top Terminal's non-volatile memory. Using the keypad on this infrared transmitting device, an operator selects channel authorizations, a barker channel, frequency line-up (standard, HRC, IRC, or EIA), parental control or remote control enable/disable. Once entered, these settings can be stored in the Subscriber Options Transmitter, and identified as tiers of service. By pointing the transmit wand and pressing the button, the infrared signal then programs the set-top terminal for the service tier. The SOT is capable of programming a single Model 8529 Set-Top Terminal or an entire rack. Only the Subscriber Options Transmitter can alter a Model 8529 Set-Top Terminal's non-volatile memory.

### Easy to Use

The Model 8529 Set-Top Terminal features subscriber-definable electronic parental control, which allows a subscriber to define the channels that are to be locked out until the control code is entered. With this feature, the responsibility of parental guidance is taken out of the cable operator's hands.

### Specifications

#### Environmental

Temperature  
0°C to 45°C  
Relative humidity  
5% to 95%

#### Electrical

Input bandwidth  
54 MHz to 550 MHz  
Number of channels  
80 channels  
Output channels  
3 or 4, set at factory  
Channel frequency response  
±2 dB  
Gain  
0 dB, min  
5 dB, typical  
Output level  
15.5 dBmV, max  
Noise figure  
12 dB, typical  
Return loss  
Input  
7 dB, min on tuned channel (54 MHz to 440 MHz)  
5 dB, min on tuned channel (440 MHz to 550 MHz)  
Output  
11 dB, min  
Isolation input/output  
60 dB  
Spurious response  
Input  
-37 dBmV (up to 550 MHz)  
Output  
-57 dBc (in channel)

The Model 8529 Set-Top Terminal is also easy for subscribers to use. A single row of five keys on the front of the terminal accepts incremental channel changes and parental authorization code entries. The subscriber can also change which channels are subject to parental control. The optional hand-held remote control duplicates all terminal key functions and adds the ability to directly access any channel and to program/recall up to fifteen channels in favorite channel memory. This adds to the convenience of the remote control transmitter so the cable operator can enjoy increased penetration of remotes. A clearly written subscriber operating guide is included with every Model 8529 Set-Top Terminal.

### Reliable, High-Quality Technology

Subscribers will benefit from the set-top terminal's reliable, high-quality design. The infrared remote control provides convenient direct channel entry and favorite channel recall. Quality Automatic Frequency Control (AFC) ensures improved tuning stability and frequency accuracy. The product is covered by Scientific-Atlanta's three-year limited warranty and 99% reliability guarantee.

Frequency accuracy  
±100 kHz  
AC input range  
115 V ac ±10%  
Power consumption  
7 W, typical  
Surge protection  
AC: Spark gaps and transformer isolation  
RF: Inductor shunt to ground  
Distortion at 15 dBmV; 80 channel load  
Flat input  
Second order: -57 dB  
Cross modulator: -57 dB  
Composite triple beat: -57 dB  
Input level  
-7 dBmV to +20 dBmV

#### Mechanical

Dimensions  
7 in. W X 4.85 in. D X 2 in. H  
Weight  
2 lbs  
Keyboard type  
5 keys  
Display type  
2-Digit LED 0.57 in. H X 0.40 in. W (per digit)

### Order Information

- Model 8529-300 Set-Top Terminal with channel 3 output
- Model 8529-400 Set-Top Terminal with channel 4 output
- Model 8550-175 Remote Control
- Model 8551-555 Subscriber Options Transmitter

Specifications and product availability subject to change without notice.

**Scientific-Atlanta, Inc.**  
Our customers are the winners.

# Addressable Set-Top Terminal Series 8580

## Specifications

### Environmental

Temperature  
0°C to 45°C  
Relative humidity  
5% to 95%

### Electrical

Input bandwidth  
54 MHz to 550 MHz  
Number of channels  
82 with single cable  
128 with optional dual cable  
Output channel  
3 or 4  
Channel frequency response  
±2 dB  
Gain  
8 dB, typical  
Output level (meets FCC Part 15-H)  
8.5 dB, typical  
14 dB, max  
Noise figure  
8.7 dB, typical  
Return loss  
Input  
7 dB (54 MHz to 440 MHz) minimum on tuned channel  
5 dB (440 MHz to 550 MHz) minimum on tuned channel  
Output  
11 dB, min  
Isolation input/output  
60 dB  
Spurious response  
Input  
-37 dBmV (up to 570 MHz)  
Output  
-57 dBmV in channel  
Frequency accuracy  
±100 kHz  
AC input  
115 V  
Power consumption  
9 W, typical  
Surge protection  
AC: Spark gaps and transformer isolation  
RF: Inductor shunt to ground  
Distortion at +15 dBmV, 78 channel load  
Flat input, second order: -57 dB  
(-57 dB 54 MHz to 440 MHz)  
(-55 dB 440 MHz to 550 MHz)

Cross modulation: -57 dB  
Composite triple beat: -57 dB  
Input level  
-7 dBmV to +20 dBmV

### Mechanical

Dimensions  
9.2 in. L x 6.9 in. W x 2.1 in. H  
Weight  
3.3 lbs  
Keyboard type  
6 keys (front access)  
Display type  
LED, 2.3 in. L x 0.57 in. H

### Telephone Return IPPV Module Specifications

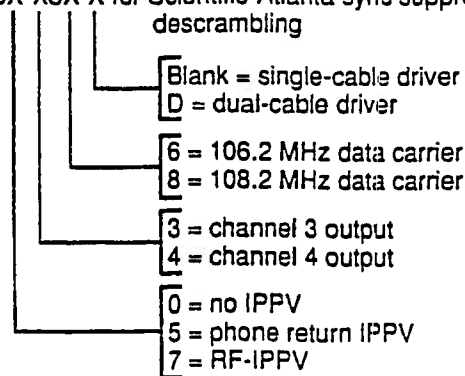
Complies with FCC Part 68  
Ringer equivalence  
0.00  
Interface to telephone line  
RJ-11C standard telephone jack  
Surge protection  
Dual MOVs and Zener diodes

### RF Return IPPV Module Specifications

Frequency range  
15.45 MHz to 17.75 MHz  
Modulation rate  
20 kb/s  
Modulation technique  
BPSK  
Maximum output power  
+55 dBmV

## Order Information

- Model 858X-X3X-X for Scientific-Atlanta sync suppression descrambling



- Model 8550-175 for remote control

Specifications and product availability subject to change without notice.

**Scientific-Atlanta, Inc.**

Our customers are the winners.



# Addressable Set-Top Terminal with On-Screen Display

## Model 8600

### Specifications

#### Environmental

Temperature  
0°C to 45°C  
Relative humidity  
5% to 95%

#### Electrical

Input bandwidth  
54 MHz to 550 MHz  
Number of channels  
82 with single cable  
99 with optional dual cable  
Output channel downloadable  
3 or 4  
Output level  
9.0 dBmV, typical  
Noise figure  
8.7 dB (including baseband circuitry)  
Return loss  
Input  
8 dB  
Output  
12 dB  
Spurious response  
Output  
-60 dBc in channel  
Frequency accuracy  
±100 kHz max  
Frequency stability  
±100 kHz max  
AC input  
105 V to 125 V  
Power consumption  
12 W max  
Surge protection  
AC  
Spark gaps and transformer isolation  
RF  
Inductor shunt to ground  
Distortion at +15 dBmV, 78 channel load  
Flat input, second order  
-60 dB  
Cross modulation  
-60 dB  
Composite triple beat  
-60 dB  
Input level  
-7 dBmV to +20 dBmV  
Audio distortion  
THD 1%  
Audio signal-to-noise  
50 dB

#### Mechanical

Dimensions  
9.2 in. L x 7.0 in. W x 2.4 in. H  
Weight  
3.6 lbs  
Keyboard type  
11 keys (front access)  
Display type  
LED, two segments  
On-screen 10-line by 24-column character display

### IPPV Module Specifications

#### Telephone Return

Complies with FCC Part 68  
Ringer equivalence  
0.00  
Interface to telephone line  
RJ-11C standard telephone jack  
Surge protection  
Dual MOVs and Zener diodes

#### RF Return

Frequency range  
15.45 MHz to 17.75 MHz  
Modulation rate  
20 kbps  
Modulation technique  
BPSK  
Maximum output power  
+55 dBmV

### Ordering Information

- Model 8600-SSNN Standard Set-Top Terminal
- Model 8600-SSNT Set-Top Terminal with Telephone IPPV Module
- Model 8600-SSNR Set-Top Terminal with RF IPPV Module
- Model 8650-E0 Remote Control

Unless otherwise noted, specifications are typical.

Specifications and product availability are subject to change without notice.

*EXPLORER<sup>®</sup> 2000*

*Digital Home Communications Terminal*

# EXPLORER 2000 DHCT Specifications

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## Introduction

This section contains operating and other specifications for the EXPLORER 2000 Digital Home Communications Terminal (DHCT).

## Electrical Overstress Protection

The EXPLORER 2000 DHCT withstands the following electrical currents without damage:

- hits at 3.5 kV to the RF and AC input ports
- 10 hits of 15 kV from a 150 pF capacitor through a 150 ohm series resistor on all external ports

## RF and Baseband Output Performance

The following table provides output measurements based on a **+15 dBmV** Input signal.

Item	Output
Cross modulation distortion (XMOD)	-54 dBc
Composite second order distortion (CSO)	-54 dBc
Composite triple beat distortion (CTB)	-55 dBc

## Frequency Resolution

Frequency assignments compatible with *STD*, *HRC*, and *IRC* frequency lineups.

Channel	Steps
ATSC (digital)	250 kHz
NTSC (analog)	62.5 kHz

*Continued on next page*

## EXPLORER 2000 DHCT Specifications, Continued

### Power

Item	Power
Consumption	35 Watts maximum
AC Input	Standard residential AC line voltage of 103.5 V AC to 126.5 V AC at 60 Hz
AC Outlet	Supplies 400 Watts maximum at the AC input line voltage. User controls on/off function through EXPLORER 2000 DHCT interface.

### Analog Channel RF Input

Item	Specification
Connector	Threaded female F-connector
Frequency range	54 MHz to 860 MHz
RF input level	0 dBmV to +15 dBmV (meets NTSC specs)
Functional operation without damage	-7 dBmV to +20 dBmV (minimum)
Input return loss	7 dB minimum
Noise figure	<12 dB at maximum gain
C/N (at input)	57 dB minimum (meets all specs) 40 dB minimum (minimum)

*Continued on next page*

## EXPLORER 2000 DHCT Specifications, Continued

### Digital Channel Input

Item	Specification
Frequency range	54 MHz to 869 MHz
Input return loss	7 dB minimum
Noise figure	<12 dB at maximum gain
Modulation technique	ITUJ.83 Annex A 64 QAM and 256 QAM
Transmission rate	<ul style="list-style-type: none"> <li>• Approximately 30 Mbps at 64 QAM</li> <li>• Approximately 40 Mbps at 256 QAM</li> </ul>
Transport	DAVIC structure - convolutional de-interleaving and Reed Solomon FEC with T=8
Average private data rate	3 Mbps (from QAM demodulated input to DRAM)
Private data format	per MPEG-2 (ISO/IEC 13818)

### RF Input Levels

Item	Modulation Rate	Level
Typical for BER after FEC <math>10^{-9}</math>	64 QAM	-20 dBmV to +14 dBmV
	256 QAM	-14 dBmV to +14 dBmV
Meets specifications of BER after FEC <math>10^{-9}</math>	64 QAM	-15 dBmV to +14 dBmV
	256 QAM	-9 dBmV to +14 dBmV
C/N (at input) to meet BER at that level or better	64 QAM	>32 dB in 6 MHz BW
	256 QAM	>38 dB in 6 MHz BW

*Continued on next page*

## EXPLORER 2000 DHCT Specifications, Continued

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### Digital Audio

Item	Specification
Data rate	384 Kbps maximum
Formats	<ul style="list-style-type: none"><li>• MPEG-1</li><li>• Layer 2</li><li>• 2 channel Musicam</li><li>• AC-3</li></ul>
Supported sampling rates	<ul style="list-style-type: none"><li>• 32 kHz</li><li>• 48 kHz</li><li>• 44.1 kHz</li></ul>

### Computer Generated Audio

The EXPLORER 2000 DHCT supports the following computer audio sampling rates:

- 8 kHz
- 11.025 kHz
- 22.05 kHz
- 24 kHz
- 32 kHz
- 44.1 kHz
- 48 kHz

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*Continued on next page*

## EXPLORER 2000 DHCT Specifications, Continued

### Baseband Audio Output

Category	Item	Specification
General	Connector	2 female RCA-type phono jacks: <ul style="list-style-type: none"> <li>• Right channel - red insulation</li> <li>• Left channel - white insulation</li> </ul>
	Output level	1.3 V p-p $\pm$ 10% with 10 k $\Omega$ load
	Output impedance	600 $\Omega$ nominal
	Mute	-50 dB
ResApp Controlled	Volume control	30 steps from 0 dB (maximum volume) to -63 dB nominal
Analog service (BTSC selected)	Frequency response	50 Hz to 10 kHz $\pm$ 2 dB
	Stereo channel separation	<ul style="list-style-type: none"> <li>• 25 dB at 3 kHz</li> <li>• 15 dB at 10 kHz</li> </ul>
	Total harmonic distortion	1 kHz <3.5%
	Signal-to-noise ratio	<ul style="list-style-type: none"> <li>• &gt; 45 dB A-weighted</li> <li>• 25 kHz L+R deviation at 1 kHz</li> </ul>
Analog service (SAP selected)	Frequency response	100 Hz to 8 kHz $\pm$ 2 dB
	Total harmonic distortion	1 kHz < 3.0%
Digital service	Frequency response	20 Hz to 20 kHz $\pm$ 1.0 dB
	Signal to noise ratio	<ul style="list-style-type: none"> <li>• &gt;80 dB A-weighted</li> <li>• &gt;80 dB at 1 kHz (dynamic range)</li> </ul>
	Total harmonic distortion - 20 Hz to 20 kHz bandwidth	< 0.2% at 1 kHz
	Stereo channel separation	> 80 dB at 1 kHz

*Continued on next page*

## EXPLORER 2000 DHCT Specifications, Continued

### Baseband Video Output

Item	Specification
Connector	Female RCA type with yellow insulation
Output	1.0 V p-p $\pm$ 10% at 75 $\Omega$ nominal
Frequency response - 220 kHz to 3.75 MHz (can change based on FCC part 76)	$\pm$ 3 dB p-p
S/N with input +5 dBmV, input C/N 57 dB min. (55-550 MHz)	42 dB minimum unweighted
S/N with input +5 dBmV, input C/N 57 dB min. (55-860 MHz)	41 dB minimum unweighted

### RF Output

Item	Specification
Connector	F type
Frequency	<ul style="list-style-type: none"> <li>• Channel 3 - 61.25 MHz</li> <li>• Channel 4 - 67.25 MHz (channels are switchable)</li> </ul>
RF output level	<ul style="list-style-type: none"> <li>• +9 <math>\pm</math> 4.5 dBmV Video</li> <li>• <math>\pm</math> 13.5 <math>\pm</math> 3.5 dBc Audio</li> </ul>
Frequency response - 220 kHz to 3.75 MHz (can change based on FCC part 76)	$\pm$ 3 dB p-p
Return loss	10 dB minimum
S/N with input +5 dBmV, input C/N 57 dB min. (55-550 MHz)	42 dB minimum unweighted equivalent to a 49 dB C/N, assuming 7 dB correction factor
S/N with input +5 dBmV, input C/N 57 dB min. (550-850 MHz)	41 dB minimum unweighted equivalent to a 48 dB C/N, assuming 7 dB correction factor

*Continued on next page*



## EXPLORER 2000 DHCT Specifications, Continued

### S-Video Output

Part	Function
Connector	4-position mini-DIN
S/N with input +5 dBmV, input C/N 57 dB min. (55-550 MHz)	42 dB minimum unweighted
S/N with input +5 dBmV, input C/N 57 dB min. (550-860 MHz)	41 dB minimum unweighted
Output levels	<ul style="list-style-type: none"> <li>• Y: 1 V p-p <math>\pm</math> 10%</li> <li>• C: 0.29 V p-p <math>\pm</math> 10%</li> </ul>

### Forward Control Channel RF Input

Item	Specification
Modulation technique	Differential QPSK
Frequency	70 MHz to 130 MHz agile in 250 kHz steps
Transmission rate	1.544 Mbps
Channel bandwidth	1 MHz
Channel spacing	1 MHz
Adjacent channel performance (data)	Meets BER performance at +6 dBc 1.00 MHz from center
Mode	Continuous
Transmission format	DS1 extended Superframe - 53 byte ATM cells with AAL5 layer T=1 Reed Solomon
RF input level	-16 dBm VRMS to +15 dBm VRMS (6 dB to 16 dB below NTSC video)
BER performance at C/N=18 dB (in 772 kHz BW) at RF level above	$< 10^{-9}$ after Reed Solomon

*Continued on next page*

## EXPLORER 2000 DHCT Specifications, Continued

### Reverse Control and Interactive Channel RF Output

Item	Specification
Modulation technique	Differential QPSK
Frequency	8 MHz to 26.5 MHz
Channel bandwidth	1 MHz
Channel step size	50 kHz
Forward error correction	Shortened Reed Solomon (59,53), T=3
Mode	Burst mode
Transmission rate	256 Kbps or 1.544 Mbps (maximum burst rate)
Transmission format	53 byte ATM cells
Channel sharing protocol	Slotted ALOHA, TDMA and Reservation
Maximum RF output level	Variable +55 dBm VRMS minimum
C/N0, 2 MHz from carrier (Output level >40 dbm VRMS)	120 dB/Hz
Spurious output (5-42 MHz)	-45 dBC
Channel tuning time	< 5 mS

### Memory Configuration

Memory Type	Capacity
CPU DRAM	4 MB standard, MB expandable to 16 MB at factory
CPU Flash	2 MB
CPU ROM	2 MB
Decompression/Graphics SDRAM	2 MB (shared by CPU for application processing)
CPU EEPROM	16 kb

*Continued on next page*

## EXPLORER 2000 DHCT Specifications, Continued

### Eagle Graphics/Video Processing Specifications

Item	Specification
Video resolution	Up to 720 x 480 VGA
Graphics resolution	Up to 640 x 480 VGA non-interlaced
Color graphics display mode	256 or 65,000
Graphics features	<ul style="list-style-type: none"><li>• Video scaling and capturing</li><li>• Alpha blending</li><li>• 8 or 16 bit color</li><li>• Square and round pixel display</li><li>• Anti-flutter filter</li><li>• Anti-aliasing fonts</li><li>• Supports transparent, translucent, and opaque graphics and overlays</li></ul>

### Environmental Specifications

Item	Specification
Operational temperature range	0°C to 40°C (32°F to 104°F)
Humidity	5% to 95%, non-condensing

### Regulatory Specifications

The EXPLORER 2000 Digital Home Communications Terminal (DHCT) meets FCC Part 15, subpart B, class B, applicable parts of Part 76, and UL rule #1409 under the required category of Cable Terminal Devices.

# TIME WARNER CABLE BINGHAMTON DIVISION

Proof - of - Performance Tests

## Headend Tests

System Name:

ONEONTA

HE Location

123 CORPORATE DRIVE, ONEONTA NY

# Visual Carrier and Aural Carrier Difference Frequency Tests

( at Headend )

System Name: ONEONTA  
 HE Location: 123 CORPORATE DR., ONEONTA NY (Otsego Feed)  
 Date: 02/06/2001 Performed by: BRIAN MILLER

Chan	Freq.	Visual Freq. (MHz)	Aural Freq. Diff. (MHz)	Chan	Freq.	Visual Freq. (MHz)	Aural Freq. Diff. (MHz)
2	55.2500	55.2400	4.5000	37	301.2625	301.2637	4.5000
3	61.2500	61.2438	4.5000	38	307.2625	307.2614	4.5000
4	67.2500	67.2502	4.5001	39	313.2625	313.2618	4.5000
5	77.2500	77.2480	4.5001	40	319.2625	319.2619	4.5002
6	83.2500	83.2255	4.5000	41	325.2625	325.2589	4.4997
				42	331.2750	331.2738	4.5000
				43	337.2625	337.2608	4.4999
A-5	91.2500			44	343.2625	343.2615	4.5000
A-4	97.2500			45	349.2625	349.2605	4.5000
A-3	103.2500			46	355.2625	355.2612	4.5000
A-2	109.2750			47	361.2625	361.2626	4.5000
A-1	115.2750			48	367.2625	367.2615	4.5000
14	121.2625	121.2624	4.5002	49	373.2625	373.2614	4.5000
15	127.2625	127.2620	4.4999	50	379.2625	379.2624	4.5000
16	133.2625	133.2636	4.4999	51	385.2625	385.2625	4.4999
17	139.2500	139.2527	4.5001	52	391.2625	391.2626	4.4998
18	145.2500	145.2494	4.5000	53	397.2625	397.2624	4.5000
19	151.3210	151.3212	4.5000	54	403.2500	403.2625	4.5000
20	157.2500	157.2494	4.5000	55	409.2500	409.2627	4.5000
21	163.2500	163.2576	4.5000	56	415.2500	415.2622	4.5000
22	169.2500	169.2564	4.5001	57	421.2500	421.2628	4.5000
7	175.2500	175.2503	4.5001	58	427.2500	427.2498	4.5001
8	181.2500	181.2507	4.5000	59	433.2500	433.2628	4.5000
9	187.2500	187.2557	4.5001	60	439.2500	439.2619	4.5000
10	193.2500	193.2369	4.4999	61	445.2500	445.2630	4.4999
11	199.2500	199.2622	4.5000	62	451.2500	451.2503	4.5000
12	205.2500	205.2568	4.5001	63	457.2500	457.2498	4.5000
13	211.2500	211.2408	4.5000	64	463.2500	463.2497	4.4999
23	217.2500	217.2503	4.5000	65	469.2500	469.2628	4.5001
24	223.2500	223.2609	4.5001	66	475.2500	475.2622	4.5001
25	229.2625	229.2611	4.5001	67	481.2500	481.2623	4.5000
26	235.2625	235.2140	OUT 4.5000	68	487.2500	487.2624	4.5000
27	241.2625	241.2656	4.5000	69	493.2500	493.2507	4.4999
28	247.2625	247.2625	4.5000	70	499.2500	499.2504	4.4999
29	253.2625	253.2624	4.5000	71	505.2500	505.2502	4.5001
30	259.2625	259.2628	4.5000	72	511.2500	511.2503	4.4999
31	265.2625	265.2627	4.5001	73	517.2500	517.2499	4.5000
32	271.2625	271.2623	4.5000	74	523.2500	523.2624	4.5000
33	277.2625	277.2641	4.5000	75	529.2500	529.2506	4.5000
34	283.2625	283.2620	4.4999	76	535.2500	535.2504	4.5000
35	289.2625	289.2632	4.5001	77	541.2500	541.2500	4.5000
36	295.2625	295.2653	4.5002	78	547.2500	547.2502	4.5000

# Visual Carrier and Aural Carrier Difference Frequency Tests

( at Headend )

System Name: ONEONTA  
 HE Location: 123 CORPORATE DR., ONEONTA NY (Delaware Feed)  
 Date: 02/06/2001 Performed by: BRIAN MILLER

Chan	Freq.	Visual Freq. (MHz)	Aural Freq. Diff. (MHz)	Chan	Freq.	Visual Freq. (MHz)	Aural Freq. Diff. (MHz)
2	55.2500	55.2438	4.5000	37	301.2625		
3	61.2500			38	307.2625		
4	67.2500			39	313.2625		
5	77.2500	77.2500	4.5000	40	319.2625		
6	83.2500			41	325.2625		
				42	331.2750		
				43	337.2625		
A-5	91.2500			44	343.2625		
A-4	97.2500			45	349.2625		
A-3	103.2500			46	355.2625		
A-2	109.2750			47	361.2625		
A-1	115.2750			48	367.2625		
14	121.2625			49	373.2625		
15	127.2625			50	379.2625		
16	133.2625			51	385.2625		
17	139.2500			52	391.2625		
18	145.2500			53	397.2625		
19	151.3210			54	403.2500		
20	157.2500			55	409.2500		
21	163.2500			56	415.2500		
22	169.2500			57	421.2500		
7	175.2500	175.2700	4.5000	58	427.2500		
8	181.2500			59	433.2500		
9	187.2500			60	439.2500		
10	193.2500			61	445.2500		
11	199.2500	199.2502	4.5000	62	451.2500		
12	205.2500			63	457.2500		
13	211.2500			64	463.2500		
23	217.2500			65	469.2500		
24	223.2500			66	475.2500		
25	229.2625			67	481.2500		
26	235.2625			68	487.2500		
27	241.2625			69	493.2500		
28	247.2625			70	499.2500		
29	253.2625			71	505.2500		
30	259.2625			72	511.2500		
31	265.2625			73	517.2500		
32	271.2625			74	523.2500		
33	277.2625			75	529.2500		
34	283.2625			76	535.2500		
35	289.2625			77	541.2500		
36	295.2625			78	547.2500		

# Visual Carrier and Aural Carrier Difference Frequency Tests

( at Headend )

System Name: ONEONTA  
 HE Location: BGA / Ox - SIDNEY HUB SITE  
 Date: 02/06/2001 Performed by: JERRY HENRY

Chan	Freq.	Visual Freq. (MHz)	Aural Freq. Diff. (MHz)	Chan	Freq.	Visual Freq. (MHz)	Aural Freq. Diff. (MHz)
2	55.2500			37	301.2625		
3	61.2500			38	307.2625		
4	67.2500			39	313.2625		
5	77.2500			40	319.2625		
6	83.2500			41	325.2625		
				42	331.2750		
				43	337.2625		
A-5	91.2500			44	343.2625		
A-4	97.2500			45	349.2625		
A-3	103.2500			46	355.2625		
A-2	109.2750			47	361.2625		
A-1	115.2750			48	367.2625		
14	121.2625			49	373.2625		
15	127.2625			50	379.2625		
16	133.2625			51	385.2625		
17	139.2500			52	391.2625		
18	145.2500			53	397.2625		
19	151.3210			54	403.2500		
20	157.2500			55	409.2500		
21	163.2500			56	415.2500		
22	169.2500			57	421.2500		
7	175.2500			58	427.2500		
8	181.2500			59	433.2500		
9	187.2500			60	439.2500		
10	193.2500			61	445.2500		
11	199.2500			62	451.2500		
12	205.2500			63	457.2500		
13	211.2500			64	463.2500		
23	217.2500			65	469.2500		
24	223.2500			66	475.2500		
25	229.2625			67	481.2500		
26	235.2625	235.2623	4.5001	68	487.2500		
27	241.2625			69	493.2500		
28	247.2625			70	499.2500		
29	253.2625			71	505.2500		
30	259.2625			72	511.2500		
31	265.2625			73	517.2500		
32	271.2625			74	523.2500		
33	277.2625			75	529.2500		
34	283.2625			76	535.2500		
35	289.2625			77	541.2500		
36	295.2625			78	547.2500		

# Visual Carrier and Aural Carrier Difference Frequency Tests

( at Headend )

System Name: ONEONTA  
 HE Location: NEW BERLIN - NEW BERLIN HUB SITE  
 Date: 02/06/2001 Performed by: DAVID KULZE

Visual Freq.		Aural Freq.		Visual Freq.		Aural Freq.	
Chan	Freq. (MHz)		Diff. (MHz)	Chan	Freq. (MHz)		Diff. (MHz)
2	55.2500			37	301.2625		
3	61.2500			38	307.2625		
4	67.2500			39	313.2625		
5	77.2500			40	319.2625		
6	83.2500			41	325.2625		
				42	331.2750		
				43	337.2625		
A-5	91.2500			44	343.2625		
A-4	97.2500			45	349.2625		
A-3	103.2500			46	355.2625		
A-2	109.2750			47	361.2625		
A-1	115.2750			48	367.2625		
14	121.2625			49	373.2625		
15	127.2625			50	379.2625		
16	133.2625			51	385.2625		
17	139.2500			52	391.2625		
18	145.2500			53	397.2625		
19	151.3210			54	403.2500		
20	157.2500			55	409.2500		
21	163.2500			56	415.2500		
22	169.2500			57	421.2500		
7	175.2500			58	427.2500		
8	181.2500			59	433.2500		
9	187.2500			60	439.2500		
10	193.2500			61	445.2500		
11	199.2500			62	451.2500		
12	205.2500			63	457.2500		
13	211.2500			64	463.2500		
23	217.2500			65	469.2500		
24	223.2500			66	475.2500		
25	229.2625			67	481.2500		
26	235.2625	235.2643	4.5000	68	487.2500		
27	241.2625			69	493.2500		
28	247.2625			70	499.2500		
29	253.2625			71	505.2500		
30	259.2625			72	511.2500		
31	265.2625			73	517.2500		
32	271.2625			74	523.2500		
33	277.2625			75	529.2500		
34	283.2625			76	535.2500		
35	289.2625			77	541.2500		
36	295.2625			78	547.2500		



# Visual Carrier and Aural Carrier Difference Frequency Tests

( at Headend )

System Name: ONEONTA  
 HE Location: DELHI / WALTON - DELHI HUB SITE  
 Date: 02/06/2001 Performed by: BRIAN MILLER

Chan	Visual Freq. Freq. (MHz)	Aural Freq. Diff. (MHz)	Chan	Visual Freq. Freq. (MHz)	Aural Freq. Diff. (MHz)
2	55.2500		37	301.2625	
3	61.2500		38	307.2625	
4	67.2500		39	313.2625	
5	77.2500		40	319.2625	
6	83.2500		41	325.2625	
			42	331.2750	
			43	337.2625	
A-5	91.2500		44	343.2625	
A-4	97.2500		45	349.2625	
A-3	103.2500		46	355.2625	
A-2	109.2750		47	361.2625	
A-1	115.2750		48	367.2625	
14	121.2625		49	373.2625	
15	127.2625		50	379.2625	
16	133.2625		51	385.2625	
17	139.2500		52	391.2625	
18	145.2500		53	397.2625	
19	151.3210		54	403.2500	
20	157.2500		55	409.2500	
21	163.2500		56	415.2500	
22	169.2500		57	421.2500	
7	175.2500		58	427.2500	
8	181.2500		59	433.2500	
9	187.2500		60	439.2500	
10	193.2500		61	445.2500	
11	199.2500		62	451.2500	
12	205.2500		63	457.2500	
13	211.2500		64	463.2500	
23	217.2500	217.2646	65	469.2500	4.5000
24	223.2500		66	475.2500	
25	229.2625		67	481.2500	
26	235.2625		68	487.2500	
27	241.2625		69	493.2500	
28	247.2625		70	499.2500	
29	253.2625		71	505.2500	
30	259.2625		72	511.2500	
31	265.2625		73	517.2500	
32	271.2625		74	523.2500	
33	277.2625		75	529.2500	
34	283.2625		76	535.2500	
35	289.2625		77	541.2500	
36	295.2625		78	547.2500	

**TIME WARNER CABLE  
BINGHAMTON DIVISION**

Proof-of-Performance Tests

System Name: ONEONTA

System Test Point # 1

Location: NYS RT 7 E

Community: EAST WORCESTER

Pole Number: 14 1/2 // 265

D.T. Value: Philips 9214

Map Number: \_\_\_\_\_

OR Number: Note 11

Trunk Cascade: 2 LE Cascade: 2

# Visual Carrier Level Visual / Aural Level Difference

( at Test Point, at The End of a 100' Drop )

System Name: ONEONTA

Test Location: TP 1...EAST WORCESTER

Date: 02/14/2001

Time: 02:24 PM

Chan	Freq. ( MHz )	Visual Level ( dbmv )	Aural Level ( dbmv )	Scra S	Diff. ( Dbmv )	Chan	Freq. ( MHz )	Visual Level ( dbmv )	Aural Level ( dbmv )	Scra S	Diff. ( Dbmv )
2	55.2500	16.1	1.3		14.8	37	301.2625	15.1	1.6		13.5
3	61.2500	17.6	2.3		15.3	38	307.2625	14.9	1.1		13.8
4	67.2500	18.7	3.5		15.2	39	313.2625	15.2	0.8		14.4
5	77.2500	16.6	6.4	S	10.2	40	319.2625	15.1	0.5		14.6
6	83.2500	17.9	2.7		15.2	41	325.2625	15.3	0.1		15.2
						42	331.2750	15.3	2.1		13.2
						43	337.2625	14.7	1.0		13.7
A-5	91.2500					44	343.2625	15.6	1.1		14.5
A-4	97.2500					45	349.2625	15.5	1.9		13.6
A-3	103.2500					46	355.2625	15.7	1.6		14.1
A-2	109.2750					47	361.2625	15.4	1.6		13.8
A-1	115.2750					48	367.2625	15.8	2.1		13.7
14	121.2625	15.5	1.1		14.4	49	373.2625	16.9	2.5		14.4
15	127.2625	15.8	1.5		14.3	50	379.2625	15.7	5.7	S	10.0
16	133.2625	15.1	2.1		13.0	51	385.2625	15.6	5.5	S	10.1
17	139.2500	15.9	1.5		14.4	52	391.2625	16.6	6.5	S	10.1
18	145.2500	16.0	2.7		13.3	53	397.2625	15.5	1.2		14.3
19	151.2500	15.3	0.9		14.4	54	403.2500	15.9	5.8	S	10.1
20	157.2500	16.8	1.5		15.3	55	409.2500	16.3	6.2	S	10.1
21	163.2500	15.4	2.0		13.4	56	415.2500	15.6	2.1		13.5
22	169.2500	15.7	1.7		14.0	57	421.2500	16.3	2.4		13.9
7	175.2500	15.4	1.2		14.2	58	427.2500	16.4	2.8		13.6
8	181.2500	15.8	1.8		14.0	59	433.2500	15.9	1.8		14.1
9	187.2500	16.1	1.9		14.2	60	439.2500	16.4	3.0		13.4
10	193.2500	17.5	2.7		14.8	61	445.2500	16.1	6.0	S	10.1
11	199.2500	15.1	0.8		14.3	62	451.2500	16.4	2.4		14.0
12	205.2500	14.6	0.5		14.1	63	457.2500	16.1	2.3		13.8
13	211.2500	14.1	-1.0		15.1	64	463.2500	15.9	3.7	S	12.2
23	217.2500	15.0	0.6		14.4	65	469.2500	16.8	3.0		13.8
24	223.2500	15.1	0.7		14.4	66	475.2500	16.1	1.7		14.4
25	229.2625	14.5	0.6		13.9	67	481.2500	16.3	1.9		14.4
26	235.2625	16.0	2.8		13.2	68	487.2500	15.7	2.5		13.2
27	241.2625	14.7	1.0		13.7	69	493.2500	15.6	0.6		15.0
28	247.2625	16.0	4.1	S	11.9	70	499.2500	16.4	5.5	S	10.9
29	253.2625	15.0	4.0	S	11.0	71	505.2500	15.7	1.7		14.0
30	259.2625	15.1	3.5	S	11.6	72	511.2500	16.8	6.7	S	10.1
31	265.2625	15.3	5.2	S	10.1	73	517.2500	16.2	2.4		13.8
32	271.2625	15.1	4.8	S	10.3	74	523.2500	15.5	0.9		14.6
33	277.2625	15.6	5.5	S	10.1	75	529.2500	16.9	6.9	S	10.0
34	283.2625	15.3	1.1		14.2	76	535.2500	15.8	1.7		14.1
35	289.2625	15.0	0.5		14.5	77	541.2500	15.4	0.3		15.1
36	295.2625	15.3	0.8		14.5	78	547.2500	16.1	1.8		14.3

PEAK TO VALLEY: 4.6

# IN CHANNEL RESPONSE Test

## CARRIER - TO - NOISE Test

### COHERENT DISTURBANCES Test

### LOW FREQUENCY DISTURBANCES Test

System Name: ONEONTA Date: 02/14/2001

Test Performed By: Brian Miller

Location: TP1 East Worcester

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	Channel Response	Carrier to Noise Ratio	dB	dB	dB	dB
4	0.4	50.5	>-60	>-60	>-60	
15	0.5	47.7	>-60	56.9	>-60	0.8
9	0.8	46.3	>-60	58.2	>-60	
24	0.7	45.1	>-60	57.3	>-60	
35	1.2	47.6	>-60	56.9	>-60	
41	0.2	48.9	>-60	56.1	>-60	
48	0.8	51.2	>-60	56.8	>-60	
57	0.1	46.5	>-60	58.5	>-60	
65	0.1	49.5	>-60	57.5	>-60	
69	0.2	46.8	>-60	56.3	>-60	
78	0.1	46.9	>-60	57.5	>-60	

TP#1

Test Point: E Worcester 1  
Date: 02/14/2001

Visual Level (dBmV)						Visual Level (dBmV)					
		Temp									
		73 Deg	81 Deg	55 Deg	52 Deg						
		Time									
Chan	10:47 AM	16:47 PM	22:47 PM	04:47 AM	Max Var	Chan					Max Var
2	13.6	13.3	14.1	14.2	0.9	39	15.2	14.9	16.2	16.2	1.3
3	14.6	14.2	15.1	15.4	1.2	40	15.1	14.7	15.9	16.1	1.4
4	14.8	14.1	15.2	15.4	1.3	41	14.9	14.5	15.9	16.0	1.5
5	13.6	13.8	14.8	14.7	1.1	42	16.0	15.6	17.2	17.1	1.6
6	14.5	14.3	15.1	15.5	1.2	43	15.6	14.8	16.2	16.5	1.7
						44	16.4	16.1	17.4	17.5	1.4
						45	16.6	16.2	17.6	17.7	1.5
						46	17.2	16.7	18.3	18.3	1.6
						47	16.6	16.0	17.7	17.9	1.9
						48	16.9	16.1	17.9	18.3	2.2
A-2						49	16.9	16.2	17.6	17.9	1.7
A-1						50	17.4	16.9	18.2	18.4	1.5
14	15.5	14.9	16.1	16.3	1.4	51	16.9	16.2	17.7	17.8	1.6
15	16.0	15.7	16.6	17.0	1.3	52	17.4	16.7	18.4	18.8	2.1
16	14.8	14.5	15.7	15.9	1.4	53	16.0	15.5	17.0	17.1	1.6
17	16.0	16.0	16.8	17.1	1.1	54	15.2	15.0	16.7	17.2	2.2
18	16.2	16.1	16.9	17.1	1.0	55	16.7	15.7	17.9	18.1	2.4
19	15.8	15.4	16.1	16.8	1.4	56	15.1	14.6	16.5	16.6	2.0
20	15.1	15.3	15.9	15.3	0.8	57	14.8	14.2	16.1	16.1	1.9
21	16.3	16.2	16.6	16.9	0.7	58	14.1	13.4	15.5	15.7	2.3
22	16.3	15.8	16.7	16.7	0.9	59	12.9	12.2	14.2	14.7	2.5
7	16.0	16.0	16.4	16.0	0.4	60	13.3	12.4	14.8	15.0	2.6
8	16.2	16.0	16.6	17.0	1.0	61	12.8	12.5	13.9	14.1	1.6
9	16.8	16.6	17.3	17.3	0.7	62	13.6	12.9	14.5	14.4	1.6
10	16.2	16.1	16.6	16.6	0.7	63	13.3	12.5	14.7	14.9	2.4
11	16.1	15.9	16.7	16.8	0.9	64	12.9	12.3	14.4	15.2	2.9
12	15.7	15.4	16.3	16.6	1.4	65	12.9	12.7	14.3	14.7	2.0
13	15.4	15.2	15.9	16.0	0.8	66	13.2	12.6	13.9	14.3	1.7
23	16.9	16.7	17.5	17.6	0.9	67	13.8	13.7	14.6	14.9	1.2
24	16.2	15.9	16.9	17.2	1.3	68	13.4	13.2	14.2	14.6	1.4
25	16.4	16.2	17.3	17.5	1.3	69	12.6	12.3	13.7	14.0	1.7
26	15.6	15.3	16.2	15.7	0.9	70	12.7	12.4	13.8	14.1	1.7
27	16.4	16.0	17.0	17.1	1.1	71	12.4	11.8	13.4	13.4	1.6
28	16.1	15.0	16.0	16.2	1.2	72	11.3	10.9	12.4	12.6	1.7
29	15.8	15.4	16.2	16.6	1.2	73	10.4	9.6	11.5	11.7	2.1
30	15.0	15.0	16.0	15.0	1.0	74	9.6	8.6	10.6	11.0	2.4
31	16.4	16.2	17.4	17.6	1.4	75	9.0	9.5	9.0	9.0	0.5
32	14.7	14.4	15.5	15.8	1.5	76	8.4	7.3	9.7	10.2	2.9
33	16.4	16.1	17.2	17.2	1.1	77	10.0	9.0	9.0	9.0	1.0
34	16.6	16.2	17.4	17.4	1.2	78	9.0	9.0	11.0	9.5	2.0
35	15.2	14.7	15.9	15.9	1.5						
36	15.0	14.0	15.0	15.0	2.0						
37	15.0	14.0	14.0	15.0	2.0						
38	15.0	14.0	14.0	15.0	1.0						
Max	16.9	16.7	17.5	17.6	2.0	Max	17.4	16.9	18.4	18.8	2.9
Min	0.0	0.0	0.0	0.0	0.0	Min	8.4	7.3	9.0	9.0	0.0
Diff	16.9	16.7	17.5	17.6	2.0	Diff	9.0	9.6	9.4	9.8	2.9

Max NonAdjacent Channel Variance: 18.8 out  
Max Adjacent Channel Variance:

Max Variance from last proof-of-performance test:

	Test 1	Test 2	Test 3	Test 4
Max	17.4	16.9	18.4	18.8
Min	0	0	0	0
Diff	17.4	16.9	18.4	18.8

Note: All measurements through a 100 ft test drop cable without a converter

# TIME WARNER CABLE BINGHAMTON DIVISION

## Proof-of-Performance Tests

System Name: ONEONTA

System Test Point # 2

Location: Railroad Ave.

Community: Sidney

Pole Number: NYSE&G T51

D.T. Value: PHILIPS 9217

Map Number: \_\_\_\_\_

OR Number: NODE 43

Trunk Cascade: 5 LE Cascade: 3

# Visual Carrier Level Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: ONEONTA

Test Location: TP 2...SIDNEY

Date: 02/16/2001

Time: 14:51 PM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scrat "S"	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scrat "S"	Diff (Dbmv)
2	55.2500	11.9	-0.7		12.6	37	301.2625	16.6	2.8		13.8
3	61.2500	13.1	-1.4		14.5	38	307.2625	17.2	2.9		14.3
4	67.2500	13.5	-1.1		14.6	39	313.2625	16.8	2.0		14.8
5	77.2500	12.9	-2.3		15.2	40	319.2625	16.2	1.4		14.8
6	83.2500	13.4	-1.8		15.2	41	325.2625	16.7	1.5		15.2
						42	331.2750	16.0	2.2		13.8
						43	337.2625	15.9	1.5		14.4
A-5	91.2500					44	343.2625	16.0	1.4		14.6
A-4	97.2500					45	349.2625	16.3	1.6		14.7
A-3	103.2500					46	355.2625	16.1	1.6		14.5
A-2	109.2750					47	361.2625	15.2	1.0		14.2
A-1	115.2750					48	367.2625	16.8	1.9		14.9
14	121.2625	13.5	-0.1		13.6	49	373.2625	16.2	2.5		13.7
15			0.1		13.4	50	379.2625	15.6	3.6	S	12.0
16			0.8		14.4	51	385.2625	16.1	4.1	S	12.0
17	139.2500	14.2	0.5		13.7	52	391.2625	15.6	4.2	S	11.4
18	145.2500	14.9	1.4		13.5	53	397.2625	15.5	1.1		14.4
19	151.2500	15.2	1.2		14.0	54	403.2500	16.3	3.7	S	12.6
20	157.2500	15.6	1.4		14.2	55	409.2500	15.7	3.5	S	12.2
21	163.2500	15.7	2.1		13.6	56	415.2500	16.2	3.1		13.1
22	169.2500	15.6	2.0		13.6	57	421.2500	16.7	3.2		13.5
7	175.2500	14.8	0.2		14.6	58	427.2500	16.5	2.2		14.3
8	181.2500	10.3	1.6		14.7	59	433.2500	16.7	2.8		13.9
9	187.2500	16.2	2.0		14.2	60	439.2500	16.6	2.9		13.7
10	193.2500	16.4	2.1		14.3	61	445.2500	17.2	4.9	S	12.3
11	199.2500	15.3	0.9		14.4	62	451.2500	16.0	2.1		13.9
12	205.2500	15.1	0.6		14.5	63	457.2500	16.4	1.7		14.7
13	211.2500	15.2	0.1		15.1	64	463.2500	16.2	0.9	S	15.3
23	217.2500	14.9	0.2		14.7	65	469.2500	15.9	2.3		13.6
24	223.2500	14.9	-0.1		15.0	66	475.2500	16.8	1.5		15.3
25	229.2625	13.6	-3.3		16.9	67	481.2500	15.9	1.3		14.6
26	235.2625	11.8	-2.8		14.6	68	487.2500	15.7	2.2		13.5
	241.2625	11.5	1.1		10.4	69	493.2500	15.9	1.4		14.5
	247.2625	14.1	3.1	S	11.0	70	499.2500	16.5	2.4	S	14.1
	253.2625	16.5	2.4	S	14.1	71	505.2500	16.9	2.7		14.2
	259.2625	16.1	2.9	S	13.2	72	511.2500	17.6	5.3	S	12.3
	265.2625	16.4	4.7	S	11.7	73	517.2500	17.4	2.5		14.9
	271.2625	16.9	4.1	S	12.8	74	523.2500	16.4	1.5		14.9
30	277.2625	17.8	5.0	S	12.8	75	529.2500	16.6	4.8	S	11.8
31	283.2625	16.3	2.3		14.0	76	535.2500	16.8	2.1		14.7
32	289.2625	16.6	2.0		14.6	77	541.2500	16.0	2.1		13.9
33	295.2625	17.0	3.0		14.0	78	547.2500	17.3	2.8		14.5

PEAK TO VALLEY: 6.3

# IN CHANNEL RESPONSE Test

## CARRIER - TO - NOISE Test

### COHERENT DISTURBANCES Test

#### LOW FREQUENCY DISTURBANCES Test

System Name: ONEONTA Date: 02/16/2001

Test Performed By: David Kulze

Location: TP2 Sidney

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In Channel Response (dB)	Carrier to Noise Ratio (dB)	Disturbance	Carrier to Noise Ratio (dB)	Disturbance	Disturbance
4	0.5	46.3	>-60	55.9	>-60	
15	0.9	46	>-60	55.3	>-60	0.9
9	1	45.3	>-60	55.3	>-60	
24	0.6	44.8	>-60	58.9	>-60	
30	1.3	44.8	>-60	57.2	>-60	
44		46.1	>-60	57.8	>-60	
47		47.2	>-60	57.5	>-60	
	4	45.2	>-60	57.2	>-60	
	0.6	46.5	>-60	56.3	>-60	
69	0.3	45.7	>-60	56.4	>-60	
78	0.6	45.6	>-60	57	>-60	



Visual Carrier Level Variation Test 76.605 (a) 4  
System Name: Time Warner Oneonta

TP#2

Test Point: Sidney 2  
Date: 02/19/2001

Chan	Visual Level (dBmV)				Max Var
	41 Deg	Temp		39.2 Deg	
		39.2 Deg	37.4	39.2 Deg	
	13:02 PM	Time		07:02 AM	
	19:02 PM	01:02 AM			
2	11.2	11.5	10.1	10.5	1.4
3	12.4	13.1	12.3	12.8	0.8
4	12.8	13.0	12.6	12.8	0.4
5	12.4	12.8	12.5	12.2	0.6
6	12.3	12.6	12.1	12.2	0.5
A-2					
A-1					
14	12.5	12.8	12.6	12.3	0.5
15	12.4	12.9	12.5	12.5	0.5
16	13.7	14.2	14.1	14.1	0.5
17	13.1	13.6	13.3	13.1	0.5
18	13.7	14.3	13.7	13.8	0.6
19	13.7	14.0	13.5	13.5	0.5
20	14.3	14.7	14.3	14.3	0.4
21	14.8	15.4	14.8	14.8	0.6
22	14.5	14.9	14.3	14.4	0.6
7	13.5	14.2	13.7	13.7	0.7
8	15.0	15.4	14.4	15.1	1.0
9	14.7	15.3	14.8	14.5	0.8
10	15.3	15.3	15.6	14.6	1.0
11	14.2	14.8	14.3	14.0	0.6
12	14.4	14.7	10.4	14.8	4.3
13	13.1	14.1	14.3	14.4	1.3
23	13.3	13.8	13.5	13.2	0.6
24	14.8	15.2	14.9	14.8	0.4
25	12.4	13.1	12.6	12.5	0.7
26	10.6	11.3	10.9	10.5	0.8
27	10.4	11.1	10.8	10.6	0.7
28	12.9	14.4	14.2	14.1	1.5
29	15.3	15.9	15.6	15.4	0.6
30	14.4	15.5	14.7	15.0	1.1
31	14.9	15.7	15.2	15.1	0.8
32	15.8	16.5	16.0	15.9	0.9
33	16.5	17.2	17.0	16.5	0.7
34	14.6	15.4	14.9	14.8	0.8
35	15.0	15.9	15.4	15.4	0.6
36	16.2	16.8	16.6	16.2	0.6
37	15.1	15.7	15.5	15.3	0.6
38	15.7	16.7	16.5	15.7	1.0
Max	16.5	17.2	17.0	16.5	4.3
Min	10.4	11.1	10.8	10.5	0.4
Diff	6.1	6.1	6.2	6.0	3.9

Chan	Visual Level (dBmV)				Max Var
	13:02 PM	19:02 PM	01:02 AM	07:02 AM	
39	15.4	16.0	15.7	15.4	0.6
40	14.8	15.5	15.0	14.7	0.8
41	14.8	15.5	15.1	14.8	0.7
42	14.2	14.9	14.6	14.3	0.7
43	14.1	14.7	14.2	14.2	0.6
44	14.4	15.0	14.6	14.6	0.6
45	14.4	15.2	14.7	14.5	0.8
46	14.1	14.5	14.1	13.8	0.7
47	13.7	14.2	13.7	13.5	0.7
48	14.7	15.1	14.9	14.7	0.4
49	14.5	15.4	14.9	14.8	0.9
50	14.1	14.8	14.4	14.1	0.7
51	14.7	15.4	15.2	14.7	0.7
52	14.4	15.2	14.8	14.5	0.8
53	13.9	14.7	14.3	14.0	0.8
54	15.1	15.8	15.4	15.2	0.7
55	14.6	15.4	15.1	14.8	0.8
56	14.2	14.8	14.7	14.4	0.6
57	15.1	15.8	15.5	15.3	0.7
58	15.2	15.7	15.6	15.1	0.6
59	15.0	15.4	15.2	15.0	0.4
60	15.2	15.7	15.4	15.4	0.5
61	15.9	16.4	16.0	15.8	0.6
62	14.8	15.1	14.7	14.4	0.7
63	14.8	15.7	15.2	15.0	0.9
64	14.7	15.1	14.9	14.7	0.4
65	14.1	14.8	14.7	14.5	0.7
66	15.4	15.8	15.7	15.1	0.7
67	14.8	15.3	15.0	14.6	0.7
68	14.1	15.2	15.0	14.5	1.1
69	14.4	15.0	14.6	14.2	0.8
70	15.1	15.7	15.3	15.0	0.7
71	15.1	15.6	15.3	14.8	0.8
72	16.1	16.8	16.3	16.1	0.7
73	15.9	16.5	16.1	15.7	0.8
74	14.5	14.9	14.6	14.4	0.5
75	15.3	15.9	15.6	15.4	0.8
76	15.4	15.9	15.5	15.5	0.5
77	14.8	15.3	14.9	14.6	0.7
78	15.9	16.4	16.2	15.8	0.6
Max	16.1	16.8	16.3	16.1	4.3
Min	13.7	14.2	13.7	13.5	0.4
Diff	2.4	2.6	2.6	2.6	3.9

Max NonAdjacent Channel Variance: 4.3  
Max Adjacent Channel Variance: 3.9

Max Variance from last proof-of-performance test:

	Test 1	Test 2	Test 3	Test 4
Max	16.5	17.2	17.0	16.5
Min	10.4	11.1	10.1	10.5
Diff	6.1	6.1	6.9	6.0

Test Point # 2

Page 5 of 5

**TIME WARNER CABLE  
BINGHAMTON DIVISION**

Proof-of-Performance Tests

System Name: ONEONTA

System Test Point # 3

Location: Bloom & Mill Streets, Gilbertsville

Community: NEW BERLIN

Pole Number: 27 // 90

D.T. Value: Philips 9423

Map Number: \_\_\_\_\_

OR Number: \_\_\_\_\_

Trunk Cascade: 2 LE Cascade: 2

# Visual Carrier Level Visual / Aural Level Difference

( at Test Point, at The End of a 100' Drop)

System Name: ONEONTA

Test Location: TP 3...New Berlin

Date: 02/16/2001

Time 09:06 AM

Chan	Freq. (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra "S"	Diff. (Dbmv)	Chan	Freq. (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra "S"	Diff. (Dbmv)
2	55.2500	7.1	-8.7		15.8	37	301.2625	10.1	-4.1		14.2
3	61.2500	8.8	-6.1		14.9	38	307.2625	9.8	-5.5		15.3
4	67.2500	8.8	-6.0		14.8	39	313.2625	7.9	-8.5		16.4
5	77.2500	9.1	-6.7		15.8	40	319.2625	6.5	-7.0		13.5
6	83.2500	6.6	-6.4		13.0	41	325.2625	8.4	-5.7		14.1
						42	331.2750	9.1	-4.6		13.7
						43	337.2625	9.4	-4.9		14.3
A-5	91.2500					44	343.2625	9.5	-5.7		15.2
A-4	97.2500					45	349.2625	8.6	-7.2		15.8
A-3	103.2500					46	355.2625	6.3	-8.4		14.7
A-2	109.2750					47	361.2625	6.0	-7.0		13.0
A-1	115.2750					48	367.2625	8.9	-4.4		13.3
14	121.2625	8.6	-5.4		14.0	49	373.2625	10.0	-4.2		14.2
15	127.2625	8.2	-5.5		13.7	50	379.2625	9.9	-0.2	S	10.1
16	133.2625	10.1	-5.7		15.8	51	385.2625	10.0	0.0	S	10.0
17	139.2500	8.1	-6.6		14.7	52	391.2625	10.6	0.1	S	10.5
18	145.2500	7.8	-5.7		13.5	53	397.2625	10.8	-5.8		16.6
19	151.2500	9.6	-3.9		13.5	54	403.2500	10.5	0.5	S	10.0
20	157.2500	10.0	-4.8		14.8	55	409.2500	10.5	0.4	S	10.1
21	163.2500	9.7	-3.9		13.8	56	415.2500	11.0	-2.8		13.8
22	169.2500	10.2	-3.8		14.0	57	421.2500	11.1	-4.0		15.1
7	175.2500	9.3	-5.4		14.7	58	427.2500	10.5	-3.3		13.8
8	181.2500	9.9	-5.3		15.2	59	433.2500	11.3	-2.0		13.3
9	187.2500	8.3	-6.8		15.1	60	439.2500	11.9	-2.0		13.9
10	193.2500	8.7	-5.3		14.0	61	445.2500	12.7	2.6	S	10.1
11	199.2500	8.1	-5.1		13.2	62	451.2500	12.4	0.2		12.2
12	205.2500	9.3	-5.3		14.6	63	457.2500	11.6	-2.7		14.3
13	211.2500	9.0	-5.9		14.9	64	463.2500	11.9	-0.5	S	12.4
23	217.2500	9.0	-6.9		15.9	65	469.2500	12.7	-1.9		14.6
24	223.2500	6.1	-10.3		16.4	66	475.2500	11.9	-2.9		14.8
25	229.2625					67	481.2500	12.0	-2.5		14.5
26	235.2625	9.6	-5.8		14.6	68	487.2500	11.7	-1.7		13.4
27	241.2625	6.6	-5.5		13.1	69	493.2500	12.4	-3.2		15.6
28	247.2625	7.4	-2.7	S	10.1	70	499.2500	12.2	0.5	S	11.7
29	253.2625	8.5	-1.8	S	10.4	71	505.2500	12.1	-2.1		14.2
30	259.2625	7.0	-3.7	S	10.7	72	511.2500	13.3	3.2	S	10.1
31	265.2625	9.6	-0.5	S	10.1	73	517.2500	13.0	-1.4		14.4
32	271.2625	8.9	-1.3	S	10.2	74	523.2500	12.4	-2.3		14.7
33	277.2625	9.0	-1.0	S	10.0	75	529.2500	13.2	3.2	S	10.0
34	283.2625	7.7	-6.5		14.2	76	535.2500	12.8	-2.6		15.4
35	289.2625	8.1	-5.8		13.9	77	541.2500	11.5	-4.6		16.1
36	295.2625	9.8	-4.1		13.9	78	547.2500	10.7	-6.0		16.7

PEAK TO VALLEY: 7.3

IN CHANNEL RESPONSE Test  
 CARRIER - TO - NOISE Test  
 COHERENT DISTURBANCES Test  
 LOW FREQUENCY DISTURBANCES Test

System Name: ONEONTA Date: 02/16/2001

Test Performed By: David Kulze

Location: TP3 New Berlin

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In-Channel Response (dB)	Carrier To Noise Ratio (dB)	Distortions			Hum (%)
			cdb	cso	svob	
4	0.5	46.5	>-60	52.3	>-60	
15	0.6	47.1	>-60	51.3	>-60	1
9	0.5	45.9	>-60	52.2	>-60	
24	0.5	43.6	57.7	55	>-60	
35	1.4	46.2	>-60	53.8	>-60	
41	0.3	45.3	59.7	51.1	>-60	
48	1.4	45.9	>-60	51.2	>-60	
57	0.1	46.8	>-60	55.5	>-60	
65	0.1	46.3	>-60	55.3	>-60	
69	0.1	45.8	>-60	54.5	>-60	
78	0.2	45.1	>-60	51.6	>-60	

Visual Carrier Level Variation Test 76.605 (a) 4  
System Name: Time Warner Oneonta

TP#3

Test Point: New Berlin 3  
Date: 02/15/01

Visual Level (dBmv)						Visual Level (dBmv)					
Chan	Temp				Max Var	Chan	Temp				Max Var
	35.6 Deg	23 Deg	14 Deg	14 Deg			35.6 Deg	23 Deg	14 Deg	14 Deg	
	Time					Time					
	13:32 PM	19:32 PM	01:32 AM	07:32 AM		13:32 PM	19:32 PM	01:32 AM	07:32 AM		
2	6.6	6.9	7.4	7.5	0.9	39	6.6	7.5	8.0	7.9	1.4
3	6.8	8.2	8.5	9.5	2.7	40	5.5	6.1	6.7	6.9	1.4
4	8.3	8.8	9.1	9.1	0.8	41	7.4	8.2	8.4	8.6	1.2
5	8.4	8.8	9.5	9.4	1.1	42	8.0	8.6	9.2	9.4	1.4
6	4.7	5.3	6.0	6.1	1.4	43	8.5	9.1	9.7	9.8	1.3
						44	8.0	8.6	9.2	9.3	1.3
						45	7.4	8.0	8.9	9.1	1.7
						46	5.0	5.6	6.6	6.6	1.6
						47	5.2	5.8	6.3	6.5	1.3
						48	8.0	8.2	8.8	9.2	1.2
						49	9.4	9.7	10.4	11.1	1.7
A-2						50	8.9	9.5	10.4	10.4	1.5
A-1						51	8.8	9.6	10.3	10.4	1.6
14	8.1	8.5	8.6	9.0	0.9	52	9.3	9.9	11.0	11.1	1.8
15	7.7	8.1	8.5	8.8	1.1	53	9.4	10.2	11.1	11.2	1.8
16	8.9	8.9	10.2	10.5	1.6	54	9.1	9.8	11.0	11.0	1.9
17	7.1	7.7	7.9	8.1	1.0	55	9.1	9.8	10.9	11.0	1.9
18	7.0	7.4	8.1	8.2	1.2	56	9.4	10.2	11.3	11.9	2.5
19	7.7	8.9	9.9	9.9	2.2	57	9.4	10.2	11.6	11.5	2.2
20	9.1	9.7	10.5	10.9	1.8	58	9.4	9.8	11.1	11.4	2.0
21	8.6	9.2	9.9	10.0	1.4	59	9.9	10.7	11.7	12.0	2.1
22	8.9	9.6	9.8	10.3	1.4	60	10.6	11.3	12.3	12.6	2.0
7	8.3	8.9	9.2	9.7	1.4	61	11.1	12.0	13.3	13.1	2.2
8	8.3	9.4	8.8	10.3	2.0	62	11.1	11.3	12.4	12.6	1.5
9	7.1	7.7	8.5	8.3	1.4	63	10.6	11.1	12.0	12.4	1.8
10	7.0	8.2	8.5	8.7	1.7	64	10.6	11.2	12.3	12.4	1.8
11	7.1	7.3	8.1	8.6	1.5	65	10.8	12.0	13.0	13.4	2.6
12	7.8	8.8	8.0	10.3	2.5	66	10.3	11.1	12.2	12.3	2.0
13	7.6	9.3	11.1	8.8	3.5	67	10.5	11.4	12.4	12.4	1.9
23	7.8	8.5	9.3	9.3	1.5	68	10.3	11.6	12.7	12.5	2.4
24	5.0	5.6	6.2	6.4	1.4	69	11.1	11.7	12.5	12.4	1.4
25						70	11.0	11.5	12.7	12.7	1.7
26	7.7	8.7	9.8	9.3	2.1	71	10.6	11.8	12.6	12.9	2.3
27	5.5	6.0	6.9	6.9	1.4	72	11.6	12.7	13.9	13.3	2.3
28	6.2	6.8	7.5	7.7	1.5	73	11.8	12.3	13.5	13.1	1.7
29	7.9	8.3	9.0	9.1	1.2	74	10.7	11.6	12.9	12.4	2.2
30	7.5	7.3	9.7	9.1	2.4	75	11.8	12.6	13.6	13.8	2.0
31	8.5	9.0	9.8	9.9	1.4	76	11.6	12.5	13.6	13.3	2.0
32	7.9	8.6	9.2	9.4	1.5	77	10.3	10.6	11.9	11.5	1.6
33	7.8	8.6	9.2	9.4	1.6	78	9.3	10.2	10.7	10.6	1.4
34	6.8	7.1	7.9	7.7	1.1						
35	7.6	8.4	8.9	8.7	1.3						
36	8.6	9.2	9.7	9.8	1.2						
37	9.3	10.1	10.4	10.9	1.6						
38	9.1	9.3	10.1	10.2	1.1						
Max	9.3	10.1	11.1	10.9	3.5	Max	11.8	12.7	13.9	13.8	3.5
Min	4.7	5.3	6.0	6.1	0.8	Min	5.0	5.6	6.3	6.5	0.8
Diff	4.6	4.8	5.1	4.8	2.7	Diff	6.8	7.1	7.6	7.3	2.7

Max NonAdjacent Channel Variance: 7.9  
Max Adjacent Channel Variance:

Max Variance from last proof-of-performance test:

	Test 1	Test 2	Test 3	Test 4
Max	11.8	12.7	13.9	13.8
Min	4.7	5.3	6	6.1
Diff	7.1	7.4	7.9	7.7

Test Point # 3

Page 5 of 5

# TIME WARNER CABLE BINGHAMTON DIVISION

## Proof-of-Performance Tests

System Name: ONEONTA

System Test Point # 4

Location: Cornish Hill Rd.

Community: COOPERSTOWN

Pole Number: NYT 2

D.T. Value: Philips 9417

Map Number:

OR Number: 70

Trunk Cascade: 7 LE Cascade: 1

# Visual Carrier Level

## Visual / Aural Level Difference

( at Test Point, at The End of a 100' Drop)

System Name: ONEONTA

Test Location: TP 4...Cooperstown

Date: 02/15/2001

Time 16:02 PM

Chan.	Freq. (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra "S"	Diff. (Dbmv)	Chan.	Freq. (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra "S"	Diff. (Dbmv)
2	55.2500	7.2	-7.0		14.2	37	301.2625	10.4	-3.5		13.9
3	61.2500	9.4	-4.7		14.1	38	307.2625	10.6	-2.8		13.4
4	67.2500	9.2	-5.6		14.8	39	313.2625	10.8	-3.2		14.0
5	77.2500	8.4	-7.2		15.6	40	319.2625	11.2	-2.9		14.1
6	83.2500	5.4	-6.8		12.2	41	325.2625	11.2	-3.4		14.6
						42	331.2750	10.8	-2.8		13.6
						43	337.2625	11.1	-3.1		14.2
A-5	91.2500					44	343.2625	11.5	-2.9		14.4
A-4	97.2500					45	349.2625	11.7	-1.9		13.6
A-3	103.2500					46	355.2625	12.3	-1.4		13.7
A-2	109.2750					47	361.2625	12.6	-2.3		14.9
A-1	115.2750					48	367.2625	12.7	-1.3		14.0
14	121.2625	5.5	-6.8		12.3	49	373.2625	12.8	-1.4		14.2
15	127.2625	7.0	-6.7		14.0	50	379.2625	12.3	0.1	S	12.2
16	133.2625	6.2	-5.9		14.1	51	385.2625	12.6	1.2	S	11.4
17	139.2500	7.3	-7.2		14.5	52	391.2625	13.1	1.4	S	11.7
18	145.2500	6.6	-5.6		12.2	53	397.2625	12.7	-2.0		14.7
19	151.2500	8.7	-5.1		13.8	54	403.2500	13.1	0.3	S	12.8
20	157.2500	10.0	-4.4		14.4	55	409.2500	12.6	0.0	S	12.6
21	163.2500	9.6	-3.8		13.4	56	415.2500	11.8	-1.2		13.0
22	169.2500	9.9	-4.3		14.2	57	421.2500	12.3	-1.9		14.2
7	175.2500	8.5	-5.4		13.9	58	427.2500	12.7	-0.8		13.5
8	181.2500	9.3	-4.7		14.0	59	433.2500	13.1	-0.3		13.4
9	187.2500	9.5	-4.5		14.0	60	439.2500	13.1	-0.5		13.6
10	193.2500	9.6	-5.4		15.0	61	445.2500	13.6	1.9	S	11.7
11	199.2500	7.8	-6.6		14.4	62	451.2500	12.5	-1.4		13.9
12	205.2500	7.0	-7.3		14.3	63	457.2500	11.8	-2.9		14.7
13	211.2500	6.7	-7.8		14.5	64	463.2500	11.4	-3.2	S	14.6
23	217.2500	7.7	-6.8		14.5	65	469.2500	12.7	-1.1		13.8
24	223.2500	7.1	-7.8		14.9	66	475.2500	12.7	-1.5		14.2
25	229.2500	6.6	-7.2		13.8	67	481.2500	13.3	-1.2		14.5
26	235.2500	7.5	-5.3		12.8	68	487.2500	12.9	-1.1		14.0
27	241.2625	7.8	-5.4		13.2	69	493.2500	12.3	-2.4		14.7
28	247.2625	8.7	-4.7	S	13.4	70	499.2500	12.9	-1.4	S	14.3
29	253.2625	7.9	-6.5	S	14.4	71	505.2500	13.0	-1.7		14.7
30	259.2625	8.5	-4.1	S	12.6	72	511.2500	13.8	1.5	S	12.3
31	265.2625	8.6	-3.3	S	11.9	73	517.2500	13.7	-0.4		14.1
32	271.2625	8.5	-1.6	S	10.1	74	523.2500	12.9	-1.5		14.4
33	277.2625	11.5	-0.7	S	12.2	75	529.2500	13.6	1.5	S	12.1
34	283.2625	10.9	-2.7		13.6	76	535.2500	13.1	-1.2		14.3
35	289.2625	11.7	-3.5		15.2	77	541.2500	13.0	-1.3		14.3
36	295.2625	10.9	-4.0		14.9	78	547.2500	13.9	0.2		13.7

PEAK TO VALLEY: 8.4

# IN CHANNEL RESPONSE Test

## CARRIER - TO - NOISE Test

### COHERENT DISTURBANCES Test

### LOW FREQUENCY DISTURBANCES Test

System Name: ONEONTA Date: 02/16/2001

Test Performed By: Brian Miller

Location: TP4 Cooperstown

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In Channel Response (dB)	Carrier to Noise Ratio (dB)	Distortions (dBc)			Blm (%)
			CTB	CSO	MOD	
4	0.1	46	>-60	54.8	>-60	
15	0.8	43.2	>-60	52.2	>-60	0.8
9	0.9	43.6	>-60	53.7	>-60	
24	0.2	44.8	58.4	51.5	>-60	
35	1.1	44.9	>-60	55.1	>-60	
41	0.3	45.9	>-60	53.3	>-60	
48	0.6	48.9	>-60	55.9	>-60	
57	0.4	43.6	>-60	54.8	>-60	
65	0.6	45.1	>-60	54.5	>-60	
69	0	45.8	>-60	52.7	>-60	
78	0.7	45.5	>-60	57.6	>-60	



TP#4

Test Point: Cooperstown 4  
Date: 02/15/2001

Chan	Visual Level (dBmv)				Max Var
	Temp				
	38 Deg	32 Deg	26.6 Deg	30.2 Deg	
Time					
04:02 PM	22:02 PM	04:02 AM	10:02 AM		
2	7.2	7.6	8.2	7.3	1.0
3	9.4	9.6	10.2	9.5	0.8
4	9.2	9.9	10.3	9.4	1.1
5	8.4	8.9	9.2	8.5	0.8
6	5.3	5.8	6.0	5.4	0.7
A-2					
A-1					
14	5.5	5.6	6.1	5.3	0.8
15	7.3	7.4	8.1	7.3	0.8
16	8.2	8.8	9.4	8.5	1.2
17	7.3	8.1	8.6	7.8	1.3
18	6.6	8.2	8.3	6.7	1.7
19	8.7	8.8	9.2	8.1	1.1
20	10.0	10.1	10.8	10.0	0.8
21	9.6	9.9	10.6	10.0	1.0
22	9.9	10.4	10.7	10.0	0.8
7	8.5	9.1	9.0	8.9	0.6
8	9.3	9.9	9.4	9.6	0.6
9	9.5	10.1	10.4	9.7	0.9
10	9.6	9.9	10.7	9.7	1.1
11	7.8	8.4	8.9	7.9	1.1
12	7.0	8.6	8.3	8.0	1.6
13	6.7	7.1	8.4	7.5	1.7
23	7.7	8.3	8.9	7.9	1.2
24	7.1	7.9	8.4	7.6	1.3
25	6.6	7.2	7.7	6.7	1.1
26	7.5	8.5	9.1	8.1	1.6
27	7.8	8.9	9.4	8.2	1.6
28	8.7	9.5	10.0	9.0	1.3
29	7.9	8.6	9.2	8.0	1.3
30	8.5	8.0	9.7	8.2	1.7
31	8.6	9.3	9.8	8.6	1.2
32	8.9	9.4	10.1	9.3	1.2
33	11.9	12.9	13.1	12.3	1.2
34	10.9	11.4	12.3	11.2	1.4
35	11.7	12.4	12.9	11.8	1.2
36	10.9	11.7	12.1	11.1	1.2
37	10.4	11.2	11.8	10.8	1.4
38	10.6	11.4	11.9	10.7	1.3

Max	11.9	12.9	13.1	12.3	1.7
Min	5.3	5.6	6.0	5.3	0.6
Diff	6.6	7.3	7.1	7.0	1.1

Chan	Visual Level (dBmv)				Max Var
	Temp				
	38 Deg	32 Deg	26.6 Deg	30.2 Deg	
Time					
04:02 PM	22:02 PM	04:02 AM	10:02 AM		
39	10.8	11.7	12.4	11.4	1.6
40	11.2	12.1	12.6	11.7	1.4
41	11.2	12.1	12.8	11.0	1.8
42	10.8	11.7	12.3	10.7	1.6
43	11.1	11.8	12.4	11.2	1.3
44	11.5	12.1	12.6	11.6	1.1
45	11.7	12.3	12.9	11.9	1.2
46	12.3	12.7	13.4	12.0	1.4
47	12.6	13.2	13.7	12.5	1.2
48	12.7	13.3	13.8	12.6	1.2
49	12.8	13.3	14.0	12.8	1.2
50	12.3	13.2	13.9	12.6	1.6
51	12.6	13.3	14.0	12.8	1.4
52	13.1	14.0	14.7	13.4	1.6
53	12.7	13.5	14.2	12.9	1.5
54	13.1	14.3	15.1	13.7	2.0
55	12.6	13.8	14.7	13.2	2.1
56	11.8	12.7	13.5	12.1	1.7
57	12.3	13.3	13.9	12.7	1.6
58	12.7	13.7	14.3	13.0	1.6
59	13.1	14.2	15.1	13.7	2.0
60	13.1	14.5	15.2	13.8	2.1
61	13.6	15.0	15.7	14.1	2.1
62	12.5	13.8	14.3	13.0	1.8
63	11.8	12.9	13.5	12.3	1.7
64	11.4	12.7	13.4	11.7	2.0
65	12.7	13.9	14.7	13.2	2.0
66	12.7	13.7	14.4	13.1	1.7
67	13.3	14.2	15.0	13.5	1.7
68	12.9	13.7	14.6	13.1	1.7
69	12.3	13.0	13.6	12.4	1.3
70	12.9	13.6	14.5	12.9	1.6
71	13.0	14.0	14.4	13.1	1.4
72	13.8	14.6	15.5	13.9	1.7
73	13.7	14.3	15.2	13.8	1.5
74	12.9	13.9	14.4	13.0	1.5
75	13.6	14.4	15.2	13.8	1.6
76	13.1	14.1	14.8	13.3	1.7
77	13.0	14.1	14.8	13.1	1.8
78	13.9	15.0	15.9	14.4	2.0

Max	13.9	15.0	15.9	14.4	2.1
Min	10.8	11.7	12.3	10.7	0.6
Diff	3.1	3.3	3.6	3.7	1.5

Max NonAdjacent Channel Variance: 9.9  
Max Adjacent Channel Variance:

Max Variance from last proof-of-performance test:

	Test 1	Test 2	Test 3	Test 4
Max	13.9	15	15.9	14.4
Min	5.3	5.6	6	5.3
Diff	8.6	9.4	9.9	9.1

**TIME WARNER CABLE  
BINGHAMTON DIVISION**

Proof-of-Performance Tests

System Name: ONEONTA

System Test Point # 5

Location: Otsego Co. RT 39

Community: TOWN OF BAINBRIDGE

Pole Number: 8 // 22

D.T. Value: Philips 9214

Map Number: \_\_\_\_\_

OR Number: 54

Trunk Cascade: 8 LE Cascade: 0

# Visual Carrier Level

## Visual / Aural Level Difference

( at Test Point, at The End of a 100' Drop)

System Name: ONEONTA

Test Location: TP 5...Bainbridge

Date: 02/16/2001

Time 14:29 P.M.

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra "S"	Diff. (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra "S"	Diff. (Dbmv)
2	55.2500	19.1	6.0		13.1	37	301.2625	18.4	4.5		13.9
3	61.2500	18.9	3.0		15.9	38	307.2625	18.5	4.5		14.0
4	67.2500	19.6	4.1		15.5	39	313.2625	18.5	3.5		15.0
5	77.2500	17.8	2.7		15.1	40	319.2625	18.0	3.0		15.0
6	83.2500	18.5	2.6		15.9	41	325.2625	17.5	2.7		14.8
						42	331.2750	17.6	3.8		13.8
						43	337.2625	16.9	3.0		13.9
A-5	91.2500					44	343.2625	17.2	2.9		14.3
A-4	97.2500					45	349.2625	17.5	3.3		14.2
A-3	103.2500					46	355.2625	17.8	3.7		14.1
A-2	109.2750					47	361.2625	17.1	3.0		14.1
A-1	115.2750					48	367.2625	18.1	4.2		13.9
14	121.2625	17.3	2.6		14.7	49	373.2625	17.8	4.4		13.4
15	127.2625	17.3	2.7		14.6	50	379.2625	17.8	5.7	S	12.1
16	133.2625	18.4	3.8		14.6	51	385.2625	17.7	6.5	S	11.2
17	139.2500	17.8	3.5		14.3	52	391.2625	17.9	6.1	S	11.8
18	145.2500	17.7	4.0		13.7	53	397.2625	17.3	3.2		14.1
19	151.2500	18.7	5.0		13.7	54	403.2500	17.5	5.4	S	12.1
20	157.2500	19.1	4.6		14.5	55	409.2500	18.0	5.7	S	12.3
21	163.2500	19.0	4.7		14.3	56	415.2500	17.8	4.9		12.9
22	169.2500	18.8	4.7		14.1	57	421.2500	18.0	5.2		12.8
7	175.2500	17.2	2.5		14.7	58	427.2500	18.8	4.8		14.0
8	181.2500	17.9	4.1		13.8	59	433.2500	18.3	4.8		13.5
9	187.2500	18.2	3.9		14.3	60	439.2500	18.4	5.1		13.3
10	193.2500	18.6	3.8		14.8	61	445.2500	19.3	8.2	S	11.1
11	199.2500	16.6	2.8		13.8	62	451.2500	18.9	4.9		14.0
12	205.2500	15.6	1.3		14.3	63	457.2500	19.1	4.8		14.3
13	211.2500	15.9	0.8		15.1	64	463.2500	18.9	4.3	S	14.6
23	217.2500	15.8	1.9		13.9	65	469.2500	19.7	5.6		14.1
24	223.2500	16.2	1.3		14.9	66	475.2500	19.2	4.6		14.6
25	229.2625	15.5	-0.9		16.4	67	481.2500	19.2	4.7		14.5
26	235.2625	13.3	-1.0		14.3	68	487.2500	18.8	5.1		13.7
27	241.2625	13.3	3.3		10.0	69	493.2500	18.2	3.5		14.7
28	247.2625	16.3	5.3	S	11.0	70	499.2500	19.1	5.1	S	14.0
29	253.2625	18.2	4.4	S	13.8	71	505.2500	19.6	5.1		14.5
30	259.2625	16.7	5.3	S	11.4	72	511.2500	19.5	7.2	S	12.3
31	265.2625	18.5	6.6	S	11.9	73	517.2500	19.2	4.7		14.5
32	271.2625	18.7	6.3	S	12.4	74	523.2500	18.5	4.0		14.5
33	277.2625	19.2	6.3	S	12.9	75	529.2500	18.8	7.0	S	11.8
34	283.2625	18.6	3.9		14.7	76	535.2500	18.2	3.9		14.3
35	289.2625	18.4	3.8		14.6	77	541.2500	17.8	3.5		14.3
36	295.2625	18.8	4.3		14.5	78	547.2500	18.6	4.3		14.3

PEAK TO VALLEY: 6.4

# IN CHANNEL RESPONSE Test

## CARRIER - TO - NOISE Test

### COHERENT DISTURBANCES Test

### LOW FREQUENCY DISTURBANCES Test

System Name: ONEONTA Date: 02/16/2001

Test Performed By: David Kulze

Location: TP5 Bainbridge

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	Channel Response (dB)	Carrier to Noise Ratio (dB)	Distortions (dB)			Hum (%)
			C/N	ESD	AMOD	
4	0.1	48	>-60	61.6	>-60	
15	0.8	46.4	>-60	58.8	>-60	0.8
9	1	45	>-60	60.3	>-60	
24	0.8	44.7	>-60	58.6	>-60	
35	1.4	45.3	>-60	58.1	>-60	
41	0.8	47.5	>-60	58.2	>-60	
48	0.8	47.7	>-60	57.7	>-60	
57	0.5	44.1	>-60	55.4	>-60	
65	0.4	47.8	>-60	58.1	>-60	
69	0.1	45.8	>-60	58.8	>-60	
78	0.6	45.7	>-60	59.1	>-60	

Visual Carrier Level Variation Test 76.605 (a) 4  
System Name: Time Warner Oneonta

TP#2

Test Point: Sidney 2  
Date: 02/19/2001

Visual Level (dBmv)						Visual Level (dBmv)					
Chan	Temp				Max Var	Chan	Temp				Max Var
	41 Deg	39.2 Deg	37.4	39.2 Deg			41 Deg	39.2 Deg	37.4	39.2 Deg	
	Time						Time				
	13:02 PM	19:02 PM	01:02 AM	07:02 AM			13:02 PM	19:02 PM	01:02 AM	07:02 AM	
2	11.2	11.5	10.1	10.5	1.4	39	15.4	16.0	15.7	15.4	0.6
3	12.4	13.1	12.3	12.8	0.8	40	14.8	15.5	15.0	14.7	0.8
4	12.8	13.0	12.6	12.6	0.4	41	14.8	15.5	15.1	14.8	0.7
5	12.4	12.8	12.5	12.2	0.6	42	14.2	14.9	14.6	14.3	0.7
6	12.3	12.6	12.1	12.2	0.5	43	14.1	14.7	14.2	14.2	0.6
						44	14.4	15.0	14.6	14.6	0.6
						45	14.4	15.2	14.7	14.5	0.8
						46	14.1	14.5	14.1	13.8	0.7
						47	13.7	14.2	13.7	13.5	0.7
						48	14.7	15.1	14.9	14.7	0.4
						49	14.5	15.4	14.9	14.8	0.9
A-2						50	14.1	14.8	14.4	14.1	0.7
A-1						51	14.7	15.4	15.2	14.7	0.7
14	12.5	12.8	12.6	12.3	0.5	52	14.4	15.2	14.8	14.5	0.8
15	12.4	12.9	12.5	12.5	0.5	53	13.9	14.7	14.3	14.0	0.8
16	13.7	14.2	14.1	14.1	0.5	54	15.1	15.8	15.4	15.2	0.7
17	13.1	13.6	13.3	13.1	0.5	55	14.6	15.4	15.1	14.8	0.8
18	13.7	14.3	13.7	13.8	0.6	56	14.2	14.8	14.7	14.4	0.6
19	13.7	14.0	13.5	13.5	0.5	57	15.1	15.8	15.5	15.3	0.7
20	14.3	14.7	14.3	14.3	0.4	58	15.2	15.7	15.6	15.1	0.6
21	14.8	15.4	14.8	14.8	0.6	59	15.0	15.4	15.2	15.0	0.4
22	14.5	14.9	14.3	14.4	0.6	60	15.2	15.7	15.4	15.4	0.5
7	13.5	14.2	13.7	13.7	0.7	61	15.9	16.4	16.0	15.8	0.6
8	15.0	15.4	14.4	15.1	1.0	62	14.6	15.1	14.7	14.4	0.7
9	14.7	15.3	14.8	14.5	0.8	63	14.8	15.7	15.2	15.0	0.9
10	15.3	15.3	15.6	14.8	1.0	64	14.7	15.1	14.9	14.7	0.4
11	14.2	14.6	14.3	14.0	0.6	65	14.1	14.8	14.7	14.5	0.7
12	14.4	14.7	10.4	14.6	4.3	66	15.4	15.8	15.7	15.1	0.7
13	13.1	14.1	14.3	14.4	1.3	67	14.8	15.3	15.0	14.6	0.7
23	13.3	13.8	13.5	13.2	0.6	68	14.1	15.2	15.0	14.5	1.1
24	14.8	15.2	14.9	14.8	0.4	69	14.4	15.0	14.6	14.2	0.8
25	12.4	13.1	12.6	12.5	0.7	70	15.1	15.7	15.3	15.0	0.7
26	10.6	11.3	10.9	10.5	0.8	71	15.1	15.6	15.3	14.8	0.8
27	10.4	11.1	10.8	10.6	0.7	72	18.1	18.8	18.3	16.1	0.7
28	12.9	14.4	14.2	14.1	1.5	73	15.9	16.5	16.1	15.7	0.8
29	15.3	15.9	15.6	15.4	0.6	74	14.5	14.9	14.6	14.4	0.5
30	14.4	15.5	14.7	15.0	1.1	75	15.3	15.9	15.8	15.4	0.6
31	14.9	15.7	15.2	15.1	0.8	76	15.4	15.9	15.5	15.5	0.5
32	15.6	16.5	16.0	15.9	0.9	77	14.8	15.3	14.9	14.6	0.7
33	16.5	17.2	17.0	16.5	0.7	78	15.9	16.4	16.2	15.8	0.6
34	14.6	15.4	14.9	14.8	0.8						
35	15.0	15.9	15.4	15.4	0.9						
36	16.2	16.8	16.6	16.2	0.6						
37	15.1	15.7	15.5	15.3	0.8						
38	15.7	16.7	16.2	15.7	1.0						
Max	16.5	17.2	17.0	16.5	3.3	Max	16.1	16.8	16.3	16.1	4.3
Min	10.4	11.1	10.1	10.5	0.4	Min	13.7	14.2	13.7	13.5	0.4
Diff	6.1	6.1	6.9	6.0	3.9	Diff	2.4	2.6	2.6	2.6	3.9

Max NonAdjacent Channel Variance: 6.9  
Max Adjacent Channel Variance:

Max Variance from last proof-of-performance test:

	Test 1	Test 2	Test 3	Test 4
Max	16.5	17.2	17	16.5
Min	10.4	11.1	10.1	10.5
Diff	6.1	6.1	6.9	6.0

Test Point # 2

Page 5 of 5

# TIME WARNER CABLE BINGHAMTON DIVISION

## Proof-of-Performance Tests

System Name: ONEONTA

System Test Point # 6

Location: NYS RT 206W

Community: Town of Walton

Pole Number: P38/51

D.T. Value: Philips 9414

Map Number:

OR Number: 87

Trunk Cascade: 5 LE Cascade: 3

# Visual Carrier Level Visual / Aural Level Difference

( at Test Point, at The End of a 100' Drop)

System Name: ONEONTA

Test Location: TP 6...Walton

Date: 08/16/2001

Time: 11:20 AM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra *S*	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra *S*	Diff (Dbmv)
2	55.2500	13.6	0.6		13.0	37	301.2625	14.6	0.5		14.1
3	61.2500	14.8	0.0		14.8	38	307.2625	14.9	1.1		13.8
4	67.2500	14.6	0.4		14.2	39	313.2625	15.0	0.3		14.7
5	77.2500	15.1	0.2		14.9	40	319.2625	14.8	0.2		14.6
6	83.2500	15.8	0.1		15.7	41	325.2625	13.9	-0.9		14.8
						42	331.2750	14.6	0.7		13.9
						43	337.2625	14.1	0.1		14.0
A-5	91.2500					44	343.2625	14.3	-0.3		14.6
A-4	97.2500					45	349.2625	14.3	0.1		14.2
A-3	103.2500					46	355.2625	13.7	-0.4		14.1
A-2	109.2750					47	361.2625	13.3	-0.7		14.0
A-1	115.2750					48	367.2625	14.8	0.8		14.0
14	121.2625	12.7	-1.1		13.8	49	373.2625	14.7	0.6		14.1
15	127.2625	12.7	-1.2		13.9	50	379.2625	14.0	2.2	S	11.8
16	133.2625	14.4	-0.5		14.9	51	385.2625	14.4	2.6	S	11.8
17	139.2500	12.8	-0.9		13.7	52	391.2625	14.4	2.6	S	11.8
18	145.2500	13.2	0.0		13.2	53	397.2625	13.8	-0.7		14.5
19	151.2500	14.2	0.4		13.8	54	403.2500	14.3	1.5	S	12.8
20	157.2500	14.7	0.3		14.4	55	409.2500	13.9	1.5	S	12.4
21	163.2500	14.5	1.0		13.5	56	415.2500	13.5	0.2		13.3
22	169.2500	15.0	1.4		13.6	57	421.2500	13.8	0.1		13.7
7	175.2500	14.4	-0.9		15.3	58	427.2500	13.3	-0.9		14.2
8	181.2500	15.5	1.4		14.1	59	433.2500	13.3	-1.4		14.7
9	187.2500	16.2	1.6		14.6	60	439.2500	12.5	-1.1		13.6
10	193.2500	15.8	1.0		14.8	61	445.2500	13.2	1.9	S	11.3
11	199.2500	14.9	1.1		13.8	62	451.2500	12.9	-1.3		14.2
12	205.2500	16.4	1.8		14.6	63	457.2500	12.8	-1.4		14.2
13	211.2500	15.2	-1.8		17.0	64	463.2500	13.1	-2.1	S	15.2
23	217.2500	15.5	1.5		14.0	65	469.2500	14.2	0.4		13.8
24	223.2500	12.5	0.3		12.2	66	475.2500	14.3	-0.6		14.9
25	229.2625	14.5	0.5		14.0	67	481.2500	14.4	-0.1		14.5
26	235.2625	16.0	2.7		13.3	68	487.2500	13.7	0.5		13.2
27	241.2625	15.8	1.5		14.3	69	493.2500	13.9	-0.8		14.7
28	247.2625	15.5	2.6	S	12.9	70	499.2500	15.4	0.8	S	14.6
29	253.2625	15.2	0.9	S	14.3	71	505.2500	15.0	0.9		14.1
30	259.2625	14.8	2.0	S		72	511.2500	16.0	3.5	S	12.5
31	265.2625	14.8	2.7	S	12.1	73	517.2500	15.6	0.9		14.7
32	271.2625	14.8	2.3	S	12.5	74	523.2500	14.7	-0.4		15.1
33	277.2625	15.4	2.8	S	12.6	75	529.2500	15.0	3.2	S	11.8
34	283.2625	14.5	-0.2		14.7	76	535.2500	14.6	0.3		14.3
35	289.2625	14.4	-0.1		14.5	77	541.2500	14.1	-0.3		14.4
36	295.2625	15.1	0.8		14.3	78	547.2500	15.3	0.3		15.0

PEAK TO VALLEY: 3.9

# IN CHANNEL RESPONSE Test

## CARRIER - TO - NOISE Test

### COHERENT DISTURBANCES Test

#### LOW FREQUENCY DISTURBANCES Test

System Name: ONEONTA Date: 02/16/2001

Test Performed By: David Kulze

Location: TP6 Walton

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In-Channel Response (dB)	Carrier To Noise Ratio (dB)	Disturbances (dB)			Hum (%)
			100 Hz	500 Hz	1000 Hz	
4	0.6	45.8	>-60	58.6	>-60	
15	0.8	45.1	>-60	55.4	>-60	0.6
9	1	45.8	>-60	56.6	>-60	
24	0.2	42.5	>-60	53.4	>-60	
37	1.1	47	>-60	55.8	>-60	
41	0.4	44.9	>-60	58.4	>-60	
48	0.6	48.4	>-60	56.1	>-60	
57	0.3	44.5	>-60	54.4	>-60	
63	0.5	46.7	>-60	55.4	>-60	
69	0.2	44.8	>-60	54	>-60	
78	0.3	46.1	>-60	54.8	>-60	



TP#2

Test Point: Sidney 2  
Date: 02/10/2001

Visual Level (dBmv)						Visual Level (dBmv)					
		Temp									
		41 Deg	39.2 Deg	37.4	39.2 Deg						
		Time									
Chan	13:02 PM	19:02 PM	01:02 AM	07:02 AM	Max Var	Chan					Max Var
2	11.2	11.5	10.1	10.5	1.4	39	15.4	16.0	15.7	15.4	0.6
3	12.4	13.1	12.3	12.8	0.8	40	14.8	15.5	15.0	14.7	0.8
4	12.8	13.0	12.6	12.6	0.4	41	14.8	15.5	15.1	14.8	0.7
5	12.4	12.8	12.5	12.2	0.6	42	14.2	14.9	14.6	14.3	0.7
6	12.3	12.6	12.1	12.2	0.5	43	14.1	14.7	14.2	14.2	0.6
						44	14.4	15.0	14.6	14.6	0.6
						45	14.4	15.2	14.7	14.5	0.8
						46	14.1	14.5	14.1	13.8	0.7
						47	13.7	14.2	13.7	13.5	0.7
A-2						48	14.7	15.1	14.9	14.7	0.4
A-1						49	14.5	15.4	14.9	14.8	0.9
14	12.5	12.8	12.6	12.3	0.5	50	14.1	14.8	14.4	14.1	0.7
15	12.4	12.9	12.5	12.5	0.5	51	14.7	15.4	15.2	14.7	0.7
16	13.7	14.2	14.1	14.1	0.5	52	14.4	15.2	14.8	14.5	0.8
17	13.1	13.6	13.3	13.1	0.5	53	13.9	14.7	14.3	14.0	0.8
18	13.7	14.3	13.7	13.8	0.6	54	15.1	15.8	15.4	15.2	0.7
19	13.7	14.0	13.5	13.5	0.5	55	14.6	15.4	15.1	14.8	0.8
20	14.3	14.7	14.3	14.3	0.4	56	14.2	14.8	14.7	14.4	0.6
21	14.8	15.4	14.8	14.8	0.6	57	15.1	15.8	15.5	15.3	0.7
22	14.5	14.9	14.3	14.4	0.6	58	15.2	15.7	15.6	15.1	0.5
7	13.5	14.2	13.7	13.7	0.7	59	15.0	15.4	15.2	15.0	0.4
8	15.0	15.4	14.4	15.1	1.0	60	15.2	15.7	15.4	15.4	0.5
9	14.7	15.3	14.8	14.5	0.8	61	15.9	16.4	16.0	15.8	0.6
10	15.3	15.3	15.6	14.6	1.0	62	14.6	15.1	14.7	14.4	0.7
11	14.2	14.8	14.3	14.0	0.6	63	14.8	15.7	15.2	15.0	0.9
12	14.4	14.7	10.4	14.6	4.3	64	14.7	15.1	14.9	14.7	0.4
13	13.1	14.1	14.3	14.4	1.3	65	14.1	14.8	14.7	14.5	0.7
23	13.3	13.8	13.5	13.2	0.6	66	15.4	15.8	15.7	15.1	0.7
24	14.8	15.2	14.9	14.8	0.4	67	14.8	15.3	15.0	14.6	0.7
25	12.4	13.1	12.6	12.5	0.7	68	14.1	15.2	15.0	14.5	1.1
26	10.6	11.3	10.9	10.5	0.8	69	14.4	15.0	14.6	14.2	0.8
27	10.4	11.1	10.8	10.6	0.7	70	15.1	15.7	15.3	15.0	0.7
28	12.9	14.4	14.2	14.1	1.5	71	15.1	15.6	15.3	14.8	0.8
29	15.3	15.9	15.6	15.4	0.6	72	16.1	16.8	16.3	16.1	0.7
30	14.4	15.5	14.7	15.0	1.1	73	15.9	16.5	16.1	15.7	0.8
31	14.9	15.7	15.5	15.1	0.8	74	14.5	14.9	14.6	14.4	0.5
32	15.8	16.5	16.0	15.9	0.9	75	15.3	15.9	15.6	15.4	0.6
33	16.5	17.2	17.0	16.5	0.7	76	15.4	15.9	15.5	15.5	0.5
34	14.6	15.4	14.9	14.8	0.8	77	14.8	15.3	14.9	14.6	0.7
35	15.0	15.9	15.4	15.4	0.9	78	15.9	16.4	16.2	15.8	0.6
36	16.2	16.8	16.6	16.2	0.6						
37	15.1	15.7	15.5	15.3	0.8						
38	15.7	16.7	16.2	15.7	1.0						
Max	16.5	17.2	17.0	16.5	4.3	Max	16.1	16.8	16.3	16.1	4.3
Min	10.4	11.1	10.1	10.5	0.4	Min	13.7	14.2	13.7	13.5	0.4
Diff	6.1	6.1	6.9	6.0	3.9	Diff	2.4	2.6	2.6	2.6	3.9

Max NonAdjacent Channel Variance: 6.9  
Max Adjacent Channel Variance:

Max Variance from last proof-of-performance test:

	Test 1	Test 2	Test 3	Test 4
Max	16.5	17.2	17	16.5
Min	10.4	11.1	10.1	10.5
Diff	6.1	6.1	6.9	6.0

Test Point # 2

Page 5 of 5

# TIME WARNER CABLE BINGHAMTON DIVISION

## Proof-of-Performance Tests

System Name: ONEONTA

System Test Point # 7

Location: Pearl St.

Community: City of Oneonta

Pole Number: NYSEG P-3/3

D.T. Value: Philips 9815

Map Number: \_\_\_\_\_

OR Number: Node 004

Trunk Cascade: 2 LE Cascade: 2

# Visual Carrier Level

## Visual / Aural Level Difference

( at Test Point, at The End of a 100' Drop )

System Name: ONEONTA

Test Location: TP 7...Oneonta Pearl

Date: 02/14/01

Time: 12:02 PM

Chan	Freq. ( MHz )	Visual Level ( dbmv )	Aural Level ( dbmv )	Scra "S"	Diff. ( Dbmv )	Chan	Freq. ( MHz )	Visual Level ( dbmv )	Aural Level ( dbmv )	Scra "S"	Diff. ( Dbmv )
2	55.2500	15.7	0.8		14.9	37	301.2625	16.3	2.5		13.8
3	61.2500	17.9	2.5		15.4	38	307.2625	15.8	2.4		13.4
4	67.2500	17.7	3.7		14.0	39	313.2625	16.5	1.7		14.8
5	77.2500	16.3	4.0	S	12.3	40	319.2625	15.6	0.3		15.3
6	83.2500	17.4	1.8		15.6	41	325.2625	15.0	-0.2		15.2
						42	331.2750	14.4	1.0		13.4
						43	337.2625	14.5	0.5		14.0
A-5	91.2500					44	343.2625	14.9	0.4		14.5
A-4	97.2500					45	349.2625	14.5	0.0		14.5
A-3	103.2500					46	355.2625	14.5	0.5		14.0
A-2	109.2750					47	361.2625	13.7	-0.4		14.1
A-1	115.2750					48	367.2625	14.5	0.6		13.9
14	121.2625	16.3	2.5		13.8	49	373.2625	14.2	0.1		14.1
15	127.2625	15.9	1.9		14.0	50	379.2625	14.9	2.6	S	12.3
16	133.2625	16.8	3.2		13.6	51	385.2625	14.9	3.0	S	11.9
17	139.2500	16.5	2.7		13.8	52	391.2625	15.1	3.5	S	11.6
18	145.2500	16.7	3.1		13.6	53	397.2625	15.2	0.4		14.8
19	151.2500	16.5	2.2		14.3	54	403.2500	15.3	2.4	S	12.9
20	157.2500	16.8	2.6		14.2	55	409.2500	16.0	3.8	S	12.2
21	163.2500	18.8	3.2		13.6	56	415.2500	15.2	1.9		13.3
22	169.2500	16.5	3.1		13.4	57	421.2500	15.8	2.1		13.7
7	175.2500	16.0	1.8		14.2	58	427.2500	15.9	1.9		14.0
8	181.2500	16.6	2.2		14.4	59	433.2500	16.0	2.6		13.4
9	187.2500	17.0	2.7		14.3	60	439.2500	16.5	2.5		14.0
10	193.2500	17.0	2.4		14.6	61	445.2500	16.7	4.9	S	11.8
11	199.2500	16.3	2.4		13.9	62	451.2500	16.1	1.9		14.2
12	205.2500	16.5	2.5		14.0	63	457.2500	15.3	1.0		14.3
13	211.2500	15.4	0.2		15.2	64	463.2500	16.0	0.6	S	15.4
23	217.2500	16.9	2.8		14.1	65	469.2500	15.8	1.7		14.1
24	223.2500	16.7	1.7		15.0	66	475.2500	15.9	1.6		14.3
25	229.2625	16.4	1.7		14.7	67	481.2500	15.5	1.6		13.9
26	235.2625	16.6	3.2		13.4	68	487.2500	15.4	2.0		13.4
27	241.2625	15.7	1.8		13.9	69	493.2500	15.7	0.6		15.1
28	247.2625	16.5	2.6	S	13.9	70	499.2500	16.1	1.7	S	14.4
29	253.2625	15.5	1.3	S	14.2	71	505.2500	16.5	2.4		14.1
30	259.2625	15.8	2.8	S	13.0	72	511.2500	16.6	4.3	S	12.3
31	265.2625	15.8	3.5	S	12.3	73	517.2500	17.0	2.2		14.8
32	271.2625	16.2	3.7	S	12.5	74	523.2500	16.2	1.4		14.8
33	277.2625	16.3	4.0	S	12.3	75	529.2500	16.9	5.7	S	11.2
34	283.2625	16.0	2.1		13.9	76	535.2500	16.4	2.1		14.3
35	289.2625	16.0	1.5		14.5	77	541.2500	15.8	1.3		14.5
36	295.2625	15.7	2.1		13.6	78	547.2500	17.1	2.2		14.9

PEAK TO VALLEY: 4.2

IN CHANNEL RESPONSE Test  
 CARRIER - TO - NOISE Test  
 COHERENT DISTURBANCES Test  
 LOW FREQUENCY DISTURBANCES Test

System Name: ONEONTA Date: 02/14/2001

Test Performed By: Brian Miller

Location: TP7 Oneonta..Pearl St.

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	Channel Response (dB)	To Noise Ratio (dB)	Distortion (dBc)		Flam (dB)
			TO	CS	EXMID
4	0.2	45.1	>-60	57.6	>-60
15	0.3	47.5	>-60	56.9	0.9
9	1	45.3	>-60	58.8	
24	0.4	44.4	>-60	58.3	
35	1.1	45.8	>-60	57.4	
41	0.7	46.9	>-60	58.4	
48	0.7	49.3	>-60	57.7	
57	0.3	44.9	>-60	57	
65	0.1	48	>-60	56.5	
69	0.1	46.7	>-60	56.5	
78	0.4	45.6	>-60	58.2	

TP#2

Test Point: Sidney 2  
Date: 02/19/2001

Chan	Visual Level (dBmv)				Max Var
	Temp				
	82 Deg	65 Deg	60 Deg	64 Deg	
	Time				
	15:17 PM	21:17 PM	03:17 AM	09:17 AM	
2	13.6	13.3	14.1	14.2	0.9
3	14.8	14.2	15.1	15.4	1.2
4	14.8	14.1	15.2	15.4	1.3
5	13.6	13.8	14.6	14.7	1.1
6	14.5	14.3	15.1	15.5	1.2
A-2					
A-1					
14	15.5	14.9	16.1	16.3	1.4
15	16.0	15.7	16.6	17.0	1.3
16	14.8	14.5	15.7	15.9	1.4
17	16.0	16.0	16.8	17.1	1.1
18	16.2	16.1	16.9	17.1	1.0
19	15.8	15.4	16.1	16.8	1.4
20	15.1	15.3	15.9	15.3	0.8
21	16.3	16.2	16.8	16.9	0.7
22	16.3	15.8	16.7	16.7	0.9
7	16.0	16.0	16.4	16.0	0.4
8	16.2	16.0	16.6	17.0	1.0
9	16.8	16.6	17.3	17.3	0.7
10	16.2	16.1	16.6	16.8	0.7
11	16.1	15.9	16.7	16.8	0.9
12	15.7	15.4	16.3	16.8	1.4
13	15.4	15.2	15.9	16.0	0.8
23	16.9	16.7	17.5	17.6	0.9
24	16.2	15.9	16.9	17.2	1.3
25	16.4	16.2	17.3	17.5	1.3
26	15.6	15.3	16.2	15.7	0.9
27	16.4	16.0	17.0	17.1	1.1
28	16.1	15.0	16.0	16.2	1.2
29	15.8	15.4	16.2	16.6	1.2
30	15.0	15.0	16.0	15.0	1.0
31	16.4	16.2	17.4	17.6	1.4
32	14.7	14.4	15.9	15.8	1.5
33	16.4	16.1	17.2	17.2	1.1
34	16.6	16.2	17.4	17.4	1.2
35	15.2	14.7	15.9	16.2	1.5
36	15.0	14.0	15.0	16.0	2.0
37	15.0	14.0	14.0	16.0	2.0
38	15.0	14.0	14.0	15.0	1.0
Max	16.9	16.7	17.5	17.6	2.0
Min	13.6	13.3	14.0	14.2	0.4
Diff	3.3	3.4	3.5	3.4	1.6

Chan	Visual Level (dBmv)				Max Var
	Temp				
	82 Deg	65 Deg	60 Deg	64 Deg	
	Time				
	15:17 PM	21:17 PM	03:17 AM	09:17 AM	
39	15.2	14.9	16.2	16.2	1.3
40	15.1	14.7	15.9	16.1	1.4
41	14.9	14.5	15.9	16.0	1.5
42	16.0	15.6	17.2	17.1	1.6
43	15.6	14.8	16.2	16.5	1.7
44	16.4	16.1	17.4	17.5	1.4
45	16.8	16.2	17.8	17.7	1.5
46	17.2	16.7	18.3	18.3	1.6
47	16.6	16.0	17.7	17.9	1.9
48	16.9	16.1	17.9	18.3	2.2
49	16.9	16.2	17.6	17.9	1.7
50	17.4	16.9	18.2	18.4	1.5
51	16.9	16.2	17.7	17.8	1.8
52	17.4	16.7	18.4	18.8	2.1
53	16.0	15.5	17.0	17.1	1.6
54	15.2	15.0	17.2	17.2	2.2
55	16.7	15.7	17.9	18.1	2.4
56	15.1	14.6	16.5	16.6	2.0
57	14.8	14.2	16.1	16.1	1.9
58	14.1	13.4	15.5	15.7	2.3
59	12.9	12.2	14.2	14.7	2.5
60	13.3	12.4	14.8	15.0	2.6
61	12.8	12.5	13.9	14.1	1.6
62	13.6	12.9	14.5	14.4	1.6
63	13.3	12.5	14.7	14.9	2.4
64	12.9	12.3	14.4	15.2	2.9
65	12.9	12.7	14.3	14.7	2.0
66	13.2	12.6	13.9	14.3	1.7
67	13.8	13.7	14.6	14.9	1.2
68	13.4	13.2	14.2	14.8	1.4
69	12.6	12.3	13.7	14.0	1.7
70	12.7	12.4	13.8	14.1	1.7
71	12.4	11.8	13.4	13.4	1.6
72	11.3	10.9	12.4	12.6	1.7
73	10.4	9.6	11.5	11.7	2.1
74	9.6	8.6	10.6	11.0	2.4
75	9.0	9.5	9.0	9.0	0.5
76	8.4	7.3	9.7	10.2	2.9
77	10.0	9.0	9.0	9.0	1.0
78	9.0	9.0	11.0	9.5	2.0
Max	17.4	16.9	18.4	18.8	2.9
Min	8.4	7.3	9.0	9.0	0.4
Diff	9.0	9.6	9.4	9.8	2.5

Max NonAdjacent Channel Variance: 9.8  
Max Adjacent Channel Variance:

Max Variance from last proof-of-performance test:

	Test 1	Test 2	Test 3	Test 4
Max	17.4	16.9	18.4	18.8
Min	8.4	7.3	9	9
Diff	9.0	9.6	9.4	9.8

Test Point # 2

Page 5 of 5