

General Instrument

General Instrument Corporation
100 Lafayette Centre
333 21st Street, Suite 405
Washington, D.C. 20036
Tel: 202 833 9700 Fax: 202 466 3295
Internet: www.gi.com

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

February 18, 1998

Magalie Roman Salas
Secretary
Federal Communications Commission
1919 M Street, NW, Room 222
Washington, DC 20554

Via Hand Delivery

Re: *Ex Parte* Notice, CS Docket No. 97-80 (Retail Sale of Navigation Devices)

Dear Ms. Salas:

This letter provides notice that on February 18, 1998, Stan Durey, Director, Security Programs for General Instrument Corporation; Christine Crafton, Director, Industry Affairs for General Instrument; and Faye Morrison, Government Affairs Representative for General Instrument (the undersigned), met with the following staff of the Commission's Cable Services Bureau in connection with the above-captioned proceeding:

Sunil Daluvoy
Ben Golant
Tom Horan
Meryl Icove
William Johnson
Michael Lance
Anne Levine
Nancy Markowitz

We discussed the theft of cable television signals through the use of illegal descrambling devices. Mr. Durey gave a brief history of cable theft, displayed and explained several different types of "black boxes," and described recent trends in pirate technology, including fully integrated theft devices. The use by cable pirates of the language in the Telecommunications Act of 1996 regarding retail availability of "navigation devices" was mentioned, along with the need for the Commission to issue an Order in this proceeding that makes explicit that the language of the Act was not intended to sanction nor promote illegal cable theft devices.

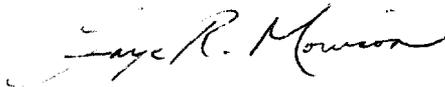
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The attached materials were handed out during the meeting. They include Web pages advertising descramblers; copies of recent magazine articles concerning the retail availability of set-top converters; and an agenda for the meeting. Please place a copy of them in the docket in the above-captioned proceeding.

Please direct any questions about this matter to me.

Sincerely,

A handwritten signature in cursive script that reads "Faye R. Morrison".

Faye R. Morrison

Attachments

cc: Sunil Daluvoy
Ben Golant
Tom Horan
Meryl Icove
William Johnson
Michael Lance
Anne Levine
Nancy Markowitz

DESCRAMBLERS INC

The United States government has declared that its citizens may legally own there own cable television converters and descramblers.

Take advantage of this new legislation with your own descrambler, or compete for your cable companies' profits and become a dealer .

Descramblers

Cable TV boxes are a fundamental part of testing your cable equipment and descrambling all premium channels.

We carry a large selection of cable boxes that will work with most systems.

Test Chips

Test chips are small circuit boards that plug into your existing cable box and allow you to VIEW ALL CHANNELS.

These board can be installed in minutes with no technical knowledge.

Dealers Wanted

We offer quantity discounts to our distributors. For pricing information call us at

1 (800) 221-8419
or contact us via E-MAIL.

General Information

All products advertised here are always available in stock. We will work with you to determine what brand of cable box or snap-in board is compatible with the cable company in your area. Please send us the name of your cable company with your order so we can make sure that your are getting the proper equipment.

Disclaimer

You must read this before purchasing any cable equipment for your personal use.

The law prohibits the reception of and viewing of premium channels without proper payment for all services received.

The purchaser must comply with all local, state, and federal laws regarding ownership of cable TV equipment.

E-Mail Us

We offer technical support for our customers through e-mail or by calling our 800 number. Our highly trained staff is capable of answering most technical questions. Business hours are: Monday to Friday 9 - 5pm. EST Closed Sat./Sun.

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- [001 Descramblers](#) - descramblers, converters, remote controls, digital video stabilizer, jerrold, scientific atlanta, panasonic, sten guns, tvs, satellite dish, dss, vcr.
- [007 Cable Wholesalers](#) - specializes in wholesaling state of the art cable boxes, converters, accessories, and descramblers.
- [A.S.I. Cable Products](#) - cable converters, descramblers, test activators, and filters.
- [A1 Cable](#) - sells cable boxes, converters, accessories, and descramblers.
- [Absolute Cable Products](#) - Converters and Descramblers, Test Activators, Newest Combination Units and more.
- [Absolute Electronics](#) - offers cable descramblers, converters and test aids. Computers and web promotions also available.
- [Advent Electronics](#) - cable TV converters / cable descrambler units, satellite equipment.
- [Aethyr Electronics](#) - cable descramblers, converters, testers, and cable accessories.
- [AGNM Cable & Television Equipment](#) - video equipment, descramblers, converters, boosters and stabilizers.
- [Art's Cable TV Converters & Descramblers](#) - also remote controls, amplifiers, coaxial cables and other TV accessories, plus stun guns for personal security.
- [B-G Cable](#) - offers cable descramblers, converters, testers and equipment for all cable systems.
- [Basic Electrical Supply And Warehousing](#) - cable TV descramblers, converters, filters, decoders and accessories.
- [Build Your Own Cable Television Descrambler Decoder](#) - Now you can build your own cable television descrambler with parts obtained from your local Radio Shack store.
- [Cable Choice](#) - DTV, cable boxes, remotes, Novavision converter boxes, cable supplies.
- [Cable Converter Concepts](#) - offers cable descramblers, test and cubes, filters, remotes and more.
- [Cable System Solutions](#) - provides cable TV equipment including converters and descramblers.
- [Cable TV Descrambler Plans](#)
- [Cable TV Products](#) - Buy (or make) your own box or descrambler.
- [Cablebox](#)
- [Channel Masters](#) - cable descramblers and converter boxes.
- [CNC Concepts](#) - wholesale source for cable TV converters and descramblers.
- [Direct-Link Network](#) - get all of the channels!
- [ETS Electonics](#) - lower your cable costs while adding to your TV viewing pleasure. We specialize in converters, descramblers, and accessories.
- [Freecable.com](#) - learn how to get free cable TV with a easy to build descrambler.
- [Glamore Electronics](#)
- [Globeo Communications, Inc.](#) - descramblers, cable converters, cable box testers, filters and kits

and more.

- **Hackers Catalog** - unique software and hardware tools, files, books, videos, and test chips for cable, satellite, cellular and computer hacking, phreaking and other fields of interest.
- **Inline Cable** - provider of cable TV equipment including converters, descramblers, and combination units.
- **Internaticnal Cable Systems** - specializes in selling state of the art converters, descramblers, test chips, and accessories.
- **JFS Electronics** - online sales of cable tv descramblers and converters.
- **John's Electronics** - descrambler/cabler converters/test aids.
- **Lucasey** - manufacture of television security and mounting systems.
- **Microstem Electronics** - personal cable converters & descramblers. All makes and models available.
- **Mike Chips** - descramblers and accessories.
- **Mike Chips - External Activators & Test Kits** - offers television descrambler and related products.
- **Modern Electronics** - a provider of cable TV equipment, including converters descramblers, combination units and many accessories that you may need.
- **Muller's Electronics** - offers cable descramblers & decoders, television tuners & converters, satellite receivers, black boxes, and DSS & pay-per-view unscramblers.
- **National Video** - offers cable descramblers.
- **Novaplex, Inc.** - manufacturers of innovative cable television products: cable boxes, remote controls, converter boxes, etc.
- **Nutek Electronics (2)**
- **Omega Products** - offering the F4, integrated converters and desramblers.
- **Online Communications**
- **Orion Electronics** - cable TV converters, filters, and descramblers.
- **Pirate Electronics**
- **OB Video** - wholesale of cable television descramblers, cable boxes, and remote accessories.
- **S.S.I. Electronics** - cable converters, descramblers, test activators, combo units, test kits, filters, digital satellite systems, wholesaler of many cable products.
- **S.V.P.** - radioenlaces de microondas.
- **Success Technology, Inc** - universal one-piece converter and descrambler. Picture in Picture, On-screen display, Stereo, et.
- **Test-Chips** - turn on every channel and feature of the box, including the descrambler portion.
- **Tidewater Electronics** - descramblers, converters, combos, and more.
- **Time Electronics** - offers cable TV converters, equipment, accessories, and more.
- **Toner Cable Equipment** - manufacturer and distributor of cable television equipment including RF system design and custom built equipment.
- **Tri-Vision International Ltd./Ltee.** - full service manufacturer and distributor of consumer, commercial and industrial electronic products. Developer and manufacturer of the V-Chip.
- **Vcipher Technologies** - offers test devices for all DSS systems.
- **VES** - cable descrambling supplies.
- **Vi-Tek Communications** - Cable converters and descramblers.
- **Viking Amusement** - Cable Test Activators, Descramblers, Converters.
- **FAQ - A's & X's Cable TV Descrambler 's** - Info on Cable Converters and how to build your own converter box.
- **FAQ - Descramblers** - Answers for consumers who want to understand the dynamics behind purchasing/owning a cable TV descrambler.

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Did you know that you are now able to legally purchase or build your own Cable TV Descrambler

See what you've been missing!

What the cable companies don't want you to know is that you no longer have to rent the equipment to view cable television, you can now purchase or build your own cable TV descrambler. This is similar to when the phone companies made their customers rent telephones from them, ask yourself this: do I know anyone who rents a telephone anymore? Then why rent cable equipment?

You can build your own cable TV descrambler with only 7 simple parts found from an electronics store. The total cost of all the parts needed to build this unit comes to an astonishingly low figure of less than \$12.00.

This list has the Radio Shack part's numbers and a description of the parts, so you will know exactly what to ask for when you visit your local store. Our plans include detailed instructions and a diagram, which are so easy to follow that anyone can use them.

Descrambler/Decoder FAQs!

What is a Descrambler / Decoder?

A descrambler / Decoder is a device that restores the picture and sound of a scrambled channel. In most cases using your own descrambler will allow you to receive ALL channels that are currently scrambled by the cable company.

Are Descramblers legal?

YES! Descramblers are 100% legal. If your cable TV company can rent the box to you then you can own the box yourself. It is legal for you to purchase and it is legal for you to own your own cable TV descrambler. When you buy or build a cable descrambler box, it is your responsibility to inform the cable TV company that you are accessing their signal.

How do I know it will work in my area?

We have available several plans. When we receive your order we will match our database to your city/state & zip code or postal code and send you the correct plans for your area.

Do you offer a refund?

Absolutely! We offer a 30 day refund.

Where do I get the box to build this unit in?

One of the 7 parts you need is a mini-box. All you do is simply assemble all the parts inside of this mini-box (you could even use an old VCR if you wanted to save \$2-3).

Why build your own Cable TV Descrambler?

1) Most people own several television sets, and they pay for viewing premium channels, but have only one descrambler. They can only watch the premium channel on one TV unless they rent additional descramblers for every TV in their home from their local cable company. This can get expensive!

So, rather than rent additional descramblers they simply build their own with our plans for less than \$12 per unit. Now they can connect a descrambler to every television in their home and have the convenience of watching all pay cable channels whenever they wish.

2) Some people simply do not want to pay for premium pay cable channels. We always recommend notifying your cable company if your intend to use a descrambler.

Is it hard to build a descrambler?

No, not at all! Our plans include part numbers and a detailed description along with a diagram to show you exactly how to assemble the unit. If you can follow simple steps than you can build your own cable TV descrambler.

Will I need a Converter?

In most cases all you will need is a cable ready television and basic cable.

I do not live in the US or Canada, do you have plans for me?

We are in the process of adding plans for different parts of the world. Not all plans work in all areas. We match the same price if you would like to "test" the plans for us in your country. All we ask in return is a short testimonial.

Why should I buy the plans from your company?

ACTION Enterprises has the most complete and up-to-date information on building your own Cable TV Descrambler on the market today. Not only do we provide you with a description of the parts needed, but we also supply you with a part's list. We also include with your packet a detailed diagram which shows exactly how to build the unit.

I think you will agree like millions of other consumers that by building your own Cable TV Descrambler that it is much more convenient and inexpensive then paying the hundreds of dollars a year in rental fees to your local cable company.

[~click here to order!~](#)

[~click here to order!~](#)

Action will also include 2 Free Descrambling Methods for you to try that use Simple Household Items. These methods will cost you virtually nothing to experiment with and are easily assembled within minutes! Again these are FREE!

Sony/NextLevel deal crucial to cable's set-top box push

Investment provides retail strategy for distribution of boxes

By Price Colman

Sony Corp.'s \$187.5 million investment in NextLevel Systems, announced last week, will be a catalyst for the cable industry's effort to hasten deployment of digital set-top boxes and drive penetration of a wide range of digital cable products.

The preliminary agreement by Sony to take a 5% stake in NextLevel—roughly 7.5 million shares at \$25 each—puts in place the second leg of what Tele-Communications Inc. Chairman John Malone has characterized as a three-legged stool. The cable industry itself is the first leg. The third leg will be financial and technological participation by the computer industry. That participation likely will come in the form of seed money for a financing company that will buy boxes from vendors and lease them to cable operators.

Sony's move comes roughly two weeks after NextLevel announced a \$4.5 billion, 15 million-box order by nine of the top 12 U.S. cable MSOs. Sony's involvement gives cable a retail strategy for box distribution. It provides an additional manufacturing source for

boxes—although that won't happen immediately—and it also encourages rapid evolution of boxes to include not only video signal converters and modems but also other devices, including digital versatile disk (DVD) players. Sony also has an eye to incorporating boxes in future-generation digital televisions.

"I think [Sony is] saying, 'let's stay close to this,'" says Ted Henderson of Janco Partners. "This keeps them close. You don't want to run out immediately and build a TV with a digital box in it. This keeps Sony close to the technology and gets them closer to CableLabs than they've been before. It gives them a strategic alliance that makes sense from the [NextLevel] and Sony standpoint."

The \$25-per-share price put about a 38% premium on NextLevel shares (from the \$18.125 at which they traded at the beginning of the year). News of the deal pushed NextLevel (NYSE: NLV) shares up \$1.56 on the day of the announcement, but they fell back 25 cents in midweek trading.

Sony's involvement, which has been



Dave Robinson, NextLevel

in the works for several months and was subject to TCI's approval, is a crucial momentum builder for the cable industry's ambitious box drive. Sony's position as one of the world's leading consumer electronics firms coupled with its technological know-how and retail clout give NextLevel (soon to return to its original General Instrument name) and the cable industry a powerful partner.

"To the extent retail distribution

becomes a supplement to the cable distribution channel, this is a major plus in confidence generation," says Dave Robinson, vice president and general manager of digital network systems at NextLevel.

Sony also stands to gain substantially. By allying with the cable industry's leading set-top manufacturer, Sony is building its own stool. The first leg is its TV set manufacturing operation, the second is its role as a builder and supplier of digital converters for the DBS industry and the third is its link to cable.

"To be a true leader in digital television, you have to be a leader in all distribution systems," says Sony spokesman Rick Clancy.

The alliance to "jointly develop digital TV technologies" encompasses high-definition television as well as digital cable boxes. The two companies are discussing the forms that those technologies will take. One likelihood: incorporating Sony's Home Network hardware and software in a box. This could make the box a sort of computer hub for digital functions in a home, connecting television, personal computers and power management systems—even digital phone systems, stereos and other home appliances.

Another possibility—combining a digital cable converter and a converter for off-air digital signals to the television.

Sony's existing ties to cable and its worldwide name recognition helped it beat out Thomson Consumer Electronics in wooing NextLevel.

Even though Sony and NextLevel have been discussing an alliance for months, the deal is preliminary. A definitive agreement, which would include Sony's equity investment in NextLevel, is several months away. ■

**Marketing merger for
ValueVision, NMC**

C'VISION'S RETAIL PLAY ...

And a look at Hall of Fame honorees

As if the OpenCable set-top consortium weren't enough, Cablevision Systems Corp. upped the ante in the convergence game last week by announcing plans to buy the bankrupt Nobody Beats the Wiz retail electronics chain.

Other cable operators have opened retail stores, but Cablevision is taking the deepest plunge with the \$95-million, 36-store deal that will give the MSO the cable industry's largest number of outlets.

Cablevision has a lot to sell: digital set-tops, cable modems, telephony products and high-definition TV sets. The musical and sporting events originating from the MSO's Madison Square Garden and Radio City Music Hall will be perfect for HDTV, and Cablevision sees The Wiz as a way to jump-start consumer interest in the on-deck technology.

Analysts might question why an MSO wants to be in the razor-thin-profit-margin business of consumer electronics. But that may be missing the point. Even if Cablevision's Wiz investment is a break-even proposition, it could pay off in other areas. Consumers will be exposed to new services for which they'll pay a recurring monthly fee, whether it's modems, digital set-tops or telephony services. That alone will be worth Cablevision's investment. Lots of major media companies own money-losing sports teams that supply cheap video programming.

And with The Wiz, Cablevision will learn a great deal about subscriber behavior toward consumer electronics, an area where cable has little expertise.

The more knowledge cable accumulates about the converged world of cable, computers and consumer hardware, the better off it will be.

The National Cable Television Center and Museum will induct six members into the Cable Television Hall of Fame at the Cable Pioneers dinner during the NCTA's May 3-6 National Show in Atlanta.

George Barco, Irving Kahn, Bob

Magness, Martin Malarkey and Milton Shapp will be inducted posthumously. The sixth inductee will be Bill Daniels.

Barco was a quintessential small-town cable operator. From his base in Meadville, Pa., he led cable initiatives into education and customer service. He also was a frequent visitor to Washington, D.C., where he forcefully argued cable's case in disputes centering on taxes, copyrights and distant-signal carriage, among others.

Irving Kahn was a charismatic showman. He developed the TelePrompTer used by news anchors and politicians and founded an

MSO by the same name in 1958. In time, TelePrompTer grew into the U.S.'s largest MSO and became an incubator for many of today's senior cable executives. Along the way, Kahn pushed cable into pay TV and fiber optics.

Bob Magness built the nation's largest MSO from humble beginnings in Memphis, Texas. With John Malone by his side, TCI launched a dealmaking binge in the 1970s that made the MSO the cable industry's de facto leader.

Martin Malarkey built his first cable system in Pottsville, Pa., in 1949, pioneering the concept of charging monthly fees for cable service. He successfully fought efforts to impose excise taxes on cable operators in the late 1950s, and with Archer Taylor founded a consulting firm that still bears their names.

Milton Shapp founded Jerrold Corp. in 1947, which became the key supplier of cable equipment and financing throughout the 1950s. Shapp went on to become governor of Pennsylvania.

Bill Daniels founded the cable system in Casper, Wyo., and went on to become cable's preeminent dealmaker after founding Daniels & Associates in the late 1950s.

It's only fitting that during cable's 50th anniversary year, the industry will induct these deserving pioneers into the Hall of Fame. *Cable World* congratulates all the winners and their families.



The Big Picture

Matt Stump

Cable World

1905 Sherman St., Suite #1000 • Denver, CO 80203
(303) 837-0900 • (303) 837-0915 (fax)
www.mediacentral.com/cableworld

MATT STUMP / Editorial Director (ext. 635)

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2824 Colgate Ave. • Delanco, N.J. 08075
(609) 461-9244 • (609) 764-5753 (fax)

JIM BARTHOLD / Technology Editor

CONTRIBUTING EDITORS

PEGGY CONGER, JEAN BERGANTINI GRILLO

ADVERTISING SALES

(732) 431-5166 • (732) 303-1899 (fax)

TERESA REICHEY / Account Executive (ext. 23)

KAREN KELLY / Sales Coordinator (ext. 25)

LEONARD N. DeRENZO / Director / Market Development

(607) 734-3513 • (607) 734-4071 (fax)

TERESA HUYCK / Director of New Business

(404) 814-5260 • (404) 814-5261 (fax)

PATRICK CONNOLLY / European Sales Manager

(44) 1702-77341 • (44) 1702-77559 (fax)

LORETTA STRENG / Classified Advertising Manager

(203) 358-4167 • (203) 358-5814 (fax)

TRICIA HIATT / Group Production Manager (ext. 617)

CAROL CANZONA / Production Manager (ext. 614)

JON THOMPSON / Production Assistant (ext. 632)

(303) 837-0900 • (303) 837-1671 (fax)

FRANK GIARRATANO, CPA

Business / Operations Manager (ext. 642)

CHRISTINA DOOLEY / Accounting Assistant (ext. 619)

(303) 837-0900 • (303) 837-1671 (fax)

DONNA BRIGGS / Publisher

(732) 431-5166 (ext. 21) • (732) 303-1899 (fax)

SUBSCRIPTIONS / CIRCULATION

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President: Daniel R. McCarthy; Senior VP/CFD: Douglas J. Manoni; Senior VP/Publishing Director: Peter M. Goldstone; Senior Adviser: Hershel B. Sarbin; Vice President, Business Development: Thomas P. Southwick

CORPORATE OFFICES

11 Riverend Dr. S Box 4949, Stamford, CT 06907-0949
(203) 358-9900 • Fax (203) 358-5811

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The Next Technology Stop: Retail

Thanks to 1997's progress, standardization will change entire cable industry

BY JIM BARTHOLD

The top technology story of 1997 wasn't about some new widget or radical shift in the techno-landscape.

Instead, it was about the way the cable industry operates and the way the public interacts with it. In short, product interoperability was last year's top story, one that should lead to a cable industry in which subscribers buy cable modems and digital set-tops the way they buy computers and TVs — off the shelf.

Interoperability, pushed by various standards-settings bodies, not only picked up momentum in 1997, but gained respectability and the support of an entire industry — including the usually fractious vendor community. The effort also attracted such non-traditional players as Sony Corp., Samsung Information Systems America and Microsoft Corp.

What's more, the push began to carve a path that will let cable operators offer the latest product and technology innovations without shouldering the burden of buying the equipment.

That said, here's the technology top 10 for 1997.

1. (tie) Cable modems. Rich Nelson, the cable TV director at Broadcom Corp., offered a comprehensive look at the way cable modems, and particularly the Multimedia Cable Network System [MCNS] Data Over Cable Service Interface Specifications [DOCSIS] process, impacted the industry in 1997.

"I think there's just a lot of momentum to drive cable modems into a real, high-volume business," he said. "I think everybody knows what the end objective is and they're trying to get there."

If 1997 was the year of the standardized cable modem — and last month's Western Show seemed evidence of that — 1998 will be a year in which consumers will be able to buy their own cable modems that will access @Home, Road Runner, MediaOne Express or whatever service a local cable operator offers.

This year, the cable industry also is

expected to focus on commercial markets, where modem manufacturers like Terayon and Com21 Inc. will be in better position to play to their strengths.

1. (tie) Digital boxes. CableLabs' OpenCable initiative to develop interoperable, standardized set-tops moved digital to the next level last year.

Consider what TCI president-COO Leo Hindery said in November when discussing his MSO's fourth-quarter results: "I absolutely believe that I [have] bought my last traditional converter. My sense is [that] by June of next year, we're going to start to deploy the next-generation box, and my further guess is [that] a month or so from now, you'll substantially know who the manufacturers of that box are."

Judging from TCI's December announcement that it plans to buy almost 12 million new digital set-tops, the big winners will be NextLevel Systems Inc., which is going back to its old General Instrument Corp. name, and Scientific-Atlanta Inc.

2. Microsoft marches into cable. The software giant resurfaced in 1997 as it aggressively pushed its operating system and software as products that can successfully marry the standard TV set to the Internet. Microsoft bought a \$1-billion stake in Comcast Corp. and became a very active participant in the OpenCable initiative.

3. The Internet beckons. More questions were raised than answered about how cable can best grab the brass ring here. While cable modems can service people who own computers, another audience may very well be open to such Internet-over-the-TV players as WebTV, WorldGate Communications Inc., The Interactive Channel and ICTV.

Questions remain, however, about how to keep subscribers glued to their cable programming — and its advertising — when they also can bop over to the Web at the push of a button.

4. Interactivity acts up. Depending on who's talking, interactive TV — including video-on-demand, thanks to Diva Systems Corp. — is back from the

dead. And in most instances, the Internet is involved in some way.

5. Advanced analog. Digital may be the up-and-comer, but most cable subscribers still get their service through analog. And it appears that it will probably be in play for some time, considering the fact that its price isn't going up, even as more features are added.

6. Cable telephony is baaaaaack. Almost quietly, cable operators are re-considering the possibility of adding voice to video and data offerings. Cox Communications Inc.'s Orange County service in southern California is by far the leading player in this arena. But others, including TCI and Cablevision Systems Corp., are joining the fray, as well.

7. CableLabs' emergence. First, through MCNS and now through OpenCable, the cable industry's R&D incubator is finally earning some recognition and respect. Indeed, few vendors consider following their own proprietary technology development paths without checking in with CableLabs these days.

8. The company formerly known as General Instrument. The cable industry's leading vendor, General Instrument Corp., certainly had an eventful 1997. In January, it shed its CommScope Inc. and Power Semiconductor divisions to focus on its core satellite, cable and telephony businesses and reinvent itself as NextLevel Systems Inc.

In October, confessing that it wasn't meeting its goals, the company 86'ed its chairman-CEO, Rick Friedland; reorganized itself; named cable veteran Ed Breen the new chief; and announced plans to move its headquarters from Chicago to Horsham, Pa., in suburban Philadelphia.

9. Harmony. In any other year, a technology-sharing agreement forged by S-A and NextLevel would be big news. In 1997, as "interoperability" became the cable industry's mantra, it was almost an afterthought. As Time Warner CTO Jim Chiddix put it, "We would have been very unhappy if they hadn't done it." ☐



Technology

GI Tests Retail Waters With SURFboard

BY JIM BARTHOLD

General Instrument Corp. has entered the retail marketplace to sell cable modems via CompUSA computer stores in Florida and California.

The stores will work with MediaOne in Jacksonville, Fla., Adelpia Communications Corp. in Miami and Daniels Cablevision in Encinitas, Calif., to offer high-speed data services using GI's built-in, one-way SURFboard products.

"It's an initial entry strategy," says Ed Zylka, senior product director in GI's cable modems group.

He adds that one nettlesome problem with retail sales is linking the service provider and the hardware, unlike selling a conventional analog phone modem and offering any number of phone-in Internet services.

"You have to work with the operator, who, in most cases is a service provider, so you have to tie the hardware together with the service," Zylka says. "It's not only an exercise in retail, but it's also an exercise in how many factors you must co-market with the service provider and the retailer."

MediaOne is offering subscribers two modem installation methods. CompUSA will do it in the store for \$50 after the modem is purchased for \$279.99. MediaOne also installs the modem and sets up the MediaOne Express service for \$99.95 in the subscriber's home.

ORTEL RESTRUCTURING: Ortel Corp. has divided into worldwide sales, operations and wafer-fabrication divisions.

George Holmes has been promoted to VP-worldwide sales; **Bill Moore**, GM of broadband communications; **John Rinks**, VP-GM of satellite communications/government business sector; **Norman Kwon**, GM of the telecom business sector; and **Larry Stark**, VP-worldwide strategic marketing activities.

PIRACY ALERT: A PSA has been created to step up the nationwide hunt for fugitive cable pirate **William Sidney Prevost III** — also known as **Trey Prevost** — who jumped bail while awaiting sentencing for committing massive fraud against the cable industry. Prevost was caught in the **FBI's** "Operation Cabletrap" sting.

The PSAs were developed at the **U.S. Department of Justice's** request by the

National Cable Television Association's Office of Cable Signal Theft.

PEOPLE: **California Amplifier Inc.** has named **Dale DeHart** VP-operations and announced the appointment of several division chiefs: **Phil Cox**, wireless products; **Robert Hannah**, direct satellite products; and **Kris Kelkar**, voice and data products.... **American Communications Services Inc.** has named **Vernon Irvin** senior VP-marketing/strategy; **Richard Putt**, executive VP-field services; and **Doug Hudson**, executive VP-national distribution/strategic development.... **Richard Stok** has been hired as managing director of **CSG Systems International Inc.'s** U.K.-based **Bytel Ltd.**, succeeding the retired **Chris Musgrave**.... **Vela Research Inc.** has named **Samuel S. Ng** director-business development for Asia Pacific and **Steve Kelly** business development manager-west coast.... **James Skupien** has been hired as regional sales manager at **NDS Americas Inc.**.... **Cronan O'Connell** was named VP-industry affairs for the **Association for Local Telecommunications Services.**



ALSO: **Winstar Communications Inc.** completed its acquisition of **GoodNet**, an Internet backbone provider, from **Telesoft Corp.**.... **Pace Micro Technology** will use **Mortice Kery Systems Inc.'s** technology to manage software programs running Pace's analog and digital satellite receivers and decoders worldwide.... **Vela Research Inc.** has opened a sales office in Sunnyvale, Calif.... **TII Industries Inc.** has introduced a fiber connector view that the vendor says will ease inspection of fiber-optic connectors in patch panels and sophisticated transmission equipment.... **D.Co Marketing Inc.'s** new version of its character-generator system incorporates text, graphics and crawl-line capabilities in one system.... **Broadband Inc.** has opened a main office in McLean, Va.... **Zenith and Intel Corp.** are developing demodulator cards that will let PC's receive digital TV broadcasts.... **Intel and The Fantastic Corp.** are promoting delivery of media-rich content to PC's via satellite, cable, digital terrestrial and digital subscriber lines.... **Online System Services** will supply a proprietary turnkey Internet product and service to **ATI's** wireless cable systems in Denver and Colorado Springs, Colo., Portland, Ore., Seattle and two other not-yet-determined markets.... **Austar**, Australia's second-largest cable TV operator, has signed a multi-year contract to use **CableData Inc.'s** customer-management and billing system. ☐

Digital TV Questions Abound at '98 CES

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uct of the later '90s."

Mundie noted that despite the fact that Microsoft's WebTV Internet-over-the-TV-set service serves only 250,000 customers, "we can at least experiment with a quarter million people."



AVAILABILITY ISSUES: The question of whether there will be enough towers and transmitters to supply upcoming digital television needs was another CES hot button

"The [equipment] orders are coming in," declared **James Farmer**, the president of **Harris Corp.** "The broadcasters are committed to the **FCC** schedule" for starting digital services during the third quarter of this year.

He added that how those services will be delivered — as high definition or multicasting — is "still in flux."

Joseph Flaherty, the senior VP-technology at **CBS**, said his network would program prime-time HDTV fare depending on the programming's availability: "We can ramp up as fast as the marketplace demands."

One of the more powerful uses for HDTV will be sports programming, he added. That, however, could be a problem due to the equipment's limited availability and high cost of the equipment, according to Flaherty: "We don't have enough mobile units to do that."

But he did predict long-term success for digital TV: "The wide screen, we think, is going to have a major impact. One of the problems is [that] we now have more transmitters in the market than receivers."

ALSO: **E.S.P. Electronics Inc.** introduced a 360-degree television display that lets viewers see the screen head-on from any angle.... **uniView Technologies Inc.** signed a deal with **Home Health Link Inc.** to develop and market an in-home health monitor that uses the Internet and home TV sets to link patients with health-care providers.... **Sony** said it will heavily promote its mini-disc recording format over the next year. ☐

Update on Pirate Equipment in the Cable Television Industry

General Instrument Corporation

February 18, 1998

10:30 a.m.

Introduction

Trends in Pirate Technology

- losses due to unauthorized connection vs. black box theft
- first generation black boxes
- modification of legitimate manufacturers' devices
- external, intentional radiators
- fully integrated, theft by design

The Retail Sale Order

- do not mandate a specific security platform (e.g., separated, "smart card" technology); leave such decisions to the cable operator
- apply retail sale rules only to digital navigation devices
- use specific language in stating that the retail sale language does not in any way sanction or create the right of a consumer to attach theft devices to the cable operator's network