Cable AML News

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MMDS SYSTEM UPGRADED FROM ANALOG TO DIGITAL

Cable AML has concluded the upgrade of an analog MMDS system, increasing program capacity six-fold and at the same time providing signal security. The system is located in the Los Angeles metropolitan area.

The system can now transmit 6 TV programs in the single 6 MHz slot previously occupied by one analog program.

Cable AML provided an integrated system consisting of a digital headend with integrated CAS (Conditional Access System), upgraded the existing STL (Studio to Transmitter Link) that transmits the signal from the TV studio to the transmitter site in Beverly Hills, and provided a new broadband MMDS transmitter and all of the subscriber set-top boxes. ✦

Steve and Mark Mouradian of Armenian World TV inspecting the Digital MMDS equipment at Cable AML prior to delivery.

WIRELESS DOCSIS RETURN FOR CABLE SYSTEM DELIVERED

Cable AML BWA-2000C system has just been installed in a large Cable system in General Roca and Neuquen, Argentina, where it became operational within two days of installation.

Horacio Indaco of Cablevision del Comahue installing the headend equipment for the Wireless DOCSIS return system provided by Cable AML.

The BWA-2000C allows cable operators to provide DOCSIS Cable Modem service in a one-way only cable plant. The system works by installing wireless return transmitters at several nodes in the cable system, providing a wireless path for the return of the DOCSIS up-stream signal to the Headend. The return link can be implemented in any licensed frequency band.

Wireless up-stream transmission is a cost-effective solution to providing DOCSIS Cable Modem service without necessarily implementing the expensive upgrade from one-way to two-way cable plant.

The BWA-2000C provides several benefits to cable operators:

• It allows for cable modem service to be started with a very low initial investment.

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WIRELESS DATA SYSTEM BACKS UP FIBER IN BAJA CALIFORNIA

A wireless data system has been installed in La Paz, Baja California (Mexico) to provide redundancy backup to a high capacity fiber system.

Cable AML's BWA-2002 system provides IP-based high throughput data service between a centrally located base station and a number of subscriber stations. Because of the Point-to-Multipoint architecture, service to additional customers can be easily provided by simply adding additional remote units.

The system's base station was installed at the same site planned for an MMDS system and shares the same transmitter and antenna.

Ths system shows how wireless data systems can provide path redundancy to critical fiber data links in dense urban environments where frequent construction activity is likely to result in interruption of service due to fiber cuts. ✦

Ruben Barcenas during system training at Cable AML

NEW MMDS TRANSMITTER INSTALLED IN ZACATECAS

The city of Zacatecas, capital of the state of Zacatecas, has expanded MMDS service and improved quality by installing a new broadband high-power transmitter from Cable AML, which has replaced an older transmitter.

The transmitter covers an area with more than 40,000 homes and feeds several repeaters that provide coverage to shadow areas, common in the region due to the hilly terrain.

According to Armando Carrillo, President of Zacatecas TV, the choice of Cable AML equipment was very easy to make because of the exceptional results obtained with three previous MMDS systems installed by Cable AML in the area, systems that have been operating flawlessly. ✦

Armando Carrillo inspects the newly installed MMDS transmitter in Zacatecas

Randel Rivas and Armando Carrillo inspect installation of Repeater in Zacatecas, Mexico

MMDS REPEATER SYSTEM PROVIDES SERVICE IN GUADALUPE

An MMDS repeater was installed in the city of Guadalupe to extend the service range of the Zacatecas MMDS transmitter.

According to Armando Carrillo, President of Zacatecas TV, a single low-cost repeater can provide service to an additional 8,000 households previously lacking any multichannel TV service, making the installation a very cost-effective investment.

The indoor repeater was installed in a specially constructed enclosure on top of a residential building and went into operation immediately following installation. ✦

MEDIACOM INSTALLS DIGITAL TV PTP LINK

Mediacom recently installed a Cable AML digital link to dramatically improve the off-air signals in Sun City California. The links uses Cable AML's Digital Headend Module.

Local-into-local DBS carriage of off-airs represents a serious competitive problem when the CATV operator suffers from less than perfect off-air pickup.

By using digital technology for transport, Cable AML provides a significant improvement in picture quality as well as an reduction in required microwave spectrum or an increase in signal carriage capability. Each Cable AML Digital Headend Module can digitize as many as six video programs into a single 6 MHz channel for high quality transport over new or existing microwave links. ✦

Mediacom off-air recieve site.

HIGH POWER OUTDOOR TRANSMITTER DELIVERED TO US MEDIA

Cable AML has shipped the first of its new product range of High Power Outdoor transmitters and repeaters. The transmitter has been installed in Truckee, California, to replace an indoor unit.

Both the ITX-011 and ITX-015 models are now offered in outdoor versions. The OTX-011 has the equivalent output power of a 25W amplifier, several times more powerful than any previous outdoor transmitter. The OTX-015 has the equivalent output power of a 50W amplifier.

With the new transmitter, waveguide attenuation is reduced and the cost of air-conditioning avoided.

Outdoor High Power 13 GHz Transmitter.

Cable AML has been delivering high power outdoor transmitters and transceivers operating in the 23, 26 and 28 GHz bands for over five years. At these millimeter wave frequencies, even a 10' (3m) waveguide run can cause unacceptable attenuation, so outdoor, high-power devices are mandatory. This outdoor technology has now been made available for 13 GHz transmitters. ✦

ADELPHIA READY FOR WIRELESS HFC EXTENSION IN HEMET, CA

The 16 mile AML link to the isolated mountain community of Idyllwild has been providing reliable signal delivery for years, but until August of this year it was a one way link limited to 54 MHz - 550 MHz transmission. Fiber was not a viable alternative due both to cost and exposure to forest fire damage.

A pair of Cable AML transceivers was added to the existing link, expanding down-stream carriage to 54 – 860 MHz and up-stream 5 – 42 MHz... a full wireless HFC extension, installed with virtually no interruption to the 54 – 550 MHz service.

Now subscribers in Idyllwild have the same HSD and digital video services that other Adelphia subscribers enjoy. ✦

Engineering team from Adephia's Hemet during system training.

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• Uses the same DOCSIS equipment used for two-way cable systems. As the cable system is upgraded to HFC or two-way, there is no need to change or replace any equipment.

• The system is totally transparent to the subscribers, who get high-speed Internet access from practically any location in the cable system.

The down-stream DOCSIS signals travel to the subscriber through the cable, like any other carrier. The up-stream signal returns through a wireless link to the headend. The wireless transmitter need not be at the subscriber premises; it can be further up-stream in the cable plant. In fact, a wireless transmitter can provide the up-stream return path to all subscribers fed from a node with two-way coaxial and electronics.

According to Mario Carranza, Chief Operations Officer of TDC, the system has made it possible to offer cable modem service at a very small fraction of the cost of upgrading the cable plant from one-way to two-way, although the plant was already designed as an HFC plant. "It is important to be able to offer broadband modem service to our customers before DSL makes inroads in our service area", said Mr. Carranza. ✦

Wireless return Path Antenna for DOCSIS Cable Modem Service is installed on existing tower next to PTP antennas.

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