



H30

Introduction



- New from Televés, a **go-to meter designed with the needs of a Cable TV operator in mind.**
- Your go to meter for installation, remote monitoring or troubleshooting. Rugged, light-weight and extremely easy to use.
- **Install, maintain and troubleshoot digital and analog cable TV networks, onsite or remotely.**

Introduction



- The H30 is a lightweight hand-held unit, packed with all the features needed to install and troubleshoot a television system using QAM digital modulation as well as analog signals.
- This meter is even inexpensive enough to leave in your headend and use its **unique in its class remote measurement and control capabilities** to provide long term monitoring or to trouble shoot those hard to find, intermittent problems.
- Available for the first time in such a portable and affordable package, **its real-time digital processing engine** gives the installers the lab-precision measurements needed in today's fulfillment environment.

Features & Benefits

Remote Control & Measurements

Control your meter and access your measurements from a smartphone, tablet, laptop or any other internet connected device. Ideal for extended signal tests over time in headends and broadband distribution networks.

Leave your H30 connected to your headend or anywhere in your plant and control the unit to measure signals and quality parameters remotely. Once finished, export the results to your computer in excel-compatible formats.



Rugged and Light Weight

A unique dual injected rubber and polycarbonate plastic housing ensures the best protection and durability.

Weighing only one pound, the H30 is comfortable to carry and use. You can put it in your pocket or hang it from its sturdy built-in grommets using the provided shoulder strap... you will hardly know it's there!

Features & Benefits



Intuitive User Interface

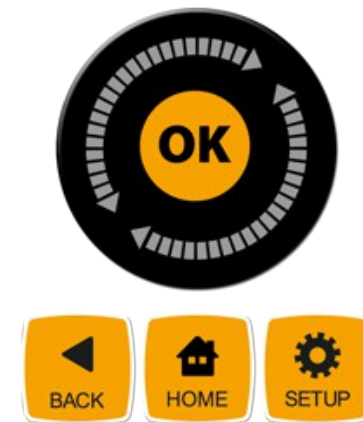
Easy to use one-level menu structure with very intuitive functions for increased usability, faster operation and maximum productivity. No function requires more than three successive button pushes to achieve the desired operation.

It doesn't get any easier than this, you will fly through the functions without ever reading the user manual.

Ergonomic Handheld Design

Intuitive and smooth operation for quick and easy function selection. The capacitive thumbwheel and three button keypad enable easy one-handed operation for maximum field work flexibility and second to none ease-of-use.

Do you know how to use your cell phone?... then you know how to use an H30, plain and simple.



Features & Benefits

Long Battery Life

High quality Li-Ion batteries, in conjunction with our advanced low power consumption technology, provide enough juice for even the largest jobs.

One hour of fast charging will provide almost three hours of extended operation.



Lab-quality Precision

Designed from the ground up to instantaneously obtain all the information in the signal in real time, a true milestone in field testing. The H30 provides the accuracy and speed needed to detect the faintest transients, ingress, or spurious signals affecting your cable system.

Lab-quality precision available for the first time in such a portable and affordable package.

Features & Benefits



Comprehensive Functions

Complete set of features such as Single Channel Measurements, System Scans, Tilt Function, Constellation Diagram, Spectrum Analyzer, Voltmeter, Hum, Service Identification, Datalogs, Reverse Path Ingress Scan, IP Speed Test, CTB/CSO measurements, Plan Learning, and more.

Automatic SW upgrades

User selectable automatic updates. Simply hook up to an internet connection and the H30 will download the latest software version from the cloud keeping itself fresh with the most up-to-date functionality and latest improvements available. You don't have to worry about when the last time you updated the software was, because your H30 will take care of that for you.

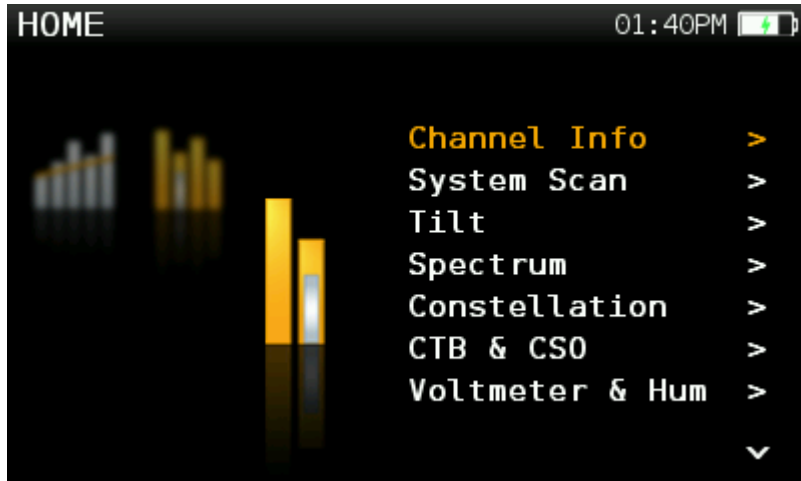


100% Automatic Signal Detection

Completely automatic, ITU-T J.83 Annex A/B/C and analog parameter detection and measurement with no setup needed. The H30 will immediately detect if the input signal is analog or digital and determine its constellation, symbol rate, and other modulation parameters, providing instantaneous readings with no user intervention.

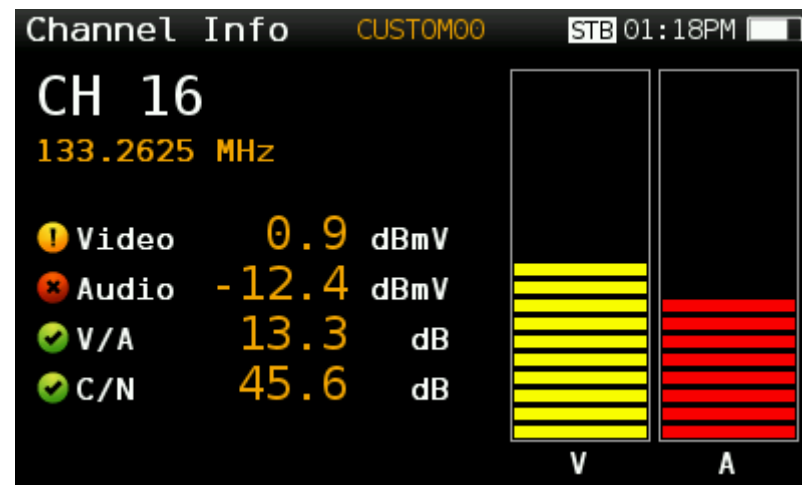
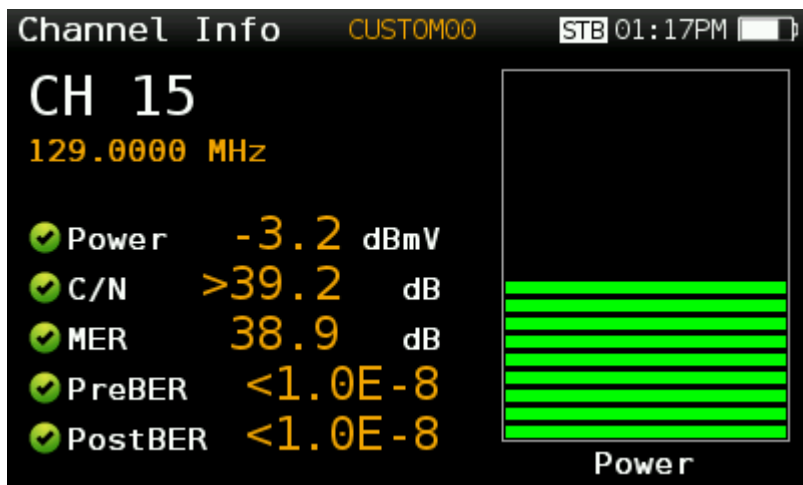


Functions



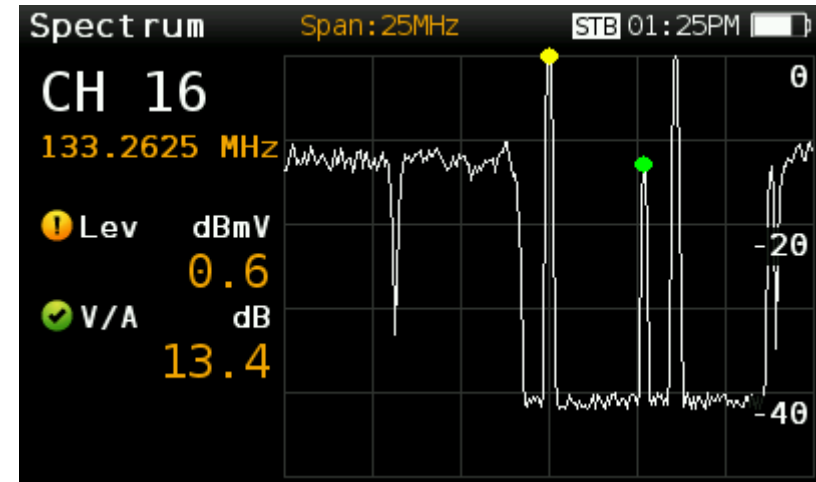
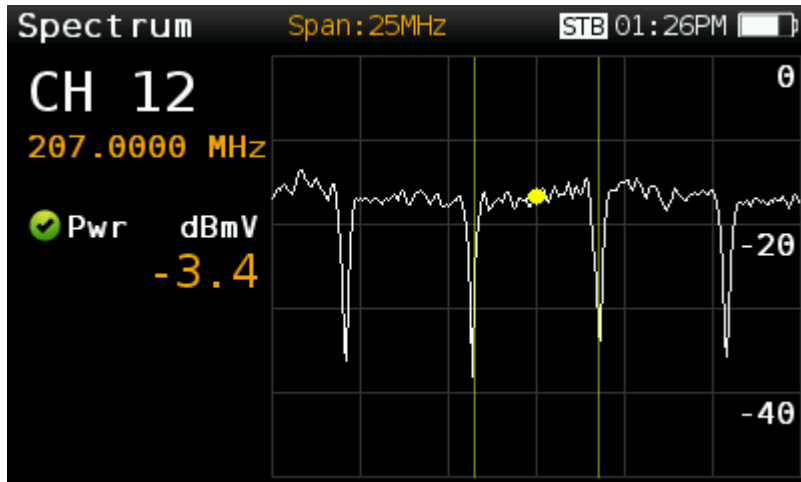
- Complete set of **easy-to-use** functions to install and monitor analog and digital cable TV networks **on-site or remotely**.
- Troubleshoot those hard to find, intermittent problems using its unique in its class remote measurement and control capabilities to provide **long term monitoring**. With the H30 you can ensure quality at all times, **while you are on site and while you are away**.
- The H30 provides the complete portfolio of tools needed to assure the quality of analog and digital television services delivered over cable.
- Combined with our **powerful real-time advanced techniques** and unparalleled ease-of-use, the H30 is the ideal tool for engineers and technicians installing and maintaining next-generation cable systems.

Functions – Channel Info



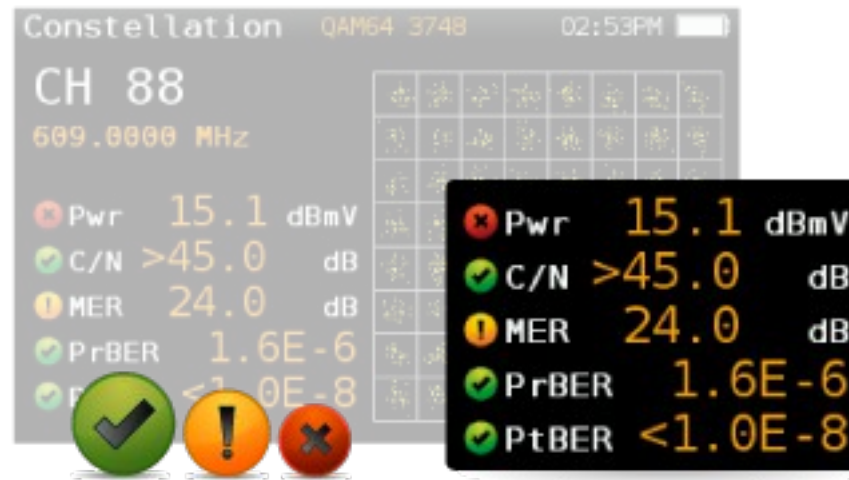
- Sometimes a quick glance at a particular channel is all you need.
- The H30's advanced single channel measurement automatically detects the type of channel, providing video and audio levels, V/A, and C/N for analog signals, and Power, C/N, MER, Pre-BER, and Post-BER in digital mode.
- All these tests are completed using just one button push and all the metrics reported based on user-defined location thresholds providing pass/fail results easy to interpret by even the least experienced technician in the team.

Functions – Spectrum Analyzer



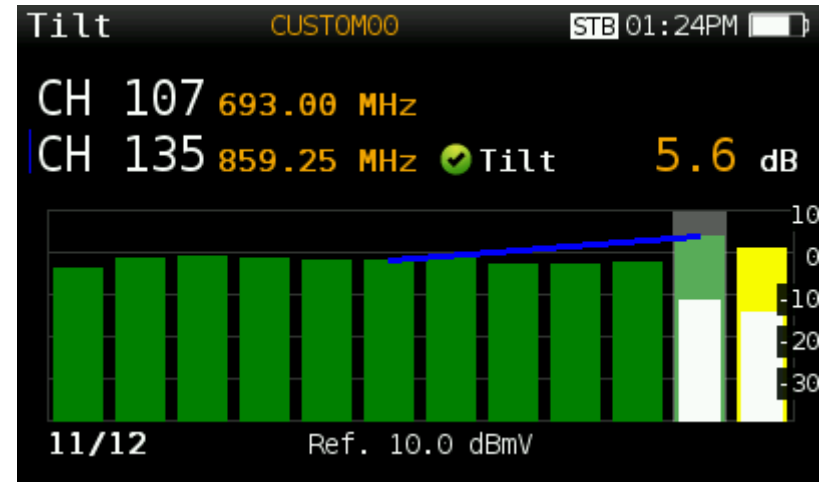
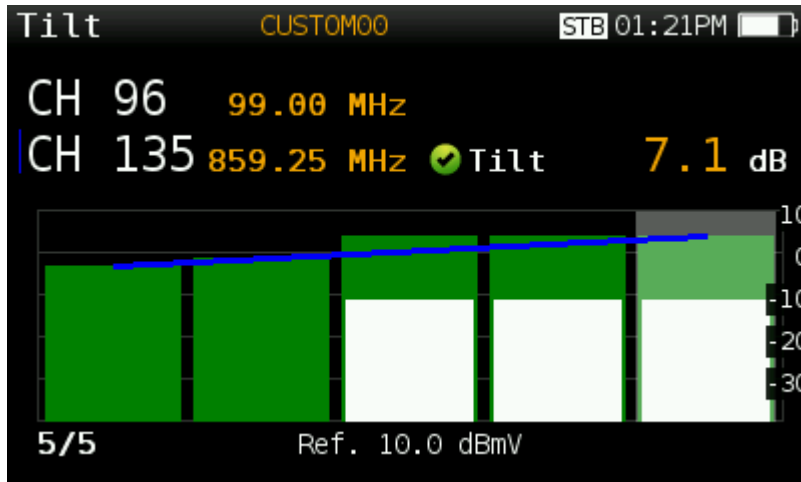
- The H30's spectrum analyzer includes 2.5, 6.25, 12.5, 25, 62.5, 125, 250, 500MHz, and 1GHz full span settings, as well as automatic reference level adjustment.
- Real-time processing speeds ensure capture of any fast, intermittent plant impairments. You'll be blown away by the accuracy and level of detail provided by this ultra-portable pocket-sized spectrum analyzer.
- A definitive tool for identifying and locating noise, interference, ingress and other waveforms that may be affecting cable services quality.

Functions – Pass/Fail Indicators



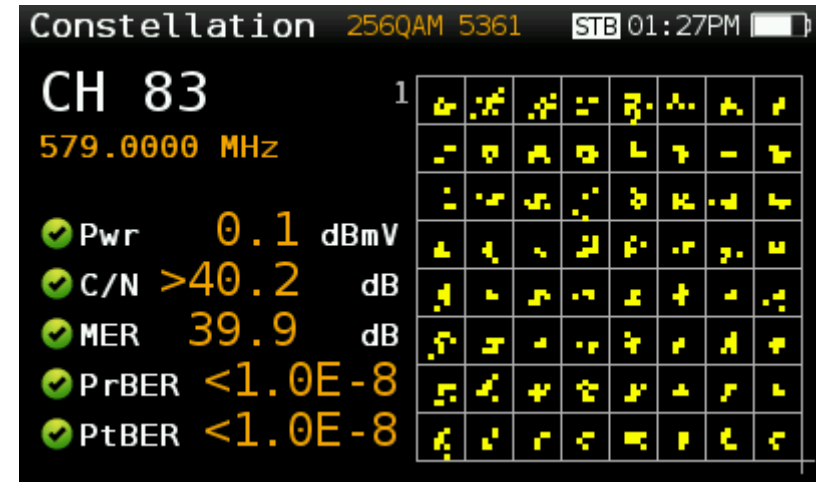
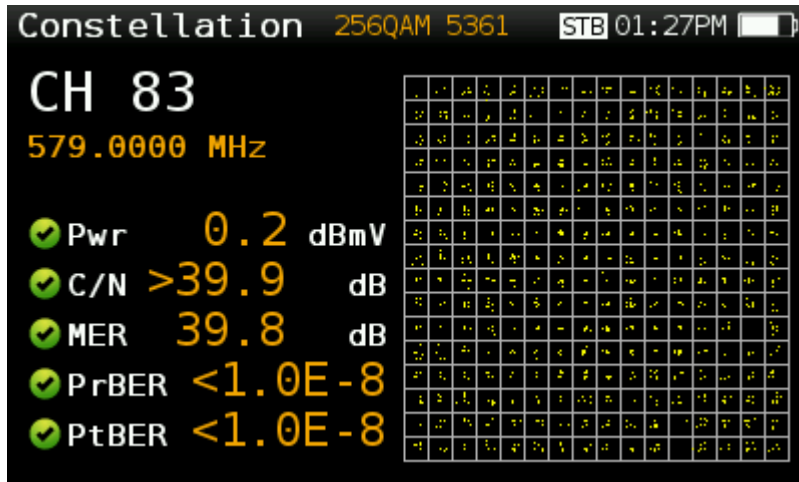
- Reduce installer errors with on screen pass/fail indicators that give a quick and easy to understand interpretation of the test results.
- Different thresholds are available for different testing locations such as headend, launch amp, tap, bonding block, customer premises, etc.
- But not only are there presets, you can configure your own custom thresholds too.

Functions – Tilt



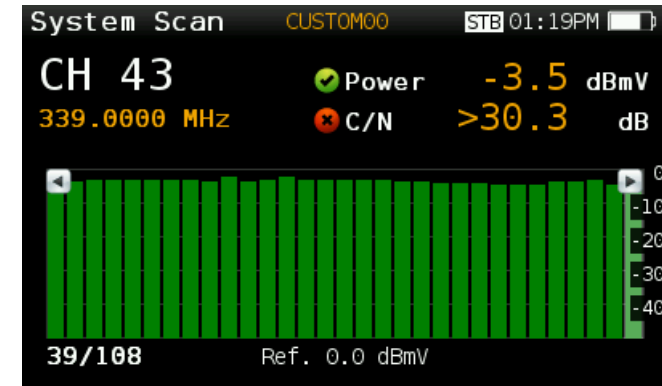
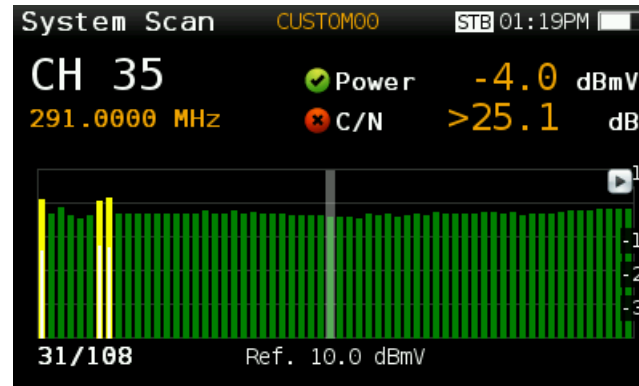
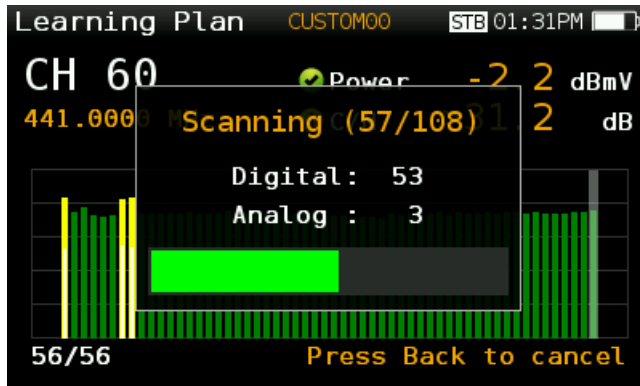
- Get a quick view of your signal level differences over a specified frequency range so you can apply attenuation or equalization to adjust them.
- Take the meter to your farthest extents and see at a glance what carriers' power levels are out by their red, yellow, and green colors.
- Any number between 2–12 analog, digital or DOCSIS channels can be measured using the tilt measurement, and you can even select which carriers are your reference points to determine the tilt between any of the channels included in the measurement.

Functions – Constellation



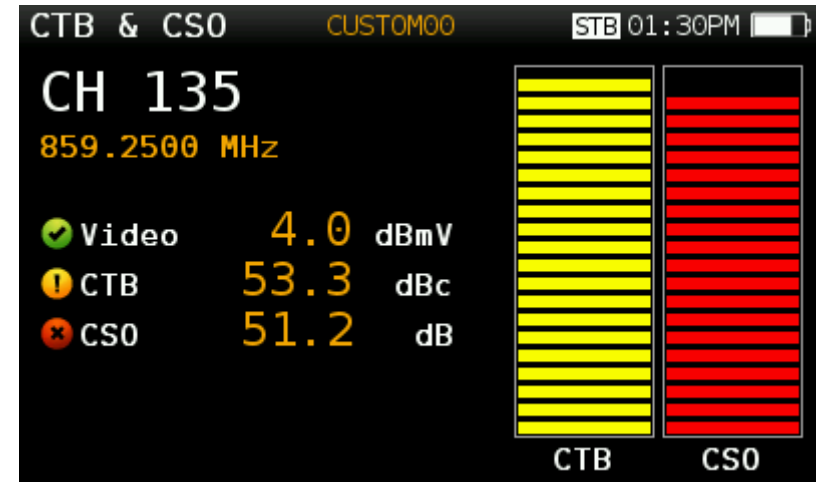
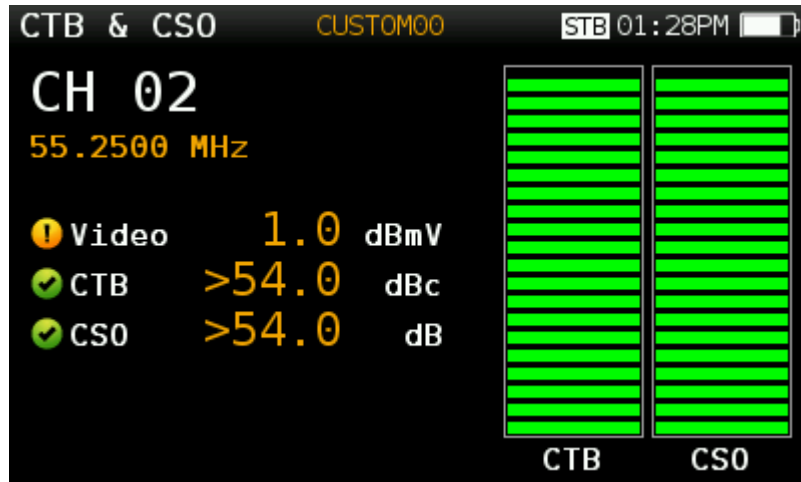
- The Constellation display is an indispensable tool for the technician when trying to measure the quality of the QAM modulated signals.
- Constellation diagrams help detect the presence of noise, phase jitter, interference, and gain compression, all of which impact overall signal quality leading to service disruption.
- By visually inspecting the size and shape of the dots within the constellation matrix, the technician can easily identify the nature of the problem.

Functions – System Scan



- Learn which channels are present in your distribution with the ultra-fast learning plan feature.
- Then select any stored plan and scan every existing analog and digital channel in real time to determine the overall frequency response of the system.
- The scan measurement leverages the location based thresholds to clearly show whether or not signal levels comply with the cable system's specifications by their green, yellow and red bar level indicators.
- This gives an easy-to-understand real-time view of the distribution, including the BER and MER values of the selected channel.

Functions – CSO & CTB



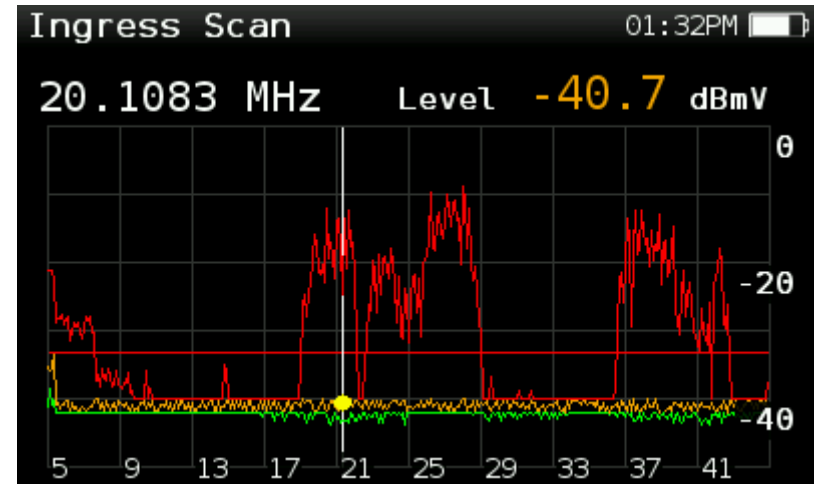
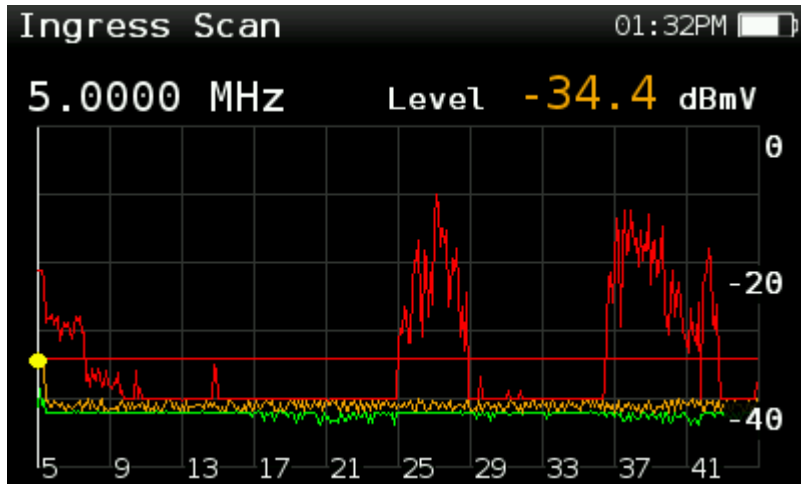
- Cable TV networks are generally located in densely populated areas or extend over large geographical regions.
- This makes cascading large numbers of amplifiers a frequent necessity that can be the cause of quality of service to drop below minimum acceptable levels.
- Composite second order (CSO) and composite triple beat (CTB) are commonly used quality parameters that can be measured with the H30 to ensure the best possible quality video for customers receiving analog signals.

Functions – Voltmeter & Hum



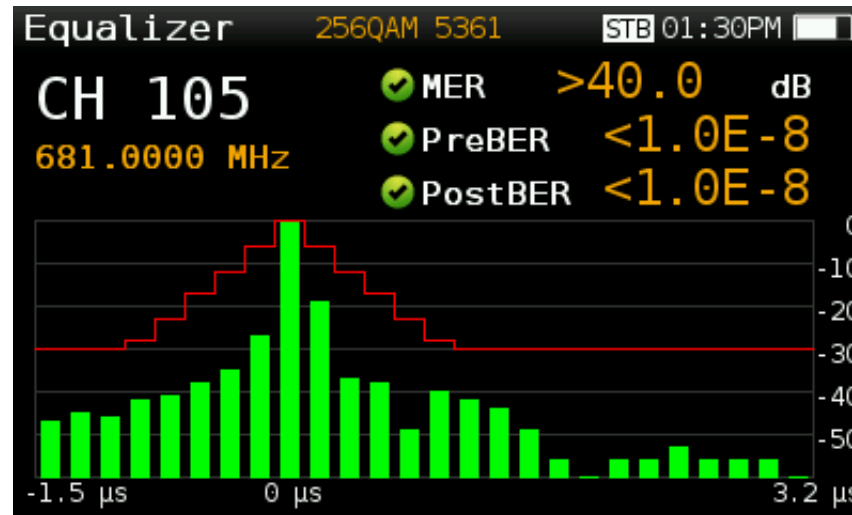
- Don't want to worry about bringing a separate volt meter with you?... no problem, the H30 will do that too.
- The H30 will also give you a Hum percentage to help you diagnose those ground and power interference problems that may result from a defective power supply or faulty/overloaded power inserters.

Functions – Reverse Path Ingress Scan



- Help identify reverse path problems before your customers are affected.
- Poorly shielded coaxial cable and faulty terminations are important sources of ingress noise which can easily add up in the return due to the large number of subscriber-generated signals that are sent back to the headend.
- The combined and amplified interference is often responsible for service disruption, so having a good reverse path ingress scan tool is always a must.

Functions – Equalizer



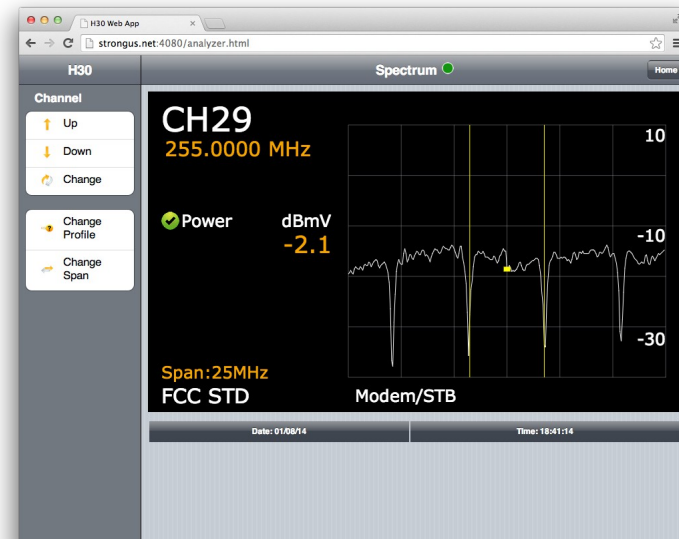
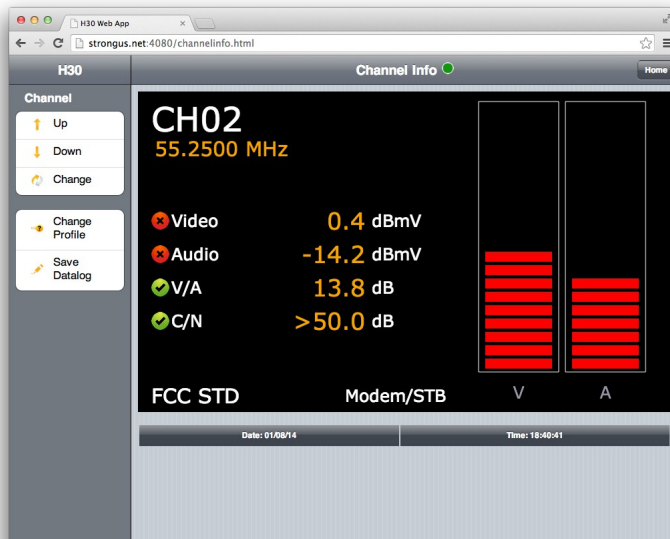
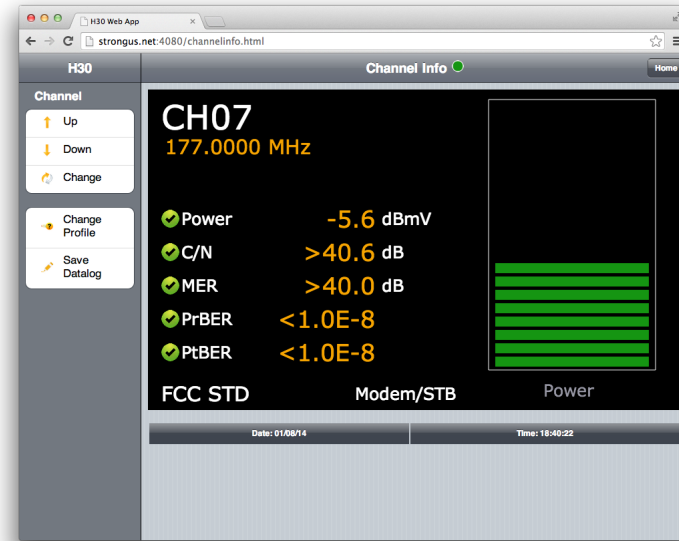
- You cleaned up your system getting the C/N ratio to reasonable levels, ingress and impulse noise are under control, the forward and reverse amps have been balanced, for the most part things are working reasonably well, but modems in some parts of the system are still having problems.
- One possible culprit is microreflections, reflections, or echoes. Impedance mismatches are everywhere: connectors, amplifier inputs and outputs, passive device inputs and outputs, and even the cable itself.
- The H30's equalizer analysis function displays the level of the equalizer coefficients in real time helping you pinpoint any possible mismatches in the distribution that can cause problems.

Functions – Datalogs

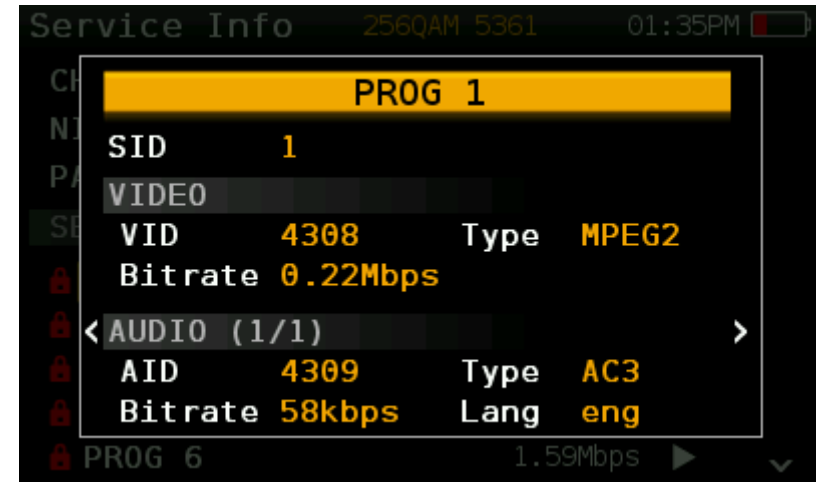
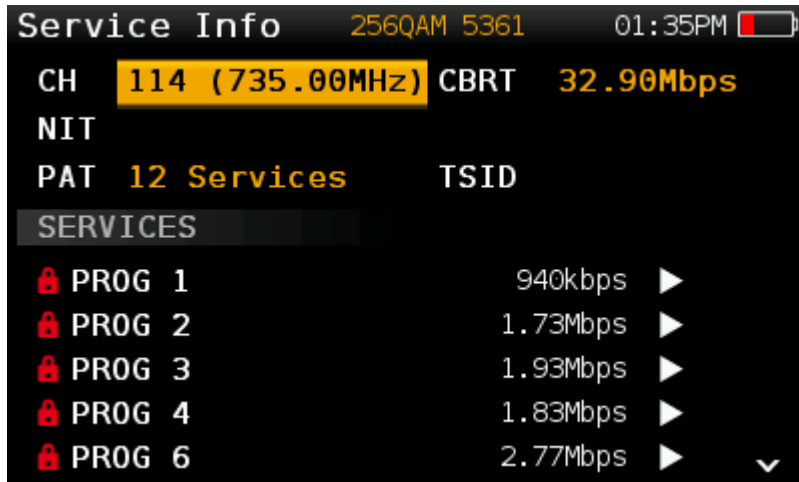


- As you are taking measurements or looking for problems, you can log data samples of all the signal parameters to further analyze problems, or just to keep for your records and job reports.
- Logs can be recorded locally or remotely, and retrieved using the meter's web server to then export them in excel-compatible format.
- Great training tool for others as well.

Functions – Remote Control & Measurements

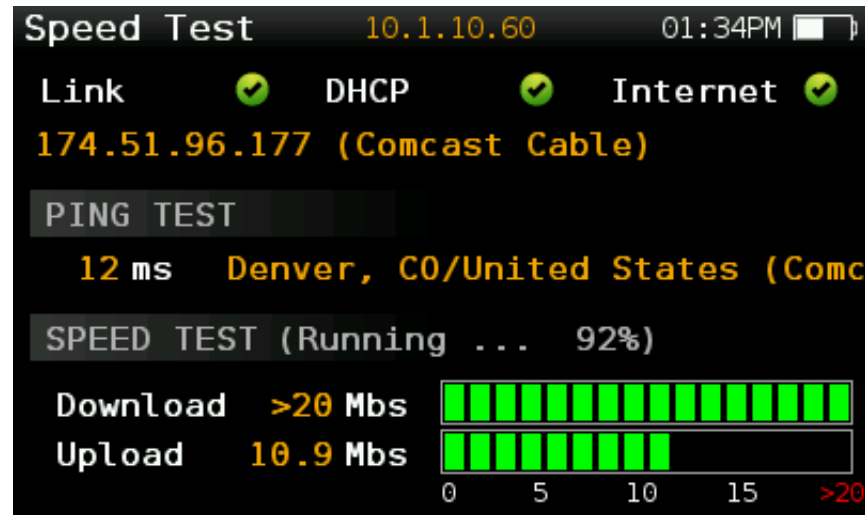


Optional Functions – Service Info



- Do you want to know what program content is on that QAM channel?
- The H30's Service Info feature will tell you. In addition to the short description of the service, you'll get the important parameters including the NIT, PAT, and TSID for the channel.
- For the individual service you'll get the SID and the PID, encode type, resolution, and bit rate for both the audio and video, all of which greatly help when trouble shooting your encoder configuration.

Optional Functions – IP Speed Test



- Need a quick check of your data network at the headend or at a customer's unit?
- The H30's IP Speed Test allows you to check your basic network performance parameters so you don't need to get your laptop out.
- This includes your upload and download speeds as well as your ping times and connectivity status.

Additional Information

Tech Specs:

<http://www.televes.com/en/content/tech-specs>

Website:

<http://www.televes.com/en/content/home-h30>

Quick Guide:

http://www.televes.com/sites/default/files/HTE/ht/01031059_004.pdf

User Manual:

http://www.televes.com/sites/default/files/HTE/ht/593101_003_en.pdf