BTPRO-1000
QAM/8VSB/Analog Signal Analyzer
### Digital and Analog Test Equipment

Blonder Tongue — Digital CATV

SOLUTIONS FOR ALL YOUR APPLICATIONS

The **BTPRO-1000** is a versatile CATV test instrument for measuring both digital and analog CATV and Broadcast TV signals. Robust and easy to use, BTPRO-1000 provides hours of operating time from its high capacity battery. The instrument comes complete with a soft carrying case, AC main and automotive chargers.

An optional Pro:Idiom™ Key Recovery feature is available for Hospitality applications that employ Pro:Idiom™ television sets. The option consists of a built-in frequency agile QAM modulator that connects directly to an affected Pro:Idiom™ TV to provide new encryption key information.

Another powerful feature the RK option provides is the ability to test TV codec capabilities on both Pro:Idiom and standard TV sets. This useful tool allows service providers to easily determine the TV video and audio decoding capability. A particular codec test signal can be selected from memory in the BTPRO-1000 RK and transmitted to the TV under test to determine if that TV can properly receive (decode) each video and audio encoding format. See below and the back page for a complete list.
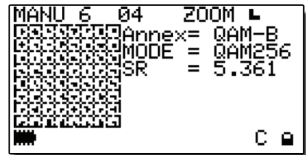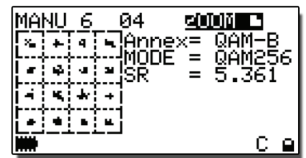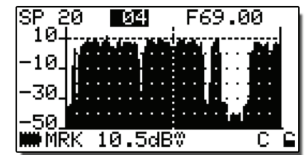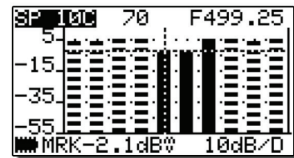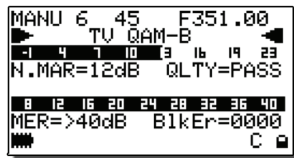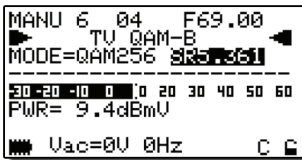
Features

- QAM/8VSB/NTSC Measurements
- Extended frequency range of 4-1000 MHz
- MER, aBER, bBER, Noise Margin and Level/Power measurements plus Spectrum Analysis
- Automatic quality analysis: FAIL-MARGINAL-PASS
- Auto Seek & Store Function - an essential feature for creating custom memory channel plans. Scans receivable signals, determines signal type (QAM,8VSB or analog) and stores only those channels having signal levels above user defined values
- Ingress and Leakage Modes
- Data Logger Function: Steps through each channel in the "Active" memory plan and stores all related measurements
- Graphics Display
- Alpha-numeric keypad

Optional TV Key Recovery for Hospitality Pro:Idiom™ Systems (RK Option)

- PI Restore and PI Key Test (PI encrypted color bar test pattern) functions
- Clear QAM test signals used for TV compatibility testing in the following formats:
  - MPEG-2 video with AC3 Audio
  - MPEG-2 video with MPEG-2 Layer 1 Audio
  - MPEG-4/H.264 with AC3 Audio
  - MPEG-4/H.264 with EAC3 Audio

Ordering Information

Model	Stock #	Description
BTPRO-1000	4230	QAM/8VSB/Analog Signal Analyzer
	4230 RK	Signal Analyzer with Pro:Idiom™ Key Recovery Option

Rev: 070816

Specifications

Level Measurement & Spectrum Analysis

Frequency Range:	TV, CATV & Radio 4-1000 Mhz
Frequency Resolution:	25 kHz
RF Input Impedance:	75 Ω (interchangeable "F" connector)
Dynamic Range:	-59 to +65 dBmV
Measurement Resolution:	0.1 dB
Level Measurement Accuracy:	1 dB typ. (2 dB max)
A/V Ratio:	up to 22 dB, +/-1.5 dB (2 dB max)
C/N Ratio:	up to 45 dB +/-1.5 dB Max; 45-50 dB +/- 2 dB
Resolution Filter Bandwidth:	100 kHz @ -3 dB
Custom Channel Plans:	25 (199 ch. per plan)

Power & Digital Measurements

Frequency Band:	4-1000 Mhz
Power Measurement:	-45 to 65 dBmV
BER Measurement:	(pre) bBER up to 1 x 10-9 (post) aBER up to 1 x 10-9
MER Measurement:	up to 40 dB (1dB typ., 2dB max)
Constellation Display:	16-32-64-128-256 QAM

Ingress & Spectrum Measurements

Frequency:	5 - 65 MHz
Level:	-55 dBmV to 65 dBmV
Accuracy:	+/- 2 dB
BW:	100 kHz @ -3dB

Leakage Measurements

Frequency Range:	115 -140 MHz
Resolution:	25 kHz
Antenna Type:	selectable

Pro:Idiom™ Key Recovery Option

RF Output	
Connector:	1x "F" Female
Modulation:	QAM 64 or 256 (user selectable)
Standard:	ITU-T J.83 Annex B
Channel Range:	CATV 2 to 158, Broadcast 2 to 69
Output Level:	20 dBmV

General

Power Supply:	Built in NiMh rechargeable battery, external power supply
Battery Duration at 25°:	4 hours
Size:	8.5" x 5.0" x 2.4" (215 x 125 x 60 mm)
PC Interface:	USB
Front Panel:	Alpha numeric keypad
Power Save:	TFT backlight timer, brightness adj

Pro:Idiom™ Key Recovery (RK Option)

CATV Channels 2 to 158
Broadcast Channels 2 to 69
QAM 64B or 256B

Pro:Idiom™ Options:

Restore (Re-Key)

Key Test (PI-encrypted color bars)

Codec Test Signals:

MPEG-2 Video with AC3 Audio
MPEG-2 Video with MPEG-2 Layer 1 Audio
MPEG-4/H.264 with AC3 Audio
MPEG-4/H.264 with EAC3 Audio

Pro:Idiom TV

Digital TV (Unknown Codecs)

Related Products

Model	Description
BTPRO-7000	HD Tablet/Touch Signal Analyzer
BTPRO-7000S	HD Tablet/Touch Signal Analyzer; HD/SD QPSK/8PSK satellite, 8VSB, QAM, Analog
MTSA-PRO	MPEG Transport Stream Analyzer