

IPQ1000 Handheld MPEG analyzer optimized for ease of use



The IPQ1000 is a handheld MPEG transport stream analyzer focused on making video over IP more intuitive and easier to diagnose. Quick touchscreen selection of

source data from ASI or IP can

be decoded and displayed on the LCD screen. Data is also available as MPEG tables in a tree view.

Bandwidth is measured by PID, program, and stream. The IPQ1000 contains a comprehensive alarm engine based on the ETSI TR-101-290 and ATSC-A/78 standards.

An MPEG2 decoder and an optional Dolby D decoder provide audio and video to the internal LCD touchscreen and speakers for quick verification of your audio / video source.

Dual Ethernet ports for video over IP allows the device to be inserted in line with a suspected problem device. The IPQ1000 will identify all IP traffic by source IP address, destination IP address and destination port number.

Features:

- Alarms on all streams simultaneously
- can monitor both ASI and IP streams at the same time
- Auto discovery of all transport streams on both ASI and IP interfaces (no specific IP setup necessary)
- The device utilizes a 5" touch screen for its graphical interface to make setup and configuration more recognizable to video professionals.
- MPEG2 / H.264 Video decoder to verify contents on the LCD screen
- Unique hardware accelerated design allows for multi-stream alarm evaluation ATSC A/78 and ETSI TR-101-290.
- Internal rechargeable battery provides a runtime of over 5 hours under typical use.
- Updatable via the USB port
- NTP client to determine STT accuracy
- CEA-608 CEA-708 Closed Captioning

Options:

- Option 1
 - Dolby AC3 decoder
 - AAC decoder
 - Internal Data storage (256GB) for capture and playback (future)
- Option 2
 - Carrying Case

Warranty

- Standard 2 year Tresent Technologies® warranty, parts and labor

Source	Destination	Port
192.168.10.11	239.0.0.2	1101
0.0.0.0	0.0.0.0	0
192.168.10.31	239.168.10.17	1235
192.168.10.31	239.168.10.245	1234

Status
IP Bandwidth: 35.47 Mb/s
ASI Bandwidth: 19.79 Mb/s

Sources Tab:

The Source Display lists all sources discovered by the IPQ1000. Select the source you want to view on the other tabs by touching the line item you are interested in. When selected, the source will be highlighted as seen here. The bandwidth for the interface (ASI or IP) can be seen at the bottom of the screen. Each source represents a separate transport stream that can be evaluated in the following tabs.

Source	Destination	Port
PAT on PID 0 (0x0)		
MGT on PID 8187 (0x1ffb)		
PMT on PID 48 (0x30)		
PMT on PID 64 (0x40)		
PMT on PID 80 (0x50)		
STT on PID 8187 (0x1ffb)		
TVCT on PID 8187 (0x1ffb)		
EIT0 Tables on PID 5000 (0x1388)		
EIT1 Tables on PID 5001 (0x1389)		
EIT2 Tables on PID 5002 (0x138a)		
EIT3 Tables on PID 5003 (0x138b)		
EIT4 Tables on PID 5004 (0x138c)		
EIT5 Tables on PID 5005 (0x138d)		
EIT6 Tables on PID 5006 (0x138e)		
EIT7 Tables on PID 5007 (0x138f)		
EIT8 Tables on PID 5008 (0x1390)		
EIT9 Tables on PID 5009 (0x1391)		
EIT10 Tables on PID 5010 (0x1392)		
EIT11 Tables on PID 5011 (0x1393)		
EIT12 Tables on PID 5012 (0x1394)		
EIT13 Tables on PID 5013 (0x1395)		

Tables Tab:

The Tables Display lists all tables contained in the selected transport stream. Each table is expandable to list the contents of each table. Just touch anywhere on the table of interest to expand the table. The color of the table will change to indicate that an alarm has triggered for that particular table.

Prog#	PID	Type
3	48 (0x30)	PMT
	49 (0x31)	ITU-T Rec. H.262 ISO/IEC
	52 (0x34)	ATSC AC-3 Audio
	53 (0x35)	ATSC AC-3 Audio
4	64 (0x40)	PMT
	65 (0x41)	ITU-T Rec. H.262 ISO/IEC
	68 (0x44)	ATSC AC-3 Audio
5	80 (0x50)	PMT
	81 (0x51)	ITU-T Rec. H.262 ISO/IEC
	84 (0x54)	ATSC AC-3 Audio

Time	Program
4:30 pm	Divorce Cou
5:30 pm	Divorce Cou The Dr. Oz

Conquest of the Planet of the Apes

abierto Allá te espero Lado a lad

Even with their increased abilities, the apes have become mistreated pets and slaves for the humans, so a brave leader for the new species decides to lead the oppressed species in an uprising that he hopes will set them free.

Guide Picture

Details Tab:

The Details Display lists all available programs in the source selected in the sources tab. The bottom part of this display contains a second tab bar where you can choose to display an electronic program guide or the picture of the selected program.


Guide Tab:

The IPQ1000 can show a guide generated from the tables. This display will show the channel name, events for each channel in their respective time slot, and the details of each event can be displayed by selecting the event of interest. The details will be displayed under the guide in the info box.

Picture Tab:

The picture can be display by selecting the program you want to view in the program list above the picture.

Prog#	PID	Type
3	48 (0x30)	PMT
	49 (0x31)	ITU-T Rec. H.262 ISO.
	52 (0x34)	ATSC AC-3 Audio
	53 (0x35)	ATSC AC-3 Audio
4	64 (0x40)	PMT
	65 (0x41)	ITU-T Rec. H.262 ISO.
	68 (0x44)	ATSC AC-3 Audio
5	80 (0x50)	PMT
	81 (0x51)	ITU-T Rec. H.262 ISO.
	84 (0x54)	ATSC AC-3 Audio



Guide Picture

Table	PID	BW(Mb/s)	UpdateRate
PAT	0 (0x0)	0.020	75
MGT	8187 (0x1ffb)	0.140	46
PMT3	48 (0x30)	0.015	100
PMT4	64 (0x40)	0.015	100
PMT5	80 (0x50)	0.015	100
STT	8187 (0x1ffb)	0.140	874
TVCT	8187 (0x1ffb)	0.140	299
EIT0	5000 (0x1388)	0.018	82
EIT1	5001 (0x1389)	0.000	250
EIT2	5002 (0x138a)	0.000	500
EIT3	5003 (0x138b)	0.000	501
EIT4	5004 (0x138c)	0.000	999
EIT5	5005 (0x138d)	0.000	500
EIT6	5006 (0x138e)	0.000	501
EIT7	5007 (0x138f)	0.000	502
EIT8	5008 (0x1390)	0.000	999
EIT9	5009 (0x1391)	0.000	1000
EIT10	5010 (0x1392)	0.000	999
EIT11	5011 (0x1393)	0.000	503
EIT12	5012 (0x1394)	0.000	999
EIT13	5013 (0x1395)	0.000	1000

Bw Tab:

The Bw (bandwidth) Display lists all tables as well as PIDs found in the transport stream. Each item listed contains a bandwidth measurement. In addition, all tables list an update rate. This is an average of the last 10 times the table has been received. The bandwidth is displayed in units of Mb/s (megabits per second) and the Update Rate is in units of ms (milliseconds)



Battery Status
Capacity: 100%
Time to Charge: 0Hrs 0min

Status
Board Temperature: 54°C 129°F
CPU Temperature: 70°C 158°F
Run Time: 00:07:49
SN: 123987654
MAC: 70:B3:0D:50:30:02
IP: 192.168.10.21

Storage
Used: 2%

LCD Backlight

CPU Usage
Capacity: 27%

Status Tab:

The Status Display lists general status of the IPQ1000.

Battery Status:

The Battery Status bar indicates an estimate for the time to charge or discharge the battery depending on the presence of the external power supply.

System Status:

The Status section displays some unit setting and also contains the setup for IP address, NTP server settings, an about box for version numbers,

and the update dialog for software updates.

Storage / LCD Status:

The Storage section displays the amount of internal storage that has been consumed. The LCD backlight brightness can be adjusted using the LCD Backlight slide bar.

CPU Status:

The CPU Usage indicator gives a general idea of how much of the CPU capacity is being used.

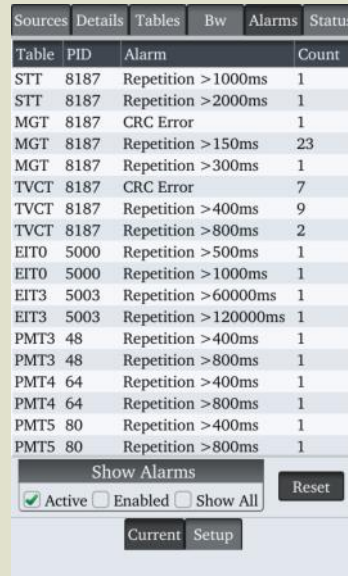


Table	PID	Alarm	Count
STT	8187	Repetition >1000ms	1
STT	8187	Repetition >2000ms	1
MGT	8187	CRC Error	1
MGT	8187	Repetition >150ms	23
MGT	8187	Repetition >300ms	1
TVCT	8187	CRC Error	7
TVCT	8187	Repetition >400ms	9
TVCT	8187	Repetition >800ms	2
EIT0	5000	Repetition >500ms	1
EIT0	5000	Repetition >1000ms	1
EIT3	5003	Repetition >60000ms	1
EIT3	5003	Repetition >120000ms	1
PMT3	48	Repetition >400ms	1
PMT3	48	Repetition >800ms	1
PMT4	64	Repetition >400ms	1
PMT4	64	Repetition >800ms	1
PMT5	80	Repetition >400ms	1
PMT5	80	Repetition >800ms	1

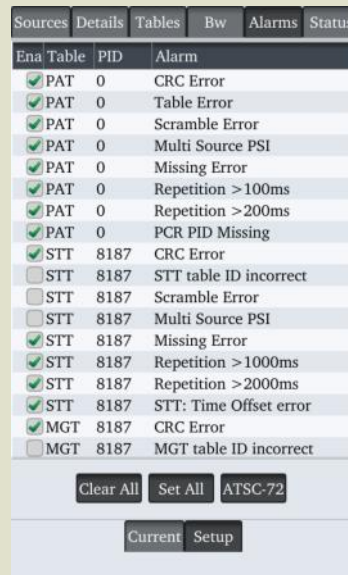
Show Alarms
 Active Enabled Show All

Alarms Tab:

The Alarms Display allows setup of the alarms as well as displays the active alarms. The alarms are based on the ATSC-A78 specification. Alarms are available for tables as well as the overall transport stream. Alarms include checks for syntax and repetition of tables, CRC, continuity, and inter table consistency errors.

Current Tab:

The Current Tab displays all active alarms (alarms that have exceeded their limits since the last time the alarm reset button was pressed)



Ena	Table	PID	Alarm
<input checked="" type="checkbox"/>	PAT	0	CRC Error
<input checked="" type="checkbox"/>	PAT	0	Table Error
<input checked="" type="checkbox"/>	PAT	0	Scramble Error
<input checked="" type="checkbox"/>	PAT	0	Multi Source PSI
<input checked="" type="checkbox"/>	PAT	0	Missing Error
<input checked="" type="checkbox"/>	PAT	0	Repetition >100ms
<input checked="" type="checkbox"/>	PAT	0	Repetition >200ms
<input checked="" type="checkbox"/>	PAT	0	PCR PID Missing
<input checked="" type="checkbox"/>	STT	8187	CRC Error
<input type="checkbox"/>	STT	8187	STT table ID incorrect
<input type="checkbox"/>	STT	8187	Scramble Error
<input type="checkbox"/>	STT	8187	Multi Source PSI
<input checked="" type="checkbox"/>	STT	8187	Missing Error
<input checked="" type="checkbox"/>	STT	8187	Repetition >1000ms
<input checked="" type="checkbox"/>	STT	8187	Repetition >2000ms
<input checked="" type="checkbox"/>	STT	8187	STT: Time Offset error
<input checked="" type="checkbox"/>	MGT	8187	CRC Error
<input type="checkbox"/>	MGT	8187	MGT table ID incorrect

Setup Tab:

The Setup Tab lists all alarms and allows them to be enabled.

Clear All:

the Clear All button will disable all alarms.

Set All:

the Set All button will enable all alarms.

ATSC-78:

The ATSC-78 button will set all alarms to the ATSC-A78 specification. In addition, individual alarms can be selected by pressing the Ena (enable) checkbox.