QTPCM-4 QUICK GUIDE

Description

QTPCM-4 (QAM Transcoder Power Control Module) provides control and monitoring of QTM-HD-4 (6243), QTM-HD-4-NPU (6223) and QTM-HD-Plus (6242) transcoder modules via GUI-based web pages. Local or remote control via the Internet is accomplished with any computer running a standard web browser. The QTPCM-4 will power up to four (4) QTM-HD-4 (2 slot width) or four (4) QTM-HD-4-NPU (2 slot width); eight (8) QTM-HD-Plus (1 slot width); or a combination of modules all housed in a QTRC (stk# 6233A) rack chassis. The 3RU chassis, when fully loaded with four (4) QTM-HD-4 or (4) QTM-HD-4-NPU and a QTPCM-4, will transcode sixteen (16) QPSK/8PSK satellite transponders to sixteen (16) QAM channels.

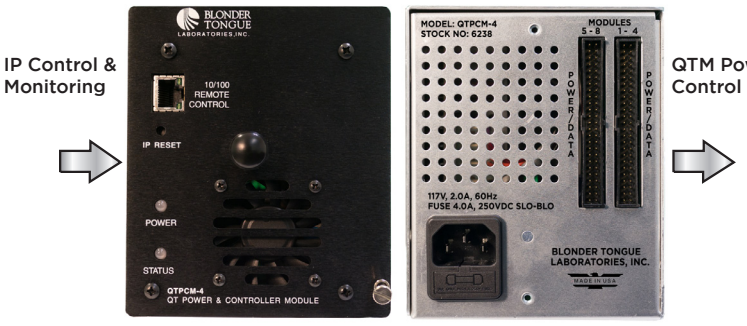
The QTM-HD-4 contains (4) independent transcoders in a single module. Each transcoder accepts one (1) input in QPSK or 8PSK format and delivers (1) QAM channel output, therefore each QTM-HD-4 module transcodes (4) satellite transponders to (4) QAM channels (54-864 MHz). An integrated satellite selector switch allows the operator to select any of the 4 inputs to any of the transcoders without the need for an external multi-switch.

The QTM-HD-4-NPU functions the same as the QTM-HD-4, but with a "Null Packet" feature that allows adding/removing null packets to/from the input stream.

The QTM-HD-Plus features a single transcoder, accepting a QPSK or 8PSK input and delivering a single QAM channel output in the frequency range of 54-864 MHz. This module is typically used in applications requiring QAM 512/1024 modulation.

Note: Do not mix different input modulation rates within the same QTM-HD unit. The modulation rate needs to be either ALL 8PSK or ALL QPSK in the same unit. It is recommended to disconnect AC power to the QTPCM-4 prior to installing or removing any QTM-4 modules.

QTPCM-4



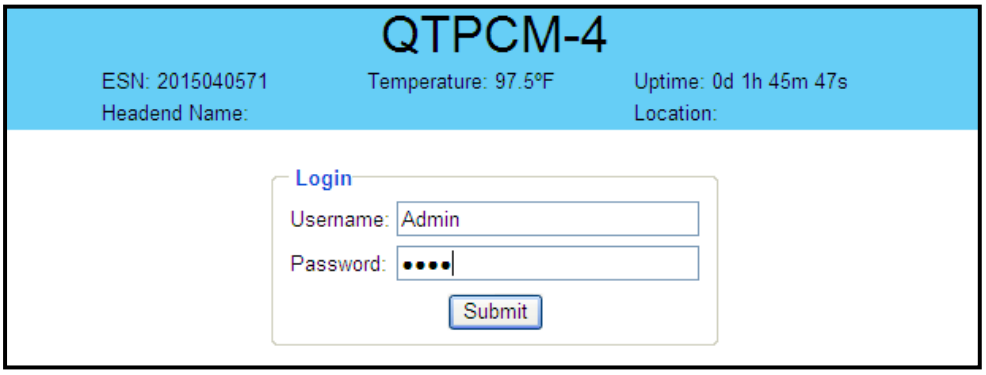
QTM-HD-4

QTM-HD-Plus

QRTC w/modules

STEP 1 - Login

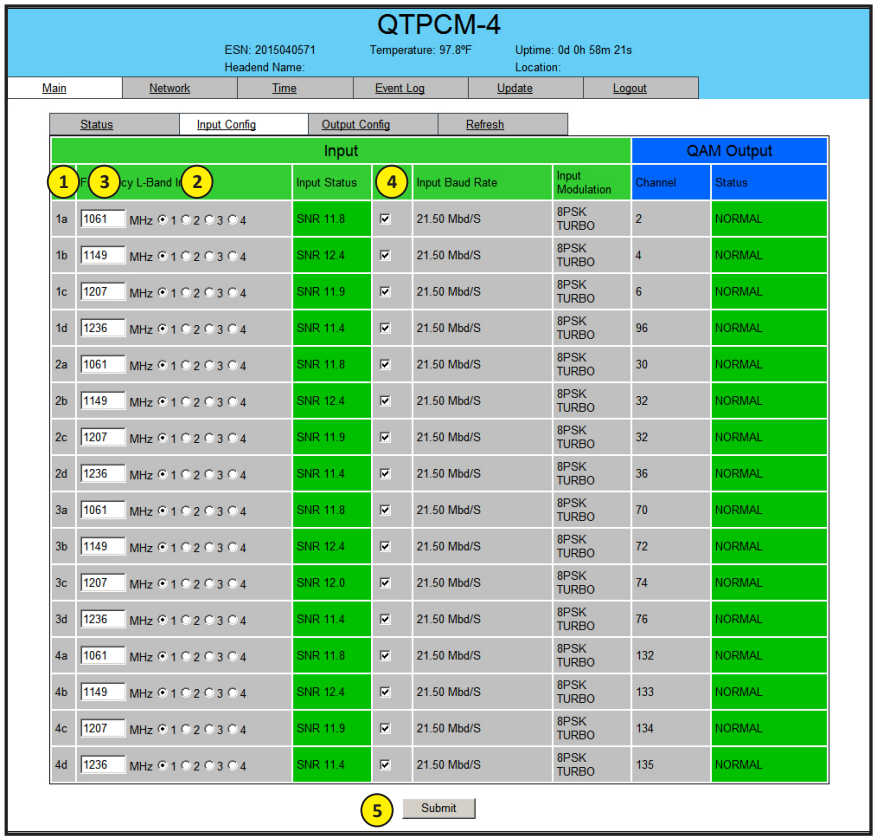
- Assign 172.16.70.2 as the static IP address for your computer.
- Enter 172.16.70.1 into your Browser to access the QTPCM-4.
- Logon with Username: “Admin” and the password: “pass”.



STEP 2 - Configure Inputs

Go to the Main > Input Config Tab to setup the input configuration.

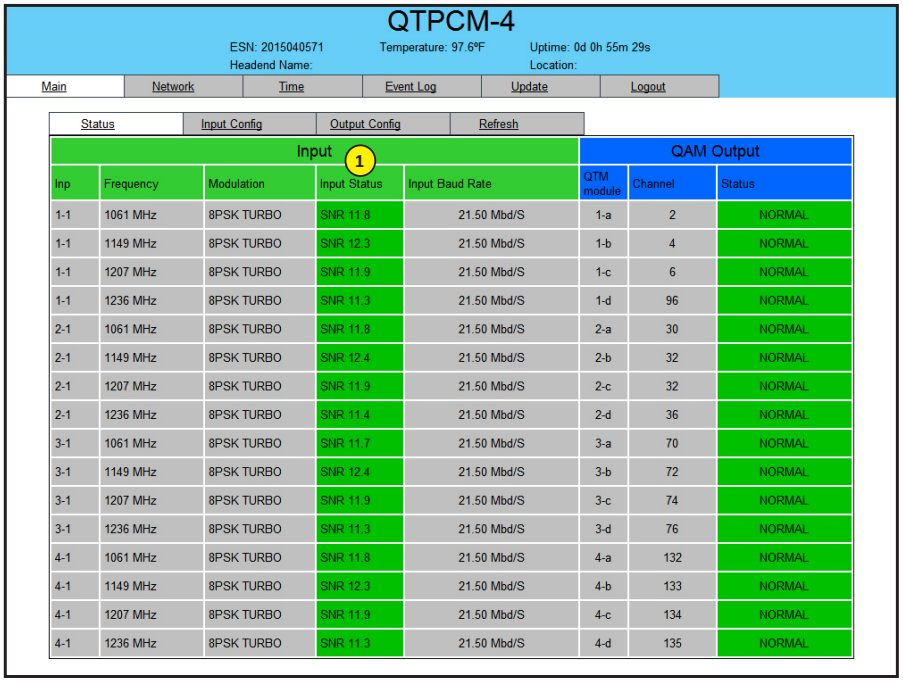
1. Designates which QTM-HD-4 module is connected to the corresponding numbered cable from the QTPCM-4.
2. Select the L-band input satellite feed for the desired transponder based on rear panel connections.
3. Input the transponder’s L-band center frequency, in MHz, for each input.
4. Make sure the AUTO box is checked on all entries.
5. Click Submit.



STEP 3 - Verify Satellite Inputs

Go to the Main > Status page and verify all input parameters are set correctly:

1. All input statuses should be green to indicate channel lock. The required installation signal level range for each satellite input is -55 to -10 dBm.



Inp	Frequency	Modulation	Input Status	Input Baud Rate	QTM module	Channel	Status
1-1	1061 MHz	8PSK TURBO	SNR 11.8	21.50 Mbd/S	1-a	2	NORMAL
1-1	1149 MHz	8PSK TURBO	SNR 12.3	21.50 Mbd/S	1-b	4	NORMAL
1-1	1207 MHz	8PSK TURBO	SNR 11.9	21.50 Mbd/S	1-c	6	NORMAL
1-1	1236 MHz	8PSK TURBO	SNR 11.3	21.50 Mbd/S	1-d	96	NORMAL
2-1	1061 MHz	8PSK TURBO	SNR 11.8	21.50 Mbd/S	2-a	30	NORMAL
2-1	1149 MHz	8PSK TURBO	SNR 12.4	21.50 Mbd/S	2-b	32	NORMAL
2-1	1207 MHz	8PSK TURBO	SNR 11.9	21.50 Mbd/S	2-c	32	NORMAL
2-1	1236 MHz	8PSK TURBO	SNR 11.4	21.50 Mbd/S	2-d	36	NORMAL
3-1	1061 MHz	8PSK TURBO	SNR 11.7	21.50 Mbd/S	3-a	70	NORMAL
3-1	1149 MHz	8PSK TURBO	SNR 12.4	21.50 Mbd/S	3-b	72	NORMAL
3-1	1207 MHz	8PSK TURBO	SNR 11.9	21.50 Mbd/S	3-c	74	NORMAL
3-1	1236 MHz	8PSK TURBO	SNR 11.3	21.50 Mbd/S	3-d	76	NORMAL
4-1	1061 MHz	8PSK TURBO	SNR 11.8	21.50 Mbd/S	4-a	132	NORMAL
4-1	1149 MHz	8PSK TURBO	SNR 12.3	21.50 Mbd/S	4-b	133	NORMAL
4-1	1207 MHz	8PSK TURBO	SNR 11.9	21.50 Mbd/S	4-c	134	NORMAL
4-1	1236 MHz	8PSK TURBO	SNR 11.3	21.50 Mbd/S	4-d	135	NORMAL

STEP 4 - Configure QAM Output

Go to the Output Config tab to setup output configuration.

1. Select the output QAM channel (#, frequency) for each corresponding input.

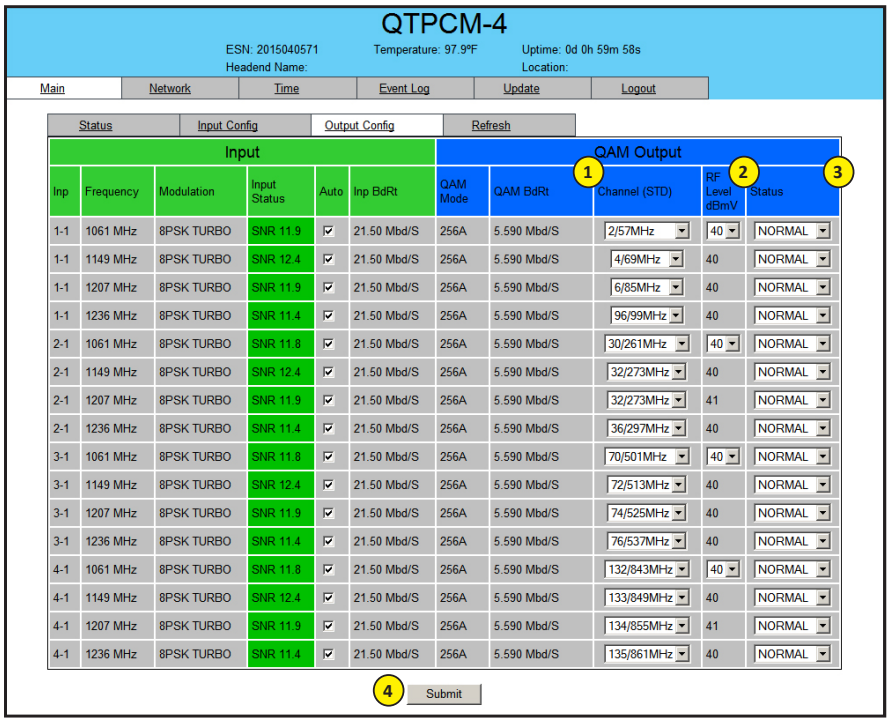
   NOTE: All four QAM outputs for a QTM-HD-4 module must be within a 42 MHz bandwidth. Selected frequencies must be in increasing order from the first (top) to the last (bottom) transcoder within each module.

2. Select the RF Level in dBmV. The range is 32 to 42 dBmV.

   NOTE: The output levels for all channels in the same QTM-HD-4 are determined by the first channel.

3. Set all Status values to normal.

4. Click Submit.



Inp	Frequency	Modulation	Input Status	Auto	Inp BdRt	QAM Mode	QAM BdRt	Channel (STD)	RF Level dBmV	Status
1-1	1061 MHz	8PSK TURBO	SNR 11.9	☑	21.50 Mbd/S	256A	5.590 Mbd/S	2/57MHz	40	NORMAL
1-1	1149 MHz	8PSK TURBO	SNR 12.4	☑	21.50 Mbd/S	256A	5.590 Mbd/S	4/69MHz	40	NORMAL
1-1	1207 MHz	8PSK TURBO	SNR 11.9	☑	21.50 Mbd/S	256A	5.590 Mbd/S	6/85MHz	40	NORMAL
1-1	1236 MHz	8PSK TURBO	SNR 11.4	☑	21.50 Mbd/S	256A	5.590 Mbd/S	96/99MHz	40	NORMAL
2-1	1061 MHz	8PSK TURBO	SNR 11.8	☑	21.50 Mbd/S	256A	5.590 Mbd/S	30/261MHz	40	NORMAL
2-1	1149 MHz	8PSK TURBO	SNR 12.4	☑	21.50 Mbd/S	256A	5.590 Mbd/S	32/273MHz	40	NORMAL
2-1	1207 MHz	8PSK TURBO	SNR 11.9	☑	21.50 Mbd/S	256A	5.590 Mbd/S	32/273MHz	41	NORMAL
2-1	1236 MHz	8PSK TURBO	SNR 11.4	☑	21.50 Mbd/S	256A	5.590 Mbd/S	36/297MHz	40	NORMAL
3-1	1061 MHz	8PSK TURBO	SNR 11.8	☑	21.50 Mbd/S	256A	5.590 Mbd/S	70/501MHz	40	NORMAL
3-1	1149 MHz	8PSK TURBO	SNR 12.4	☑	21.50 Mbd/S	256A	5.590 Mbd/S	72/513MHz	40	NORMAL
3-1	1207 MHz	8PSK TURBO	SNR 11.9	☑	21.50 Mbd/S	256A	5.590 Mbd/S	74/525MHz	40	NORMAL
3-1	1236 MHz	8PSK TURBO	SNR 11.4	☑	21.50 Mbd/S	256A	5.590 Mbd/S	76/537MHz	40	NORMAL
4-1	1061 MHz	8PSK TURBO	SNR 11.8	☑	21.50 Mbd/S	256A	5.590 Mbd/S	132/843MHz	40	NORMAL
4-1	1149 MHz	8PSK TURBO	SNR 12.4	☑	21.50 Mbd/S	256A	5.590 Mbd/S	133/849MHz	40	NORMAL
4-1	1207 MHz	8PSK TURBO	SNR 11.9	☑	21.50 Mbd/S	256A	5.590 Mbd/S	134/855MHz	41	NORMAL
4-1	1236 MHz	8PSK TURBO	SNR 11.4	☑	21.50 Mbd/S	256A	5.590 Mbd/S	135/861MHz	40	NORMAL

STEP 5 - Verify QAM Outputs

Go to the Main > Status page:

1. **Verify all output parameters are set properly.**

QTPCM-4

ESN: 2015040571 Temperature: 97.6°F Uptime: 0d 0h 55m 29s
Headend Name: Location:

Main | Network | Time | Event Log | Update | Logout

Status | Input Config | Output Config | Refresh

Input					QAM Output		
Inp	Frequency	Modulation	Input Status	Input Baud Rate	QTM module	Channel	Status
1-1	1061 MHz	8PSK TURBO	SNR 11.8	21.50 Mbd/S	1-a	2	NORMAL
1-1	1149 MHz	8PSK TURBO	SNR 12.3	21.50 Mbd/S	1-b	4	NORMAL
1-1	1207 MHz	8PSK TURBO	SNR 11.9	21.50 Mbd/S	1-c	6	NORMAL
1-1	1236 MHz	8PSK TURBO	SNR 11.3	21.50 Mbd/S	1-d	96	NORMAL
2-1	1061 MHz	8PSK TURBO	SNR 11.8	21.50 Mbd/S	2-a	30	NORMAL
2-1	1149 MHz	8PSK TURBO	SNR 12.4	21.50 Mbd/S	2-b	32	NORMAL
2-1	1207 MHz	8PSK TURBO	SNR 11.9	21.50 Mbd/S	2-c	32	NORMAL
2-1	1236 MHz	8PSK TURBO	SNR 11.4	21.50 Mbd/S	2-d	36	NORMAL
3-1	1061 MHz	8PSK TURBO	SNR 11.7	21.50 Mbd/S	3-a	70	NORMAL
3-1	1149 MHz	8PSK TURBO	SNR 12.4	21.50 Mbd/S	3-b	72	NORMAL
3-1	1207 MHz	8PSK TURBO	SNR 11.9	21.50 Mbd/S	3-c	74	NORMAL
3-1	1236 MHz	8PSK TURBO	SNR 11.3	21.50 Mbd/S	3-d	76	NORMAL
4-1	1061 MHz	8PSK TURBO	SNR 11.8	21.50 Mbd/S	4-a	132	NORMAL
4-1	1149 MHz	8PSK TURBO	SNR 12.3	21.50 Mbd/S	4-b	133	NORMAL
4-1	1207 MHz	8PSK TURBO	SNR 11.9	21.50 Mbd/S	4-c	134	NORMAL
4-1	1236 MHz	8PSK TURBO	SNR 11.3	21.50 Mbd/S	4-d	135	NORMAL

Please visit our website at www.blondertongue.com to download the latest QTPCM-4 Instruction Manual (PDF document). First time website visitors are required to complete a short registration process prior to accessing product information. Once signed in, you can quickly navigate to the QTPCM-4 product page by simply searching on "QTPCM-4". The Instruction Manual can be found under the "Documents" tab.