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.



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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".

	QTPCM-4	1
ESN: 2015040571 Headend Name:	Temperature: 97.5°F	Uptime: 0d 1h 45m 47s Location:
	.ogin sername: Admin assword: •••• Submit	

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.

Select the L-band input satellite feed for the desired transponder based on rear panel connections.

- 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.

		ES He	N: 201504057 adend Name:	1	Tempera	iture: 97.8º	F Uptim Locat	ie: Od Oh 58m 21 ion:	s	
Main <u>Network</u> <u>Time</u>					Event L	.og	Update	Lo	gout	
Status		Input Co	nfig	Output (Config		Refresh			
				Input				QAM Output		
1 F 3	cy L-Band II	2	Inp	ut Status	4	Input Bau	d Rate	Input Modulation	Channel	Status
1a 1061	MHz 🖲 1	2 0 3 0	4 SN	R 11.8	~	21.50 Mb	i/S	8PSK TURBO	2	NORMAL
1b 1149	MHz • 1	2030	4 SN	R 12.4	◄	21.50 Mbd	i/S	8PSK TURBO	4	NORMAL
1c 1207	MHz • 1	02030	4 <mark>SN</mark>	R 11.9	◄	21.50 Mbd	l/S	8PSK TURBO	6	NORMAL
1d 1236	MHz 🖲 1	02030	4 SN	R 11.4	~	21.50 Mbd	l/S	8PSK TURBO	96	NORMAL
2a 1061	MHz • 1	02030	C4 SNR 11.8		◄	21.50 Mbd/S		8PSK TURBO	30	NORMAL
2b 1149	MHz • 1	02030	C4 SNR 12.4		◄	21.50 Mbd/S		8PSK TURBO	32	NORMAL
2c 1207	MHz 🖲 1	2 0 3 0	2 0 3 0 4 SNR			21.50 Mbd/S		8PSK TURBO	32	NORMAL
2d 1236	MHz • 1	02030	4 <mark>SN</mark>	R 11.4	◄	21.50 Mbd	l/S	8PSK TURBO	36	NORMAL
3a 1061	MHz 🖲 1	02030	4 SN	R 11.8	◄	21.50 Mbd	l/S	8PSK TURBO	70	NORMAL
3b 1149	MHz • 1	02030	4 <mark>SN</mark>	R 12.4	◄	21.50 Mbd	i/S	8PSK TURBO	72	NORMAL
3c 1207	MHz • 1	2 0 3 0	4 SN	R 12.0	▼	21.50 Mbd	l/S	8PSK TURBO	74	NORMAL
3d 1236	MHz 🖲 1	2 0 3 0	4 SN	R 11.4		21.50 Mb	i/S	8PSK TURBO	76	NORMAL
4a 1061	MHz 💿 1	2 0 3 0	4 <mark>SN</mark>	R 11.8	▼	21.50 Mb	i/S	8PSK TURBO	132	NORMAL
4b 1149	MHz 🖲 1	2 0 3 0	4 SN	R 12.4	~	21.50 Mb	1/S	8PSK TURBO	133	NORMAL
4c 1207	MHz 🖲 1	2 0 3 0	4 SN	R 11.9		21.50 Mb	1/S	8PSK TURBO	134	NORMAL
4d 1236	MHz • 1	02030	4 SN	R 11.4	◄	21.50 Mbd	J/S	8PSK TURBO	135	NORMAL

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.

		ESI Hea	N: 2015040 adend Nam)571 e:	Terr	perature: 97	.6°F Uptime Locatio	: Od Oh 55n on:	1 29s			
lain	Netwo	<u>ork</u>	Time	1	Eve	ent Log	<u>Update</u>		Logout			
<u>s</u>	Status	Input Cor	nfig	Output	Config		<u>Refresh</u>					
			l. I	nput 🕧					QAM Output			
Inp	Frequency Modulation		Input Sta	Input Status Input Ba		Baud Rate		Channel	Status			
1-1	1061 MHz	8PSK T	URBO	SNR 11.	В	2	21.50 Mbd/S		2	NORMAL		
1-1	1149 MHz	8PSK T	URBO	SNR 12.3	3	21.50 Mbd/S		1-b	4	NORMAL		
1-1	1207 MHz	8PSK T	URBO	SNR 11.	Ð	2	1.50 Mbd/S	1-c	6	NORMAL		
1-1	1236 MHz	8PSK T	8PSK TURBO		SNR 11.3		21.50 Mbd/S		96	NORMAL		
2-1	1061 MHz	8PSK T	8PSK TURBO		SNR 11.8		21.50 Mbd/S		30	NORMAL		
2-1	1149 MHz	8PSK T	8PSK TURBO		SNR 12.4		21.50 Mbd/S		32	NORMAL		
2-1	1207 MHz	8PSK T	8PSK TURBO		SNR 11.9		21.50 Mbd/S		32	NORMAL		
2-1	1236 MHz	8PSK T	URBO	SNR 11.4	SNR 11.4		21.50 Mbd/S		36	NORMAL		
3-1	1061 MHz	8PSK T	URBO	SNR 11.	SNR 11.7		21.50 Mbd/S		70	NORMAL		
3-1	1149 MHz	8PSK T	URBO	SNR 12.4	4	2	1.50 Mbd/S	3-b	72	NORMAL		
3-1	1207 MHz	8PSK T	URBO	SNR 11.	Ð	21.50 Mbd/S		3-с	74	NORMAL		
3-1	1236 MHz	8PSK T	URBO	SNR 11.3	SNR 11.3		21.50 Mbd/S		76	NORMAL		
4-1	1061 MHz	8PSK T	8PSK TURBO SNR 11		3	2	1.50 Mbd/S	4-a	132	NORMAL		
4-1	1149 MHz	8PSK T	URBO	SNR 12.3	3	2	1.50 Mbd/S	4-b	133	NORMAL		
4-1	1207 MHz	8PSK T	URBO	SNR 11.9	Ð	2	1.50 Mbd/S	4-c	134	NORMAL		
4-1	1236 MHz	8PSK T	URBO	SNR 11.3	3	2	1.50 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.

Set all Status values to normal.

	_		Headend Nar	ne:	5.11		Location:			
Main Network Time				<u>e</u>	Event Log		Update	Logout		
	Status	In	put Config	Out	out Config	B	efresh			
			Input					QAM Output	6	
Inp	Frequency	Modulatio	n Input Status	Auto	Inp BdRt	QAM Mode	QAM BdRt	1) Channel (STD)	RF 2 Level dBmV	Status
1-1	1061 MHz	8PSK TU	RBO SNR 11	9 🔽	21.50 Mbd/S	256A	5.590 Mbd/S	2/57MHz 💌	40 💌	NORMAL -
1-1	1149 MHz	8PSK TU	RBO SNR 12	4	21.50 Mbd/S	256A	5.590 Mbd/S	4/69MHz 💌	40	NORMAL -
1-1	1207 MHz	8PSK TU	RBO SNR 11	9 🔽	21.50 Mbd/S	256A	5.590 Mbd/S	6/85MHz 💌	40	NORMAL -
1-1	1236 MHz	8PSK TU	RBO SNR 11	4 🔽	21.50 Mbd/S	256A	5.590 Mbd/S	96/99MHz 💌	40	NORMAL -
2-1	1061 MHz	8PSK TU	RBO SNR 11	8 🔽	21.50 Mbd/S	256A	5.590 Mbd/S	30/261MHz 💌	40 💌	NORMAL -
2-1	1149 MHz	8PSK TU	RBO SNR 12	4 🔽	21.50 Mbd/S	256A	5.590 Mbd/S	32/273MHz 💌	40	NORMAL
2-1	1207 MHz	8PSK TU	RBO SNR 11	9	21.50 Mbd/S	256A	5.590 Mbd/S	32/273MHz 💌	41	NORMAL -
2-1	1236 MHz	8PSK TU	RBO SNR 11	4	21.50 Mbd/S	256A	5.590 Mbd/S	36/297MHz 💌	40	NORMAL -
3-1	1061 MHz	8PSK TU	RBO SNR 11	8	21.50 Mbd/S	256A	5.590 Mbd/S	70/501MHz 💌	40 💌	NORMAL -
3-1	1149 MHz	8PSK TU	RBO SNR 12	4 🗹	21.50 Mbd/S	256A	5.590 Mbd/S	72/513MHz 💌	40	NORMAL -
3-1	1207 MHz	8PSK TU	RBO SNR 11	9 🗹	21.50 Mbd/S	256A	5.590 Mbd/S	74/525MHz 💌	40	NORMAL -
3-1	1236 MHz	8PSK TU	RBO SNR 11	4	21.50 Mbd/S	256A	5.590 Mbd/S	76/537MHz 💌	40	NORMAL -
4-1	1061 MHz	8PSK TU	RBO SNR 11	8 🔽	21.50 Mbd/S	256A	5.590 Mbd/S	132/843MHz 💌	40 💌	NORMAL -
4-1	1149 MHz	8PSK TU	RBO SNR 12	4 🔽	21.50 Mbd/S	256A	5.590 Mbd/S	133/849MHz 💌	40	NORMAL -
4-1	1207 MHz	8PSK TU	RBO SNR 11	9 🔽	21.50 Mbd/S	256A	5.590 Mbd/S	134/855MHz 💌	41	NORMAL
4-1	1236 MHz	8PSK TU	RBO SNR 11	4 🔽	21.50 Mbd/S	256A	5.590 Mbd/S	135/861MHz -	40	NORMAL -

Click Submit.

STEP 5 - Verify QAM Outputs

Go to the Main > Status page:



Verify all output parameters are set properly.

		ES He	SN: 20150405 adend Name:	71	C	DTPC	CM- 7.6⁰F	4 Uptime: Location	0d 0h 55m n:	1 29s															
<u>Main</u>	Netwo	<u>ırk</u>	<u>Time</u>		Eve	nt Log Update				Logout															
<u>S</u>	itatus	Output Config Refresh						QAM	Output																
Inp	Frequency Modulation Input		Input Stat	out Status Input B		ut Baud Rate		t Baud Rate QTM module Channel		Channel	Status														
1-1	1061 MHz	8PSK	TURBO	SNR 11.8			21.50 N	bd/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	8PSK TURBO		SNR 11.8		21.50 Mbd/S		2-a	30	NORMAL														
2-1	1149 MHz	8PSK	PSK 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 N	bd/S	3-а	70	NORMAL														
3-1	1149 MHz	8PSK	TURBO	SNR 12.4			21.50 Mbd/S		21.50 Mbd/S		3-b	72	NORMAL												
3-1	1207 MHz	8PSK	TURBO	SNR 11.9			21.50 Mbd/S		21.50 Mbd/S		21.50 Mbd/S 3-c 74		74	NORMAL											
3-1	1236 MHz	8PSK	TURBO	SNR 11.3	2 11.3		.3		SNR 11.3		SNR 11.3		NR 11.3		21.50 Mbd/S		21.50 Mbd/S		21.50 Mbd/S		21.50 Mbc		3-d	76	NORMAL
4-1	1061 MHz	8PSK	TURBO	SNR 11.8		21.50 Mbd/S		bd/S	4-a	132	NORMAL														
4-1	1149 MHz	8PSK	TURBO	SNR 12.3		21.		21.50 Mbd/S		bd/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 N	bd/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.

