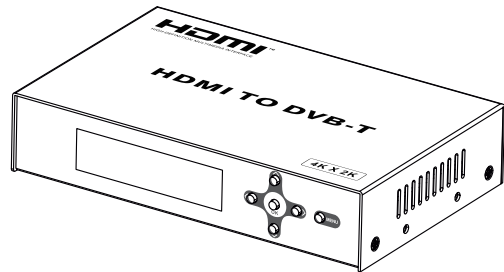


# HDMI To DVB-T Converter

## User Manual



### Disclaimer

The product name and brand name may be registered trademark of related manufactures. ™ and ® may be omitted on the user manual. The pictures in this user manual are just for reference. We reserve the rights to make changes without further notice to a product or system described herein to improve reliability, function or design.

**HDMI™**  
HIGH-DEFINITION MULTIMEDIA INTERFACE

The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI Trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

**Please read below safety instructions carefully before installation and operation:**

- Please pay attention to all the warnings and hints on this device.
- Do not expose this unit to rain, moisture and liquid.
- Do not put any stuff into the device.
- Do not repair or open this device without professional people's guidance.
- Make sure good ventilation openings to avoid product overheating damage.
- Shut off power and make sure environment is safe before installation.
- Do not plug-in/out the connected cables when it is in using.
- Use DC12V/1A power adapter. Make sure the specification matched if using 3<sup>rd</sup> party DC adapters.

**• Product Introduce**

This is an HDMI to DVB-T Converter, perfect solution to distribute HDMI signal to DVB-T standard digital cable television via coaxial cables. Output can be set as any channel number and distributed to all the TV's in the system directly via CATV splitter, coexisting with all your current regular channels. Multiple this HDMI to DVB-T converter can be installed to distribute as many channels as you need. It's a perfect solution for monitor systems, outdoor large screen display, shopping mall advertisement, media education fields etc.

**• Package Contents**



Converter x1pc



Power adapter x1pc



User manual x1pc



Wall-mount kit x2pcs



Screws x4pcs

## • Installation

1. Source devices (Device with HDMI Port, like PS3, Set-top box, DVD and PC etc.)
2. Display devices (TV with build-in DVB-T, or standard DVB-T Set-top box )
3. Cables ( 26AWG standard HDMI cable, 75-5 [75Ω] standard Coaxial Cable)
4. CATV Splitter if needed

## • Features

1. Metal housing, stable and durable
2. Wall-mounted function, easy installation
3. Strong anti-noise and anti-interference ability
4. Supports multiple modulators to be installed to distribute as many channels you need
5. Distribute one source to multiple displays with one modulator via CATV splitter
6. Supports DVB-T digital high definition RF signal output
7. HDMI input resolution up to 3840x2160@60Hz, RF output signal resolution up to 3840x2160@30Hz
8. Lightning protection, surge protection, ESD protection

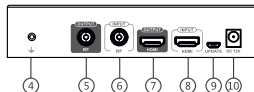
## • Panel Description

### Front Panel



- ① LCM Screen
- ② Navigatishn button
- ③ Menu button
- ④ GND
- ⑤ RF output

### Back Panel



- ⑥ RF input
- ⑦ HDMI output
- ⑧ HDMI input
- ⑨ Micro USB port: Used for firmware upgrade
- ⑩ Power port: (DC12V/1A)

## • Panel Operation

### Button introduction

**LCM screen:** It presents the selected menu and the parameter settings when power on.

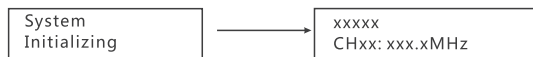
**Left/Right/Up/Down buttons:** use these buttons to turn the screen pages, shift the target items by moving the triangle, or change the parameter settings.

**OK button:** Use this button to enter a submenu or save a new setting after adjustment.

**Menu button:** Press this button to enter the main menu interface, or step back.

### Initial status

Below status will be displayed when power on:



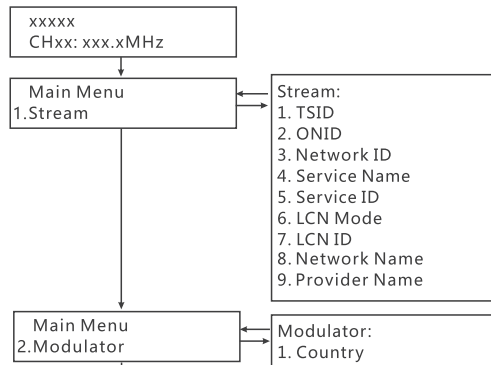
**xxxxx:** indicate the service name of the device

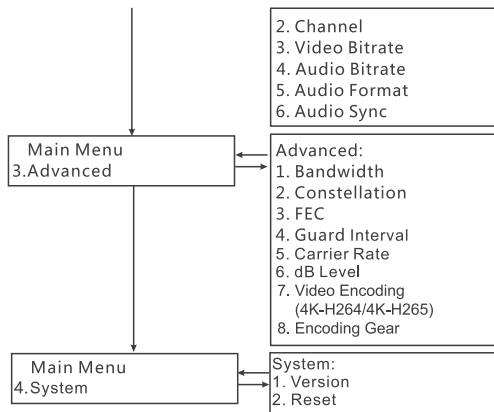
**CHxx:** indicate the current channel of the device

**xxx.xMHz:** indicate the current output frequency of the device

### General setting for Menu

When the power is connected, the LCM menu goes as below chart





All above page/main menu/submenu can be moved/chose/set by the panel button:

- 1) Stream: User can view or adjust TSID(Transport Stream ID),ONID (Original Network ID), Network ID, Service Name, Service ID, LCN (Logical channel number) Mode, LCN ID, Network Name and Provider Name
- 2) Country: User can choose country and area under submenu Modulator, there are fifteen options: France, Greece, Ireland, Germany, UK, Spain, Finland, Sweden, Italy, Denmark, Netherlands, Norway, Portugal, New zealand, Australia
- 3) Channel: User can choose Channel under submenu Modulator
- 4) Video Bitrate: Adjust in the range of 1~24Mbps
- 5) Audio Bitrate: Select audio bit rate among 64, 96, 128, 192, 256, 320
- 6) Audio Format: Select audio format between MPEG and AAC

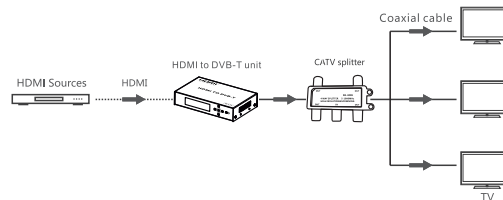
- 7) Audio Sync: Adjust in the range of -400~400
- 8) Bandwidth: Choose between 6M, 7M and 8M
- 9) Constellation: Choose between 16QAM, 64QAM and QPSK
- 10) FEC: Choose between 1/2, 2/3, 3/4, 5/6, 7/8
- 11) Guard Interval: Choose between 1/4, 1/8, 1/16 or 1/32  
Default is: 1/32
- 12) Carrier Rate: Choose between 2K and 8K
- 13) dB Level: Adjust it at range of -10dBm~-+20dBm
- 14) Video Encoding: Choose between 4K-H264 and 4K-H265
- 15) Encoding Gear: Choose between H (High), M (Middle), and L (Low)
- 16) Version: It shows the version information of the device
- 17) Reset: Choose the factory's default configuration

## • Connection and operation

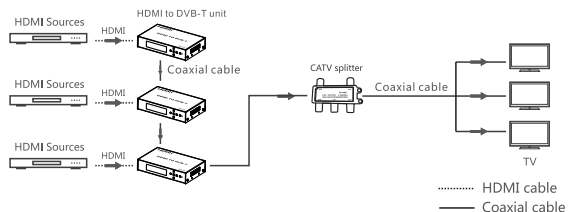
1. Point to point



2. Point to multi-point



### 3. Multi-point to multi-point



#### Connection instructions :

- 1) Step 1- Connect HDMI source device with the HDMI to DVB-T Converter by HDMI cables
- 2) Step 2- Connect the RF output of this HDMI to DVB-T Converter with DVB-T standard digital CATV or set-top box via coaxial cable
- 3) Step 3- Connect with power supply, choose country and channel, this device works

### • FAQ

Q: Image is not normal after setting channel (splash screen, disturbance, mosaic etc)?

A: Restart, and make sure coaxial cable connection is stable, or try other channel for testing.

Q: TV displays "NO SIGNAL" on screen?

A: 1 ) Please check if there is a HDMI signal input;

- 2 ) Try to connect the signal source directly to display device to see if there is signal output from source device or change the signal source, HDMI wire and try again.

### • Specification

Item	Specification
HDMI Signal	HDMI 2.0, compatible HDCP 1.4/HDCP 2.2
HDMI DDC Signal	5Vp-p (TTL)
HDMI TMSD Signal	0.5~1.5Vp-p (TMDS)
HDMI Resolution Supported	480p@60Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080P@24/25/30/50/60Hz, 3840x2160@24/25/30/50/60Hz RF OUTPUT: 720p@50/60Hz, 1080P@24/25/30Hz, 3840x2160@24/25/30Hz
Video Encoding	H.264/H.265(4K)
Audio Encoding	MPEG2
Coaxial output Standard	DVB-T
Coaxial Cable required	RG6, RG7, RG11
Frequency	177.5 to 866MHz
Effective Bitrate	Max:24M bits
Insert Loss	+2dBm
RF output Wattage(TX)	-46dBm~-19dBm
RF Interface	British system (75Ω type F)
Delay Time	200-300ms (Depends on the decoding ability of receivers)
Audio Format	MPEG (44.1kbps, 48kbps)
Power	DC12V/1A
Product Consumption	< 8W
Working Temperature	-20~60°C
Stock Temperature	-30~70°C
Relative Humidity	0~90%RH (No Condensation)
Product Dimension	158x115x33mm
Weight	476g
Color	Black

## Appendix 1:

List of some DVB-T standard countries or regions (58 countries). For full information, please visit:  
<https://www.itu.int/en/ITU-D/Spectrum-Broadcasting/DSO/Pages/dataminer.aspx>

Algeria	Lithuania
Andorra	Luxembourg
Australia	Malta
Austria	Marshall Islands
Azerbaijan	Mauritius
Belarus	Morocco
Belgium	Netherlands
Bosnia and Herzegovina	Netherlands Antilles
Brunei Darussalam	New Zealand
Bulgaria	North Macedonia
Cambodia	Norway
Colombia	Panama
Croatia	Poland
Cyprus	Portugal
Czech Republic	Russian Federation
Denmark	Rwanda
Estonia	Saudi Arabia
Finland	Slovak Republic
France	Slovenia
Germany	Spain
Greece	Sudan
Hungary	Sweden
Iceland	Switzerland
India	Tunisia
Iran	United Kingdom of Great Britain and Northern Ireland
Ireland	Uzbekistan
Israel	Vatican
Italy	Viet Nam
Lao People s Democratic Republic	
Latvia	

## Appendix 2: RF Channel vs Center Frequency (MHz) Map

Germany		UK		Spain		Finland	
RF Ch.	Center Frequency (MHz)	RF Ch.	Center Frequency (MHz)	RF Ch.	Center Frequency (MHz)	RF Ch.	Center Frequency (MHz)
5	177.5	N/A	N/A	5	177.5	5	177.5
6	184.5	N/A	N/A	6	184.5	6	184.5
7	191.5	N/A	N/A	7	191.5	7	191.5
8	198.5	N/A	N/A	8	198.5	8	198.5
9	205.5	N/A	N/A	9	205.5	9	205.5
10	212.5	N/A	N/A	10	212.5	10	212.5
11	219.5	N/A	N/A	11	219.5	11	219.5
12	226.5	N/A	N/A	12	226.5	12	226.5
21	474	21	474	21	474	21	474
22	482	22	482	22	482	22	482
23	490	23	490	23	490	23	490
24	498	24	498	24	498	24	498
25	506	25	506	25	506	25	506
26	514	26	514	26	514	26	514
27	522	27	522	27	522	27	522
28	530	28	530	28	530	28	530
29	538	29	538	29	538	29	538
30	546	30	546	30	546	30	546
31	554	31	554	31	554	31	554
32	562	32	562	32	562	32	562
33	570	33	570	33	570	33	570
34	578	34	578	34	578	34	578
35	586	35	586	35	586	35	586
36	594	36	594	36	594	36	594
37	602	37	602	37	602	37	602
38	610	38	610	38	610	38	610

39	618	39	618	39	618	39	618
40	626	40	626	40	626	40	626
41	634	41	634	41	634	41	634
42	642	42	642	42	642	42	642
43	650	43	650	43	650	43	650
44	658	44	658	44	658	44	658
45	666	45	666	45	666	45	666
46	674	46	674	46	674	46	674
47	682	47	682	47	682	47	682
48	690	48	690	48	690	48	690
49	698	49	698	49	698	49	698
50	706	50	706	50	706	50	706
51	714	51	714	51	714	51	714
52	722	52	722	52	722	52	722
53	730	53	730	53	730	53	730
54	738	54	738	54	738	54	738
55	746	55	746	55	746	55	746
56	754	56	754	56	754	56	754
57	762	57	762	57	762	57	762
58	770	58	770	58	770	58	770
59	778	59	778	59	778	59	778
60	786	60	786	60	786	60	786
61	794	61	794	61	794	61	794
62	802	62	802	62	802	62	802
63	810	63	810	63	810	63	810
64	818	64	818	64	818	64	818
65	826	65	826	65	826	65	826
66	834	66	834	66	834	66	834
67	842	67	842	67	842	67	842
68	850	68	850	68	850	68	850
69	858	69	858	69	858	69	858

70	866			70	866	70	866
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Sweden		Italy		France		Denmark	
RF Ch.	Center Frequency (MHZ)	RF Ch.	Center Frequency (MHZ)	RF Ch.	Center Frequency (MHZ)	RF Ch.	Center Frequency (MHZ)
5	177.5	5	177.5	5	177.5	5	177.5
6	184.5	6	184.5	6	184.5	6	184.5
7	191.5	7	191.5	7	191.5	7	191.5
8	198.5	8	198.5	8	198.5	8	198.5
9	205.5	9	205.5	9	205.5	9	205.5
10	212.5	10	212.5	10	212.5	10	212.5
11	219.5	11	219.5	11	219.5	11	219.5
12	226.5	12	226.5	12	226.5	12	226.5
21	474	21	474	21	474	21	474
22	482	22	482	22	482	22	482
23	490	23	490	23	490	23	490
24	498	24	498	24	498	24	498
25	506	25	506	25	506	25	506
26	514	26	514	26	514	26	514
27	522	27	522	27	522	27	522
28	530	28	530	28	530	28	530
29	538	29	538	29	538	29	538
30	546	30	546	30	546	30	546
31	554	31	554	31	554	31	554
32	562	32	562	32	562	32	562
33	570	33	570	33	570	33	570
34	578	34	578	34	578	34	578
35	586	35	586	35	586	35	586
36	594	36	594	36	594	36	594
37	602	37	602	37	602	37	602

38	610	38	610	38	610	38	610
39	618	39	618	39	618	39	618
40	626	40	626	40	626	40	626
41	634	41	634	41	634	41	634
42	642	42	642	42	642	42	642
43	650	43	650	43	650	43	650
44	658	44	658	44	658	44	658
45	666	45	666	45	666	45	666
46	674	46	674	46	674	46	674
47	682	47	682	47	682	47	682
48	690	48	690	48	690	48	690
49	698	49	698	49	698	49	698
50	706	50	706	50	706	50	706
51	714	51	714	51	714	51	714
52	722	52	722	52	722	52	722
53	730	53	730	53	730	53	730
54	738	54	738	54	738	54	738
55	746	55	746	55	746	55	746
56	754	56	754	56	754	56	754
57	762	57	762	57	762	57	762
58	770	58	770	58	770	58	770
59	778	59	778	59	778	59	778
60	786	60	786	60	786	60	786
61	794	61	794	61	794	61	794
62	802	62	802	62	802	62	802
63	810	63	810	63	810	63	810
64	818	64	818	64	818	64	818
65	826	65	826	65	826	65	826
66	834	66	834	66	834	66	834
67	842	67	842	67	842	67	842
68	850	68	850	68	850	68	850

69	858	69	858	69	858	69	858
70	866	70	866			70	866

Greece		Ireland		Nether lands		Norway	
RF Ch.	Center Frequency (MHZ)	RF Ch.	Center Frequency (MHZ)	RF Ch.	Center Frequency (MHZ)	RF Ch.	Center Frequency (MHZ)
5	177.5	5	177.5	5	177.5	5	177.5
6	184.5	6	184.5	6	184.5	6	184.5
7	191.5	7	191.5	7	191.5	7	191.5
8	198.5	8	198.5	8	198.5	8	198.5
9	205.5	9	205.5	9	205.5	9	205.5
10	212.5	10	212.5	10	212.5	10	212.5
11	219.5	11	219.5	11	219.5	11	219.5
12	226.5	12	226.5	12	226.5	12	226.5
21	474	21	474	21	474	21	474
22	482	22	482	22	482	22	482
23	490	23	490	23	490	23	490
24	498	24	498	24	498	24	498
25	506	25	506	25	506	25	506
26	514	26	514	26	514	26	514
27	522	27	522	27	522	27	522
28	530	28	530	28	530	28	530
29	538	29	538	29	538	29	538
30	546	30	546	30	546	30	546
31	554	31	554	31	554	31	554
32	562	32	562	32	562	32	562
33	570	33	570	33	570	33	570
34	578	34	578	34	578	34	578
35	586	35	586	35	586	35	586
36	594	36	594	36	594	36	594

37	602	37	602	37	602	37	602
38	610	38	610	38	610	38	610
39	618	39	618	39	618	39	618
40	626	40	626	40	626	40	626
41	634	41	634	41	634	41	634
42	642	42	642	42	642	42	642
43	650	43	650	43	650	43	650
44	658	44	658	44	658	44	658
45	666	45	666	45	666	45	666
46	674	46	674	46	674	46	674
47	682	47	682	47	682	47	682
48	690	48	690	48	690	48	690
49	698	49	698	49	698	49	698
50	706	50	706	50	706	50	706
51	714	51	714	51	714	51	714
52	722	52	722	52	722	52	722
53	730	53	730	53	730	53	730
54	738	54	738	54	738	54	738
55	746	55	746	55	746	55	746
56	754	56	754	56	754	56	754
57	762	57	762	57	762	57	762
58	770	58	770	58	770	58	770
59	778	59	778	59	778	59	778
60	786	60	786	60	786	60	786
61	794	61	794	61	794	61	794
62	802	62	802	62	802	62	802
63	810	63	810	63	810	63	810
64	818	64	818	64	818	64	818
65	826	65	826	65	826	65	826
66	834	66	834	66	834	66	834
67	842	67	842	67	842	67	842

68	850	68	850	68	850	68	850
69	858	69	858	69	858	69	858
70	866	70	866	70	866	70	866

Portugal		New zealand		Australia	
RF Ch.	Center Frequency (MHZ)	RF Ch.	Center Frequency (MHZ)	RF Ch.	Center Frequency (MHZ)
21	474	25	506	6	177.5
22	482	26	514	7	184.5
23	490	27	522	8	191.5
24	498	28	530	9	198.5
25	506	29	538	9A	205.5
26	514	30	546	10	212.5
27	522	31	554	11	219.5
28	530	32	562	12	226.5
29	538	33	570	28	529.5
30	546	34	578	29	536.5
31	554	35	586	30	543.5
32	562	36	594	31	550.5
33	570	37	602	32	557.5
34	578	38	610	33	564.5
35	586	39	618	34	571.5
36	594	40	626	35	578.5
37	602	41	634	36	585.5
38	610	42	642	37	592.5
39	618	43	650	38	599.5
40	626	44	658	39	606.5
41	634	45	666	40	613.5
42	642	45	674	41	620.5
43	650	47	682	42	627.5

44	658	48	690	43	634.5
45	666			44	641.5
46	674			45	648.5
47	682			46	655.5
48	690			47	662.5
49	698			48	669.5
50	706			49	676.5
51	714			50	683.5
52	722			51	690.5
53	730			52	697.5
54	738			53	704.5
55	746			54	711.5
56	754			55	718.5
57	762			56	725.5
58	770			57	732.5
59	778			58	739.5
60	786			59	746.5
61	794			60	753.5
62	802			61	760.5
63	810			62	767.5
64	818			63	774.5
65	826			64	781.5
66	834			65	788.5
67	842			66	795.5
68	850			67	802.5
69	858			68	809.5
				69	816.5