



DHM-2060 DVB-T SD&HD Encoder & Modulator with USB

Home Use



User manual V1.2

Thank you for buying this encoder modulator.

Please read this manual carefully to install, use and maintain the encoder modulator in the best conditions of performance. Keep this manual for future reference.

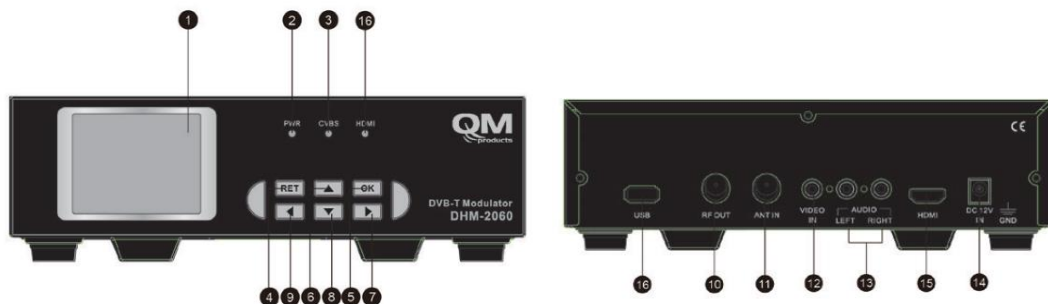
Directory

CHAPTER 1 Product Introductions	1
Technical Specifications.....	1
CHAPTER 2 Safety Instruction and Installations	3
CHAPTER 3 Operations and Management	3,5,6,7
NOTES	

CHAPTER 1 Product Introductions

General Description

QM-products DHM-2060 HD&SD encoder & modulator is designed based on consumer electronics which allow audio/video signal input in TV distributions with applications in home entertainment, surveillance control, hotel Digital Signage, shops etc.



NO	Description	FUNCTION
1	LCD Screen	Video display
2	PWR	Power indicator light
3	CVBS	CVBS indicator light
4	RETURN	Return submenu and save settings
5	OK	Confirm the current operation
6	Y	Change the frequency point or cursor up
7	B	Switch settings in menu or cursor right
8	Z	Change the frequency point or cursor down
9	A	Switch settings in menu or cursor left
10	RF OUT	Rf output port
11	ANT IN	Terrestrial Digital signal input port
12	VIDEO IN	Composited video input port supports NTSC and PAL
13	AUDIO IN	Stereo audio signal input port
14	DC 12V IN	Connect to Adaptor Input
15	HDMI IN	HDMI signal input port
16	USB	Use for software upgrade

2. TECHNICAL SPECIFICATION

Modulator	Standard	DVB-T
	Constellation	QPSK / 16QAM / 64QAM
	Bandwidth	6 / 7 / 8 MHz
	Carriers	2K / 8K
	Guard Interval	1/4, 1/8, 1/16, 1/32
	Code Rate	1/2, 2/3, 3/4, 5/6, 7/8
	MER	35 dB
	Frequency Range	50 ~ 860 MHz
	Output Level	70 ~ 100 dBuV
	Output Impedance	75Ω
Video	Input Format	CVBS/HDMI
	Encoding Format	H.264
	Video Resolution	576i PAL / 480i NTSC/1080p
	Connector	RCA/HDMI 1.3
Audio	Input Format	Stereo L/R channel
	Encoding Format	MPEG-1 Audio Layer II
	Connector	RCA
General	Power Source	DC 12V / 1.5A
	Operating Temperature	0 ~ +50°C
	Dimensions	212mm(L) × 121mm(W) × 67mm(H)
	Weight	0.9Kg

- 1.Since the modulator uses MPEG 4 H.264 encoding, users need using DVB-T service which supports standard H.264 encoding for normal display.
- 2.HD program which contains HDCP agreement protection will not play normally, such as Blue-ray Disc and so on.
- 3.If the image and sound are not synchronous, please restart your STB , it will return to normal.

CHAPTER 2 Safety Instruction and Installations

Safety Instructions



WARNING: Hot plug is not allowed since it may cause system halted.

To prevent fire or electrical shock, do not expose the device to rain or moisture.



The encoder modulator is powered with a voltage of 12V DC. The power supply voltage must not exceed the recommended voltage, which otherwise may cause irreparable damage to the device and the invalidation of the warranty. Therefore:

- Do not replace power supply with a voltage greater than 12V DC.
- Do not connect the device to the power if the power cord is damaged.
- Do not plug the device into mains supply until all cables have been connected correctly.
- Do not cut the cord.



Avoid placing the device next to central heating components and in areas of high humidity.

Do not cover the device with elements that obstruct the ventilation slots.

If the encoder modulator has been kept in cold conditions for a long time, keep it in a warm room minimum 2 hours before plugging into the mains.

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutes may result in fire, electric shock or other hazards.

Safety check- Upon completion of any service or repairs to this device, ask the service technician to perform safety checks to determine that the device is in proper condition.

FEATURES

- High level of integration, high-performance, Full-featured, integrated design
- Single input modulator that converts analogue A/V and HDMI source to a DVB-T
- Standard COFDM modulation and H.264 encoding
- Multiple video format compatibility including 576i(PAL) / 480i(NTSC) / 1080p
- Bandwidth: 6/7/8MHz
- Frequency range: 50~860MHz
- Continuously adjustable RF signal output level range 70dBuV from 100dBuV, step 1dBuV
- 2.4-inch color LCD display
- Carriers 2K and 8K
- User friendly setup and control
- Desk and wall mount

CHAPTER 3 Operations and Management

DHM-2060 is controlled and managed through the key board and 2.4-inch color LCD display.



LCD Display – It presents the selected menu and the parameter settings. The backlight in the display is on when the power is applied.

LED – These lights indicate the working status

- Power: It lights up when the power supply is connected.
- CVBS: It lights up when the input is switched on
- HDMI: It lights up when the input is switched 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 in the program mode.

OK – Use this button to enter a submenu or save a new setting after adjustment; press it to start adjusting the value of certain items with Up/Down buttons

RET – Press this button to step back

DVB-T: modulating standard; XX.XXX MHz the current output frequency



Main Menu



Please press OK into the main menu.



DVB Settings

- Country: press AB key to enter country list, and use YZ key to select a country, then press OK to confirm.
- Channel Name: press AB key to change the channel number.
- Frequency: frequency setting in range of 50~860MHz, press AB key to move cursor and press YZ key to change numbers.
- Bandwidth: press AB key to select bandwidth of 6/7/8MHz.
- Carrier: carrier setting, press AB key to select 2K or 8K.
- Modulate: modulation mode setting, press AB key to select QPSK, 16QAM or 64QAM.
- FEC code rate setting, press AB key to select 1/2, 2/3, 3/4, 5/6 or 7/8.
- Guard Interval: press AB key to select 1/4, 1/8, 1/16, 1/32.
- Program Name: : use YZAB key to edit program name.

TS Settings



- LCN (Logical channel number).
- LCN mode (auto ,UK Europe ,NorDig ,Australia).
- Network name.
- Network ID.
- Original ID.
- TS ID.
- Service ID .
- PMT PID.
- Video PID.
- Audio PID .

Please make sure that the (PMT , Video en Audio PID is different values)

AV Settings



- Video Bit rate adjust in the range 1.000~20.000 Mbps of Auto.
- Select audio bit rate among 64~320 kbps.

System Setup



- OSD Language: press AB key to change language.
- RF Output Level: RF output level setting, press AB key to change value in range of 70~100dBuV.
- Signal Source: press AB key to choose HDMI ,CVBS or Auto.
- Key Tone: press AB key to ON/OFF key tone.
- Service Provider: use YZAB key to edit operator name.
- Password: to set a 8-digit password for unlocking the keyboard.*
- Factory Set: press OK to confirm factory reset.

** factory password:00001111*

** if you don't want to use a password change to 00000000*

** Password forgotten, please contact your reseller*