



USER'S MANUAL



فروشگاه اینترنتی ایتولز
www.etoolsco.com

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1. GUIDE

1.1 IMPORTANT SAFETY INSTRUCTIONS

Thank you for choosing our product. Before installation, we would like to remind you some notes, which is very important for operating safely and properly, as follows:

- Be sure to read this user manual before starting your operation.
- When the unit is suddenly moved to a hot area from a cold area, it may cause some problems. In that case, turn off the power, and turn on again after 1-2 hours.
- Keep modulator placed in clean space with sufficient ventilation.
- Do not cover the modulator with or place it on a unit that emits heat.
- Clean the case by a soft cloth with a little washing liquid.
- Do not remove the cover.
- Do not let the unit exposed to extreme heat, cold or humid conditions.
- No liquids or any other materials to come inside of the unit.

1.2 GENERAL DESCRIPTION

This is a composite video input standard definition DVB-T HD modulator which provides COFDM RF signal in range of 50-860MHz.

It consists of A/D, Coding, Modulation, Frequency conversion which provides bandwidth of 6/7/8MHz to select.

It is designed to achieve HD input, and it only supports standard H.264 encoding.

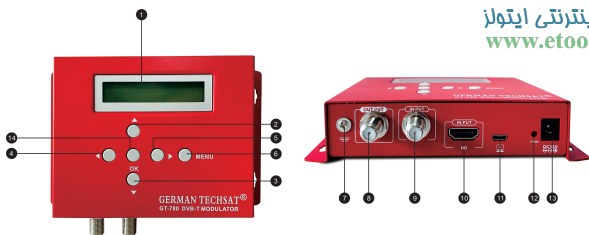
It is an excellent choice to transport HD signals from TV satellite receivers, surveillance camera or video/media players to a LCD TV or set-top-box.

It can be used in series with other modulator so the number of channels in the coaxial cable no the SMATV system can be increased as desired.

1.3 PRODUCT OVERVIEW & ILLUSTRATION



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No	Description	Function
1	LCD Screen	Video display
2	▲	Change number or cursor up
3	▼	Change number or cursor down
4	◀	Switch settings in menu or cursor left
5	▶	Switch settings in menu or cursor right
6	MENU	Enter main menu or return to superior menu
7	GND	Connect to ground
8	RF OUT	RF output port

No	Description	Function
9	RF IN	RF input port
10	HD INPUT	HD signal input port
11	USB	Upgrade by PC
12	PWR	Power indicator light
13	DC 12V	Connect to adaptor input
14	OK	Confirm the current operation



2. FEATURES

- High level of integration, high-performance, Full-featured, integrated design
- Single input modulator that converts HD source to a DVB-T channel
- Standard COFDM modulation and H.264 encoding
- Multiple video format compatibility including 720p / 1080p
- Bandwidth: 6/7/8MHz
- Frequency range: 50~860MHz
- Continuously adjustable RF signal output level range 70dBuV from 100dBuV, step 1dBuV
- 16*2 LCD lattice screen
- Small size and light weight
- Carriers 2K and 8K
- User friendly setup and control
- Compact and wall mountable





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3. QUICK MENU GUIDE

System Booting

CH1	→	Program Name
CH-21 477.0MHz	→	Channel Number & Frequency

Main Menu

1. ProgramName	10. RF Level	19. Version
2. Country	11. LCN	20. Reset
3. Channel	12. Video Bitrate	
4. Frequency	13. Audio Bitrate	
5. Bandwidth	14. NID	
6. Carrier	15. ONID	
7. Modulate	16. TSID	
8. FEC	17. SID	
9. Guard Interval	18. NIT Version	

Submenu

1. ProgramName --> OK -->

2. Country --> OK -->

CH1

▲ ▼ OK ◀ ▶

UK	Germany	Poland
Ukraine	Greece	Romania
Albania	Holland	Russia
Algeria	Hungary	Saudi Arabia
Australia	Iran	Serbia

Austria	Iraq	Singapore
Belgium	Ireland	Slovakia
Brunei	Libya	South Africa
Bulgaria	Lithuania	Spain
China	Italy	Sweden
Croatia	Macedonia	Switzerland
Czech Republic	Netherlands	Taiwan
Denmark	New Zealand	Thailand
Finland	Norway	Tunisia
France	Portugal	Turkey

3. Channel --> OK -->

CH-21 474.0MHz

◀ OK ▶

4. Frequency --> OK -->

Freq: 056.000MHz

▲ ▼ OK ◀ ▶

5. Bandwidth --> OK -->

Bandwidth: 7M

◀ OK ▶

6. Carrier --> OK -->

Carrier: 2K

◀ OK ▶

7. Modulate --> OK -->

Modulate: QAM64

◀ OK ▶

8. FEC --> OK -->

FEC: 7/8

◀ OK ▶

9. Guard Interval --> OK -->

Interval: 1/32

◀ OK ▶

10. RF Level --> OK -->

100dBuV

◀ OK ▶

11. LCN --> OK -->

LCN: 0401

(0-1023) ▲▼OK◀▶

12. Video Bitrate --> OK -->

Vid Bitrate: Auto

◀ OK ▶

13. Audio Bitrate --> OK -->

Aud Bitrate: 192K

◀ OK ▶

14. NID --> OK -->

NID: 12289

(0-65535)▲▼OK◀▶

15. ONID --> OK -->

ONID: 08572

(0-65535)▲▼OK◀▶

16. TSID --> OK -->

TSID: 37491

(0-65535)▲▼OK◀▶

17. SID --> OK -->

SID: 21008

(0-65535)▲▼OK◀▶

18. NIT Version --> OK -->

NIT Version: 0

◀ OK ▶

19. Version

--> OK -->

Modulator Ver
Ver: 3.7

20. Reset

--> OK -->

Factory Reset?
YES No



4. 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
RF Level	69 ~ 100 dBuV
Output Impedance	75Ω
HD	
Compression	H.264 - bitrate 5-15 Mb/s
Video Resolution	1920*1080_60P, 1920*1080_50P; 1920*1080_60i, 1920*1080_50i; 1280*720_60p, 1280*720_50P
Connector	HD
General	
Power Source	DC 12V / 1.5A
Operating Temperature	0 ~ +50°C
Dimensions	125mm(L) × 100mm(W) × 28mm(H)
Weight	0.5Kg



Note:

1. Since the modulator uses H.264 encoding, users need using DVB-T service which supports standard H.264 encoding for normal display.
2. If the image and sound are not synchronous, please insert HD port again, it will return to normal.





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