DYNALINK

A 1129A

HDMI RF Digital DVB-T Modulator
with 4K Loop Output

Operating Instructions

Features

- 1080p modulated resolution
- HDMI 4K pass through
- H.264 video compression
- 30dB MER (typical)
- 100dB output level
- RF TV antenna input
- 177-858MHz frequency
- Includes power supply

Package Contents

1 x HDMI DVB-T Modulator
1 x 12V Power adapter
1 x User Manual

Overview

A high performance HD modulator module able to generate a signal in DVB-T format (Digital Terrestrial Television) from HDMI input. This modulator allows you to distribute any HD device signals (Foxtel, DVD etc) in HD around the home or business with ease. It is equipped with one channel HDMI input, one HDMI out (4K pass-though) and one DVB-T RF out (1080p Max resolution). It also adjusts the compression rate to the available bandwidth.

Specifications

Connections:	
HDMI IN	Max 4K Resolution
HDMI OUT	4K Pass Through
RF Output	1 DVBT RF output with type F female, 75 ohm (Max 1080P resolution)
RF Input	RF Combiner
Modulation	Standard: DVBT (ETSI EN 300 744) Constellation: QPSK, 16QAM, 64QAM Guard Interval: 1/4, 1/8, 1/16, 1/32 FFT Carriers Mode: 2K, 8K Bandwidth: 6MHz, 7MHz, 8MHz, 7-8MHz
Power Supply	12V Adapter
Display	LCD panel @ 2 x 16 characters (on front panel).
Configuration	6 Local keys on front panel
Environmental for operating	Temperature range: 5°C- 40°C Relative Humidity: 80% @ 30°C

Specifications

Source Input:	
Input Channel	101
Video	HDMI
Video System	480i/p, 576i/p, 720p, 1080i/p, 4K(3840x2160 or 4096x2160)
Audio System	HDMI
Compression:	
Video	H.264 Baseline Profile Level4.0
Video Resolution	1080p 25 / 30 Max
Video Bit rate	12Mbps MAX
Audio	MPEG-2 / AAC
Audio Bit rate	192 Kbit/S
DVB insertion tables	SDT, NIT
Editable field	Service Name , Network Name , Provider Name , TS ID , Network ID , Original NET ID, LCN , NIT Version , Private Data ,Country
RF Output:	
Type	1 Multiplex DVBT with a digital TV service
Frequency	177 – 858 MHz
MER	30 dB Min.
Output level	100 dBuV
RF Level Adj	0 dB ~ -30dB
Attenuation step	1dB per step

Note: To be able to see the 4K signal output from HDMI OUT (HDMI Pass through)port, the specifications requirement of connected TV listed; 4K Ultra HD (3840x2160) Resolution, HDMI 2.0, HDCP 2.2/1.4, Support 4K50P/60P, HDMI 2.0 Cable
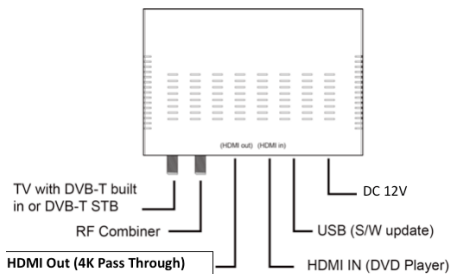
Installation

1. Power Supply:
Connect the external power supply to the 100~230V mains and the 12V to the DC input.
Once connected to power, the device turns on and it takes about 30 seconds to be operational. Then the message "Keyboard Locked" appears on the display.
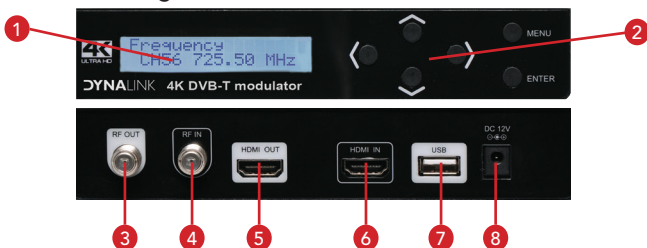
2.Connection Diagram:

ATTENTION!
FOR THIS CONFIGURATION YOU SHOULD USE OUTPUT FREQUENCIES DIFFERENT FROM THE ONES THAT YOUR TV IS CURRENTLY USING.

3. Navigation
The instrument is configured through its 6 keys and front panel display. In general, it is not necessary to configure the instrument to generate a DVB-T signal compatible with any digital terrestrial television receiver.

Product Diagram

1. Display (LCD)
2. Menu navigation keys:

   - ENTER Key : Select parameter, or menu
   - L / R Keys : Move menu, or characters
   - Up / down : Select value of the figure, or field
   - MENU keys : Return to start menu

3. TV COFDM Output
4. RF Combiner
5. 4K Pass Through Output
6. HDMI Input
7. USB: Firmware output only
8. Input 12V DC power adapter (included).

Note: The resolution of the LCD Display is representative of the video resolution of the RF output.
Please refer to below table :

HDMI IN	LCD Display	RF OUT	HDMI OUT (HDMI Pass through)
3840×2160p50/60	1920X1080p50/60	1920X1080p25/30	3840×2160p50/60
1920X1080p50/60	1920X1080p50/60	1920X1080p25/30	1920X1080p50/60
1920X1080p24	1920X1080p24	1920X1080p24	1920X1080p24
1920X1080i50/60	1920X1080i50/60	1920X1080i50/60	1920X1080i50/60
1280X720p50/60	1280X720p50/60	1280X720p50/60	1280X720p50/60
720X576p50	720X576p50	720X576p50	720X576p50
720X576i50	720X576i50	720X576i50	720X576i50
720X480p60	720X480p60	720X480p60	720X480p60
720X480i60	720X480i60	720X480i60	720X480i60

Starting

1. After connecting the power to the instrument, the message "Initial…." "Please Wait..." appears for 37 seconds.
2. Then the message "Keyboard Locked" appears. To access to the configuration menus the user has to enter a password.
3. Press ENTER .
4. The field "Enter Password" appears. Enter the access code. (By default: 0000).
5. Press ENTER .
6. The field "Network Setting" appears, this is the first option on the configuration menu.

Configuration menu

1. Frequency: It sets the frequency value for the output signal. Important: Check that the selected frequency is not already being used by a current television distribution channel.
2. RF Level Adj: It adjusts the power level of the output signal, in dB units. Its range from 0 to -30 dB.
3. Bandwidth: Channel bandwidth. (6, 7 , 8 ,7-8MHz).
4. FFT Carriers: Signal transmission mode. (2K,8K).
5. Guard Interval: Safety signal margin. (1/4, 1/8, 1/16, 1/32).
6. Constellation: Constellation type used to transmit signal (QPSK,16QAM, 64QAM).
7. Code Rate: Available values are (1/2, 2/3, 3/4, 5/6, 7/8).
8. Video Output: Video encode. H.264 of the video output.
9. Audio Output: Audio encode. Selection between MPEG-2 and AAC
10. Video Bitrate: Select video bit rate (2,4,6,8,10,12 Mbit/S).
11. Audio Bitrate: Bitrate to encode the audio. Maximum 192 kbit/s.
12. Service Name: Service name edit.
13. Provider Name: Service provider name edit.
14. Service ID: Service ID edit.
15. LCN: It specifies the index for the service sorting on the digital terrestrial television receiver. Values are between 1 and 999.
16. Country: Country selection for LCN sorting.
17. Original Net ID: Identifier of the original network. It is the number to identify the network from where the signal comes.
18. Network ID: It is the number that identifies the network where the signal is distributed.
19. Network Name: Network name edit.
20. TS ID: It is the transport stream identifier.

Configuration menu

21. NIT Version: Network Information Table version. In some countries it should match with other tables version received from the receiver.
22. Information: It shows the firmware version installed in the modulator. This option is not editable.
23. Apply Setting: It saves the current configuration on the non-volatile memory of the modulator.
24. New Password: It allows the user to change to a new password to access the menu.
25. Load Default: It returns to the default values.

Configuration menu

MAIN		Layer 1	Layer 2	Menu Options
Network Setting	1	Country	Other	Australia,Croatia,Czech,Denmark,Estonia,Finland,France,Ireland, Italy, Latvia, Netherlands, New Zealand, Norway,Poland, Portugal, Slovak, Sweden, UK, Other
	2	Original Net ID	8350	
	3	Network ID	13057	
	4	Network Name	Private Network	
	5	TS ID	128	
	6	NIT Version	28	
CH & Enc Setting	1	Service Name	CH1	
	2	Provider Name	CH1	
	3	Service ID	1	
	4	LCN	1	1~999
	5	Video output	H.264	
	6	Audio Output	MPEG-2	AAC/MPEG-2
	7	Video Bitrate	12 Mbit	2,4,6,8,10,12 Mbit
	8	Audio Bitrate	192 Kbit	
RF Setting	1	Frequency	CH24 533.00MHz	177~857MHz
	2	Constellation	64QAM	QPSK,16QAM,64QAM
	3	Guard Interval	1/32	1/4,1/8,1/16,1/32
	4	Code RATE	7/8	1/2,2/3,3/4,5/6,7/8
	5	FFT Carrier	8K	2K,8K
	6	Bandwidth	6MHz	6,7,8,7-8MHz
	7	RF Level ADJ.	00dB	00~-30dB
Information	1	FW	5.1.2.x.x	
		APP	xx.xx.xx.xx	
Load Default	1	Yes,No		
Change Password	1	0000		

Altronic Distributors warrants this product for one year from date of purchase from Altronics or its resellers to the consumer. If this item is part of an installation or another product, please contact the installer or supplier for your warranty.

During the warranty period, we undertake to repair or replace your product at no charge if found to be defective due to a manufacturing fault. The warranty excludes damage by misuse or incorrect installation (i.e. failure to install and operate device according to specifications in the supplied instruction manual), neglect, shipping accident, or no fault found, nor by use in a way or manner not intended by the supplier.

For repair or service please contact your **PLACE OF PURCHASE.**

If this item was **purchased directly from Altronics** please make a warranty claim by:
1. FOR MAIL ORDER CUSTOMERS (includes school and trade orders),
   a) Ringing us on 1300 797 007 and quoting your tax invoice number.
   b) Upon contacting Altronics, we will issue an R.A. (Return Authorisation). As Altronics have a number of service agents throughout Australia, a copy of the R.A. will be emailed, faxed or mailed to you with full instructions of how and where to send the goods. The freight for shipping goods back to Altronics for all repairs is at the customers expense.
   c) A copy of the R.A. form, (or at the very minimum, the R.A. number) must accompany the goods to effect the repair.
   d) Altronics will pay the return freight to the customer where the warranty claim has been accepted.
   e) Please quote the R.A. number in any correspondence to us.

2. FOR OVER THE COUNTER PURCHASES to make a warranty claim, please return the goods to us in any of our stores, with a copy of your proof of purchase (tax invoice).
   a) Upon leaving the goods at one of our stores, an R.A. number will be issued to you.
   b) Once repaired, you will be contacted, advising that the goods are ready to be collected from the store.

It is at Altronics discretion as to whether the goods will be repaired or replaced (whilst under warranty); and as to whether identical goods will be used to replace the item due to changes of models / products.

Note: Under no circumstances should you attempt to repair the device yourself or via a non-authorised Altronics service centre, as this will invalidate the warranty!

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.