

HDMI RF Digital DVB-T Modulator with 1080p HDMI input

Operating Instructions



Features

- 1080p modulated resolution
- HDMI loop through
- 1080 HDMI input
- H.264 video compression
- 30dB MER (typical)
- 100BuV ± 5 output level
- RF TV antenna input
- 38-56kHz IR frequency
- 9V IR pass over RF
- Includes power supply

Package Contents

- 1 x HDMI DVB-T Modulator
- 1 x IR Emitter
- 1 x IR Receiving Eye
- 1 x 12V Power adapter
- 1 x User Manual

Overview

A high performance HD modulator for HDMI sources with IR return path and HDMI loop through. This modulator allows you to distribute any HD device signals (Foxtel, DVD etc) in HD around the home or business with ease. Combined with infra-red targets and emitters full remote control of AV devices at the location of each television is available. Ideal for retro-fitting/upgrading older analogue modulator installations.

Specifications

Source Input:	
Input Channel	1
Video	HDMI
Video System	480i/p, 576i/p, 720p, 1080i/p
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 Typically
Output level	100 dBuV \pm 5
RF Level Adj	0 dB ~ -20dB
Attenuation step	1dB per step

*Specifications subject to change without prior notice.

Specifications

Connections:	
HDMI IN	HDMI IN
HDMI OUT	HDMI Pass Through
RF Output	RF output (providing accessory power supply 9 volts DC for IR pass)
DC Switch	Power supply 9 volts DC for IR Pass
RF Input	RF Combiner
USB	Firmware upgrade
IR Out	IR Emitter Output
Modulation	Standard: DVBT (ETSI EN 300 744) Constellation: QPSK, 16QAM, 64QAM Guard Interval: 1/4, 1/8, 1/16, 1/32 Code Rate: 1/2, 2/3, 3/4, 5/6, 7/8 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 : <ul style="list-style-type: none"> • 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
Environmental for operating	Temperature range: 5°C - 40°C Relative Humidity: 80% @ 30°C
IR Receiving Eye	
Freq. range	100 -900 MHz
Insertion loss	3.0dB Typical
Return path signal freq	7.0MHz
IR freq.	20-60KHz
Impedance	75 ohm
Power consumption	9mA

Installation

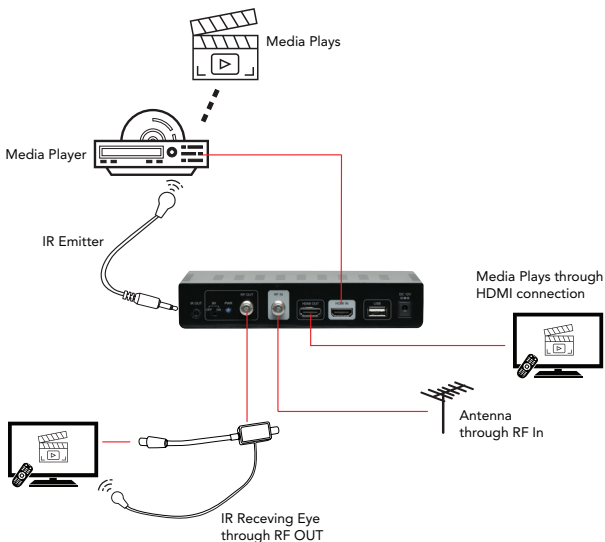
Using the Power Supply

To start using it, connect the external power supply to the 230V mains and the 12V to the instrument input. Once connected to power, the device turns on and it takes about 18 seconds to be operational. Then the message "Keyboard Locked" appears on the display.

Using a Operation via external power supply

Use only the external power adapter supplied with the instrument.

Connection Diagram



Product Overview



1. Display (LCD)
2. Menu navigation keys
3. IR Output
4. 9V DC Switch
5. LED (9V DC Indicator)
6. TV COFDM Output (IR Return with 9V DC)
7. RF IN
8. HDMI Out
9. HDMI In
10. USB: S/W update
11. Input 12V DC power adapter (included)

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. Available values are between 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.
21. **NIT Version:** Network Information Table version. In some countries it should match with other tables version received from the receiver.
22. **IR:** IR Frequency selection.(Mode A: 38KHz, Mode B:56KHz)
23. **Information:** It shows the firmware version installed in the instrument. This option is not editable.
24. **Load Default:** It returns to the default values.
25. **Configuration:** User can backup and restore all configuration setting from the device to a local file.
26. **Change Password:** It allows the user to change to a new password to access the menu.

Configuration menu

MAIN	NO	Layer 1	Layer 2(Default)	Layer 2
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	1 ~ 65535
	3	Network ID	13057	1 ~ 65535
	4	Network Name	Private Network	
	5	TS ID	128	1 ~ 65535
	6	NIT Version	28	0 ~ 31
CH&Enc Setting	1	Service Name	CH1	
	2	Provider Name	CH1	
	3	Service ID	1	1~65535
	4	LCN	1	1~1023
	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	CH21 474.00 MHz	CH5 178.75 Mhz~ CH69 858.00 MHz
	2	Constellation	64QAM	QPSK,16QAM,64QAM
	3	Guard Interval	1/4	1/4,1/8,1/16,1/32
	4	Code Rate	2/3	1/2,2/3,3/4,5/6,7/8
	5	FFT Carrier	8K	2K,8K
	6	Bandwidth	8MHz	6,7,8,7-8MHz
	7	RF Level Adj	00dB	00 ~ -30dB
IR	1	IR MODE A	MODE A	MODE A, MODE B
Information	1	FW : 5.2.2.5.4 APP : 1D,B0,0C,02		
Load Default	1	Load Default? Yes No		
Backup Config.	1	USB Connected? Yes No		
Restore Config.	1	USB Connected? Yes No		
Change Password	1	New Password 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) Calling your nearest store location 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-authorized 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.