



CONEXER

DIGITAL MODULATOR DMUSD01B

SINGLE AV ENCODER • DVB-T MODULATOR

USER MANUAL

www.antiference.co.uk

Congratulations on your purchase of the DMSD01B

This 'state of the art' product is an SD encoder. The video and audio can be taken from CVBS inputs and compressed into MPEG 2 video and AAC or MPEG1-L2 audio. The output is configured as DVB-T transport stream.

Standalone configuration is made easy through three tactile switches and ergonomic menus. To make the configurations of the DMSD01B is very simple as special **DMSDiFace** software is available for you to download from our website:

www.antiference.co.uk/product/dmsd01b-conexer-single-av-dvbt-c-modulator/

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1. SAFETY CONSIDERATIONS

1.1. Connecting to the mains supply

This product has to be connected to the mains supply. If there is the slightest doubt concerning the type of connection available on the installation, please contact your supplier of electricity. Before carrying out maintenance operation or modification of the installation, the modulator has to be disconnected.

N.B. Only use the supplied power adaptor.

1.2 Overvoltage

An overvoltage on the mains supply can cause short circuits or fire. Never overload the power lines.

1.3. Liquids

This module should be protected from splashes. Please ensure that no containers containing liquids are placed on this module. Be aware of other persons splashing liquids on the module.

1.4. Cleaning

Disconnect the module before cleaning. Use only a damp cloth and do not use solvents.

1.5. Ventilation

In order to assure an adequate air circulation and to prevent overheating, the ventilation holes should not be obstructed. The module may not be installed in a hermetically sealed environment. Other electronic products or heat producing items may not be placed upon or near the module.

1.6. Accessories

The use of accessories not manufactured by the manufacturer can cause damage to the module.

1.7. Installation of the module

The module must be installed in a place well protected from direct sunlight.

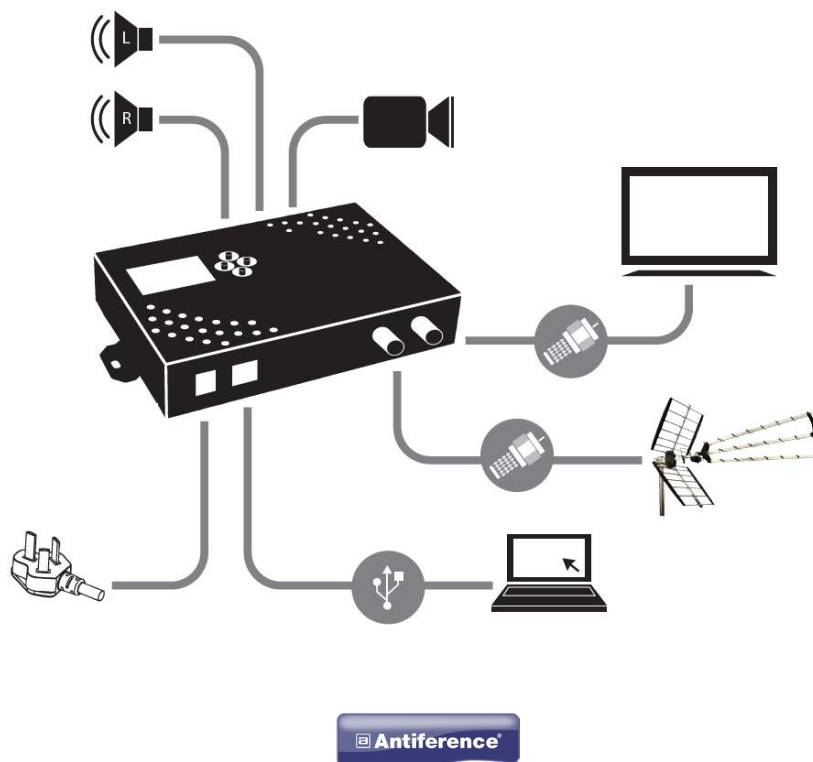
All measures have to be taken to avoid installation in humid or sunny places.

Do not install near heating elements or other devices producing heat.

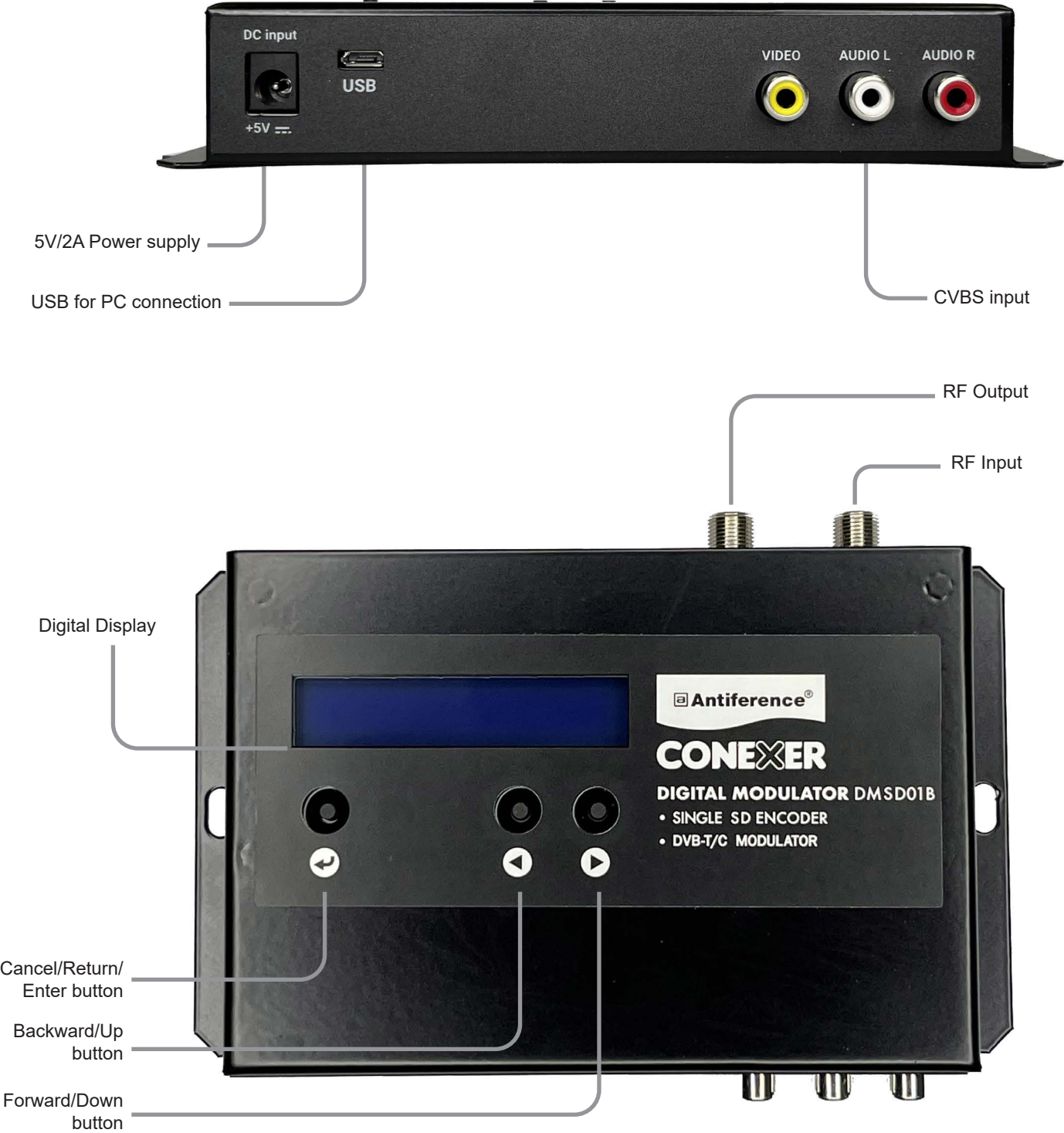
Ensure that the module is placed at least 10 cm from other equipment which is susceptible to electromagnetic radiation. Do not install the module on unstable items, a fall can cause physical or material damage.

2. INSTALLATION

Please find a typical connection and installation layout for the DMSD01B.



3. DESCRIPTION OF THE DIFFERENT ELEMENTS



4. SETTING UP THE DMSD01B

The DMSD01B has a quick menu to allow for quick basic settings. For more detailed settings an advance menu is also available

4.1. The Quick Menu

To enter the quick menu please press the following sequence of buttons:    

When entered successfully, the quick menu becomes available, use the   buttons to move between the different menu options. Press and hold the  to select that option and use   to change the value to that option. Changes are automatically saved.

DMSD01B MODULATION    		DMSD01B DVB-T/DVB-C  	Change between DVB-T & DVB-C
DMSD01B CHANNEL    		DMSD01B 21 (474MHz)  	Change the output channel
DMSD01B ATTENUATION    		DMSD01B 17dB  	Change the output level
DMSD01B L.C.N    		DMSD01B 801  	Set channel location in EPG
DMSD01B TS ID    		DMSD01B 100  	Change Transport Stream ID
DMSD01B LANGUAGE    		DMSD01B (ENGLISH)  	Change the language
DMSD01B DEFAULT CONFIG    		DMSD01B YES  	Reset modulator to default
DMSD01B EXIT    		DMSD01B YES  	Exit menu

4.2. The Advanced Menu

To enter the advanced menu please press the following sequence of button: ◀ ◀ ▶ ▶

When entered successfully, the advanced menu becomes available, use the ◀ ▶ buttons to move between the different menu options. Press and hold the ◀ to select that option and use ◀ ▶ to change the value to that option. Changes are automatically saved.

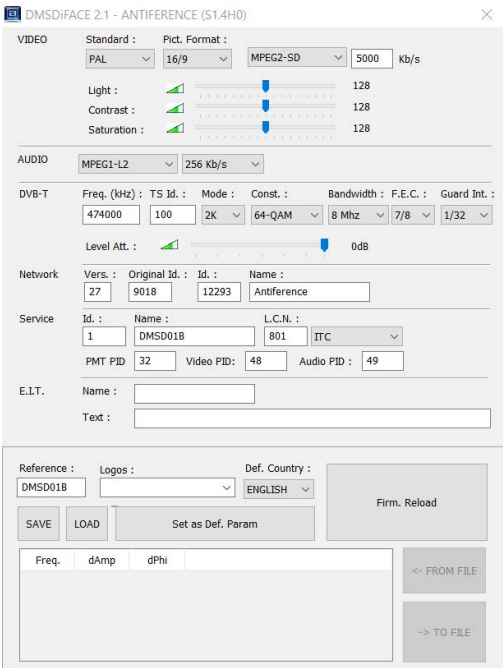
	◀	DMSD01B FREQUENCY	◀	DMSD01B 474000 KHz	Set the output frequency
		◀ ▶		◀ ▶	
	◀	DMSD01B BANDWIDTH	◀	DMSD01B [8 MHz]	Select the bandwidth 6, 7 or 8 MHz
		◀ ▶		◀ ▶	
	◀	DMSD01B CONSTELLATION	◀	DMSD01B [QAM64]	Select the constellation QPSK, QAM16 or QAM64
		◀ ▶		◀ ▶	
	◀	DMSD01B F.E.C	◀	DMSD01B [7/8]	Select the F.E.C 1/2, 2/3, 3/4 5/6 or 7/8
	◀ ▶		◀ ▶		
◀	DMSD01B GUARD INTERVAL	◀	DMSD01B [1/32]	Select the guard interval 1/4, 1/8, 1/16 or 1/32	
	◀ ▶		◀ ▶		
◀	DMSD01B MODE	◀	DMSD01B [2K]	Select the carrier mode 2K or 8K	
	◀ ▶		◀ ▶		
◀	DMSD01B EXIT	◀	DMSD01B YES	Exit menu	
	◀ ▶		◀ ▶		

	◀	DMSD01B FREQUENCY	◀	DMSD01B 474000 KHz	Set the output frequency
		◀ ▶		◀ ▶	
	◀	DMSD01B BANDWIDTH	◀	DMSD01B [8 MHz]	Select the bandwidth 6, 7 or 8 MHz
		◀ ▶		◀ ▶	
	◀	DMSD01B CONSTELLATION	◀	DMSD01B [QAM256]	Select the constellation QAM16, QAM32, QAM64, QAM128 or QAM256
		◀ ▶		◀ ▶	
	◀	DMSD01B SYMBOL RATE	◀	DMSD01B [6960]	Select the symbol rate
	◀ ▶		◀ ▶		
◀	DMSD01B EXIT	◀	DMSD01B YES	Exit menu	
	◀ ▶		◀ ▶		

DMSD01B TS SETTINGS		DMSD01B NIT RELEASE		DMSD01B 27	Set the NIT version
	◀ ▲ ▼ ▶		◀ ▲ ▼ ▶		◀ ▶
		DMSD01B NET ID.		DMSD01B 12293	Set the Network ID
	◀ ▲ ▼ ▶		◀ ▲ ▼ ▶		◀ ▶
		DMSD01B ORIG. NET ID.		DMSD01B 9018	Set the original network ID for your country
	◀ ▲ ▼ ▶		◀ ▲ ▼ ▶		◀ ▶
		DMSD01B NETWORK NAME		DMSD01B Antiference	Set the network name
	◀ ▲ ▼ ▶		◀ ▲ ▼ ▶		◀ ▶
		DMSD01B TS ID.		DMSD01B 100	Set the Transport Stream ID
	◀ ▲ ▼ ▶		◀ ▲ ▼ ▶		◀ ▶
		DMSD01B PROGRAM ID		DMSD01B 1	Set the program ID
	◀ ▲ ▼ ▶		◀ ▲ ▼ ▶		◀ ▶
		DMSD01B LCN ID.		DMSD01B [ITC]	Set the LCN system, EACEM, ITC or Nordig.
	◀ ▲ ▼ ▶		◀ ▲ ▼ ▶		◀ ▶
		DMSD01B L.C.N		DMSD01B 801	Set the LCN number
	◀ ▲ ▼ ▶		◀ ▲ ▼ ▶		◀ ▶
		DMSD01B SERVICE NAME		DMSD01B DMSD01B	Set the service name
	◀ ▲ ▼ ▶		◀ ▲ ▼ ▶		◀ ▶
		DMSD01B PMT PID		DMSD01B 32	Set the PMT PID
	◀ ▲ ▼ ▶		◀ ▲ ▼ ▶		◀ ▶
		DMSD01B VIDEO PID		DMSD01B 48	Set the Video PID
	◀ ▲ ▼ ▶		◀ ▲ ▼ ▶		◀ ▶
		DMSD01B AUDIO PID		DMSD01B 49	Set the audio PID
	◀ ▲ ▼ ▶		◀ ▲ ▼ ▶		◀ ▶
		DMSD01B EIT TITLE		DMSD01B	Set the EIT Title
	◀ ▲ ▼ ▶		◀ ▲ ▼ ▶		◀ ▶
		DMSD01B EIT TEXT		DMSD01B	Set the EIT Text
	◀ ▲ ▼ ▶		◀ ▲ ▼ ▶		◀ ▶
		DMSD01B EXIT		DMSD01B YES	Exit menu
	◀ ▲ ▼ ▶		◀ ▲ ▼ ▶		

	DMSD01B VIDEO SETTINGS	◀ ▶	DMSD01B RESOLUTION	◀ ▶	DMSD01B PAL	Set the video resolution PAL or NTSC
		◀ ▶	DMSD01B COMPRESSION	◀ ▶	DMSD01B MPEG2-SD	Set video compression MPEG2-SD, MPEG2 or H264
		◀ ▶	DMSD01B VIDEO RATE	◀ ▶	DMSD01B 5000	Set the video bitrate
		◀ ▶	DMSD01B FORMAT	◀ ▶	DMSD01B 16/9	Set the aspect format
		◀ ▶	DMSD01B LIGHT	◀ ▶	DMSD01B 128	Set the light value
		◀ ▶	DMSD01B CONTR.	◀ ▶	DMSD01B 128	Set the contrast value
		◀ ▶	DMSD01B SAT.	◀ ▶	DMSD01B 128	Set the saturation value
		◀ ▶	DMSD01B EXIT	◀ ▶	DMSD01B YES	Exit menu

	DMSD01B AUDIO SETTINGS	◀ ▶	DMSD01B COMPRESSION	◀ ▶	DMSD01B MPEG1-L2	Set the audio compression MPEG1-L2 or AAC-LC
		◀ ▶	DMSD01B AUDIO RATE	◀ ▶	DMSD01B [256 Kb/s]	Set the audio bitrate
		◀ ▶	DMSD01B EXIT	◀ ▶	DMSD01B YES	Exit menu



5. PROGRAMMING USING A PC

The settings of the DMSD01B can also be changed using a PC. First, please install the software **DMSDiFace** on your PC. You can download this software from our internet site www.antiference.co.uk. After installing the software, connect the DMSD01B using a USB cable (not included) to your computer. Then launch the program **DMSDiFace**. On the display of the DMSD01B the message <USB> appears, indicating that programming is now performed through your PC. The following window appears on your screen.

All the functions can now be edited and modified using the **DMSDiFace**.

6. TECHNICAL SPECIFICATIONS

Video input	Input	CVBS composite video RCA
	Resolution modes	480p - 576p
	Compression	MPEG2-SD, MPEG2, H.264
Audio input	Input	CVBS composite audio stereo RCA's
	Audio bitrate	100...20 Mbit/s
	Compression	AAC-LC / MPEG1 - L2 - bitrate 128-320 Kb/s
DVB Processing	Table insertion	PAT, PMT, SDT, NIT
	Configuration	Channel/network name, SID, LCN, TSID, ONID, NID, versions, audio, video PIDs.
DVB-T output	Output frequency / level	170-230 MHz + 470-862 MHz / > 80 dBμV
	Constellation - FEC	QPSK/16QAM/64QAM - 1/2, 2/3, 3/4, 5/6, 7/8
	Guard interval	1/4, 1/8, 1/16, 1/32
	Mode - MER - bandwidth	2K/8K - > 35 dB - 6/7/8 MHz
Power	DC 2.1 mm connector	+5V 2A
	Consumption	10 Watts
Dimensions	LxWxH	150x130x35mm
	Weight	0.9kg

7. DECLARATION OF CONFORMITY

CE

We, ANTIFERENC LIMITED herewith declare that the modulator CONEXER DMSD01B complies with all essential requirements and any other applicable conditions set forth on directive 2014/30/EU.

UK
CA

According to the WEEE (Waste Electrical and Electronic Equipment) EU Directive, do not dispose of this product as household waste or commercial waste. Waste Electrical and Electronic Equipment should be appropriately collected and recycled as required by practices established for your country. For information on recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.

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