Radio Frequency Range

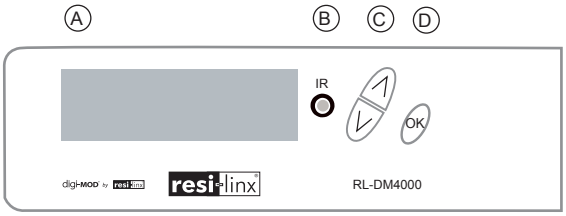
RL-DM4000

DVB-T Quad Input Digital IR Modulator complete with 12V DC 3A Power Supply

www.resi-linx.com

digi-MOD INSTALLATION MANUAL

Face Plate



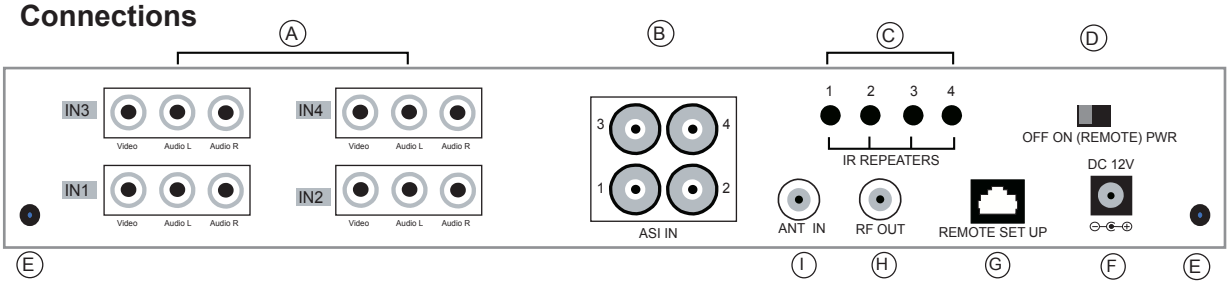
Face Plate

- (A) LCD Display
- (B) LED IR Display
- (C) Scroll Up / Down
- (D) Enter Button (OK)

Connections

- (A) Video and Audio Inputs Source IN1-IN4
- (B) ASI Inputs x 4
- (C) IR Repeater Outputs x 4
- (D) Remote Power Switch
- (E) Screw Holes for Mounting brackets
- (F) 12V DC Power Input
- (G) Not Active
- (H) RF Output
- (I) Antenna Input

Connections



Hardware Connection

1. Connect the RCA cable from the video source (eg. CABLE / PAY TV, DVD, VCR, CAMERA) to the yellow RCA video 'INPUT' jack (A) (Video) on the rear of the RL-DM4000 Modulator.
2. Connect the RCA cable from the audio source to the red/ white 'INPUT' audio jacks (AudioR, AudioL) (A) on the rear of the RL-DM4000 Modulator. Use red and white jacks for dual input, or either one for single input.
3. For ASI connect the cable from the Source to the ASI Input (B) on the rear of the RL-DM1000 Modulator.
4. Repeat steps 1-3 for connection of other sources to AV Inputs IN2 - IN4.
5. Connect the RF output (H) from the RL-DM4000 to the modulator input on the RF Distribution Module RL-RF380. Alternatively, connect the RF output (H) to an existing distribution system or directly to a television set.
6. Slide the Remote Power switch (D) to 'ON' if connecting the Modulator to a RL-RF380 Video Hub.
7. Connect IR emitters RL-IR700/800 to the outputs (C) on the rear of the RL-DM4000 Modulator. Place the other end within 25mm of the IR receiver on the AV source (depending on environmental conditions).
8. Connect the supplied 12V DC Switch Mode power pack to the power input (F).

Technical Specifications

INPUT	
Video Input	CVBS / ASI
Video Input Level	0.7-1.4 V (pp)
Video Mode	PAL
Audio Input	Stereo
Audio Input Level	0.4 - 4.8 V (pp)
Input Connectors	Video (RCA) - Audio (RCA)
Input Impedance	75 Ω
OUTPUT	
Output Level	85 dB V
Output Impedance	75 Ω
Channel Bandwidth	7 MHz
Output Level Adjustment	20 dB typ.
MER	30 dB typ.
Connector Type	"F" female
MODULATION	
Video Resolution	PAL 720x576 @ 25fps
Video Compression	MPEG2 MP@ML
Audio Compression	MPEG1 Layer II
GENERAL	
Power Supply	12 VDC 3-AMP
Consumption	1700 MA
Dimensions	300mm x 200mm x 47mm
Weight	1.860kg

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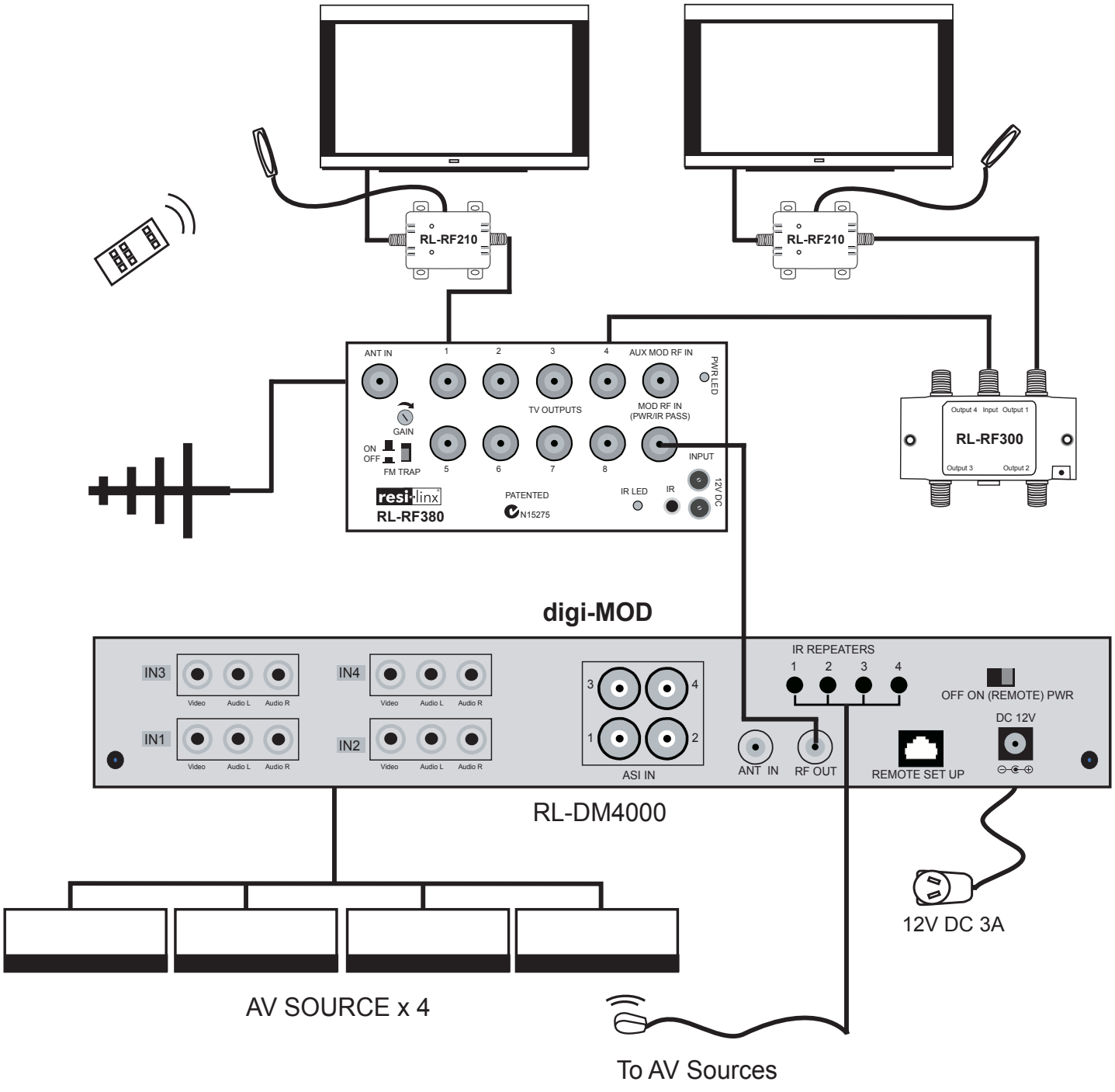
digi-MOD WIRING DIAGRAM



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digi-MOD INFORMATION SHEET

The resi-linx “digi-MOD” range of Digital Modulators comes available in the following three options

RL-DM1000 – Single Channel
RL-DM2000 – Dual Channel
RL-DM4000 – Quad Channel

The “digi-MOD” DVB-T Digital RF Modulation system will allow you to distribute any AV devices (Foxtel, Austar, DVD, CCTV Camera etc) around the home or business with ease.

The resi-linx “digi-MOD” comes with the following factory pre-sets

Output Channel	21
Attenuation	0
Constellation	QAM64
FEC	3/4
Guard Interval	1/16
Channel Region	Australia
Network Name	RL-NETWORK
Channel Name	CHANNEL - 1
	CHANNEL - 2
	CHANNEL - 3
	CHANNEL - 4
Video Input	CVBS
Video Standard	PAL

Before you start installing the digi-MOD, you should perform a “Factory Default”

In order to do this, please follow the below steps -:

- Power Up the digi-MOD, wait until the booting process is complete
- Once complete, use the Scroll up/down Key to reach “Default Config” in the menu. Once “Default Config” is located – press the “OK” button
- Then power down the digi-MOD by removing the power lead
- Wait 5 seconds and the re-connect the power supply

Once the unit has completed its booting process, enter the menu by selecting the “OK” button

- The LCD screen will now display “Advanced Menu Output Channel” - select the “OK” button
- The LCD screen will now display “Output Channel 21” with the frequency in MHz. In some TV sets Channel 21 in not available, so it is recommended to change this to appropriate available output channel to suit your installation (40, 50, 60 etc.)
- Once you have scrolled and selected a channel number, Select “OK” to lock in the change
- Then use the UP scroll button until the LCD display reads “Advanced Menu EXIT”
- Select “OK”, the LCD will now read “EXIT, EXIT Menu”. Select “OK”
- The LCD display will now show “Running”
- The digi-MOD unit is now ready to have sources connected.
- Auto Scan for Channels on the TV set with the digi-MOD connected and powered
- Sources for selected digi-MOD Channel selection, (e.g. channel 40), are found on TV channels 101, 102, 103, 104 (changeable via menu – see below).
- If the digi-MOD is powered down, there is no need to reconfigure. All settings will remain unless a factory default is done.
- *If you are connecting via ASI, simply go to the ‘Video Input’ option in the desired input and change from CVBS to ASI. Allow up to 70 seconds for the Modulator to detect the ASI Input and lock it in.*

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digi-MOD INFORMATION SHEET

Changing the Channel name/s and LCN

CHANNEL NAME. Channels can be named by using the Scroll UP key until you reach “CHANNEL NAME”
Use the UP/DOWN scroll keys to change each letter. Click OK to confirm channel name change.
LCN (Logic Channel Number) can be moved from its default position (101, 102, 103 and 104) to a different channel number (e.g. 4, 5, 6, 8) by scrolling up/down in the LCN option for each channel. Once selected, press the “OK” button to lock your channel change.

Setting options – (default first)

Channel Output – 21 UHF (6-69)
FEC (forward error correction) - ¾ (1/2, 2/3, ¾, 5/6, 7/8)
Guard Int - 1/16 (1/2, ¼, 1/8, 1/16, 1/32)
Attenuator - 0 (0 – 20dB adjustable)
Constellation - 64QAM (16QAM)
OFDM Mode - 8K (2K)
Video Input - CVBS (ASI)
Brightness – 128 (adjustable)
Contrast – 128 (adjustable)
Saturation – 128 (adjustable)
Sharpness – 64 (adjustable)
HUE – 128 (adjustable)
CELL ID – 0
STREAM ID – 1000
NETWORK ID – 100
ORG NET ID – 10
NETWORK NAME – RL-NETWORK (changeable via menu)
PROGRAM NUMBER – 1000/2000/3000/4000 (changeable via menu)
CHANNEL NAME – CHANNEL-1/ CHANNEL-2/ CHANNEL-3/ CHANNEL-4 (changeable via menu)
LCN – 101/102/103/104 (changeable via menu)

Safety Precautions

- **Do not** apply power to the DVB-T Quad Input Digital IR Modulator until all components have been installed and all wiring has been properly terminated. Failure to do so may result in damage to the product and void manufacturer’s warranty
- **Do not** attempt to terminate, change or un-install any wiring without first unplugging Power Adapter from the DVB-T Quad Input Digital IR Modulator
- **Do not** expose any component to moisture. Doing so can create electrical hazards or render the component unusable. Exposure to moisture will also void the warranty on the system.
- This modulator is powered with a voltage of 12 VDC. The power supply voltage must not exceed this, otherwise this modulator could suffer irreparable damage and subsequent invalidation of the warranty.

  Note:

  - **Do not** replace the power supply with a voltage greater than 12 VDC.
  - **Do not** connect the modulator to the power if the power cord is damaged.
  - **Do not** plug the modulator into the mains supply until all cables have been connected correctly.
  - **Do not** cut the cord.
- Avoid placing the modulator next to central heating components and in areas of high humidity.
- Do not cover any modulator elements that could obstruct the ventilation slots and cause overheating.
- If the modulator has been kept in cold conditions for a long time, keep it in a warm room no less than 2 hours before plugging it into the mains.