WEVI

VIDEO WAVE

VW-5

Operating Instructions

Pages 2 - 13

English   Pages 14 - 29

WEVI -   a division of IDX

Table of Contents

Accessories Check

VW-5TX	VW-5RX
AC Adaptor with power cord	AC Adaptor with power cord
AV cable	AV cable
S-Video cable	S-Video cable
IR cable	Holder
Holder	SCART adaptor (for Europe only)
SCART adaptor (for Europe only)	

.SAFETY INSTRUCTIONS

● READ INSTRUCTIONS	● RETAIN INSTRUCTIONS
All the safety operating instructions should be read before the product is operated.	The safety and operating instructions should be retained for future reference.
● POWER SOURCES	● POWER-CORD PROTECTION
The product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer. For products intended to operate from battery power or other sources, refer to the operating instructions.	Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, sockets, and the point where they exit from the product.
● ACCESSORIES	● VENTILATION
Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.	Openings in the unit are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacture's instructions have been adhered to.

● WATER AND MOISTURE	● CLEANING
Do not use this product near water. For example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool and the like.	Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a soft cloth for cleaning.
● ATTACHMENT	● OVERLOADING
Do not use attachments not recommended by the product manufacturer as they may cause hazards.	Do not overload wall outlets; extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
● LIGHTNING STORMS	● OBJECT AND LIQUID ENTRY
For added protection for this product during storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the product due to lightning and power-line surges.	Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
● SOURCE OF LIGHT	● SERVICING
Do not look into the lens while the lamp is on. The strong light from the lamp may cause damage to your eyes or sight.	Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
● HEAT SOURCE	● HEED AND FOLLOW
Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.	Heed all warnings and follow all instructions.

.CONTENTS

Chapter 1 Product Overview

The Wireless Video Wave Module (VM-5) product delivers video and audio using wireless WLAN 802.11a at 5GHz as a media stream, which is a multiplexed and compressed signal, from the VW-5TX to the VW-5RX.

The VW-5TX is used on the video source side, such as a DVD, VCR, PVR, STB or BS. The VW-5RX is used on the display side, usually a standard TV, flat screen or video monitor.   In addition IR remote control function makes it easy to operate.

It employs WLAN bit rates of 6Mbps, 12Mbps and 24Mbps and video bit rates of 4Mbps, 8Mbps and 14Mbps are supported. It also provides automatic adaptation of video bit rate and WLAN bit rate, or fixed video and WLAN bit rate. This product offers security-enhanced features, with communication authenticated and the media stream is encrypted for secure use.

When used inside, it is possible to transmit/receive up to approx. 50m in open spaces and 30m in places separated by two typical office/home walls.

- *Other characteristics*
  - *Transfer speed adaptive capability allows stable image transmission and avoids interruption even in varying reception conditions.*
  - *Automatic hopping function for optimum channel selection up to 4Ch's*
  - *NTSC/PAL/SECAM automatic recognition and operation function*
  - *Multiple VW-5RX can be pair linked with one VW-5TX*
      However, LAN link is always one to one, so it prioritizes the first recognized RX communication.
  - *AES standard adoption enables high security level contents encryption and protection*

Above transmission distance is approximate (an estimate) and the condition may vary depending on wall materials, surroundings, electrical activity etc.

If more than 4 sets are used adjacent, they might interfere with each other and video image may stop (freeze).

If it is placed near a TV etc, the TV image can be interrupted. Please keep away from devices such as TVs if this happens.

At places with a lot of 5GHz wireless LAN devices in operation and communication can be influenced and images may be more interrupted.

Signal reception may be effected according to the position, height and angle of placement. If reception is not stable, please look for the best condition.
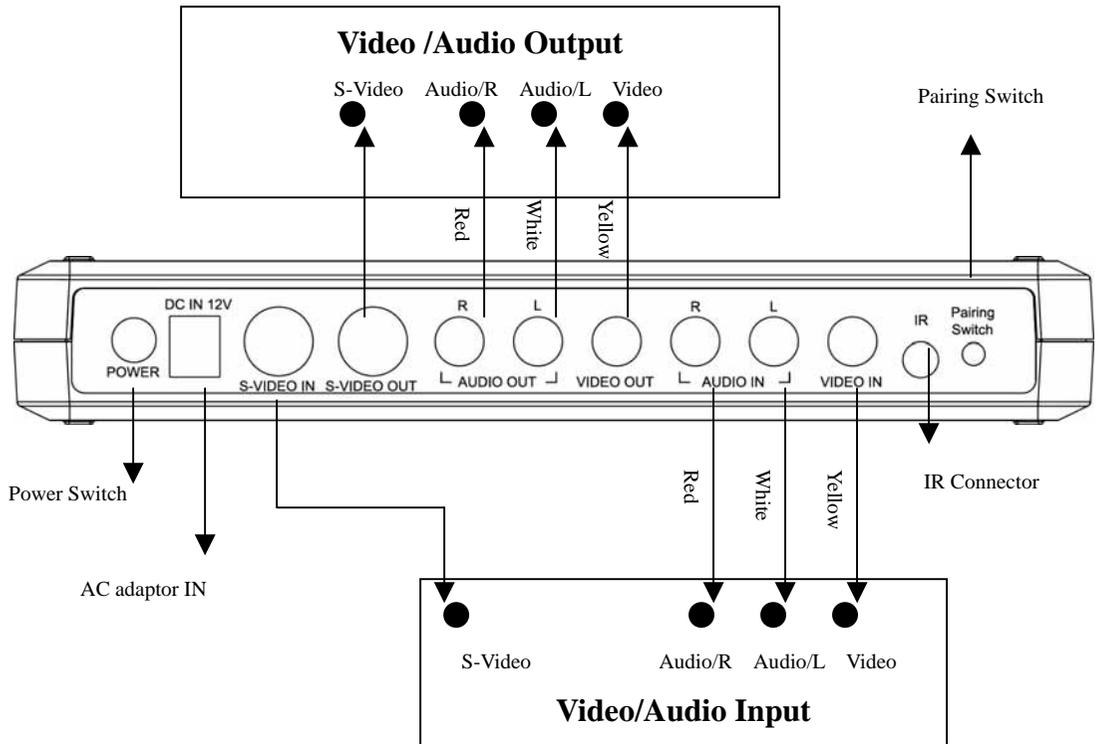
.

Chapter 2   Getting Started

2.1   VW-5TX Transmit unit

2.1.1   TX Front Panel View

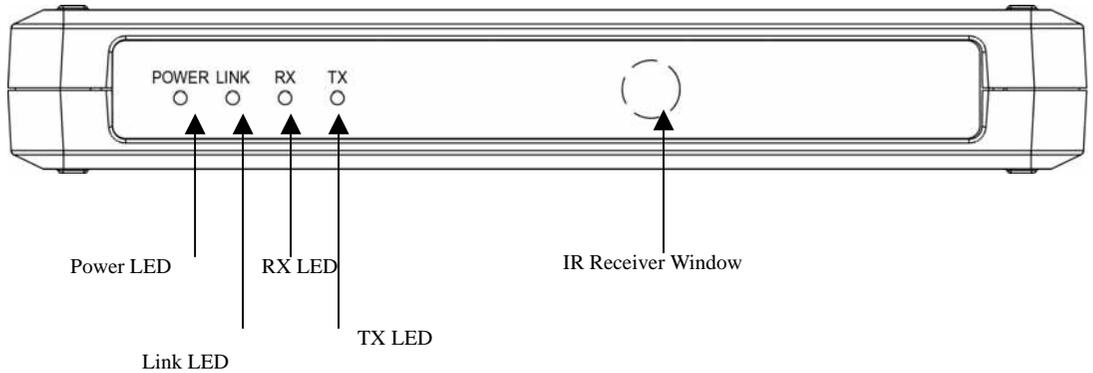|		
◆	**POWER LED**	Power ON/OFF status:
		✧ Green light: Unit is ON
		✧ No light: Un it is OFF
◆	**LINK LED**	Indicates link status:
		✧ Slow blinking : searching for RX unit
		✧ Fast blinking: found RX and connecting
		✧ ON: connection and authentication completed
◆	**TX LED**	Indicates transmit speed:
		✧ Fast blinking: high rate
		✧ Middle blinking: middle rate
		✧ Slow blinking: low rate
◆	**RX LED**	Indicates data receive status:
		✧ ON: receiving data or control signal
		✧ OFF: no data received

2.1.2 TX Rear Panel View

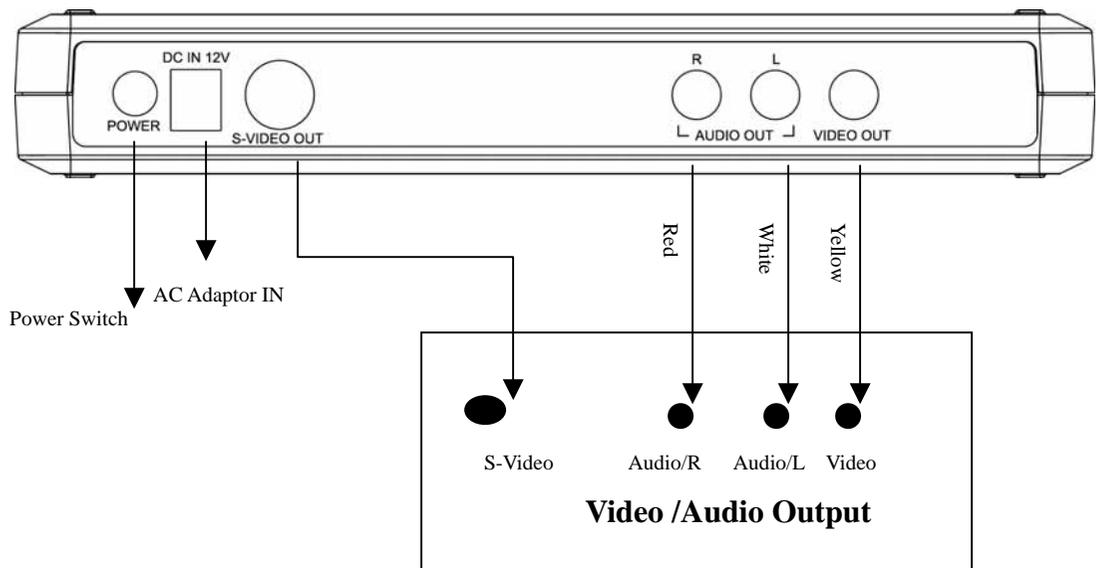|		
◆ **Power Switch**	Press the power button to turn the power ON/OFF
◆ **DC IN**	Connect the DC-in from the supplied AC adaptor here
◆ **S-VIDEO IN**	Connect the S-Video cable here if the input source - DVD, VTR etc has an S-Video out.
◆ **S-VIDEO OUT**	This is a through signal of the S-Video IN
◆ **Audio OUT**	This is a through signal of the Audio IN
◆ **Video OUT**	This is a through signal of the Composite Video IN
◆ **Audio In**	Connect the Input source Audio in using supplied AV cable
◆ **Video In**	Connect the Input source Video in using supplied AV cable
◆ **IR Connector**	If remote control is required connect the supplied IR cable here.
◆ **Pairing SW**	Pairing setup (see later instructions)

2.2 VW-5RX unit

2.2.1 RX Front Panel View

◆ **POWER LED**	Power ON/OFF status: ✧ Green light: ON ✧ No light: OFF
◆ **LINK LED**	Indicates link status: ✧ Slow blinking : searching TX ✧ Fast blinking: find TX and connecting ✧ ON: complete and linked
◆ **RX LED**	Indicates transmit speed: ✧ Fast blinking: high transfer rate ✧ Middle blinking: middle rate ✧ Slow blinking: low rate
◆ **TX LED**	Indicates data received status: ✧ ON: receiving data or control signal ✧ OFF: no data received
◆ **IR Receiver Window**	The window where the remote control signal is received from the video source remote control unit (if used)

NOTE: The IR function enables the user to control the DVD (or other video source) even when the TV and the DVD are not in the same room. The user can use the DVD's remote control unit by pointing the remote control at the IR receiver located at the VW-5RX. The IR signals are conveyed by wireless signal to the VW-5TX.

2.2.2 RX Rear Panel View

	Power Switch	Press power button to turn the power ON/OFF
◆	**Power Switch**	Press power button to turn the power ON/OFF
◆	**DC IN**	Connect the supplied AC adaptor
◆	**S-VIDEO OUT**	Connect the S-Video cable to the receiving unit, usually a TV, Plasma display or LCD display
◆	**Audio OUT**	Connect to the audio in of the receiving unit using supplied AV cable
◆	**Video Output**	Connect to the video in of the receiving unit using supplied AV cable (if the S-Video signal is not available)

Chapter 3   Setup Menus

The following lists a step by step set-up procedure.

Step 1~4   VW-5TX   Transmit Unit

Step 1   Connect power cord

Connect power cord to AC adaptor.

Attach AC adaptor to DC IN jack on VW-5TX unit.

Step2   Power On

Press the power button on the rear to turn the power ON.

Step 3   Connect video source

Connect your Video device (DVD, VAR, PVR, STB or BS) using the supplied S-Video or AV video cable

Step4   Video Input

Connect AV cable to video input jack and/or connect S-Video cable to S-Video IN jack on the VW-5TX unit. If both signals are available the S-Video will be the priority and used due to its higher quality.

IR Function

If you require use of a remote control connect the included IR cable at the back of the VW-5TX unit. Then locate the LED head module of the cable in front of the usual IR receive point of the input source (e.g. DVD player, cable box)

Step 5~8   VW-5RX   Receive Unit

Step5   Connect power cord

Connect power cord to AC adaptor.

Attach AC adaptor to DC IN jack on VW-5RX unit.

Step6   Power On

Press the power button on the rear to turn the power ON.

Step7   Video Output

Connect AV cable to video output jack and /or connect S-Video cable to S-Video OUT jack, as required by the display unit used.

Step8　Video Input (TV display unit)

Connect AV cable (yellow) to video input jack and/or connect S-Video cable to S-Video in jack.

IR Function

Use your DVD (or other video source) remote control by pointing at the IR receiver window located the front panel of VW-5RX unit.

Chapter 4　Main Specifications

VW-5 System

1, IEEE802.11a (5.2G)

4, MPEG2 Encoder and Decoder built in

5, Adaptive transmission (24Mbps, 12Mbps, 6Mbps)

6, Adaptive Video rate (14Mbps, 8Mbps, 4Mbps)

7, Automatic Error recovery

8, Small constant latency (less than 0.4-0.6s)

9, AES content protection

Wireless LAN Interface	
Standard	IEEE802.11a (ARIB STD-T71)
Transmission method	Orthogonal Frequency Division Multiple Modulation (OFDM)
Frequency area	5,150 5,250MHz (4ch) Auto-select 5,150 5,350MHz (8ch) Auto-select U.S. Spec
Data transfer speed	6/12/24Mbps Auto Switch
Encryption	AES Encryption
Transmission power (max)	Japan 180mW/18MHz U.S. 50mW/20MHz Europe 200mW/20MHz *1
Reception sensitivity	-74dBmW typ.

1 : Max power setting is ruled by the 802.11a regulation of each country.

VW-5TX

Transmission side　　Specification

Video	
Video Signal	NTSC/PAL/SECAM　Auto detection
Composite Input	1.0Vpp/75
S-Video Input	1.0Vpp/75　(Y), 0.28Vpp/75　(C)
Composite Output	1.0Vpp/75
S-Video Out	1.0Vpp/75　(Y), 0.28Vpp/75　(C)
Audio Input	5.66Vpp(2.0Vrms) max　with 20K　load
Audio Output	2.0Vpp(0.7Vrms) max　with 100K　load
Compression/Expansion method	MPEG-2
MPEG Bit rate	4/8/14Mbps　Auto Switch
Infrared Ray Remote Controller	
Signal carrier frequency	38KHz
In/Out Connector	
Video Input	RCA pin (Composite), S connector
Video Output　Through output	RCA pin (Composite), S connector
Audio Input	RCA pin L/R
Audio Output　Through Output	RCA pin L/R
IR Cable	Mini Jack
Others	
Size	Width 220mm , Depth 150mm, Height 45mm
Weight	390g (only main body)
Power supply　AC adaptor	AC in　100-240V 50/60Hz 1.0A DC out　12V(± 5%) 2.5A
Power consumption	Max approx. 6.5W
Operation environment	Temperature 0-40　Humidity 20-80%(No Dew)
Approved Standard	TELEC, FCC part15, CE

VW-5RX

reception side	Specification
Video	
Video Signal	NTSC/PAL/SECAM Auto distinction
Composite Output	1.0Vpp/75
S-Video Output	1.0Vpp/75 (Y), 0.28Vpp/75 (C)
Audio Output	2.0Vpp(0.7Vrms) max with 100K load
Compression/expansion method	MPEG-2
MPEG Bit rate	4/8/14Mbps Auto Switch
Remote Control	
Signal carrier frequency	38KHz
In/Out Connectors	
Video output	RCA pin (composite), S connector
Audio Output	RCA pin L/R
Others	
Size	Width 220mm, Depth 150mm, Height 45mm
Weight	390g (only main body)
Power Supply AC adaptor	AC in 100-240V 50/60Hz 1.0A DC out 12V(± 5%) 2.5A
Power Consumption	Max approx. 6.5W
Operation Environment	Temperature 0-40 Humidity 20-80%(No Dew)
Approved Standard	TELEC, FCC part15, CE

Chapter 5.　　Inputs/Outputs

VIDEO INPUT:

1. VW-5TX supports the following video inputs:
   - Composite video input
   - S-Video input
   (1) User may choose either input type, usually determined by the connection available from the input video source device.
   (2) The video input is selected by automatic detection of a video signal at one of the inputs. If the two inputs become active simultaneously, the order of precedence is : S-Video, Composite Video.

2. The video standard accepted by the VW-5TX is set by automatic detection of the video standard (NTSC/PAL/SECAM).

3. Video standard supports the following video inputs: NTSCM, NTSC-Japan, PAL[BGHI], SECAM.

4. This product supports the following VBI signals:
   - NTSC WSS (also known as CGMS or WSS525) and PAL WSS.
   - Macrovision (NTSC and PAL)

   The VBI signals are accepted at the video inputs and transferred to the video outputs.

5. The system support NTSC closed caption signals. The CC signals are accepted at the video inputs and transferred to the video outputs.

6. The system is capable of accepting and outputting black and white signal (no colour component present).

AUDIO INPUT

1. VW-5TX supports an analog stereo audio input, consisting of left and Right audio channels.

VIDEO OUTPUT

1. VW-5RX supports the following video outputs:
   - Composite video output
   - S-Video output

2. The two outputs are active simultaneously.

3. Video standard output (NTSC/PAL/SECAM) is the same standard as the video input used.

4. Video standard supported on video outputs:
   NTSC-Japan, PAL (BGHI), SECAM

5. Support of the VBI signals:
   - NTSC WSS (also known as CGMS or WSS525) and PAL WSS
   - Macrovision (NTSC and PAL)

6. Support of NTSC closed Caption signals

AUDIO OUTPUT

1. VW-5RX supports an analog stereo audio output, consisting of Left and Right audio channels.

Chapter 6   Pairing & Others

PAIRING (MATCHING) INSTALLATION

1. The VW-5 is already supplied paired (matched) from the factory.
2. If needed users can also pair manually using the following steps:

- Supply power to and switch on both WV-5TX and VW-5RX
- Connect the IR remote control cable to the back of the WV-5TX
- Position the units so the IR cable LED head from the VW-5TX is directed in front of the IR receiver window of the VW-5RX
- Then press the pairing button at the rear of the VW-5TX for at least 2 sec.
- The VW-5TX sends an authorization code to the VW-5RX and when this configuration data is confirmed over the IR link the pairing is complete.

OTHERS

- Product Dimensions: 220(w) x 150(d) x 45(h) mm
- Power Adaptor: Input: AC100~240V 50/60Hz 1.0A
                         Output: DC12V 2.5A
- Operation Temp: 0~40 deg C
- This product is for indoor use only.