CHAPTER 1
WELCOME TO GRAND ULTIMATE WIRELESS

1.1 INTRODUCTION

Thank you for purchasing the Grand ULTIMATE WIRELESS.**GRAND ULTIMATE WIRELESS** is a **VGA** to **TV** converter with an integrated **2.4GHz Wireless Transmitter & separate Receiver.** Transmit the computer's video and audio to any remote TV. It is ideal for **Internet or DVD/VCD movie viewing**, presentations, baby/patient monitoring, burglary detection, theft prevention, or home/company monitoring.

1.2 FEATURES

- Plug and Display, no software required.
- Supports **four selectable channels and multiple receivers , transmits** , **ISM Band** from 2414~2468Mhz.
- Simultaneous display on **TV**, **Remote TV** and **VGA monitor**.
- Supports **NTSC,NTSC-EIAJ， PAL-N, PAL, PAL-M, PAL-combination-N and SECAM** video system.
- Supports **CVBS, S-VIDEO** video outputs by switch change (via wired connections) .
- True 24 bit, true color digitizer.
- User controls: **MENU, ZOOM, FINE TUNE， SAVE， VIDEO SOURCE， POWER & Position** adjustments.
- Menu key supports **Freeze , Size**, **Brightness**, **Contrast**, **Hue**, **Saturation**, **Video Standard, Flicker , OSD color**, **Reset**.
- DIP Switch supports functions : CHANNEL 1~ CHANNEL 4
- LED indicator PAL & POWER.

- Adjustable H-SIZE and V-SIZE.
- 64 stages control : Brightness, Contrast, Hue, Saturation adjustment.
- 16 stages control : Fine Tune (Sharpness), Flicker adjustment.
- Stereo Audio input from sound card or any audio device.
- RF frequency: **CH1=2414MHz, CH2=2432MHz, CH3=2450MHz, CH4=2468MHz**.
- Demodulation Method: FM.
- Frequency Generating: P.L.L..
- Audio Response: 20Hz ~ 20kHz.
- Video Output: 1Vpp/ 75 ohm composite Video.
- Distance : Open area is 100 meters, indoor is 30 meters. (Actual range may vary depending on environment)

1.3 MODE AND RESOLUTION TABLE

This converter supports the following VGA display modes:

Resolution	720 x 400	640 x 480	800 x 600	1024 x 768	1152 x 864	1280 x 960	1280 x 1024
Vertical Frequency (Hz)	70	60, 70, 72, 75, 85, 100, 120	56, 60, 70, 72, 75, 85, 100	60, 70, 72, 75	60, 70, 72, 75	60	60

This converter supports the following MAC display modes:(for MAC G4,G4 Cubic,G3)

Resolution	640 x 480	832 x 624	800 X 600	1024 X 768	1152 X 864

Vertical Frequency(Hz)	60,66,72,75,85,100,120	75	56,60,72,75,85, 100	60,70,75	60,70

This converter fully supports APPLE iMac and iMAC DV computer display modes

Resolution	640x480	800x600	1024x768
Vertical frequency (Hz)	117	95	75

1.4 SYSTEM REQUIREMENTS

- Desktop or laptop computer with HD15 VGA standard connection.
- TV or VCR that supports NTSC or PAL video standard with composite video input (required for wireless transmission), (or) S-Video input, (or) SCART input connector.

1.5 PACKAGE CONTENTS

This package contains the following items:

- User's Manual

For Tx

- Grand ULTIMATE WIRELESS Tx
- S-Video cable
- Video cable.
- Audio cable.
- H cable for IBM PC
- Power adapter (DC 6V/800mA)

For Rx

- Grand ULTIMATE WIRELESS Rx
- Audio/Video Cable for Rx
- RGB SCART with AV cable (for Europe)
- Power adapter (DC 6V/800mA)

S-Video cable

Video cable.

Audio cable.

H cable for IBM PC

Audio/Video Cable

RGB SCART w/ AV Cable

CHAPTER 2
INSTALL GRAND ULTIMATE WIRELESS

The following section shows the function of controlling the **Grand ULTIMATE WIRELESS**. Refer to **Figure 1** for the Outline of Grand ULTIMATE WIRELESS.

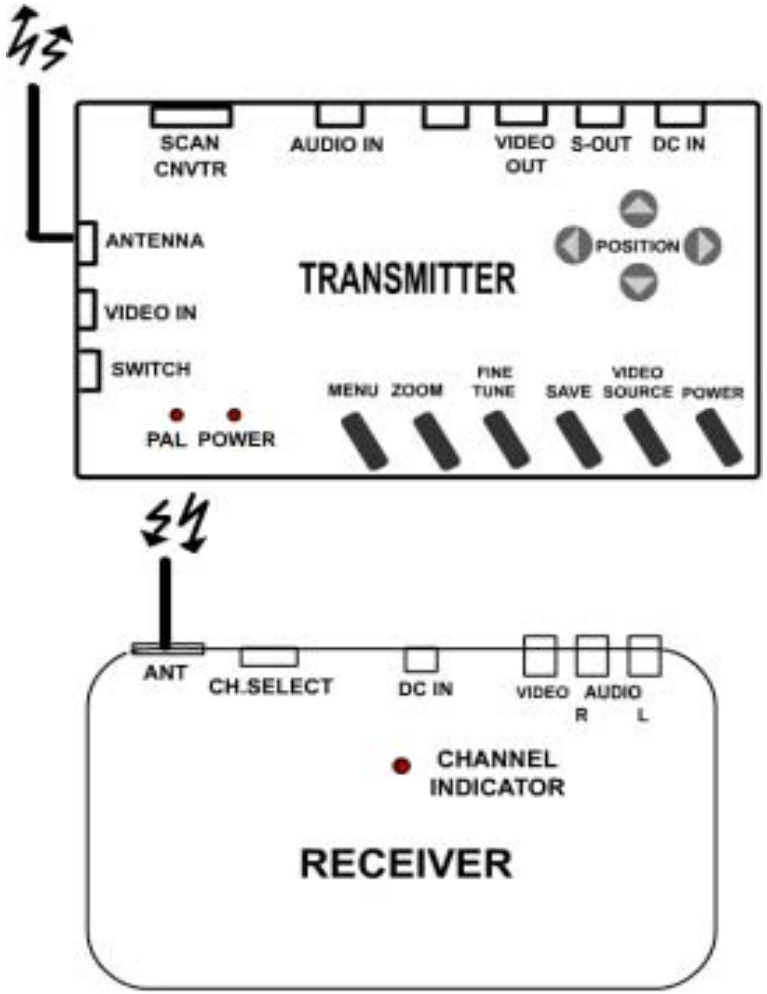

FIG.1 Outline of Grand ULTIMATE WIRELESS

2.1 CONNECTORS OF GRAND ULTIMATE WIRELESS

- SCAN CNVTR : Connects H cable to PC, Grand ULTIMATE WIRELESS and monitor.
- AUDIO IN: Connects to sound device or audio output of DVD/ VCD /VCR.
- VIDEO OUT: Connects Grand ULTIMATE WIRELESS to the Video input of TV.
- S-OUT : Connects Grand ULTIMATE WIRELESS to your TV supporting the S-VIDEO input.(Recommend for wired connections)
- DC IN : Connects with supplied AC power adapter.
- VIDEO IN: Connects to your video device such DVD/VCR/Camera for video pass-through.

2.2 BUTTONS & SWITCH OF GRAND ULTIMATE WIRELESS

- **POWER :** Toggle between power on & off.
- **VIDEO SOURCE :** Toggles between displaying the converted computer display and the video pass-through source.
- **SAVE:** Press this button to save current display and position settings.
- **FINE TUNE :** Press this to fine-tune the video image.
- **ZOOM :** Toggle between Zoom and Normal display for converted computer display.
- **MENU :** Press button to cycle through the functions. The functions are Freeze, HSIZE, VSIZE, Brightness, Contrast, Hue, Saturation, Video Standard, Flicker OSD color & Reset.
- **POSITION :** Press up, down, left and right button to adjust the position of the converted TV display. These four buttons also are used to make adjustments to the settings in the MENU.

2.3 CHANNEL SETTING

- **DIP SWITCH:**

SW1	SW2	SW3	SW4	SW5	SW6	DESCRIPTION
DOWN (ON)						CHANNEL 1
	DOWN(ON)					CHANNEL 2
		DOWN(ON)				CHANNEL 3
			DOWN(ON)			CHANNEL 4
				DOWN(ON)		Optional
					DOWN(ON)	Optional

- **2.4GHz Receiver Channel seting:**

SWITCH 1	CHANNEL 1
SWITCH 2	CHANNEL 2
SWITCH 3	CHANNEL 3
SWITCH 4	CHANNEL 4

2.4 INSTALLATION FOR IBM PC USER

The Grand ULTIMATE WIRELESS is a “Plug and Display” video converter. The only requirement to get the output of the computer on the TV is to make the proper connection and ensure that your computer display is set within the supported parameters. Please read the following sections carefully for the installation of the hardware. Please refer to Fig.2 for and overview of the process.

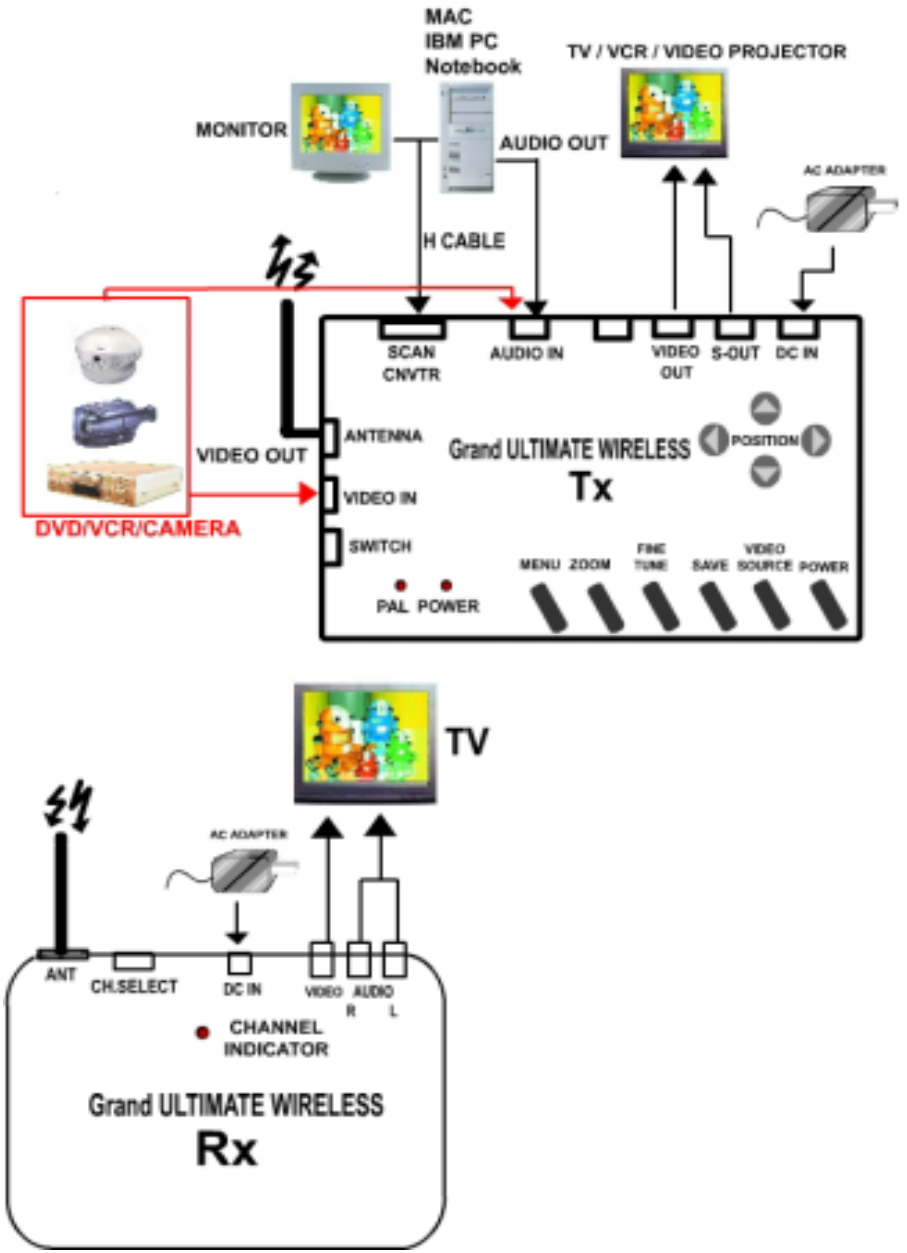

Fig.2 Grand ULTIMATE WIRELESS Installation

2.5 STEP BY STEP CONNECTIONS

IMPORTANT! Turn your computer OFF before connecting the Grand Ultimate Wireless!

1. Connect the end of the H Cable that is RED to the port on the Ultimate Wireless labeled SCAN CNVTR (which is also red).
2. Connect the end of the H cable that is BLUE to the CRT port on the back of your laptop or desktop PC. On a desktop, you may need to first unplug the monitor.

Fig. 3 – Laptop Connection

Fig. 4 – Desktop with Monitor

3. Connect one end of the audio pass-through cable to the AUDIO IN port on the Grand Ultimate Wireless. Connect the other end to the LINE OUT or SPEAKER OUT of your sound card. On a desktop you may first have to disconnect your existing computer speakers.

Fig. 5 – Audio Pass-Through Cable

4. Connect one of the supplied power supplies to the DC IN port on the Grand Ultimate Wireless and then connect the supply to a wall outlet.

NOTE: Connecting anything other than a 6V DC power supply with a center positive connector to the Grand Ultimate Wireless will cause damage to the product and *will void the warranty*. GrandTec recommends using only the supplied power supplies when using the Grand Ultimate Wireless.

5. Connect the Grand Ultimate Wireless Receiver to your TV using the AV Cable. Plug the power supply to the DC IN of the Receiver and then connect the supply to a wall outlet.

Fig. 6 – Audio/Video Cable

Note: Grand Ultimate Wireless also supports high quality S-VIDEO via the S-video cable. If your TV or VCR supports S-VIDEO IN, we highly recommend you use it to get the best TV picture. This option is not available when transmitting the video wirelessly.

6. Toggle the display input to correspond with the video input you are using. For instance, a TV defaults to the antenna or cable input when it is turned on. You will see either a TV channel or snow. Each TV varies slightly, so you may need to refer to your TV's user's manual for further assistance.

7. If you are experiencing any distortion or interference in the wireless transmission, change the transmission channels. Using a paperclip, change the switches on both the transmitter and the receiver so that they are on the same channel. Only one switch should be DOWN on each and the switch that is DOWN indicates which channel is in use.

8. If your TV does not have a VIDEO input, you may connect through a VCR's VIDEO IN. Note: Since virtually every VCR is different, please refer to your VCR User's Manual for exact instructions for recording an external video source.

To connect the Grand Ultimate Wireless to a VCR for recording, follow these steps:

1. Using either the RCA or the S-video (recommended) cable, connect from the video out on the Grand Ultimate Wireless to the Video IN on the VCR
2. Using either an RCA or a 75 Ohm coaxial cable connect from the Video OUT on the VCR to the Video IN on the TV
3. Set the TV/VCR switch on the VCR to "VCR"
4. Set the TV to display the video input signal (Refer to TV's User's manual for instruction on displaying an external video source)
5. You should be able to see the converted computer display on the TV
6. Insert a blank tape into the VCR and press "RECORD". Stop the tape after a few moments to test that it is recording.

CHAPTER 3
TECHNICAL TIPS

The following are problems that might arise when using the PC to TV converter, and possible solutions to them.

Q: How can I enhance the display quality?

A: You can usually decrease the contrast and increase brightness control to get the better picture.

Q: I connect with a NOTEBOOK PC, no output is displayed on TV.

A: Please refer to your computer’s User’s Manual to display an external VGA Signal. (Many Notebook computers have 3 settings, VGA external only, VGA internal only, and VGA internal & external simultaneously)

CHAPTER 4
TROUBLE SHOOTING

Check the following before requesting service.

Symptom	Point to check
No TV output	Press the video select or AV button of the TV to select the video Input from the Grand ULTIMATE WIRELESS.
Text not sharp	Use S-Video or SCART connection.
Ghost image	1. If long cable is used to connect the Grand ULTIMATE WIRELESS to a TV, use a better 75 ohm coaxial cable. (RG-59 is recommended) 2. Adjust Sharpness of TV.
Missing characters	1. Set the Grand ULTIMATE WIRELESS to underscan. Adjust horizontal and vertical position button to the center screen.
No color	1. Toggle the PAL/NTSC button to match your TV system. 2. Make sure the color (also called saturation for some TVs) setting is not minimum. 3. If your TV is multi-standard, set the standard to AUTO or the same as that output from the Grand ULTIMATE WIRELESS.
Flicker：	Adjust the Flicker or V SIZE of the GRAND ULTRAVIEW EX.
Distorted lines：	Reduce the brightness level of the TV. If problem persists, choose a better TV model.

Jitter： Press the FINE TUNE Button to get the smooth picture. Please refer to the figure below.

When you need RMA or advanced technique service, please fill this form as detail as possible and FAX to your dealer.

Product S/N:			
Name:			
TEL No.:		FAX No.:	
E-mail address:			
Full Address:			
Hardware condition:			
Mainboard chipset:			
Mainboard CPU:		CPU clock:	MHz
Main memory:	MB	Cache memory:	KB
VGA card:		Display memory:	MB
Sound card:		Hard Disk:	MB
Other add-on cards:			
Monitor:	Horizontal Freq.: KHz to KHz Vertical Freq.: Hz to Hz		
Problem description:			