



Contents

Warning before install	p. 2
1. Check package contents	p. 4
2. Physical description	p. 5
3. Installing the software	p. 6
4. Connect and disconnect the Sky Cam to USB port	p. 17
5. Launching the software	p. 19
6. Positioning the Sky Cam	p. 26
7. Cleaning the lens	P. 27
8. Specifications	P. 28
9. Electromagnetic Compatibility	P. 30
10. Liability	P. 31



Before Install - Warning

• Power off the Sky Cam as soon as it is found smoking or smelt unusual

Contact your distributor when such cases happen

• Keep the Sky Cam away from the water. If the Sky Cam is wet, power off immediately.



Contact your distributor when such cases happen

• Do not place the Sky Cam around the heat sources.



• Refer to the specification for the operating temperature.



• Keep the Sky Cam away from the direct sunlight.



• Do not place the Sky Cam in high humidity environments.





• Do not place the Sky Cam on unsteady surface.



• Do not touch the Sky Cam when it's lightening.



• Do not disassembly the Sky Cam.



• Do not drop the Sky Cam.



• Do not manually pan and tilt the Sky Cam when it is rotating by electrical power.





1. Check package contents

The Sky Cam (normal or high resolution model)



USB cable



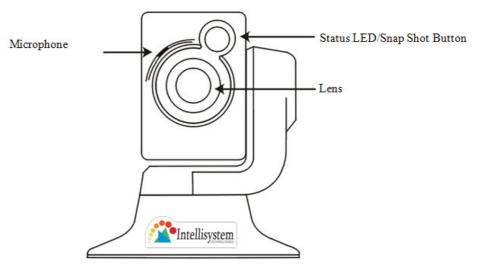
Software CD



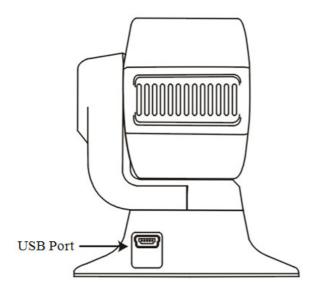


2. Physical description

• Front Panel



Rear Panel





3. Installing the software

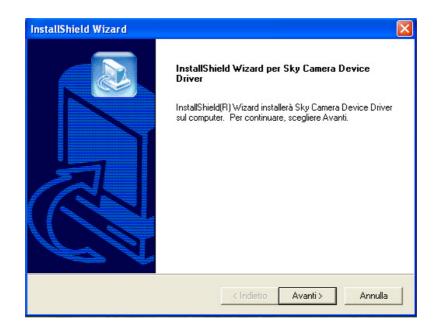
Turn on your computer or notebook and close all the programs run under Windows system. Make sure that your computer operative system is Windows 2000 SP-4 or XP. To get better performance for this USB2.0 device, XP professional SP-2 is recommended. If necessary, please upgrade the system from Microsoft website. USB 2.0 port will be good for better performance of the Sky Cam. Load the software CD into CD-ROM drive, wait a few seconds for auto-run menu running. Don't connect the Sky Cam to your computer when installing the software.



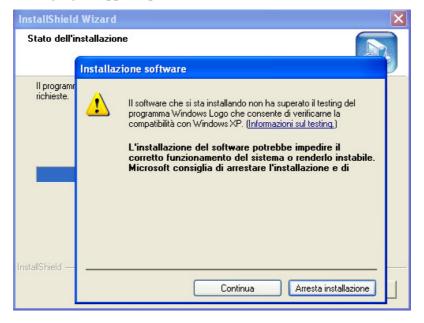
Choose all software on the main menu to install. You will loss some major function if you choose only few of them. Click "Next" and follow the on-screen instruction as the figure reported above.



The first software that will be installed is the Sky Cam USB driver. Please select "Avanti"/"Next" in order to install it.



Each time that the following figure appears please select "Continua"/"Continue"







Please click on "Fine" to finish the driver installation in order to continue with next software.

Next software is "etMCAP". Please select "I Agree" and follow the instruction.

😤 XviD codec 24.2.2003 (uManiac's build) 🛛 🛛 🔀		
This will install XviD MPEG4 Video Codec. Please read the license terms below before installing. Get newest XviD build at http://xvid.hopto.org. This build was created on 24.2.2003 at 11:00.		
GNU GENERAL PUBLIC LICENSE		
Copyright (C) 1989, 1991 Free Software Foundation, Inc. 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.		
Preamble		
The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public		
Cancel XviD build 24,2,2003 (uManiac's I Agree		



Click "OK" and continue.

👺 XviD codec 24.2.2003 (uManiac's build)	×
Registering: C:\WINDOWS\system32\xvid.ax	
Show details	
🚇 XviD codec 24.2.2003 (uManiac's b 🔀	
XviD 24.2.2003 11:00 was installed successfully.	
ОК	
Cancel XviD build 24.2.2003 (uManiac's < Back Close	

Please click on "Close" to finish this software installation in order to continue with next one.

😫 XviD codec 24.2.2003 (uManiac's build)	
Show details	
Cancel XviD build 24.2.2003 (uManiac's < Back Cl	ose



Next software is "FF DSHOW". Please select your language an click "OK".

Installer	Language 🛛 🔀
FF DSHOW	Please select a language.
	English
	OK Cancel

Please click "Next"





Please click on "I Agree".

ffdshow-20050920	
icense Agreement Please review the license terms before installing ffdshow.	FF dshow
Press Page Down to see the rest of the agreement.	
GNU GENERAL PUBLIC LICENSE Version 2, June 1991	
Copyright (C) 1989, 1991 Free Software Foundation, Inc. 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.	
Preamble	
The licenses for most software are designed to take away your	~
If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install ffdshow.)
soft Install System v2.04	ncel
	icense Agreement Please review the license terms before installing ffdshow. Press Page Down to see the rest of the agreement. GNU GENERAL PUBLIC LICENSE Version 2, June 1991 Copyright (C) 1989, 1991 Free Software Foundation, Inc. 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed. Preamble The licenses for most software are designed to take away your f you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install ffdshow. soft Install System v2.04

Please click on "Next". No more then default "Selected components to install" are required.

🚛 ffdshow-20050920		
Choose Components Choose which features of ffdsh	ow you want to install.	
Check the components you war install. Click Next to continue.	nt to install and uncheck the components you don't	want to
Select components to install:	DirectShow filter (required) Documentation (optional) VFW interface VFW interface VFW interface AviSynth scripts serving Applications plugins	
Space required: 14.4MB	Position your mouse over a component to see its description.	;
Nullsoft Install System v2.04 ——	< Back Next >	Cancel



Click always "Next >" as on the next figures.

🕼 ffdshow-20050920		🚛 ffdshow-20050920	
Video decoder Select supported video codecs	FF DSHOW	Audio decoder Select supported audio codecs	FF DSHOW
XVID MPEG 1 DivX 3 MPEG 2 DivX 4 H.263(+) DivX 5 H.264, X264 MS MPEG4v3 MJPEG MS MPEG4v2 VDv MS MPEG4v1 Windows Media Video 1/7 V CorePNG, MP Windows Media Video 2/8 Uncompresse J 3IV2, 3IV2, RMP4, DM4v Set for all users Nullsoft Install System v2.04		✓ MP2 □ Uncompressed ✓ MP3 ○ Vorbis ○ Windows Media Audio V1 ○ Windows Media Audio V2 ✓ AC3 ✓ DT5 ✓ AAC ✓ AMR ○ Flac ○ Set for all users Nullsoft: Install System v2:04 ket.org	Cancel
🕼 ffdshow-20050920		4 ffdshow-20050920	
If dshow-20050920 Video filters Select video filters which should be enabled by default	EFF DSHOW	### ffdshow-20050920 Audio filters Select audio filters which should be enabled by default	
Video filters		Audio filters	L CHAR



Please select "Next >".

🦝 ffdshow-20050920	
Choose Install Location Choose the folder in which to install ffdshow.	<i>Б</i> реном
Setup will install ffdshow in the following folder. To install in a different folder, click Brow and select another folder. Click Next to continue.	se
Destination Folder C:\Programmi\ffdshow Browse	
Space required: 14.4MB	
Space available: 27.7GB	
Nullsoft Install System v2.04	
< Back Next > Ca	incel

Please select "Install".

🕼 ffdshow-20050920		
Choose Start Menu Folder Choose a Start Menu folder for the ffdsh	ow shortcuts.	Б реном
Select the Start Menu folder in which you can also enter a name to create a new fo	would like to create the program's shortcu Ider.	uts. You
ffdshow		
Accessori ATI HYDRAVISION Canon i560 CANON i560 Manual		
Canon S6300 CorelDRAW Graphics Suite X3 CutePDF EPSON Printers		
Esecuzione automatica Fa×Talk Communicator FileZilla		~
Do not create shortcuts		
Nullsoft Install System v2.04 ————	< Back Install	Cancel



Please select "Next >"

🗱 ffdshow-20050920	
Installation Complete Setup was completed successfully.	Б DSHOW
Completed Show details	
Nullsoft Install System v2.04	Cancel

Select "Finish" in order to finish the software installation and continuing with next one.

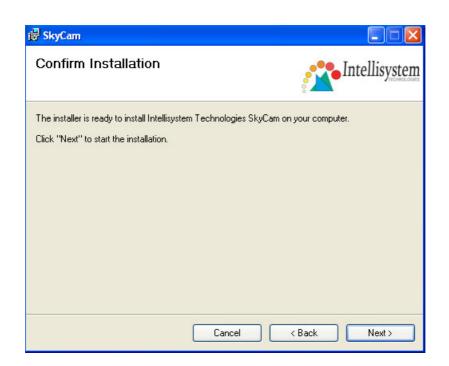




Next software is "Sky Cam Setup Wizard". Please click "Next >" for begin the installation



Please click "Next >"





When the setup is complete please click on "Close" in order to finish this software installation and continue with next one.

🙀 SkyCam	
Installation Complete	Intellisystem
SkyCam has been successfully installed. Click "Close" to exit.	
	Cancel < Back Close

Last software is the ActiveX 9.0 runtime please install it. If your system has a new one the software will go quickly to the end of installation.

When complete the driver and software installation please restart your computer to ensure the software could be operated adequately. If you failed in the process of installation or got a new version of software, please use uninstall to remove all software and re-install again.

4. Connect and disconnect the Sky Cam to USB port

After software is well installed, it is possible to connect the Sky Cam to the computer's USB port. When first time you plug the Sky Cam to the USB port, the device driver should be installed for the computer to identify the new hardware device. Please follow the on screen instruction to complete the installation. Wait few seconds, the motor control logo will show on the screen when the video device is found. If you are using Windows 2000 system, you will be requested to restart your computer when the audio device is found. Please restart your computer to ensure that the Sky Cam could be operated adequately. Please close all software before every time you plug the Sky Cam to computer including the "Video Client", or it may cause trouble to the software with sound effect that is still running on computer.



You can control the pan/tilt, position reset and 10x digital zoom by clicking the motor control logo on the screen when running all software. The motor control logo could be set hidden or show again by clicking twice the Sky Cam icon on the bar in right-bottom side.

Every time when you unplug the Sky Cam from your computer, there is an indication to show you the status that the Sky Cam is removing or is completely removed.

Note: Don't plug again at the moment when Sky Cam is not completely <u>removed.</u>



When the Sky Cam is shown completely removed, it's save to plug the Sky Cam again to your computer if necessary.

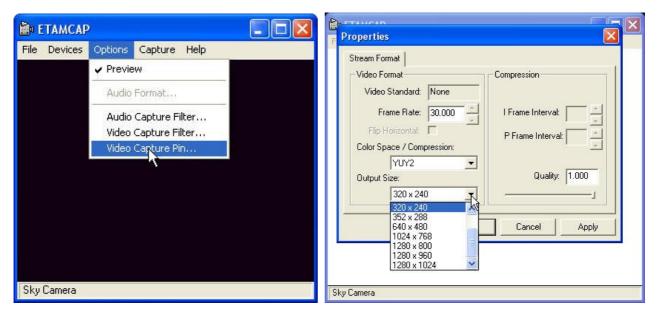




5. Launching the software

By using the software "etAMCAP", you can get high resolution video capture or still image capture which could be up to 1280*1024 pixels. Enter the options setting, choose video capture pin and then set the video compression to be YUV2. The video resolution (size) could be set from range 320*240 to 1280*1024.

You can change the capture angle by moving the Sky Cam head from the motor control logo. Push the button on the Sky Cam could get a still image. You could also record the video in high resolution but that will get huge storage size occupation.



When you are running the powerful software "Sky Cam", on the main menu you have several kind of application software to choose for what you need. Close "etAMCAP" before you clicking any of the listed software.

When choosing all listed software except the "Video Server" and "Video Client", you can always use motor control logo to control the pan/tilt. The motor control logo will become disappear once you open the software "Video Server" or "Video Client" that with built in control panel.

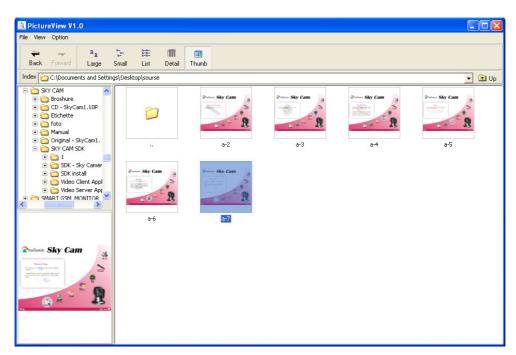


Main menu



Click the "picture view" from the main menu, makes you easy to do pictures management.

Picture View



The software "Sky Cam" especially provide you convenience to do several kind of video/audio application like motion tracking, motion detection with e-mail notification, surveillance through internet, ... etc. Close



"etAMCAP" or other video software, then clicking "Video View" on the main menu will link to software "Video Server". Let you start experiencing the amazing video/audio world.

The software "Video Server" may be blocked from your computer if a firewall for networking security is installed. Please unblock this program and click "OK".

Security Alert					
٢	To help protect your computer, Windows Firewall has blocked this program from receiving unsolicited information from the Internet or a network.				
Salar	Name: Publisher:	Video Server App Intellisystem Technologies			
	 Unblock this program 				
	Keep blocking this program				
	Keep blocking this program, but ask me again later				
Learn more about Windows Firewall OK					

Video Server :

In configuration of Video Server, you can do setting for properties of the Sky Cam and to enable some special function. Then choose mode "Capture" for local use or choose " Monitor" for network connection.

In file setting, let you know the disk size available for recording. The allocate file "capture.avi" is buffer location in process of recording. Don't save the recorded file here. In network setting, you can get the IP address for this

computer and enter configuration for password and e-mail setting.

This software provides special function: motion tracking and motion detection with e-mail notification. Please don't set the video resolution higher than 640*480 when enable the motion tracking. With this function enabled, could help you to get messages immediately that could be abnormal condition with object moving in the surveillance area.

🚇 Intellisystem Technologies - Video Server 📃 🔲 🔀					
CAPTURE MONITOR CONFIG					
Audio and Video Setting					
Video Device Sky Camera Property					
Audio Device USB EMP Audio					
Video Compressor XviD MPEG-4 Codec					
Audio Compressor CCITT u-Law					
File Setting					
Allocate File c:\capture.avi Browse					
Available Disk Size 28815 MB					
Allocate File Size 0 MB					
Network Setting					
IP Address 172.16.10.21 Refresh IP					
Passward (for Connection Verify) Configuration					
E-Mail (for Video Detection) Configuration					
Special Setting					
Enable Motion Detection					
🗂 Enable Motion Tracking					
Configuration Page CPU 20% MEM 14%					



E-mail setting

When you enable the motion detection, please enter the configuration of e-mail to setup SMTP server and e-mail address. The function motion detection with e-mail notification is valid only in "Monitor" mode.

The message sending out through e-mail includes a picture that can be saved in certain directory when entering setup "attach file".

Once you press the button in eye shape to start monitor, or the Sky Cam is already in connection from remote "Video Client", then the content of message will be text only in e-mail.

Intellisystem Tech	inologies - Video Server 📃 🗖 🔀					
CAPTURE MONITOR CONFIG						
Audio and Video Setting						
Intellisystem Technologies - Email Setting						
Smtp field place the IP address of your smtp provider. ex (xxx.xxx.xxx) Attach File						
SMTP	smtp					
From:	user@smtp					
To:	user@smtp					
CC:						
BCC:						
Subject	Video Motion Dection					
Body	Something is moving!					
OK CANCEL						
Enable Motion Tracking						
onfiguration Page CPU 20% MEM 14%						

Password setting

Type twice to confirm the password, then every time you have to use the password when connecting to this Sky Cam from remote site.

If you don't set it, the default setting of password is "Sky Cam".

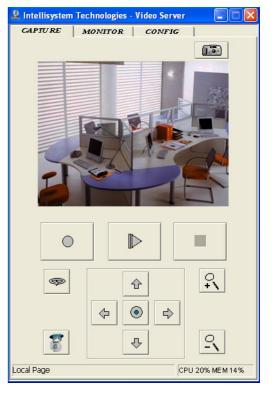
💐 Intellisystem Techno	logies - Video Serv	ver 💶 🗆 🗙					
CAPTURE MONI	TOR CONFI	G					
Audio and Video Setting							
Video Device	Sky Camera	Property					
Audio Device	USB EMP Audio						
Video Compressor	XviD MPEG-4 Code	2C					
Audio Compressor	CCITT u-Law						
File Setting							
Allocate File c:\capture.avi Browse							
Amilable Dick Size	Amilable Dielz Size 28815 MB						
Intellisystem Technologies - Password							
MONITOR PASSWORD Enter Your Password (6 ~ 12 char or num) Enter it again OK CANCEL							
Special Setting Enable Motion Detection Enable Motion Tracking							
Configuration Page CPU 20% MEM 14%							



Video Capture in local

In here, you can do record, play, stop of the video/audio, also 10x zoom, motor control, reverse the image, auto pan and take picture. The size of recording video is quite small because it's in high ratio compression.

The file size would be 2~3 MB if you record one minute video.



Monitoring

When you click the "Monitor", the function is almost the same as in "Capture" mode. Once you press the start button, icon with eye shape, then the video and audio is ready for network connection. <u>Under this situation, you can use the software "Video Client ",</u> <u>installed in remote site connecting to this Sky Cam for surveillance</u> <u>purpose.</u>

When the Sky Cam is installed at an internet address, you can follow the same installing procedure to install the software on a PC in any Lan network with output ports of TCP 5001, 6001 and UDP 9001 opened for the router and use the software "video client" to monitor the Sky Cam.

When the Sky Cam is installed at a Lan address, you can install the software on a PC in same Lan network and use the software "video client" to monitor the Sky Cam.





Monitor Client Connection

Click the connection button will pop up a window for you to type the IP address and password that set in video server. Wait a few seconds to successfully connect to the Sky Cam that setup in the server computer.

Notice! Don't plug the Sky Cam to client computer when the software "Video client" is working with the Sky Cam setup in server computer. Setup ready the Sky Cam before you turning on the video client software.

If there is no setting of password in video server, you have to enter "Sky Cam" as default setting.

🌲 Intellisystem Technologies - MonitorClient 💦 🔲 🗐	×
Intellisystem Technologies - Server Address 🛛 🗙	ĺ
Server Address 127.0.0.1	
Login Password OK CANCEL	
♦ ●	
₹ •	
Video Client Program CPU 20% MEM 14%	

Monitor Client

By using the software "Video Client", you can connect to the Sky Cam that setup in the server computer after confirming with the password and IP address that set in video server. Must open output ports of TCP 5001, 6001 and UDP 9001 for the router if the software "Video Client" is installed at Lan network and Sky Cam set at an internet address. Also you can do record, play, stop, 10x zoom, reverse the image, motor control and auto pan from remote site. Once disconnect, need to wait 1, 2 minutes for re-connection. Sky Cam can be used as interactive video conference if you installed both Sky Cam in the same Lan network or both at internet IP address. Setup ready the Sky Cam first then turning on the software "Video Server" and "Video Client" simultaneously. Through the two way video/audio transmission, both you in server and client can see and control the Sky Cam each other.





Sky Cam User's Manual

Video Server + Video Client





6. Positioning the Sky Cam

Tabletop Placement.

The Sky Cam can be placed on a tabletop next to your computer monitor. Use the Sky Cam on its base, or use the mounting stand to raise the Sky Cam to your eye level.

Monitor Placement.

If there is a flat, stable surface on top of your monitor, place the Sky Cam on the base in the middle of your monitor. You don't need to use the stand on your Sky Cam.

For surveillance purpose.

If you will use this Sky Cam as a surveillance purpose, you can use the stand to mount the Sky Cam on anywhere like as wall, ceiling ... etc.

Sky Cam Rotation.

Do not manually rotate the Sky Cam when it is rotating driven by electrical power. That could damage the Sky Cam. Beside this situation, you could rotate the Sky Cam either by hand or use your mouse or keyboard to pan and tilt the Sky Cam to your favorite angle.



7. Cleaning the lens

When it is necessary to clean the lens, please follow these instructions:

- Prepare cotton swabs and alcohol.
- Moisten the cotton swab with alcohol.
- Slightly clean the lens.

If the lens is still dirty, repeat $2 \sim 3$ steps until it is cleaned. Change a clean cotton swab if the old one is dirty or contains dirt that might scrape the lens. Never touch the lens hard.



8. Specifications

Key Features

Audio & Video Surveillance/Security for Home/Office Via Internet Motorized Pan/Tilt Operation and 10x Digital Zoom Via Web Remote Control Auto-pan allowed Built - in Motion Detection and E-mail Notification Built - in Microphone Video tracking for surveillance purpose Integrate Yahoo! Messenger, MSN Messenger, Skype, AOL Instant Messenger, ICQ Recording Software to Record Video in Hard Drive Snap Shot Button for Instant Still Image Capture Adjustable Manual Focus, Auto White Balance, Auto Exposure Control USB 2.0 Plug & Play



Technical Specifications

Video	Sky Cam specification	
Video Capture/Still Image Capture :	CMOS sensor	
Sky Cam - Up to 1280 X 960 Pixels(Interpolated)	Sky Cam : 300K pixels	
Sky Cam HR (High Res) - Up to 1280 X 1024 Pixels	Sky Cam HR: 1300K pixels	
30fps at CIF/QCIF/VGA, 15fps at SVGA	Sensitivity 0.9V/Lux-Sec	
Sharpness enhancement	Dynamic range 62dB	
Contrast, brightness, and saturation adjustments		
Lens	Audio	
Focal length 1/4" VGA 5.4mm	Sample rates of 48K,44.1K,32K,16K and 8K	
(Focal length 1/4" SXGA 3.8mm : Sky Cam HR)	S/N ratio : more than 90dB	
Viewing system requirement	<u>Microphone</u>	
USB2.0/1.1	Omni-directional	
Operating system : Microsoft Windows 2000 SP-4 or XP	Frequency : 20 – 20,000Hz	
(XP professional SP-2 is recommended)	S/N ratio : more than 60db	
(Ar professional SF-2 is recommended)	Output sensitivity : -38+-3dB	
Pan/Tilt angle	EMI & Safety	
Pan : Range 350 degree, Tilt : Range 135 degree	CE, FCC	
Operating Environment	Dimension	
Temperature : 0 - 40°C Humidity : 85% RH	80 x 68 x 68 (mm)	
Power	Weight	
Consumption : Max 2.5 W	Net : 130 g	



Electromagnetic Compatibility (EMC)

This device compiles with FCC Rules Part 15. Operation is subject to the following two conditions.

This device may not cause harmful interference, and

This device must accept any interference received, including interference that may cause undesired operation.

USA - This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a partial installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables must be used in order to comply with emission limits.

Europe - This digital equipment fulfills the requirement for radiated emission according to limit B of EN55022/1998, and the requirement for immunity according to EN50082-1/1992.



Liability

Intellisystem Technologies S.r.l. cannot be held responsible for any technical or typographical errors and reserves the right to make changes to the product and manuals without prior notice. Intellisystem Technologies S.r.l. makes no warranty of any kind with regard to the material contained within this document, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. All other company names and products are trademark or registered trademarks of their respective companies.

For any question and support please contact:

Intellisystem Technologies S.r.l.

Support: info@intellisystem.it

Web Site: http://www.intellisystem.it