SONY

3-000-000-**11** (1)

Data Projector

Operating Instructions for Air Shot

VPL-CX85

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Precautions

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Features

This unit is equipped with the Air Shot (wireless connection) function. Any image of a computer can be projected by using the projector without connecting cables. Images from several computers can also be easily switched and projected.

Easy setting and connection in Simple Mode

Simple Mode is an easy connection mode with no need for network and wireless settings. The wireless connection of the projector and computer can be done easily by using the Simple Mode function. Insert the supplied wireless LAN card into the projector and the supplied USB wireless LAN module into the computer, and an image from the computer can be easily projected.

Installation by the USB storage media

For using Air Shot, install the application software, Projector Station for Air Shot, in the computer. The installation can be done easily in accordance with the instructions on the screen by using the supplied USB storage media, even if your computer is not equipped with a CD-ROM drive.

Speedy and high quality transportation/display

The image data is efficiently compressed so that a high-quality image can be transported speedily. An animation function can be used at a presentation by real time transportation. (It is not available for a movie using a DVD player.)

Security system

Data can be encoded and transported (WEP). Data is also encoded in Simple Mode for the communication of the projector and the computer. You can feel confident about data communication.

Control by using Web browser

You can control the projector and confirm its setting.

Connection to a LAN

You can not only connect the projector and computer directly but also connect to a LAN by using the access point. Power on/off, input selecting, confirmation, etc. of the projector can be done from the computer. And viewing an image in the internet, you can transport it to the projector.

Multiple connections

A maximum of five projectors can be connected to one computer without using a distributor and an image can be projected on the projectors at the same time.

Presentation tool with laser pointer

PowerPoint images can be played back forward or backward or muted by using the supplied presentation tool.

System Requirement

Recommended system requirements for the installed Projector Station for Air Shot are as follows.

Available computer

CPU: Intel Pentium III 600 MHz or higher
Memory: 64 MB or more, recommended 128 MB or more (Windows XP: 128 MB or more)
Hard disc: 10 MB or more

Available OS

Microsoft Windows 98SE, Microsoft Windows Me, Microsoft Windows 2000, Microsoft Windows XP Home Edition, Microsoft Windows XP Professional

Available resolution

Size: VGA (640 × 480), SVGA (800 × 600), XGA (1024 × 768), SXGA (1280 × 1024)
Color number: 16 bit, 24 bit, 32 bit
Usable browser: Internet Explorer 5.0 or higher

Usable wireless LAN card

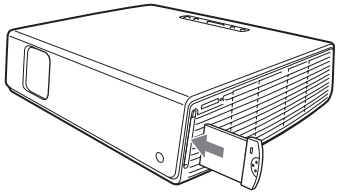
Standard: IEEE802.11b (WiFi compliant)
Channel: 1 to 11
Access system: Access point mode or Ad-hoc (peer-to-peer) mode
WEP: 128 (104)/64 (40) bit

Inserting Card

Insert the supplied wireless LAN card into the slot of the projector.

Inserting the card

Insert the card facing the right side towards the front panel of the projector until it stops.



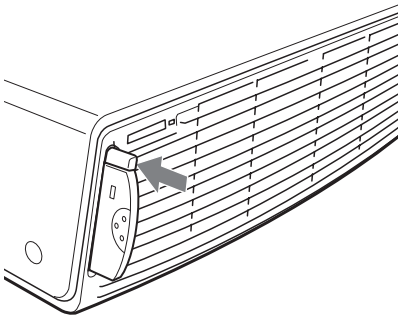
Notes

- Never use a wireless LAN card other than the supplied one.
- When the projector is carried, remove the card from the slot.

Removing the card

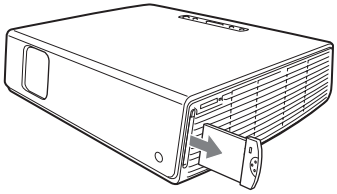
Before removing the card, turn off the power.

1 Press the eject button at the upper side of the slot.
The eject button pops out.



2 Press the eject button again.
The card pops out.

3 Remove the card.



Note

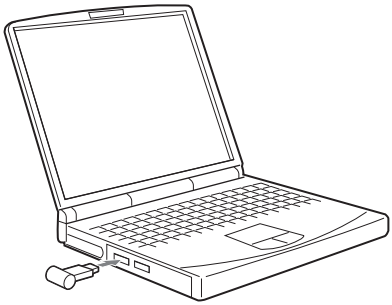
After the card is removed, press the eject button. If the button remains popped out, it may cause breakage of the button.

Installation

For using Air Shot, install the application software, Projector Station for Air Shot, in the computer.

1 Connect the supplied USB storage media to the USB terminal of the computer.

Computer



USB storage media (supplied)

2 Double-click [My Computer], [Removable Disc] and [As_inst.exe].

The window for installing the Projector Station for Air Shot appears.

3 Click [Install].

4 Install the software according to the "wizard" within the installer.

After the installation is completed, [Exit installation procedure.] appears.

Projector Station for Air Shot can also be installed by using the supplied CD-ROM.

Connecting Examples

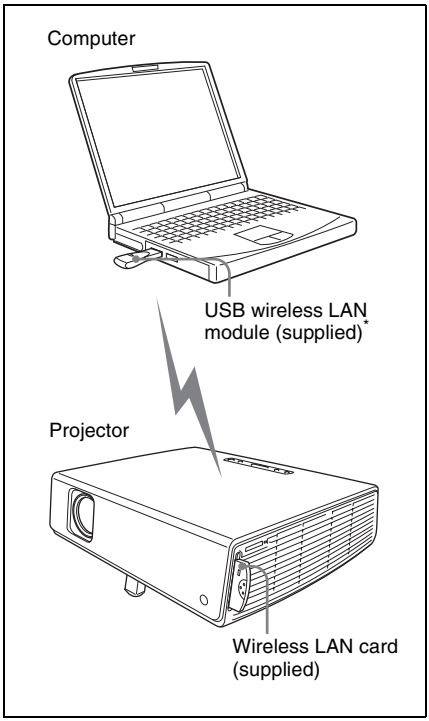
Connecting one projector and one computer

When Simple Mode is used

See “When Simple Mode is Used” on page 8.

When Simple Mode is not used

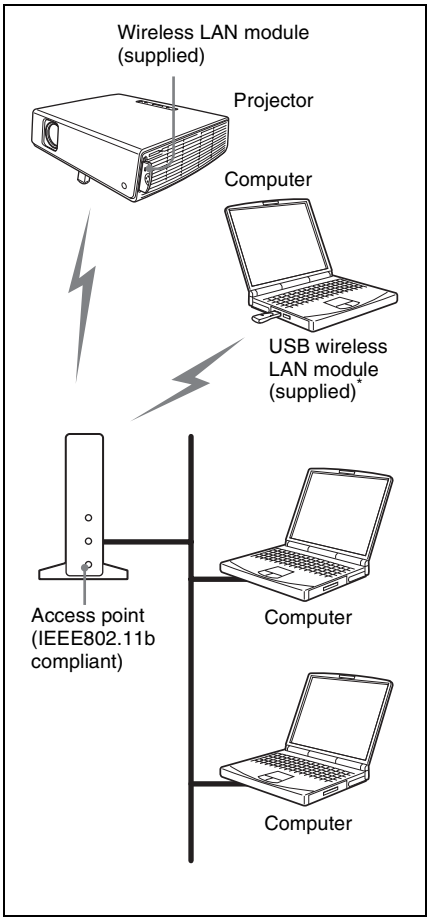
See “When Simple Mode is not Used” on page 10.



* When Simple Mode is not used, you can also use a wireless LAN device (IEEE802.11b compliant) other than the supplied USB wireless LAN module.

Connecting to wireless LAN using the wireless LAN access point

For setting and operations, see “When Simple Mode is not Used” on page 10.



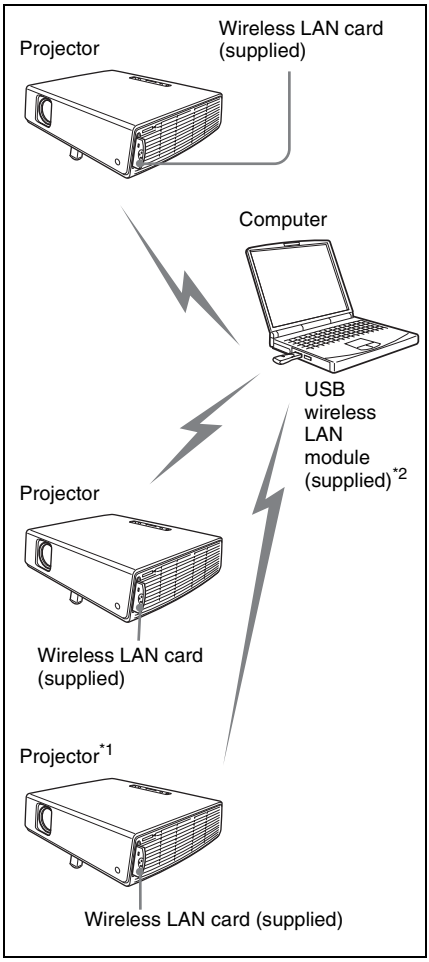
* You can also use a wireless LAN device (IEEE802.11b compliant) other than the supplied USB wireless LAN module.

Note

For a network connection, consult the network administrator.

Connecting to several projectors at the same time

For setting and operations, see “When Simple Mode is not Used” on page 10.



*1 A maximum of five projectors can be connected at the same time.

*2 You can also use a wireless LAN device (IEEE802.11b compliant) other than the supplied USB wireless LAN module.

When Simple Mode is Used

Setting the projector

1 Insert the supplied wireless LAN card into the slot of the projector.

2 Turn on the projector.

3 Press the AIR SHOT key on the remote commander.

The home display of Air Shot appears. Check that [Simple Mode] is set to [On].

If the home display does not appear

Select [Air Shot] in [INPUT C FUNCTION] of the “SET SETTING” menu.
For details of the “SET SETTING” menu, see the attached Operating Instructions.

If Simple Mode is not set to [On]

See step **5** of “When Simple Mode is not Used” on page 10 and set it to [On].

To change the network channel for Simple Mode

The default setting is [11]. Set [Network Channel] to the other channel. The channel is selected from among 1 to 11.

Notes

- If the USB wireless LAN module is connected to the computer, remove it before setting.
- You may not be able to use some channels according to the country.

Setting the computer

1 Start the Projector Station for Air Shot.

When it starts, the [ ] icon appears in the task bar.
When [Create Shortcut Icon into Startup Folder.] is selected at installation, the Projector Station for Air Shot starts automatically.

2 Connect the USB wireless LAN module to the USB terminal of the computer.

After a while, the wireless setting is automatically done. After the connectable projector is searched, the image of the computer is projected on the searched projector.

When the USB storage media other than the supplied one is used for installation

Connect the USB wireless LAN module to the USB terminal of the computer and add the projector to be used. The added projector appears in the select list.

Setting

1 Right-click the [ ] icon in the task bar.

The main window of Projector Station for Air Shot opens.

2 Click the [ ] button of the main window to open the [Option] dialog box.

For details of the [Option] dialog box, see the help manual.

3 Click the [Change Projector] button of [Simple Mode Setting].

The dialog box with a projector name and serial number is displayed.

4 Click the [Add] button and enter the projector name and serial number.

The projector is added to the list.

Note

Even when the setting to add a projector is completed, the projector name is listed "Unknown" until the projector has been connected once.

When Simple Mode is not Used

Setting the projector

1 Insert the supplied wireless LAN card into the slot of the projector.

2 Turn on the projector.

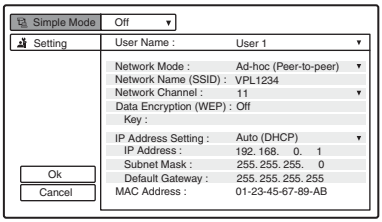
3 Press the AIR SHOT key on the remote commander.

The home display of Air Shot appears. If the home display does not appear, select [Air Shot] in [INPUT C FUNCTION] of the "SET SETTING" menu.

For details of the "SET SETTING" menu, see the attached Operating Instructions.

4 Press the ENTER key.

The setting menu display appears.



5 Select [Off] in [Simple Mode] and set [User Setting].

User Name: the setting items can be saved. There are five memories and you can select from among [User 1] to [User 5]. When you want to change the user name, see "Projector setting" on page 14 ("Setting/Operating the Projector from the Computer (via Web)").

Network Mode: select [Ad-hoc (Peer-to-peer)] or [Wireless Access Point].

- Ad-hoc (Peer-to-peer): for wireless LAN connection without the access point
- Wireless Access Point: for wireless LAN connection with the access point

Network Name (SSID): enter the same network name as that of the connected computer.

A maximum of 32 characters/numbers can be entered.

Network Channel: when [Ad-hoc (Peer-to-peer)] is selected in [Network Mode], you can select from 1 to 11.

When [Wireless Access Point] is selected in [Network Mode], [Auto] is selected automatically.

Notes

- If the USB wireless LAN module is connected to the computer, remove it before setting.
- You may not be able to use some channel according to the country.

Data Encryption (WEP): select the data encryption system.

You can select from among [Off], [64 (40) bit ASCII], [128 (104) bit ASCII], [64 (40) bit HEX], [128 (104) bit HEX]. When [Off] is selected, [Key] becomes invalid.

Key: when [Data Encryption (WEP)] is used, enter the key.

Enter the same key as that of the computer.

The number of the characters/figures is due to the setting of the [Data Encryption (WEP)].

- 64 (40) bit ASCII: max. five characters
- 128 (104) bit ASCII: max. 13 characters/numbers from 0 to F
- 64 (40) bit HEX: max. ten characters/ symbols
- 128 (104) bit HEX: max. 26 characters/numbers from 0 to F

IP Address Setting: select [Auto (DHCP)] or [Manual].

When the [Manual] is selected, set [IP Address], [Subnet Mask] and [Default Gateway].

Note

A DHCP server is needed to make DHCP valid.

IP Address: select the IP address setting from among 0 to 255.

Subnet Mask: select the subnet mask setting from among 0 to 255.

Default Gateway: select the default gateway setting from among 0 to 255.

MAC Address: the MAC address of the attached wireless module is displayed.

You can set the projector by using the browser. See "Projector setting" on page 14 ("Setting/Operating the Projector from the Computer (via Web)").

To save the setting

Select the [OK] button and press the ENTER key. The settings are saved and the home display appears.

To clear the setting menu without saving the setting

Select the [Cancel] button and press the ENTER key.

Setting the computer

1 Right-click the [ ] icon in the task bar.

The main window of Projector Station for Air Shot opens.

2 Click the [ ] button of the main window to open the [Option] dialog box.

For details of the [Option] dialog box, see the help manual.

3 Select [Off[in [Simple Mode].

4 When the supplied USB wireless LAN module is used, set the wireless LAN referring to the User's Guide of the wireless LAN module.
When a device other than the supplied wireless LAN module is used, set the wireless setting of the computer so that the projector and computer can be connected.

Connecting the projector and computer

You can project an image of the computer on the projector after the connection operation. For details of the operation, see the help manual.

When accessing from the computer

Open the main window of Projector Station for Air Shot and connect the computer and the projector referring to the help manual.

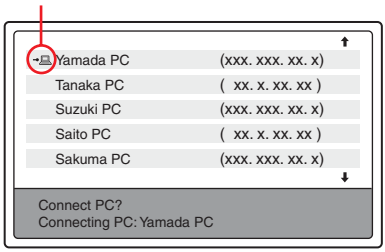
When accessing from the projector

1 Press the AIR SHOT key on the remote commander.

The connectable computer list appears.

2 Press ↑ or ↓ key on the remote commander to select the computer to be connected, and then press the ENTER key.

Appears when the computer is connected.



For disconnecting

Press ↑ or ↓ key to select the computer to be disconnected, and then press the ENTER key.

Setting/Operating the Projector from the Computer (via Web)

You can check the information of the projector from the computer or operate the projector on the computer. Check the connection and turn on the equipment.

Accessing from the Computer

You can access the Web page of the projector by either of the following two ways.

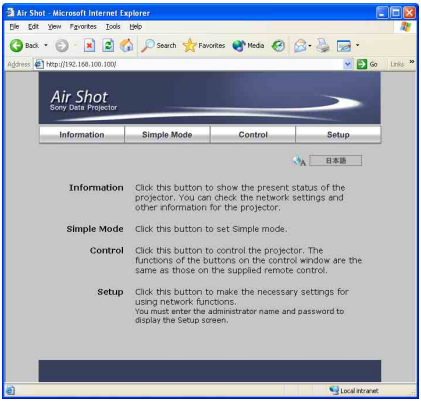
Right-click the projector button in the main window of Projector Station for Air Shot.

Start a browser of the computer (Internet Explorer 5.0 or higher) and enter the address "http:// xxx.xxx.xxx.xxx (IP address of the projector.)"

Note

If the browser of your computer is set to "Access the Internet using a proxy server," enter the IP address of the projector in the box "Access the Internet without using a proxy server" when you have access to the projector from your computer.

After access, the following display appears.

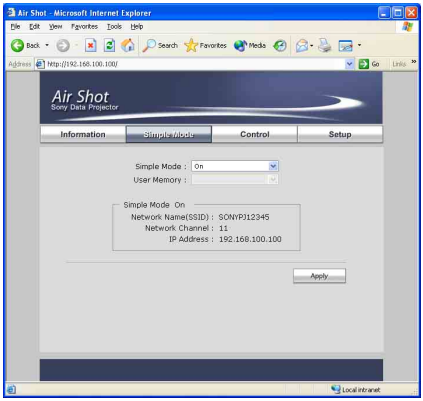


Confirming the State of Projector Settings (Information)

Click [Information].
You can confirm the current state of the projector on the computer. You cannot change the settings of the projector. Click [Refresh] when the setting of the projector is changed after displaying the information window.

Setting the Connecting Mode (Simple Mode)

Click [Simple Mode].
Set the Simple Mode and user name.
Click the [Apply] button to reflect the projector.

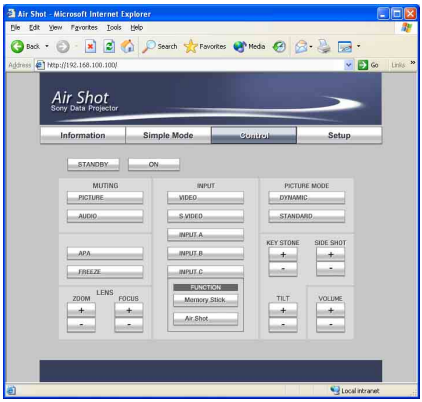


Simple Mode: set the Simple Mode. When [On] is selected, the mode is set to easy connection mode with no need for network and wireless settings. When [Off] is selected, the user settings are needed.

User Memory: select the user name.

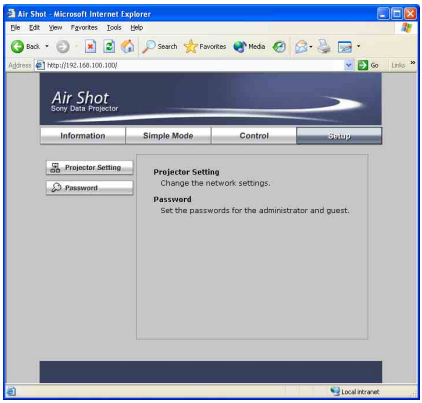
Operating the Projector on the Computer (Control)

Click [Control].
You can control the projector on the computer.
The keys that have the same names as those on the supplied remote commander function identically.
The current state is reflected in the projector by clicking the [Apply] button.



Setting (Setup)

Click [Setup].
Set for using the network function.
Click [Projector Setting] or [Password] and set each item.
The current state is reflected in the projector by clicking the [Apply] button.



Projector setting

Click [Projector Setting].

Projector Name: enter a projector name.

Simple Mode: set [On] or [Off].
When [Off] is selected, set the following.
Setting: select [Ad-hoc (peer-to-peer)] or [Wireless Access Point].
Network Name (SSID): enter the same network name as that of the connected computer. A maximum of 32 characters/numbers can be entered.
Network Channel: when [Ad-hoc (peer-to-peer)] is selected in [Setting], you can select from 1 to 11.
When [Wireless Access Point] is selected in [Setting], [Auto] is selected.

Notes

- If the USB wireless LAN module is connected to the computer, remove it before setting.
- You may not be able to use some channel according to the country.

Data Encryption (WEP): select the data encryption system.
You can select from among [Off], [64 (40) bit ASCII], [128 (104) bit ASCII], [64 (40) bit HEX], [128 (104) bit HEX].
When [Off] is selected, [Key] does not function.
Key: when [Data Encryption (WEP)] is used, enter the key. Enter the same key as that of the computer.
The number of the characters/figures is due to the setting of the [Data Encryption (WEP)].
- 64 (40) bit ASCII: max. five characters
- 128 (104) bit ASCII: max. 13 characters/numbers from 0 to F
- 64 (40) bit HEX: max. ten characters/symbols
- 128 (104) bit HEX: max. 26 characters/numbers from 0 to F

IP Address setting: normally select [Auto (DHCP)].
When [Manual] is selected, set [IP Address], [Subnet Mask] and [Default Gateway].

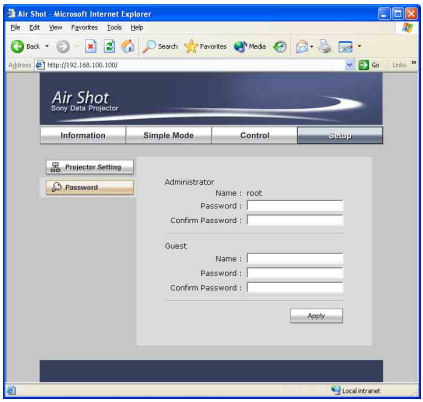
Note

A DHCP server is needed to make DHCP valid.

User Memory: select from [User 1] to [User 5].
Edit: click when you want to enter a new user name. The [User Name], [Setting] and [Cancel] button function.
User Name: enter the user name.
Set to List: click to register the added user name.
Cancel: click to cancel the user name.

Password

Click [Password].



Administrator: enter [Password] and [Confirm Password]. The name is fixed to [root].
Guest: enter [Name], [Password] and [Confirm Password] of the user.

Troubleshooting

Symptom	Cause and Remedy
The image does not appear in Simple Mode.	• The supplied wireless LAN card is not used. ➔ When the supplied wireless LAN card is not used, Air Shot does not work correctly. • A black screen appears (picture muting.) ➔ Press the PIC MUTING key to release the muting. • The Simple Mode setting of the projector or Projector Station for Air Shot is not set to [On]. ➔ Set the Simple Mode setting to [On].
LAN connection is impossible.	• The network or wireless setting is not correct. ➔ Check that the IP address, SSID, WEP or etc. is the same as that of the equipment to be connected. • The channel of the access point is set to from 12 to 14. ➔ Set the channel from 1 to 11.
The computer cannot be connected to the projector.	• INPUT C is not selected on the projector. ➔ Press the AIR SHOT key on the supplied remote commander or select INPUT C by the INPUT button. • [Memory Stick] is selected in INPUT C. ➔ Select [Air Shot].
The connectable projector does not appear in the window of Projector Station for Air Shot.	• The signal is too weak. (The computer is 30 m or more from the projector or there is an object such as a steel partition or door between the computer and projector.) ➔ Put the computer and projector near each other or remove the obstacle.
The image of one computer cannot be projected on several projectors.	• Simple Mode is used. ➔ Set Simple Mode to [Off] and set the network and wireless settings.
The internet browser does not starts.	• The computer is not connected to the projector. ➔ Check the settings. • The browser of the computer is set to “Access the Internet using a proxy server.” ➔ Enter the IP address of the projector in the box "Access the Internet without using a proxy server" when you have access to the projector from your computer. • “0” is input at the head of the IP address of the projector. ➔ When the IP address starts from “0”, remove “0”. Ex: 192.168.000.001 ⟶ 192.168.0.1 • The version of the browser is old. ➔

Warning Messages

Symptom	Cause and Remedy
Cannot connect.	• →
Cannot disconnect.	• →
Cannot switch.	• →
Wireless LAN card not inserted.	• The wireless LAN card is not inserted correctly into the slot of the projector. → Check the card direction and insert until it stops.
Incompatible card mounted.	• The supplied wireless LAN card is not used. → When a wireless LAN card other than the supplied one is used, the wireless operation does not function correctly.
The setting is invalid.	• →
The same IP address already exists.	• The set IP address is already in use. → Input a new IP address.
Could not find connectable projector.	• →
You can connect up to 5 projectors.	• A maximum of five projectors can be connected to one projector. →
No response from projector.	• →

Technical Terms

Air Shot
The function to connect the computer and the projector in wireless mode.

DHCP
The function to share the IP address automatically with the equipment connected to the network. The DHCP server does not share a fixed IP address but shares the IP address with each equipment according to the situation.

IP address
The address to recognize each connected machine in the TCP/IP network.

LAN (Local Area Network)
The network to be used in a limited area such as an office or home.

MAC address
The individual address to be shared at the factory when it is produced.
There is no other machine with the same address and the address cannot be changed by the user.

Projector Station for Air Shot
The application software to use Air Shot. Install in the used computer.

SSID (Service Set Identifier)
The data to recognize the equipment to be connected in a wireless LAN.
Equipment with the same SSID can be connected.

TCP/IP
The protocol to use in a network.
Each computer on the internet uses TCP/IP to communicate with any other computer and this is used as the protocol for LAN.

WEP (Wired Equivalent Privacy)
The security system to communicate the encrypted data.
Register the same key as that of the connected computer to communicate.

Access point mode
The mode using the wireless access point in a wireless LAN.

Ad-hoc (peer-to -peer) mode
The mode not using the wireless access point in a wireless LAN.

Subnet mask
A means of allocating an IP address according to the individual need.

Simple Mode
The simple setting mode to connect the projector and computer without the network and wireless settings.

Channel
Channel allotted to a wireless LAN to avoid interference.
Some channels cannot be used according to the country.

Default gateway
This means a router address.

http://www.sony.net/
Sony Corporation