

LocationFree Player Pak ***– LocationFree Base Station*** ***– LocationFree Player***

Operating Instructions



NET-AV

LF-PK1


– LF-B1

– LFA-PC2

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Note

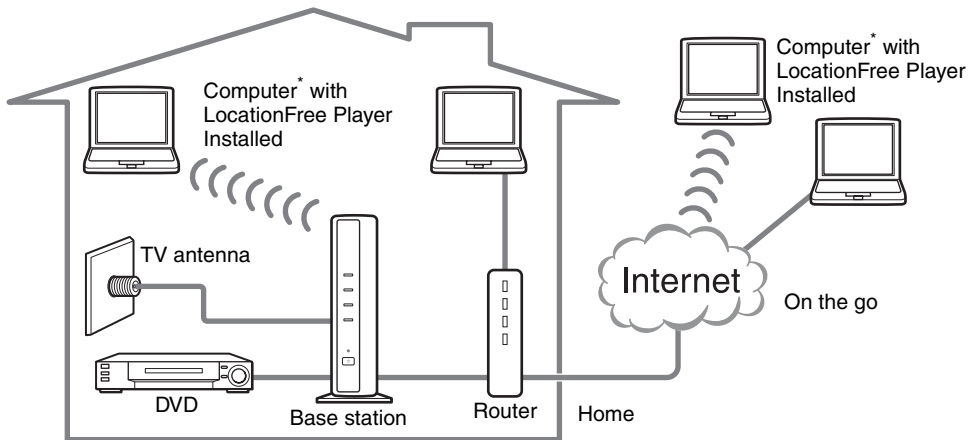
The screen shots used in this manual are only example images.

What is the LocationFree Base Station?

The LocationFree Base Station allows you to watch TV and videos both at home and on the go. Your home base station can be accessed via the internet while you are away from home by installing and configuring the LocationFree Player on your computer or another LocationFree device*. Also, by placing the base station in a central room, such as your living room, you can enjoy TV and videos from anywhere in your home via your home LAN.

* LocationFree device: A computer with LocationFree Player installed or a LocationFree TV.

NetAV: A function that allows you to access the base station via a home network or the Internet to watch TV and videos.



Tips

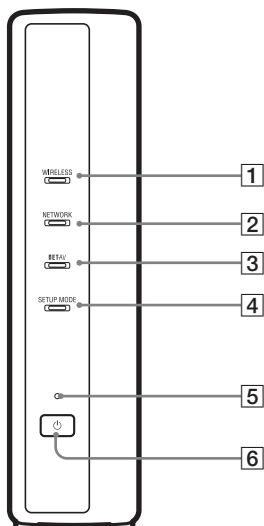
- You cannot use NetAV when connected to the Internet via an analog phone line that uses a dial-up router or cellular phone.
- You may not be able to watch some videos, DVDs, and other media that are copyright protected with the software.
- When the power is turned on, the base station continuously emits a wireless signal.
- To use the NetAV function, we recommend a broadband connection with upload and download speeds of at least 300 kbps.
- This base station can connect to the monitor of the LocationFreeTV. To register the LocationFreeTV monitor on the base station, the base station LF-B1 setup information (domain name, port number, and registration password) needs to be set on the LocationFreeTV monitor. For details, refer to the operating instructions for the LocationFreeTV, "Registering LocationFree Devices on the Base Station" (page 41) in these operating instructions, or the following site.
LocationFreeTV FAQ pages:
<http://www.sony.com/locationfree/faq/>
- NetAV cannot be used via a proxy server.

Notes

- The LocationFree Base Station transmits on the 2.4 GHz and 5 GHz wireless channels. If other devices in the vicinity emit electrical waves, such as a wireless LAN device or microwave oven, the strength of the wireless signal may decrease. The materials used in the construction of a building's walls and floors may also affect the signal strength.
- When using NetAV, the base station, router, and connected devices at home also need to be left on when you are away from home so that you can connect to them via the Internet.
- Use of the NetAV function for purposes other than personal enjoyment is prohibited.

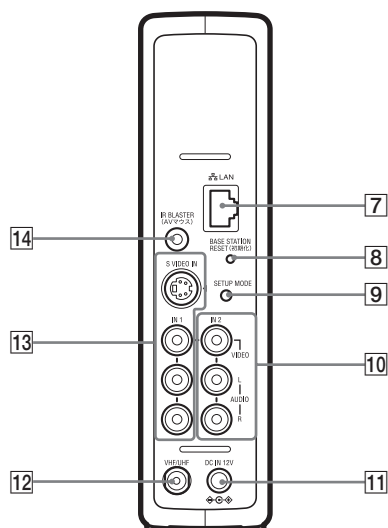
Identifying Parts and Controls (Base Station)

Front



- 1 WIRELESS LED**
Indicates the wireless function status.
Blue: Connected with the LocationFree device on the 5 GHz channel.
Green: Connected with the LocationFree device on the 2.4 GHz channel.
Turns blue or green momentarily, then turns off for 3 seconds: Wireless is enabled, but wireless communication with a LocationFree device is not taking place.
- 2 NETWORK LED**
Indicates the connection status to an external network, such as the Internet.
Green slow blinking: Attempting to connect.
Green: Connected to the network. The LED blinks quickly when data is transmitted.
Off: Not connected.
- 3 NETAV LED**
Indicates the connection status with the LocationFree device.
Green fast blinking: NetAV authentication has failed.
Green slow blinking: Attempting to connect with NetAV.
Green: Connected with NetAV.
Umber blinking: Updating dynamic DNS.
Umber: Dynamic DNS failure.
Off: Not connected.
Red: The base station is being initialized.
- 4 SETUP MODE LED** (☞ page 12)
Umber: The base station is in Setup mode.
Umber blinking: Easy registration is possible.
- 5 POWER LED** (☞ page 13)
Green: The power is on.
Red blinking: A malfunction has occurred.

Rear

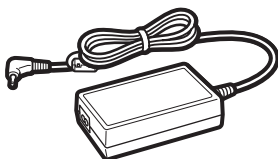
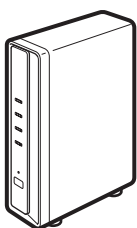


- 6 POWER button** (☞ page 13)
Turns the base station power on and off.
- 7 LAN port**
Connect a LAN cable.
- 8 BASE STATION RESET button** (☞ page 48)
Initializes all settings on the base station to the factory defaults.
- 9 SETUP MODE button** (☞ page 12)
Press to register LocationFree devices, or to make base station settings.
- 10 IN 2 (AUDIO/VIDEO) terminal** (☞ page 9)
Connect audio and video cables.
- 11 DC IN jack** (☞ page 13)
Connect the AC power adapter (supplied).
- 12 VHF/UHF jack** (☞ page 7)
Connect an antenna cable.
- 13 IN 1 (S-VIDEO/AUDIO/VIDEO) terminal** (☞ page 9)
Connect audio cables and either a video or S-video cable.
- 14 IR BLASTER port** (☞ page 10)
Connect the IR Blaster (supplied).

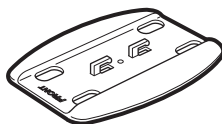
Part 1 Checking the Package Contents

After unpacking, check that all the following items have been included:

- Base station (1)
- AC-LX1B AC power adapter (1)
- Power cord (1)



- IR Blaster (1)
- Base station stand (1)



- LocationFree Player software CD-ROM (1)



- LocationFree Player software*
- Operating Instructions (PDF file)
- License (text file)

- Quick Start Guide (1)
- Instructional DVD (1)
- Dynamic DNS Terms-of-Use Agreement (1)

* One serial key for LocationFree Player is supplied.

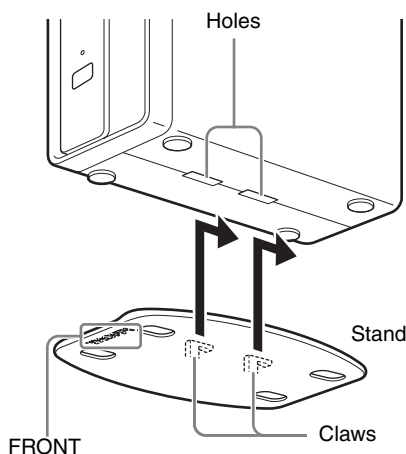
Part 2 Attaching the Base Station Stand

To keep the base station stable, attach the base station stand.

Notes

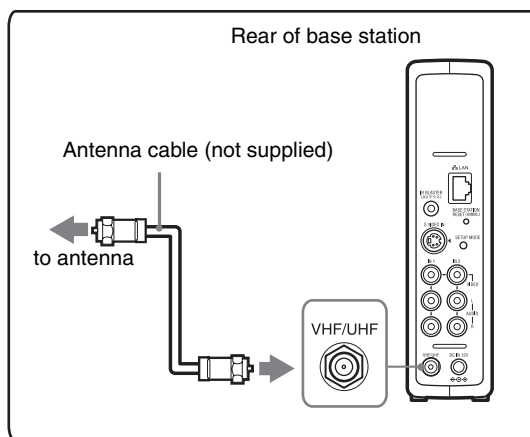
- The SSID, WEP key, and initial password are printed on the side panel of the base station. You will need this information when you set up the base station and make wireless connections. Install the base station so that you can easily see the side panel.
- Place the base station at least 10 cm away from the wall.

With the stand positioned so that the section labeled as **FRONT** is toward the front of the base station, insert the claws of the stand in the holes on the bottom of the base station and slide the stand toward the back of the base station to lock it into place.



Part 3 Connecting Cable or Antenna

The procedure for connecting to a TV antenna depends on the type of antenna jack. Some antenna jacks require a separate converter or splitter (not supplied). For more information, contact your Sony dealer.



Connecting to a Cable Box (STB)

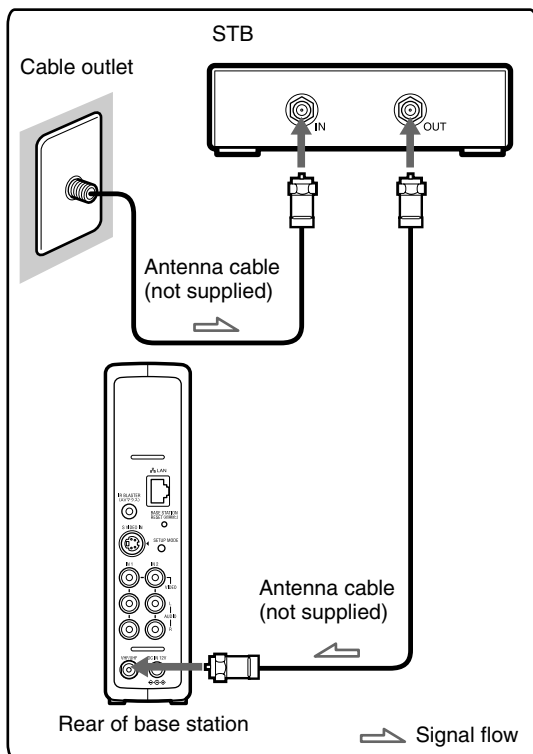
Depending on the output jacks on your cable or satellite receiver set-top box (STB), you can use either the base station's VHF/UHF input (as shown below) or the video inputs (☞ page 9).

Connecting to the video input terminal

See “Part 4 Connecting Other Devices”

(☞ page 9)

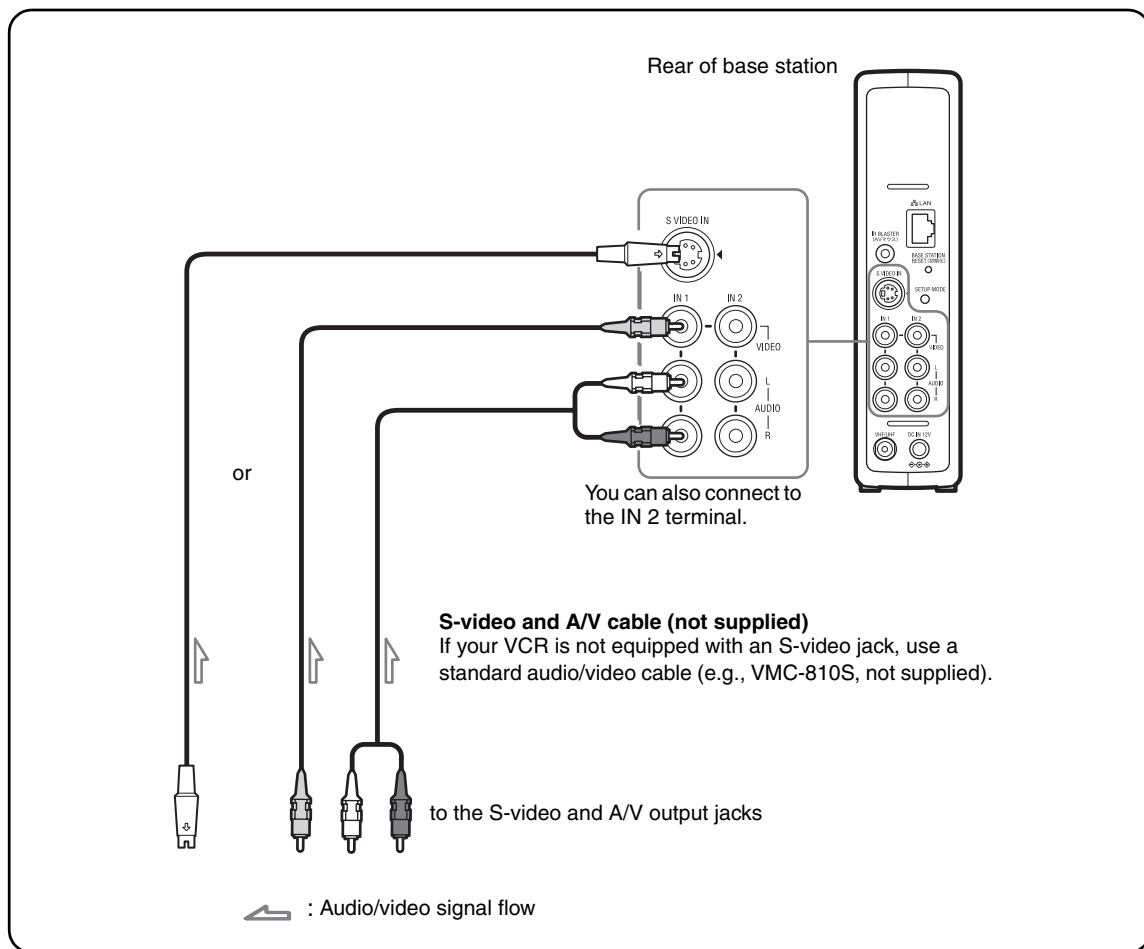
Connecting to the antenna cable



Part 4

Connecting Other Devices

You can connect external devices featuring an A/V output terminal, such as a VCR, AV receiver, DVR, DVD player/ recorder, or digital cable, to the base station. Refer to the operating instructions for each device.



Watching video with a connected device

Select [Video 1] in the [Index] window. You can operate the connected device using the on-screen remote control. Open the [Index] window, select [Video 1] or [Video 2] according to the input terminal to which the device is connected.

Tip

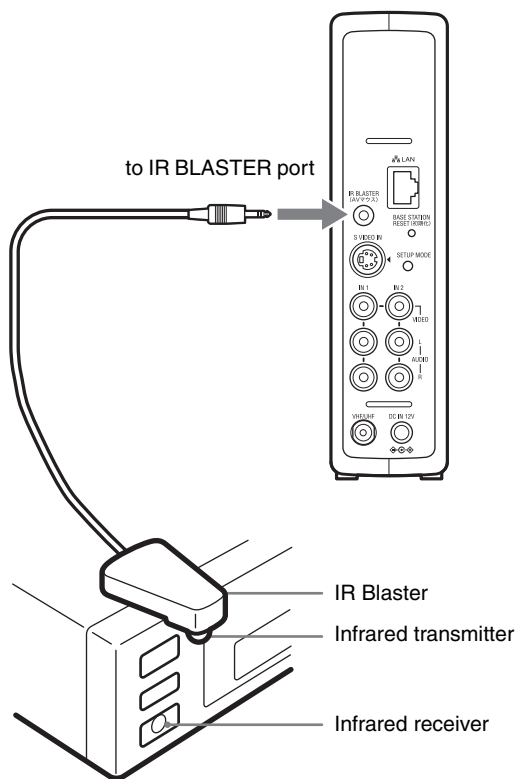
To operate other devices from the LocationFree device, you must connect the supplied IR Blaster. For details, see the next page.

Note

If you connect a DVD player to the base station via a VCR, the VCR's copy guard function may distort or dim the DVD picture. Connect the DVD player directly to the video input terminal on the base station.

Connecting the IR Blaster

Attach the supplied IR Blaster to the device connected to the base station. You can control the device with the LocationFree TV's on-screen remote control via the IR Blaster.



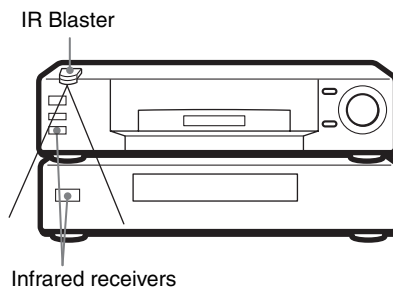
With reference to the operating instructions of the device, make sure to place the IR Blaster just above the infrared receiver.

Note

Do not remove the backing paper from the IR Blaster yet.

After configuring LocationFree Player remote control settings (☞ page 30), remove the backing paper from the IR Blaster and fix it in place.

When operating two devices with the IR Blaster, set the devices and the IR Blaster as shown.




Note

For details on setting up a device, refer to the operating instructions of the device.

If the infrared receivers on the two devices do not line up like the picture above, you cannot control them with the single supplied IR Blaster, and you need to purchase a plug adapter (PC-230M, not supplied) and another IR Blaster. Connect the plug adapter to the IR BLASTER port on the base station and connect each IR Blaster to a port on the adapter plug.

Tips

- If the IR Blaster cable is too short, use the extension cable (RK-G138, not supplied).
- Infrared receivers on Sony VCRs and other products are identified with the  symbol.
- You can set up two on-screen remote controls for each video input connector. These on-screen remote controls allow you to operate two devices connected directly to the base station, and to control video input via those devices.

Flow of Setup

Use the following steps to configure.

STEP 1

Setup to watch TV at home

STEP 1-1 Turn on the base station (🔗 page 13)

STEP 1-2 Connect a LocationFree device to the base station (🔗 page 14).

- Connecting with a router (🔗 page 15)
- Connecting directly to the base station by a wireless connection (🔗 page 15)

STEP 1-3 Display TV on your LocationFree device (🔗 page 16).



STEP 2

Setup to watch TV away from home

STEP 2-1 Check your Internet connection (🔗 page 18).

STEP 2-2 Make Easy Setup settings to watch TV away from home (🔗 page 18).

If the NetAV Check is incomplete (🔗 page 20).

Base Station Modes

The base station has a normal mode and a setup mode.

Press the base station power switch



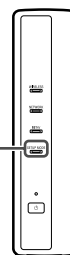
Normal mode (SETUP MODE LED off)

- You can use NetAV at home and away from home.
- You can make base station settings via a wireless connection.
- You cannot make base station settings.*

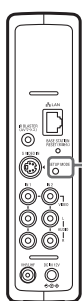
* You can make settings via a router if you set [Security] in the [Advanced Setup] page (page 36) to [Enable at all times (Security Level: Low)]. You can also make base station settings via a wireless connection.

SETUP MODE LED

Off



SETUP MODE button



Press the SETUP MODE button on the rear panel of the base station.

Keep pressing until the SETUP MODE LED starts blinking.

- When the base station reboots.
- When the base station settings page has not been accessed for 15 minutes.

Setup mode (SETUP MODE LED on)

- You cannot use NetAV at home and away from home.
- You can make base station settings.*

* Use the SSID and WEP key on the sticker of the base station for a wireless connection in setup mode. Also, a wireless LAN uses a channel in the 2.4 GHz band when the base station is in setup mode.

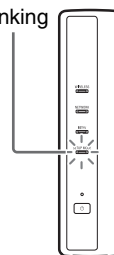
On



Status for registration (SETUP MODE LED blinking)

- You can register LocationFree devices only during the first 5 minutes after the base station is in setup mode. (The base station is still in setup mode after this 5-minute state.)
- If the 5-minute registration state ends before you finish, switch to the registration status by pressing and holding the SETUP MODE button again until the SETUP MODE LED starts blinking.

Blinking



STEP 1

Setup to Watch TV at Home

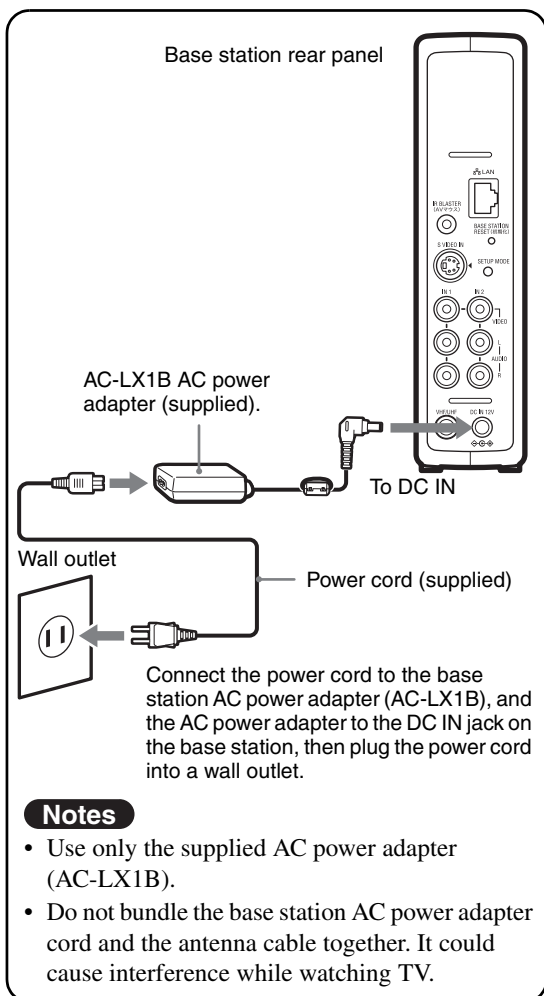
This section describes the setup for using NetAV to watch TV and videos at home.

STEP 1-1

Turn on the base station

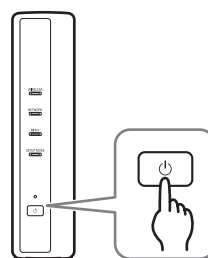
Connect the Power Cord to the Base Station

Connect the power cord after you finish making all other connections.

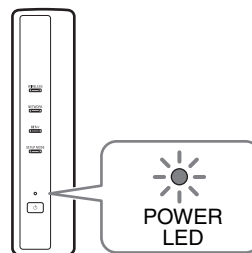


Turn on the Base Station Power

Press the POWER button on the front panel of the base station to turn it on.

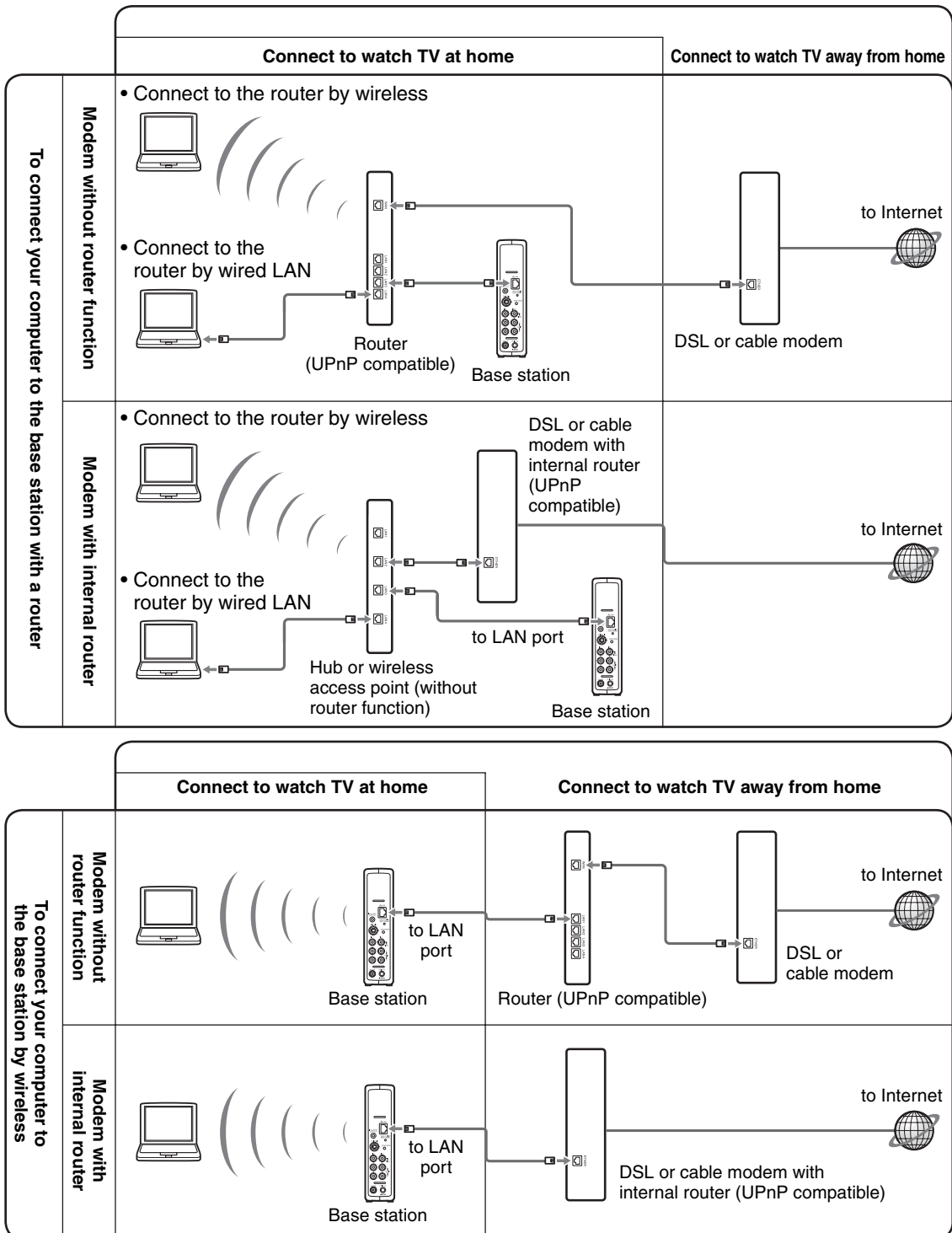


The POWER LED on the front panel of the base station lights green.



STEP 1-2

Connect a LocationFree device to the base station



* To determine the type of your modem, check with your Internet service provider.

* UPnP: Universal Plug and Play

Using a Router to Connect a LocationFree Device to the Base Station

Connecting with a wired router

If your router is configured to assign IP addresses by a DHCP function, and your computer is set to [Obtain an IP address automatically], then you can connect simply by connecting the computer and base station with a LAN cable.



Tip

Make sure the NETWORK LED on the front of the base station is turned on. If it is off, make sure the router is on and the LAN cable is connected properly.

Connecting with a wireless router

Connect the computer to the wireless router.

Connecting a LocationFree Device to the Base Station by a Wireless Connection

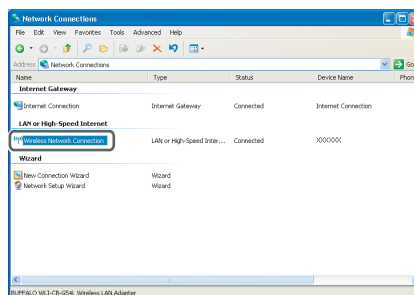
To make a wireless connection between a computer and the base station, set up the wireless network connection of the computer.

For details, refer to the operating instructions for your computer and wireless LAN devices, such as a wireless LAN card.

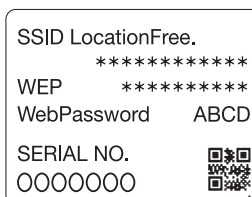
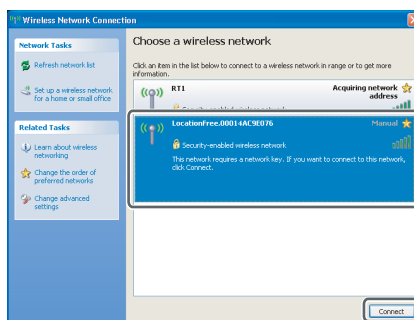
The instructions in this section are based on a Windows XP with Service Pack 2 installed.

- 1 Click [Control Panel] from the [Start] menu of Windows and then double-click [Network Connections].

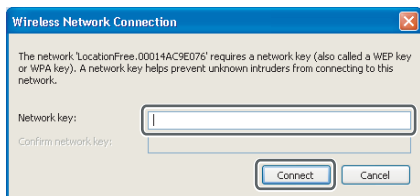
- 2 Double-click [Wireless Network Connection].



- 3 Select the same SSID as printed on the sticker of the base station from the list of wireless networks and then click [Connect].



- 4 Enter the WEP key printed on the sticker of the base station and then click [Connect].

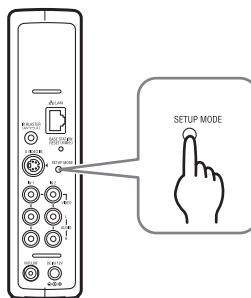


Proceed to STEP1-3 (📖 page 16).

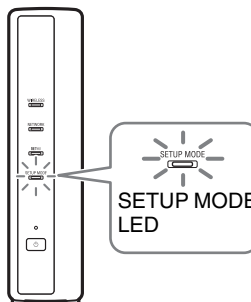
STEP 1-3 Display TV on your LocationFree device

Before you register your computer with the base station and display TV on the computer, you need to install LocationFree Player on the computer (📖 page 32).

- 1 With the base station powered on, press the [SETUP MODE] button on the rear panel of the base station. Keep pressing until the SETUP MODE LED starts blinking.




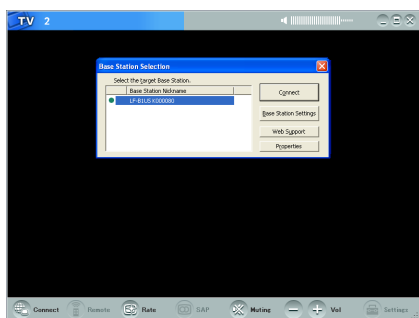
The SETUP MODE LED blinks.



💡 Tip

When using a router to connect to the base station, it takes a while for the IP address to be assigned to the base station by DHCP. The base station does not appear in the window shown in Step 2 until the IP address has been assigned. Proceed to Step 2 after the NETWORK LED turns on.

- 2 Double-click the  (LocationFree Player) icon on the desktop of the computer. You can also use the [Start] menu. Point to [All programs] ([Programs] in Windows 2000), [Sony LocationFree Player], and then click [LocationFree Player]. LocationFree Player starts, and the [NetAV Connection] window appears.

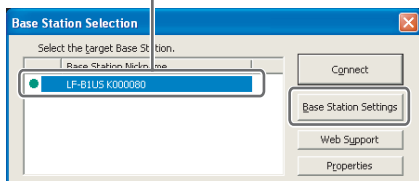


Notes

- Depending on the security software installed on the computer, a confirmation message may be displayed at startup to confirm whether to block LocationFree Player. If a message appears, set to unblock it.
- If the destination base station cannot be found at startup, a confirmation message appears. For details on changing the settings of the security software, click [Web Support] in the [Base Station Selection] window and refer to the support page that appears.

- 3 In the [Base Station Selection] window, select a base station with a green icon from the list, and then click [Connect].

Select a green icon.



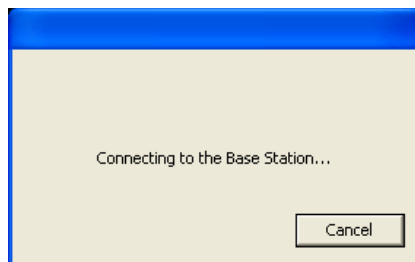
Tip
You can change the nickname on the screen that appears if you click [Properties].

Note

Before clicking [Connect], check that the SETUP MODE LED is still blinking. If the SETUP MODE LED turns on without blinking, keep

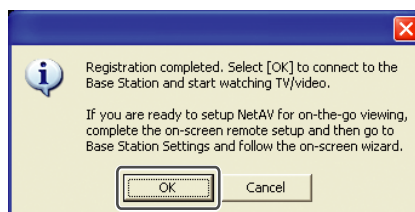
pressing the SETUP MODE button until the LED starts blinking.

Open a connection with the base station.



Base station registration begins automatically.

- 4 Click [OK] to connect to the base station.



The base station is restarted automatically after registration. Wait until a connection is established with the base station.

Go to page 29 and set the TV channels.

To watch TV and videos away from home, proceed to the next section “STEP 2 Setup to Watch TV Away from Home.”

STEP 2

Setup to Watch TV Away from Home

This step explains how to set up your network to connect to your base station at home via public wireless LAN networks and hotel LAN connectors.

Note

- You need to do this setup before you go out.
- A contract or application may be required to connect to the Internet at some locations.

STEP 2-1

Check Your Internet Connection

To watch TV and videos away from home, you must first connect the base station to the Internet. You can connect the base station to the Internet over a DSL line or a cable TV line.

💡 Tips

- To use the NetAV function to watch TV and videos away from home, we recommend that the connection to the base station be broadband with upload and download speeds of at least 300 kbps. Contact your Internet service provider for more information about the speed of your communications line.
- The faster line speeds you use, the better picture quality you get when you watch TV using NetAV.

Connecting to the router

Using a LAN cable (not supplied), connect the LAN terminal of the base station to your router. The connection method you should use depends on your ISP and equipment. For more information, contact your ISP.

Notes

- Depending on your Internet service provider, you may not be able to connect multiple devices, such as the base station and several computers. For more information, contact your service provider.

- To determine what kind of LAN cable you use, refer to the operating instructions for your router, cable modem, or DSL modem.
- For details on setting up the connection, refer to the operating instructions for your router, cable modem, or DSL modem. If you have any questions, contact your service provider.
- Further information about configurations is also available on the following website.
LocationFreeTV FAQ pages:
<http://www.sony.com/locationfree/faq/>


STEP 2-2

Make Easy Setup Settings to Watch TV Away from Home

You need to do this setup before you go out.

Setting Up the NetAV Function

When connecting a computer to the base station using a router (🔧 page 14), set the base station to setup mode (🔧 page 16).

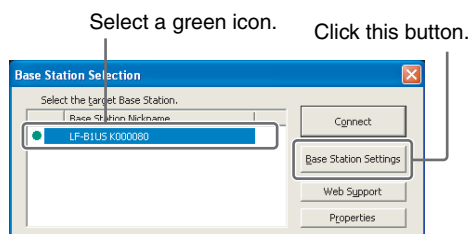
- 1 Double-click the  (LocationFree Player) icon on the desktop of the computer. You can also use the [Start] menu. Point to [All programs] ([Programs] in Windows 2000), [Sony LocationFree Player], and then click [LocationFree Player]. LocationFree Player starts, and the [Base Station Selection] window appears.

💡 Tip

If LocationFree Player is already running, disconnect by clicking [Disconnect] in the lower left of the window, then click [Connect] again.

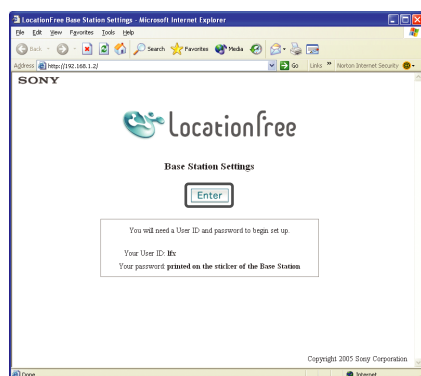


- 2 Select a base station with a green icon, and click [Base Station Settings].



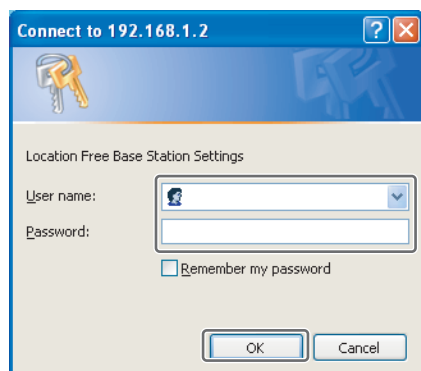
Your web browser starts, and the [Base Station Settings] page opens.

- 3 Click [Enter].



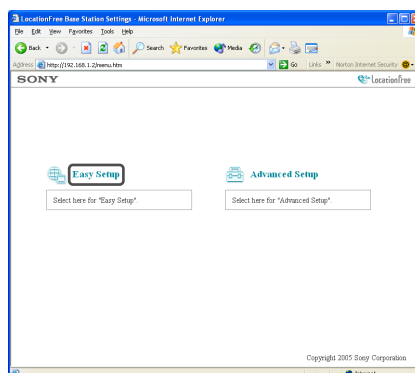
The password input page appears.

- 4 Enter the user ID and password, and then click [OK].
User ID (User name): lfx (lowercase letters)
(The user name cannot be changed)
Initial password: WebPassword printed on the sticker of the base station.



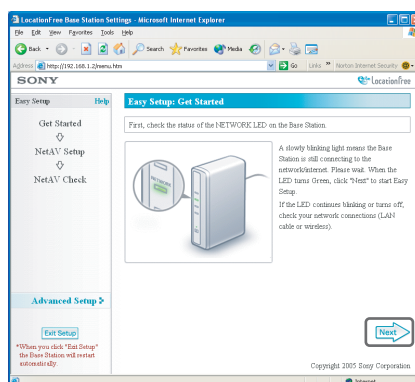
The following page appears when you log in to [Base Station Settings].

- 5 Click [Easy Setup].



The [Easy Setup] page appears.

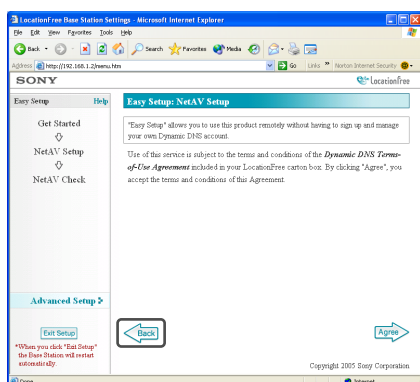
- 6 Follow the on-screen instructions to confirm the NETWORK LED is turned on and then click [Next].



Note

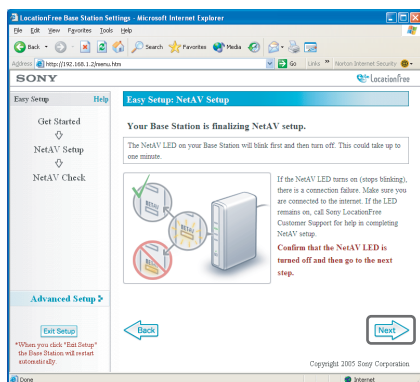
If the NETWORK LED is off, check that the router is turned on and the LAN cable is connected properly.

- 7 Read the “Dynamic DNS Terms-of-Use Agreement” included in the box and then click [Agree].



When you click [Agree], the information required for the dynamic DNS is saved to the base station.

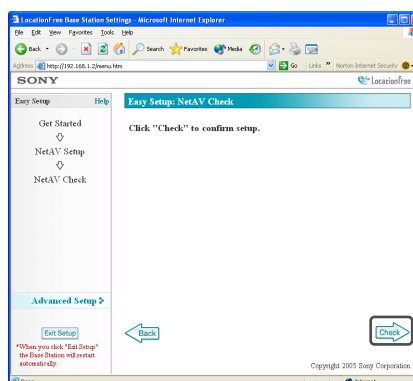
- 8 Follow the on-screen instructions to wait until the NETAV LED stops blinking (umber) and click [Next] when the NETAV LED turns off.



Tips

- The NETAV LED continues to blink for about one minute before turning off.
- If the NETAV LED turns on umber, check that the router and modem are turned on and the LAN cable is connected properly.
- When the NETAV LED turns green, another device is connected by NetAV. Wait until the LED turns umber to perform this step.
- NetAV cannot be used via a proxy server.

- 9 Click [Check].



The setup is complete if [Success] appears in the [NetAV Check] page.

If the test page does not appear, check the network connection.

- 10 Click [Exit Setup].
Restart the base station.
Close the browser.

If NetAV Check is incomplete

Read the instructions on the NetAV Check page and configure the necessary settings.

The base station needs to be set up to use the NetAV function away from home. There are two setup types: [Easy Setup] and [Advanced Setup]. [Easy Setup] requires the router to be UPnP compatible and the UPnP function of the router to be enabled. Refer to the operating instructions for your router and confirm the settings.

If your router is not UPnP compatible, you prefer not to use the UPnP function of the router, or if you use the UPnP function but the setup is unsuccessful, port forwarding needs to be set on the router.

Tips

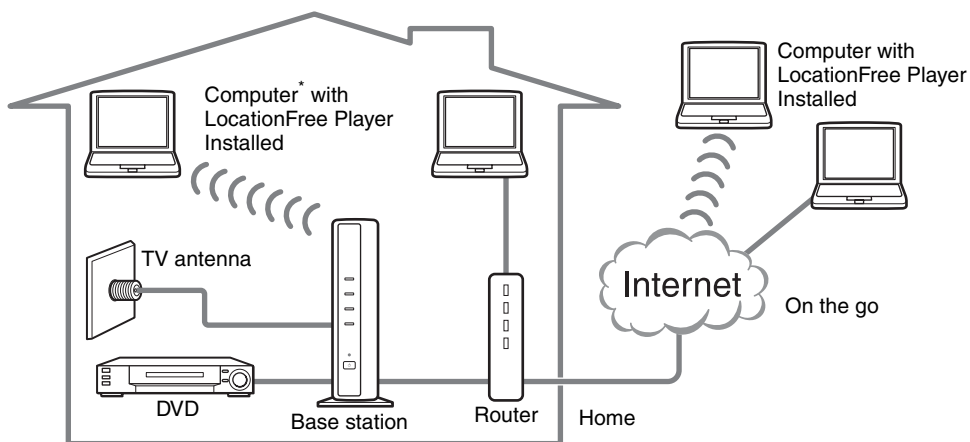
- Setting port forwarding on the router requires a static IP address to be set in the [Internet Connection] frame of the [Advanced Setup] page for the base station. For details, refer to the instruction

manual for the router and “Setting a Router Incompatible with the UPnP Function” (🔗 page 38).

- Some UPnP compatible routers are only compatible with specific messenger services and games. For such a router, set port forwarding.

What is LocationFree Player?

LocationFree Player is a software that allows you to watch TV and videos on your computer by connecting to a base station at home via a wireless connection or a router. By placing the base station in a central room, you can watch TV and videos from anywhere in your home via a wireless connection or your home LAN. Away from home, you can watch TV and videos via the Internet by accessing the base station from public wireless access points at cafes or the LAN connectors in hotel rooms.



Tip

LocationFree Player LFA-PC2 can connect to the base station of the LocationFreeTV (not supplied). For details on registering the LFA-PC2 on the LF-X1/X5 base station, refer to the corresponding section in these operating instructions. However, the LF-X1/X5 base station does not support the [Easy Setup] described on pages 18 to 20 of these operating instructions. Set the LF-X1/X5 base station settings information (domain name, port number, and registration password). For details, refer to the operating instructions for the LF-X1/X5, "Display TV on your LocationFree device" (page 16) in these operating instructions, or the following site.

LocationFreeTV FAQ pages:

<http://www.sony.com/locationfree/faq/>

Notes

- The base station and router need to be left turned on to use LocationFree Player to watch TV.
- Use of the NetAV function for purposes other than personal enjoyment is prohibited.

LocationFree Player Basic Window

Overview of the LocationFree Player Window

Normal size



- 1** TV/Video indicator
- 2** TV channel number
- 3** Volume indicator
- 4** Minimize button
Minimizes the LocationFree Player window.
- 5** Maximize/Restore button
Maximizes the LocationFree Player window. Click again to restore the window to its original size.
- 6** Close button
Quits the LocationFree Player application.
- 7** Index (☞ page 26)
Click TV, Video 1, or Video 2.
- 8** Settings (☞ page 29)
Displays the [Settings] window, which allows you to make TV channel and remote control settings.
- 9** Volume controls
Click [+] to increase the volume, and [-] to decrease it.
- 10** Muting
Turns off the sound.
When the sound is off, you can turn it back on by clicking this button again or by clicking the volume [+] button.

When the window size is small.



- 11** SAP (☞ page 27)
Switches between STEREO and SAP only when a secondary audio program is available.
- 12** Rate (☞ page 27)
Displays the screen for adjusting the video rate (picture quality).
- 13** Remote (☞ page 26)
Displays the on-screen remote for TV, Video 1, or Video 2.
- 14** Connect/Disconnect
Connect: Connects to the base station.
Disconnect: Disconnects from the base station.
- 15** ∨, >>
Appears when the window has been resized to a smaller size, hiding the lower part of the index and the buttons at the bottom right. Click this to display the hidden buttons.

Note

When the volume buttons [+] and [-] are hidden and then displayed by clicking [>>], the volume can only be adjusted by one step at a time.

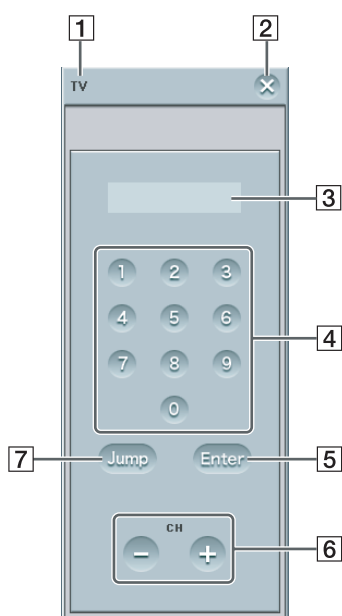


Tip

You can use your mouse or keyboard to display the settings dialog box and to make various adjustments. For details, see “Mouse and Keyboard Operations” (page 28).

Overview of the on-screen remote

Depending on your settings and the devices connected to your system, the on-screen remote may vary from the one illustrated here. The explanations in this section refer to the on-screen remote for TV when using the LocationFree base station’s internal tuner.



- 1** Remote control name
- 2** Close button
To hide the on-screen remote, use this button.
- 3** Channel display
- 4** Number buttons
To select a channel, use these buttons. After you enter a channel, click the [Enter] button or wait 3 seconds to confirm.
- 5** Enter
To confirm the channel entered with the number buttons.
- 6** CH +/-
To display the next channel, use the + button. To display the previously channel, use the - button.

7 Jump

To jump between the current channel and the last channel, use this button.

Note

Index and remote control operations are only possible when you connect to a base station. Before establishing a connection, select [Properties] in the [Base Station Selection] window and then click [Channel/Remote Settings] to enable operations.

Connecting to the Base Station


You can watch TV, videos, and DVDs by starting LocationFree Player and connecting to the base station.

The procedure to watch TV at home is the same as the procedure to watch TV away from home.

Before starting LocationFree Player

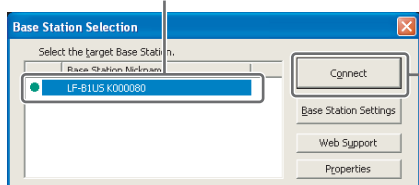
Check that the base station is turned on. Also, make sure that your computer is connected to your home LAN, when watching at home, or to the Internet, when watching away from home.

Starting NetAV

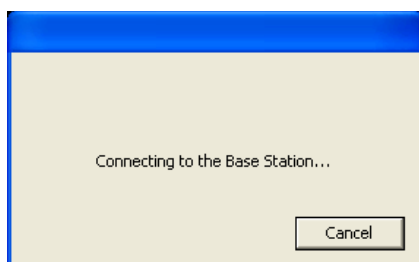
- 1 Double-click the  (LocationFree Player) icon on the desktop of the computer. You can also use the [Start] menu. Point to [All programs] ([Programs] in Windows 2000), [Sony LocationFree Player], and then click [LocationFree Player].

- 2 Click a base station from the list, and then click [Connect] on the [Base Station Selection] screen.

Select a green icon. Click this button.



The following screen appears and the computer begins establishing a connection to the base station.



When the connection is established, a TV picture appears.

About the icons that appear in the list

Green icon:

The base station is located within the same LAN. A base station in the same LAN always has a green icon, regardless whether you connect to it.

Light green icon:

The base station is on the Internet but you have connected to it in the past (e.g., the base station is at home).



If you have connected to your base station at home before, and then connect to it away from home, the color of the icon is light green.

Quitting the Watching Session


Closing the Connection with the Base Station

Click anywhere in the window to display the lower bar, then click [Disconnect] at the bottom left of the window.



[Disconnect]

Quitting LocationFree Player

Click anywhere in the window to display the lower bar, then click  (Close) at the top right of the window.

TV and Video Operations

Selecting TV Channels

With the On-screen Remote Control

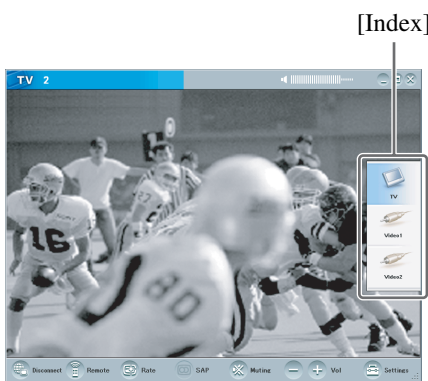
When the on-screen remote control is configured, you can display it by clicking [TV], and then clicking [Remote] at the bottom left of the window. Use the remote control number buttons to enter the desired channel number, and then click [Enter].

- 1 Click anywhere inside the LocationFree Player window. The index appears.

Note

If you do not connect to the base station, the index does not appear by clicking inside the window.

- 2 Click the TV or Video input that you want to see.



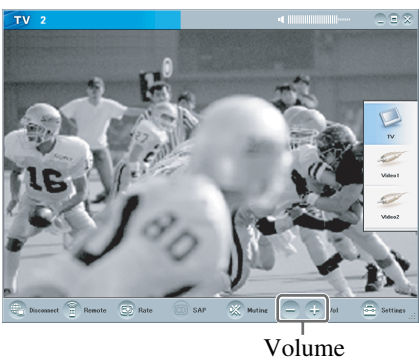
The selected TV or video is displayed.

With Your Keyboard (Only when using the internal tuner)

You can only change the channel with the UP ↑ (CH +) and DOWN ARROW ↓ (CH -) keys on the keyboard when you use the LocationFree Base Station internal tuner.

Adjusting the Volume

Turn up or down the volume using [+] and [-].



You can also adjust the volume by using the LEFT (Vol -) and RIGHT (Vol +) ARROW keys.

Tip

If you cannot obtain the desired level when adjusting the volume with the [+] and [-] volume buttons, adjust the volume of the computer.

Using the On-Screen Remote

After the on-screen remote is configured (☞ pages 30 to 31), you can control the TV or connected devices to Video 1 and Video 2.

Click [Remote] at the bottom left of the window. The remote control appears. The remote control appears only when you connect to the base station.

Selecting a Secondary Audio Program (SAP)

The secondary audio program (SAP) mode is available for broadcasts that include multiple audio tracks.

When a TV program with multiple audio tracks is tuned in, click [SAP] repeatedly at the bottom of the window to switch among audio tracks. Each time the [SAP] button is clicked, [STEREO] or [SAP] appears on the window.



Tip

To select an SAP option for external equipment, use the remote supplied with the connected equipment. However, some devices can be operated with the on-screen remote control.

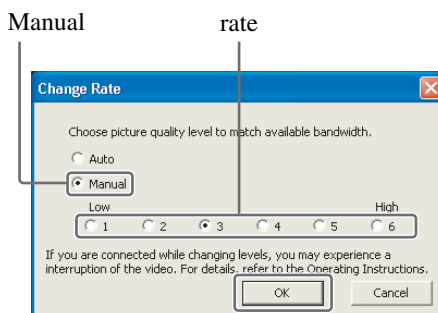
Adjusting the Video Rate

You can adjust the streaming rate according to the bandwidth available on your communications connection. This allows you to watch video with the optimum quality.

Normally, selecting [Auto] sets the optimal video rate in accordance with available bandwidth. When selecting a rate manually, note that a higher rate results in higher picture quality, but a higher (larger number) rate requires a larger bandwidth and video will tend to keep stopping and starting if there is insufficient bandwidth for the higher rate.

1 Click [Rate] at the bottom of the window. The [Change Rate] window appears.

2 Click a rate, and then click [OK].



Note

When you switch between [Auto] and [Manual], change the rate from [1] or [6] to another rate, or change from another rate to [1] or [6] while connected, the NetAV connection may be disconnected and then reconnected automatically in some cases.

Mouse and Keyboard Operations

You can perform the following LocationFree Player operations with your computer's mouse and keyboard.

Mouse operations

	Operations
Click	Clicking anywhere inside the window displays the index.
Right click	Right clicking anywhere inside the window displays a context menu as described below.

Right click menu

Items	Operations
Connect/ Disconnect	Connect: Connects to the base station. Disconnect: Disconnects from the base station.
Remote	When you have set up a remote control, displays the remote control on the screen.
Settings	Displays the [Settings] window for making various settings.
Rate	Adjusts the streaming rate according to the bandwidth available on your communications connection, so that you can watch video with the optimum quality.
SAP	Switches between audio channels for broadcasts with a secondary audio program.
Muting	Turns off the sound. To turn the sound back on, select this again or adjust the volume.
Vol +	Turns the volume up.
Vol -	Turns the volume down.
Always on top	Displays the LocationFree Player window in front of other windows.
Operating Instructions	Displays Operating Instructions.
Version Information	Displays the version of LocationFree Player.

Items	Operations
Update Serial Key*	Allows you to update a LocationFree Player serial key. Devices must be registered again when you update the serial key.
Quit Application	Quits the LocationFree Player application.

* This only appears if you did not enter the serial key when you installed LocationFree Player. It allows you to enter the serial key if you did not enter it during installation.

Keyboard operations

Shortcut keys	Operations
Ctrl + W or Alt + F4	Quits the LocationFree Player application.
F1	Displays the Operating Instructions.
F5 or Ctrl + S	Connects to or disconnects from the base station.
F6 or Ctrl + R	When you have set up a remote control, displays the remote control on the screen.
F7 or Ctrl + L	Displays the screen for changing the rate.
F8 or Ctrl + M	Turns off the sound. To turn the sound back on, click [Muting] again or click the volume [+] button.
F12 or Ctrl + P	Displays the [Settings] window for making various settings.
←, →	Adjust the volume. The left arrow key turns the volume down, and the right arrow key turns the volume up.
↑, ↓	Change channels. Each press of the up or down arrow key selects the channel.
Alt + spacebar	Displays a menu relevant to the display.

Setting Up LocationFree Player

Making TV and Video Settings

This section explains how to configure TV channels and the remote control.

Configuring the TV Channels

- 1 Click anywhere inside the window.
The index appears.
- 2 Click [Settings] at the bottom right of the window.



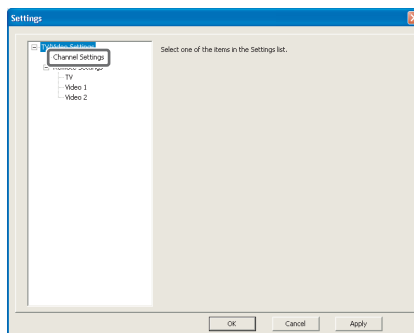
[Settings]

The [Settings] window appears.

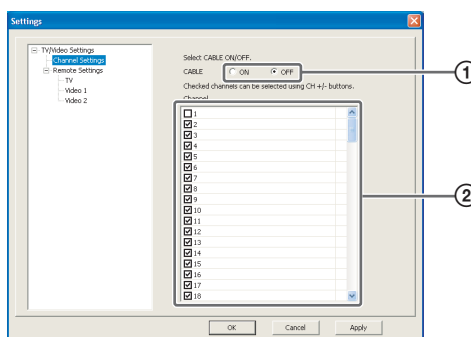
Tip

[Settings] at the bottom right of the window appears only when you are connected with NetAV. When you are not connected, click [Connect] at the bottom left of the window, select the base station you want to set up from the list that appears, click [Properties], and then click [Channel/Remote Settings].

- 3 Select [Channel Settings] under [TV/Video Settings].



- 4 Configure all the settings.



- ① If you subscribe to cable TV, select the [ON] option.
When [CABLE] is set to [ON], channels 1 to 125 are automatically selected, and when [CABLE] is set to [OFF], channels 2 to 69 are automatically selected.
- ② Clear the check boxes for channels that you do not watch.

- 5 Click [OK] or [Apply].
Click [OK] to enable the settings and close the [Settings] window.
Click [Apply] to enable the settings without closing the [Settings] window.

Configuring the TV Remote Control

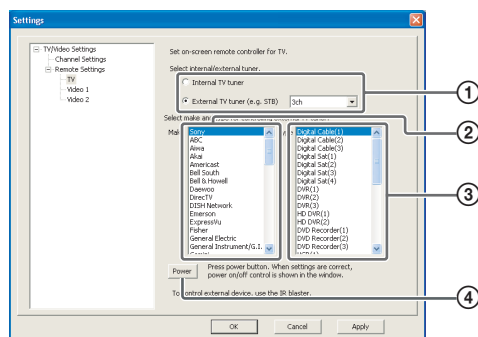
You can control the TV using an on-screen remote. The remote settings depend on which TV tuner you use.

If you use an external TV tuner, you need to connect a device such as a set-top box first, and then make the settings.

For more on how to connect to devices, see “Connecting to a Cable Box (STB)” (☞ page 8). For more on how to connect the IR Blaster, see “Connecting the IR Blaster” (☞ page 10).

- 1 Click anywhere in the window to display the index, then select [Settings] at the bottom right of the window.

- 2 Select [TV/Video Settings], [Remote Settings], and then [TV].



- ① Select [Internal TV tuner] or [External TV tuner].
If you selected [Internal TV tuner], proceed to Step 3.
If you selected [External TV tuner], select an appropriate channel from the pull-down list.
- ② Select the make of the connected device.
- ③ Select the type of the connected device.

- ④ If the configuration above is correct, each time you click [Power], you can turn on or off your device.

After clicking [Power], it takes five seconds or more for the device to respond.

If it does not work, make sure that the make and model are correct, and then try again.

Also, check the connection between the base station and the connected device, and make sure the IR Blaster is installed properly.

Notes

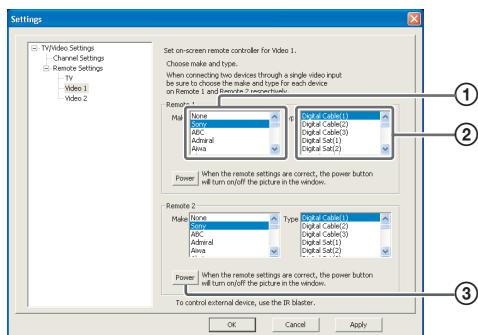
- Even if the power turns on and off correctly with [Power], other buttons may not be enabled. If this happens, select [TV] from the Index. With the on-screen remote, confirm that the buttons are enabled.
- Some devices may not have a [Power] button (e.g. DVR). In this case, as well, use the on-screen remote to display [TV] and confirm that the buttons are enabled.

- 3 Click [OK] or [Apply].
Click [OK] to enable the settings and close the [Settings] window.
Click [Apply] to enable the settings without closing the [Settings] window.

Configuring the Remote Control for Video 1 and Video 2

- 1 Click anywhere in the window to display the index, then select [Settings] at the bottom right of the window.

- 2 Select [TV/Video Settings], [Remote Settings], and then [Video 1] or [Video 2].



- ① Select the make of the connected device.
- ② Select the type of the connected device.
- ③ If the configuration above is correct, each time you click [Power], you can turn on or off your device.

After clicking [Power], it takes five seconds or more for the device to respond.

If it does not work, make sure that the make and type are correct, and then try again.

Notes

- Even if the power turns on and off correctly with [Power], other buttons may not be enabled. If this happens, select [Video 1] or [Video 2] from the Index. With the on-screen remote, confirm that the buttons are enabled.
- Some devices may not have a [Power] button (e.g. DVR). In this case, as well, use the on-screen remote to display [Video 1] or [Video 2] and confirm that the buttons are enabled.

When connecting two devices to Video 1 or Video 2

Configure the remote control settings for each remote.

When connecting an all-in-one video device, such as a VCR+DVD player

The second remote is automatically set when you select a device displayed as an all-in-one device from the [Type] list (e.g., Sony “VCR+DVD player”). Select the [Switch] button on the on-screen remote to switch between the remote control of the VCR and that of the DVD player.

- 3 Click [OK] or [Apply].
Click [OK] to enable the settings and close the [Settings] window.
Click [Apply] to enable the settings without closing the [Settings] window.



Tip
After configuring the remote control for Video 1 and Video 2, the [Video 1] and [Video 2] options in the [index] window change to their set remote control names.

LocationFree Player System Requirements

Computer requirements (where LocationFree Player is installed)

Operating system:

Windows 2000 Professional Service Pack 4
Windows XP Professional/Home Edition
Service Pack 2

Processor:

Pentium 4, 1 GHz or more

RAM:

256 MB or more

Available hard disk space:

300 MB or more

Monitor resolution:

800 x 600 pixels or more, HighColor (16 bit) or more

Other:

- A wireless LAN card that complies with IEEE802.11b, IEEE802.11g or IEEE802.11a. The card must support WEP encryption. (Required to connect directly to the base station via a wireless LAN.)
- A 10BASE-T or 100BASE-TX LAN connector. (Required to connect via a wired LAN.)

Note

Some video cards (graphic cards) may distort video picture while using the LocationFree Player. If you see distorted images while using, please be sure to check your PC manufacture's web site for the latest driver software.

Installing and Uninstalling LocationFree Player

Use the procedures in this section to install and uninstall LocationFree Player.

Installing LocationFree Player Software

Tips

- LocationFree Player is compatible with Windows XP (Service Pack 2) and Windows 2000 Professional (Service Pack 4). It cannot run on other operating systems.
- LocationFree Player must be installed from a user account with administrator privileges. Before performing the installation, log on to Windows as a user with administrator privileges.
- If Microsoft DirectX 9.0 is not installed on the computer where you choose to install LocationFree Player, it is installed at the same time you install LocationFree Player.

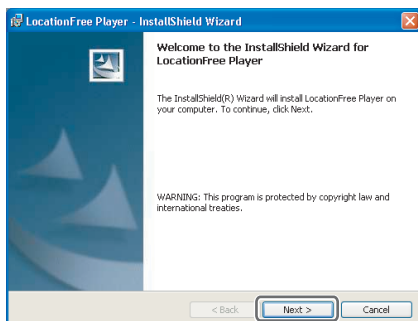
Notes

- 3ivx is installed at the same time as LocationFree Player. 3ivx is essential to the proper operation of LocationFree Player and it should not be removed.
- If LFA-PC1 is installed, LFA-PC2 cannot be installed. Uninstall LFA-PC1 before you install LFA-PC2.

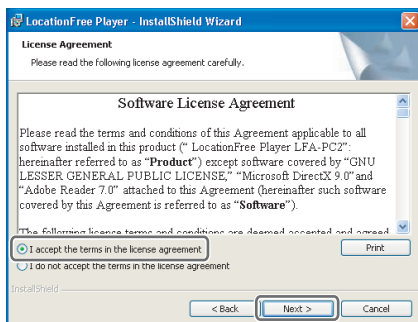
-
- 1 Insert the LocationFree Player software CD-ROM into the CD-ROM drive of your computer.
The installation wizard starts.

If the installation wizard does not start, find the "setup.exe" file on the CD-ROM, and then double-click it.

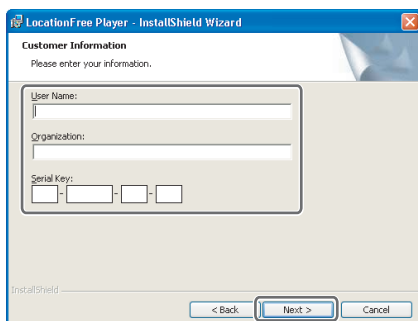
2 Click [Next].



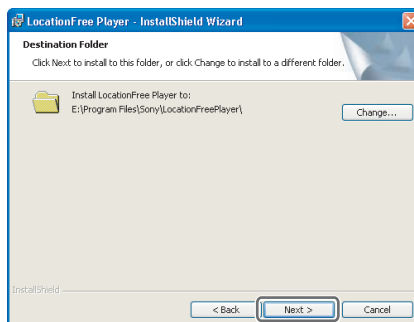
3 Read the license agreement, select [I accept the terms in the license agreement], and then click [Next].



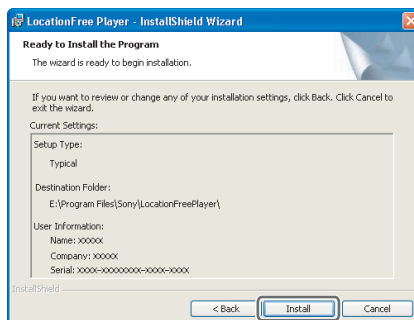
4 Type your name, organization and serial key, and then click [Next].



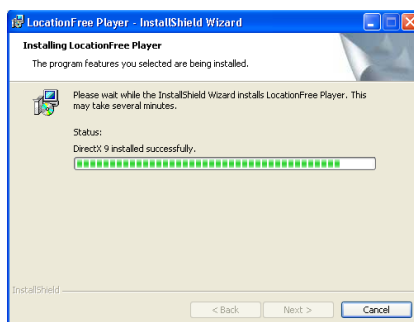
5 Confirm the installation folder, and then click [Next]. If you want to modify the installation folder, click [Change].



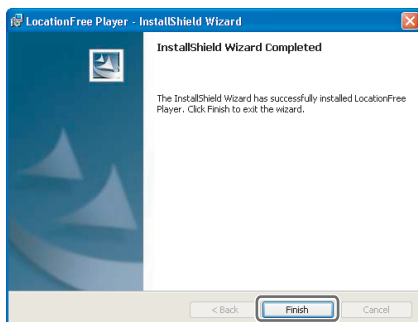
6 Verify the installation settings, and then click [Install].



Installation starts.



7 When the installation ends, click [Finish].



A shortcut to LocationFree Player appears on your desktop after the installation.



Uninstalling LocationFree Player from Your Computer

Click [All programs] ([Programs] in Windows 2000), [Sony LocationFree Player], and then click [Uninstall LocationFree Player] on the [Start] menu.

Follow the instructions on the screen to complete the procedure.

Note

3ivx is not removed automatically when LocationFree Player is uninstalled. Remove it manually. You can do so by using [Add or Remove Programs] ([Add or Remove Applications] in Windows 2000) in the Control Panel.

Opening the [Base Station Settings] Page

The [Base Station Settings] page is accessed and set from your web browser. You can make more detailed settings, such as changing a wireless LAN encryption key, in the [Advanced Setup] page.

Open the [Advanced Setup] page with your web browser, by accessing the settings for a selected base station.

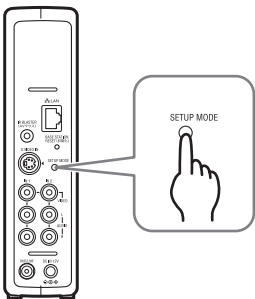
Before making settings

Check to be sure that the base station is powered on.

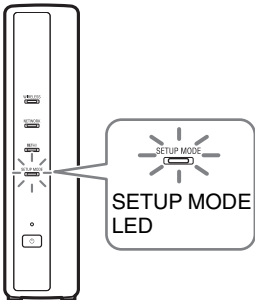
Base Station Advanced Settings (Only with a Router Connection)

If you are connected via a router, you need to put the base station into setup mode before making base station settings (☞ page 12). This is not necessary for a wireless connection.

- 1 Press the **SETUP MODE** button on the rear panel of the base station. Keep pressing until the **SETUP MODE** LED starts blinking.




The base station is in setup mode, and the **SETUP MODE** LED on the front panel starts blinking in amber, and then lights.

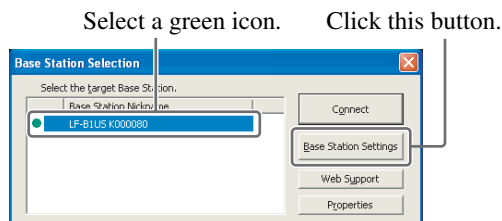


Note
If the [Base Station Settings] page is not accessed for 15 minutes, setup mode ends and the base station restarts automatically.

Tip
When using a router to connect to the base station, it takes a while for the IP address to be assigned to the base station via DHCP. The base station does not appear in the window shown in Step 2 until the IP address has been assigned. Proceed to Step 2 after the **NETWORK** LED turns on.

Opening the [Advanced Setup] Page

- 1 Double-click the  (LocationFree Player) icon on the desktop of the computer to start LocationFree Player, select the base station you want to set in the [Base Station Selection] window that appears, and then click [Base Station Settings].



Your web browser starts and the [Base Station Settings] page opens. Select [Enter], and a password input page opens.

- 2 Enter the user name lfx (lowercase letters) and password, and then click [OK]. The following page appears when you log in to [Base Station Settings].

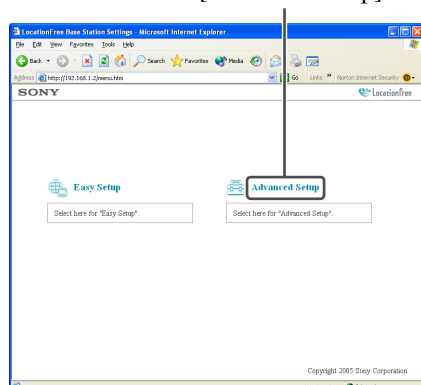


Tip

The initial password at the time of purchase is printed on the sticker on the base station. You can change the WebPassword by selecting [Change Password] in the [Advanced Setup] page.

- 3 Click [Advanced Setup].

[Advanced Setup]



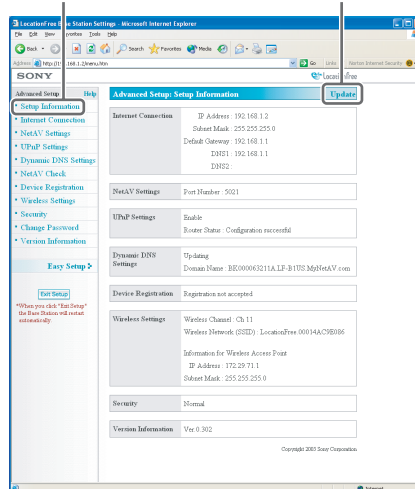
The [Setup Information] page appears.

Checking the Current Base Station Status

You can use the [Setup Information] page to check the current settings and status of the base station.

[Setup Information]

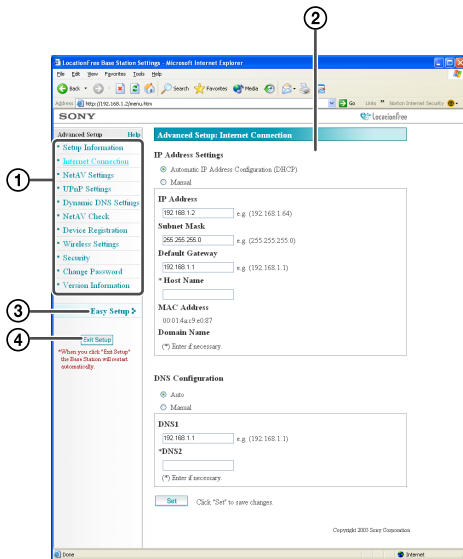
[Update]



To display the latest status, click [Update].

Basic Operations in the [Advanced Setup] Page

This section explains the operations common to each frame in the [Advanced Setup] page.



- ① Click the item to configure.
The information for the clicked item appears in the frame on the right.
- ② Make settings or perform operations for the selected item.
If you make any settings, be sure to click [Set] to save the changes.
- ③ Jump to the [Easy Setup] screen.
- ④ Exits settings and automatically reboots the base station.

The remainder of this section explains the specific settings and operations of each frame in the [Advanced Setup] page.

Setting Up Your Internet Connection

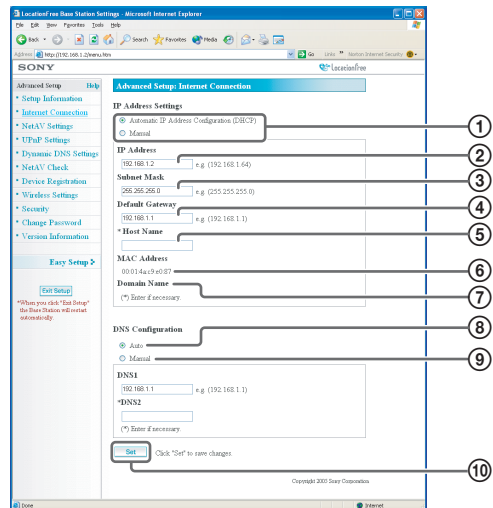
To access the base station via the Internet, you need to set its IP address and make DNS settings.

Internet Connection

The [Internet Connection] frame allows you to set an IP address for your base station, according to your network environment. You can also check the base station's MAC address for the wired LAN. To determine the address to set, contact your contracted ISP to the operating instructions of your modem or router.

Note

If you change the IP address in the [Internet Connection] frame and then click [Set] while you are connected using a router, you will no longer be able to access the [Base Station Settings] screen because the IP address changes. To open the [Base Station Settings] screen, click [Base Station Settings] on the [Base Station Selection] screen of the LocationFree Player.



- ① Select whether to assign an IP address to the base station automatically, using the DHCP function of your router or modem, or to assign an IP address manually.

If you select [Auto (DHCP)], the router's DHCP server will automatically assign the [IP address], [Subnet mask] and [Default gateway].

If you select [Manual], contact your contracted ISP to assign the proper values in the [IP address], [Subnet mask], [Default gateway] and [Host name] fields.

At the time of purchase, this item is set to [Auto (DHCP)].

- ② Enter an IP address.
- ③ Enter a subnet mask.
- ④ Enter a default gateway.
- ⑤ Enter a host name for the base station, as required.



Tip

The host name can be specified only when [Automatic IP Address Configuration] is selected.

- ⑥ The base station's MAC address for the wired LAN appears.
- ⑦ Depending on the operating environment, the domain name appears.
- ⑧ Select this if you want to assign the DNS server automatically. The DNS server is only assigned automatically if "Automatic IP Address Configuration (DHCP)" is set for the IP address.

This button is selected at the time of purchase.

- ⑨ Select this if you want to assign the DNS server manually.
If you select this button, enter the addresses of your ISP's DNS servers in the [DNS1] and [DNS2] fields.
- ⑩ Click this to save changes.

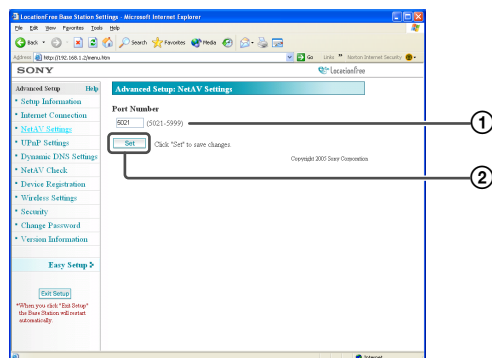
Setting Up to Watch TV Away From Home

You do not need to configure the settings on pages 38 to 41 if you performed the easy setup (☞ page 18 to 20).

This section explains how to make advanced settings for using the NetAV function.

NetAV Settings

Set the port of the base station when the NetAV function is to be used.



- ① If there are multiple base stations and 5021 is already being used, change the port number of the NetAV server.
You can specify port numbers in the range 5021 to 5999.
At the time of purchase this item is set to 5021.
- ② Click this to save the changes.

Setting a Router Incompatible with the UPnP Function

When port forwarding needs to be set on the router, follow the procedure below to set the base station's IP address.



Tip

The IP address, subnet mask, and default gateway used in the procedure below are only examples. Before you configure these settings, check the IP address settings of the router.

- 1 Set [IP Address Settings] to [Manual] in the [Internet Connection] frame and then enter the following information.

IP Address: 192.168.0.64^{*1}

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.0.1^{*2}

^{*1} Example when the IP address of the router is 192.168.0.1. If the IP address of the router is 192.168.1.1, enter 192.168.1.64 for the IP address. If you are using multiple base stations, set a different setting for each base station, such as 64 and 65.

^{*2} Example when the IP address of the router is 192.168.0.1. If the IP address of the router is 192.168.1.1, enter 192.168.1.1 for the default gateway.

- 2 Set [Manual] for [DNS Configuration] and enter the following information.

DNS1: 192.168.0.1^{*3}

DNS2: It is OK to leave the field blank.

^{*3} Example when the IP address of the router is 192.168.0.1. If the IP address of the router is 192.168.1.1, enter 192.168.1.1 for the DNS1.

- 3 Click [Set].

- 4 Set port forwarding on the router. Enter the Port Number that you set while making NetAV Settings. For details, refer to the operating instructions for your router.

UPnP Settings

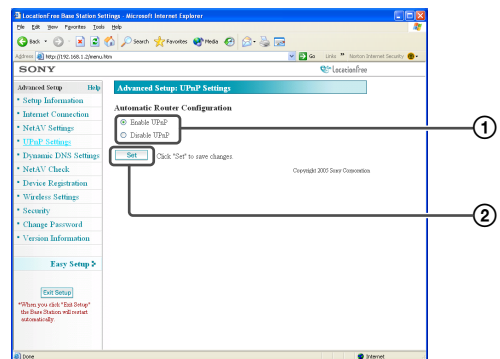
To connect to the base station via your router at home and to use NetAV when you are away from home, port forwarding needs to be set on the router.

When your router is compatible with UPnP (Universal Plug and Play), you can use UPnP to configure port forwarding on the router dynamically.



Tip

For details about router settings, refer to the operating instructions for your router.



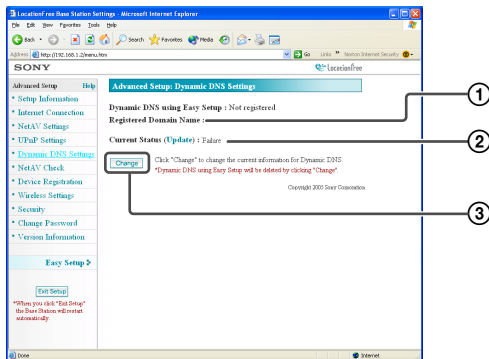
- ① Select whether to enable or disable automatic router configuration (UPnP). When [Disable UPnP] is set, port forwarding needs to be set on the router. At the time of purchase, this is set to [Enable UPnP].
- ② Click this and save changes.

Dynamic DNS Settings

To use the NetAV function to watch TV and videos away from home, you need to use the Dynamic DNS service. You can use the Dynamic DNS service that can be set from the [Easy Setup]. You do not need to configure the following settings if you performed the [Easy Setup].

Checking Registered Dynamic DNS Information

The [Dynamic DNS Settings] frame appears when you click [Dynamic DNS Settings].



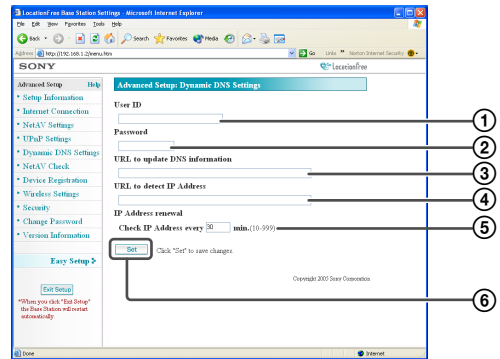
- ① A domain name appears here if you have used the [Easy Setup] to register with the preset Dynamic DNS service.
- ② The current status of the Dynamic DNS settings appears here. "Success" appears if the service works correctly.
- ③ Click this if you want to change the Dynamic DNS settings manually.

Tip

If an [Easy Setup] has already been performed, the current Dynamic DNS setting status appears in [Current Status]. If the Dynamic DNS is set manually after performing an [Easy Setup], the Dynamic DNS registered by the [Easy Setup] is canceled.

Setting Dynamic DNS Manually

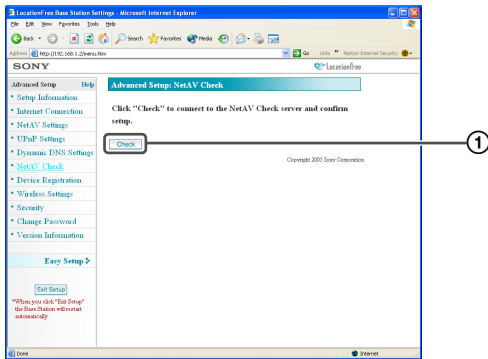
If you want to use a Dynamic DNS service other than the one you can set with [Easy Setup], set the Dynamic DNS manually.



- ① Enter the user name that you registered with the Dynamic DNS service.
- ② Enter the password that you registered with the Dynamic DNS service.
- ③ Enter the URL for updating DNS information.
- ④ Enter the URL for detecting IP addresses.
- ⑤ Enter a renewal time for the IP Address between 10 and 999 minutes.
- ⑥ Click this to save changes.

NetAV Check

You can check whether NetAV has been set up correctly.



- ① When you click this button, a NetAV Check page appears and the test begins. If [Success] appears in the test page, click [Exit Setup] and close the base station settings screen. If [Setup Incomplete] appears in the NetAV Check page, read the instructions on the NetAV Check page and configure the necessary settings.



Tip

When setting the dynamic DNS manually, a domain name needs to be entered after you start the NetAV test. Follow the on-screen instructions to enter the domain name.

Registering LocationFree Devices on the Base Station

Although you do not normally need to perform the device registration procedure described below because registration can be performed easily from LocationFree Player (see page 18). Perform the following procedure if you need to enter the registration password when you establish a connection.

Device Registration

You can register or delete another computer or LocationFree TV monitor equipped with a device registration function on the base station.

You can register up to four devices. The following types of devices can be registered.

- Computer with LocationFree Player installed
- LocationFree TV monitor equipped with a device registration function (optional)



Tip

Before starting the registration (see page 12), configure the device you are registering so that it is able to connect with the base station.

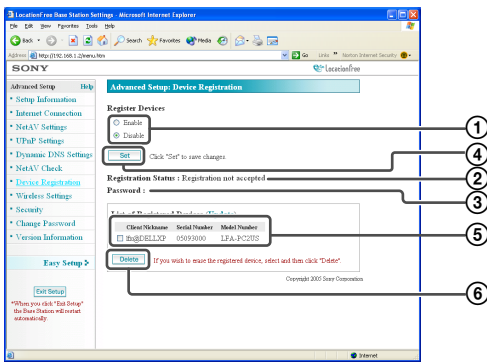
Note

It is not possible to watch TV or video on more than one of the registered computers, or monitors at the same time. (At any one time, only one of the devices may view video.)

Changing the Wireless Settings of the Base Station

Wireless Settings

You can change the wireless settings of the base station. If the settings of the base station are changed, the wireless settings of the device to be connected to also need to be changed.



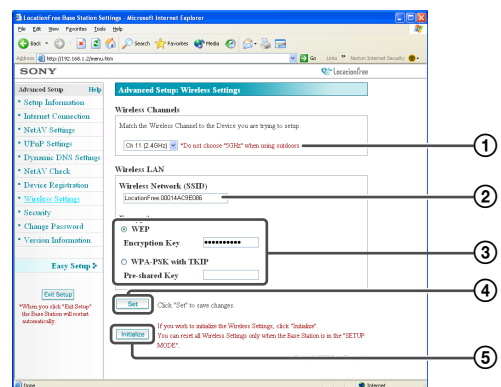
- ① To enable device registration, select [Enable].
- ② The base station's current registration processing status appear here.
- ③ The password needed to register a device with the base station appears here. You will need this password when you make device registration settings on the device side, so make a note of it.
- ④ When you click this button, the base station confirms the state (Enable/Disable) selected for [Registered devices].
- ⑤ A list of the devices currently registered with the base station appears here.
- ⑥ If you want to stop connecting to the base station from a registered device, check the device in the "List of Registered Devices" list and click the [Delete] button.

Generating a Registration Password

- 1 Select [Enable] under [Register Devices].
- 2 Click [Set].
- 3 Click [Device Registration] in the left frame. The registration password appears.

Tips

- The registration password changes with every registration. If you cancel a registration, and then start another registration, the registration password changes to a new password.
- To check whether device registration is complete, click [Update] under [List of Registered Devices].



- ① Wireless LAN devices that conform to the IEEE802.11a, b, or g standards can be used on the following channels. When connecting your computer to the base station via a wireless connection, select a channel supported by the LAN device.
 - IEEE802.11a wireless LAN device: 5 GHz
 - IEEE802.11b wireless LAN device: 2.4 GHz
 - IEEE802.11g wireless LAN device: 2.4 GHz
- ② An SSID is already entered here at the time of purchase (the characters shown on the side of the base station). If you want to change it, enter a string of up to 32 alphanumeric characters and symbols. An SSID is an ID that identifies a wireless network.
- ③ [WEP] and [WPA-PSK with TKIP] are encryption methods. Select one or the other, and enter an encryption key or a pre-shared key.

When using WEP:

As the encryption key, enter a string of characters or a string of hexadecimal numbers.

You can use any string of characters as the key, but the number of required characters differs depending on the length of the key. The following table shows the number of required characters and the characters that can be used in encryption keys.

Key length	64-bit	128-bit
Character input	5 characters (alphanumeric, symbols)	13 characters (alphanumeric, symbols)
Hexadecimal input	10 characters (0 to 9, A to F, a to f)	26 characters (0 to 9, A to F, a to f)

When using WPA-PSK with TKIP:

Enter a pre-shared key from 8 to 64 characters in length.

When you enter 64 characters, the available characters are limited to 0 to 9, A to F, and a to f.

Input method	Number of characters
Character input	8 to 63 characters (alphanumeric, symbols)
Hexadecimal input	64 characters (0 to 9, A to F, a to f)



Tip

For details on WEP and WPA-PSK with TKIP, refer to “About Wireless Security” in “Important Safeguards” (separate document).

- ④ Click this to confirm and save the information you have entered.
- ⑤ Click this to initialize all wireless LAN settings.
Initialization is possible only in setup mode.

Notes

- When choosing encryption keys and pre-shared keys, you should avoid words and phrases that are easy for other people to guess.
- For better security, you should change your encryption key or pre-shared key periodically.



Tips

- You will need the SSID, and the encryption key or pre-shared key, when you connect your computer to

the base station via a wireless connection. Make a note of the information you enter here.

- The information set here is only used in normal mode. In setup mode, the initial settings shown on the side of the base station are used (🔧 page 12).
- The initial setting for the wireless channel in normal mode is a channel in the 2.4 GHz band. To use a wireless device that is only compatible with the 5 GHz band, follow the procedure described in “Using a Router to Connect a LocationFree Device to the Base Station” (🔧 page 15) to connect to the base station and then change the wireless channel of the base station to a channel in the 5 GHz band. When you use such a connection to configure settings, the base station needs to be switched to setup mode (🔧 page 12).
- Configuring the wireless settings on a computer connected to the base station via a wired LAN is recommended to ensure security.

Also you can use the base station as a wireless LAN access point.

If you use the base station as a wireless LAN access point, you can connect to the Internet via the base station from a device equipped with a wireless LAN function.



Tip

To use the base station as a wireless access point for computers, the computers must be equipped with integrated wireless LAN functions or wireless LAN cards that conform to the IEEE802.11a, b, or g standards.

Notes

- Not all wireless LAN devices can be guaranteed to connect to the base station.
- You can also connect a maximum of 16 wireless LAN devices by using the base station as an access point. In some cases, however, the number of connecting devices may cause the communication speed to decrease. For example, you may not be able to send or receive video smoothly if other wireless LAN devices connect and communicate with the base station.

Setting Up Your Computer

To use a wireless LAN from a computer, you need a computer with a built-in wireless LAN function or a wireless LAN card that conforms to the IEEE 802.11a, b, or g standard. Next, you

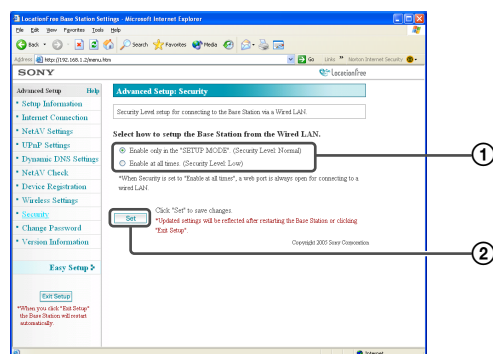
must configure the Windows environment settings, Internet connection settings, and wireless connection settings on your computer to match the wireless LAN settings of the base station, so that the computer can communicate with the base station (☞ page 15). For more information, refer to the user's manual of your computer and the operating instructions that came with your wireless LAN card.

Other Settings

Other settings that you can make include enabling security, changing your password, and upgrading the base station software.

Allowing the Settings Page to Be Opened Anytime (Security Settings)

If you set the security level to “Low”, you can access the [Base Station Settings] page from a wired network, even if the base station is not in setup mode.



- ① You can select the security level to use when the base station and computers are connected via a wired LAN. If you select [Enable at all times. (Security Level: Low)], you can configure settings even when the base station is not in setup mode because the Web port for the wired LAN is always open. At the time of purchase, this setting is set to [Enable only in the “SETUP MODE”. (Security Level: Normal)].
- ② Click this to save changes.

Warning

- If you set the base station security level to “Low”, port 80 of the base station is always open on the wired LAN, even if the base station is not in setup mode.
- When security is provided from the Internet side (WAN side), make sure it also covers this port 80, such as by means of a firewall function on the router.*1

- If security is not provided by the router, there is a risk that the base station may be accessed via port 80 by an intruder on the Internet (WAN) side. To ensure the security of the base station, refer to “Changing the Password” (☞ page 45), and change the password periodically to prevent an intruder from logging in to the [Base Station Settings] page.^{*2}
- If an intruder accesses and logs in to the [Base Station Settings] page, the following dangers exist:^{*3}
 - The base station settings may be changed.
 - The intruder’s LocationFree device may be registered in the base station settings, allowing the intruder to control and view the contents of any devices connected to the base station (such as video and DVD players).

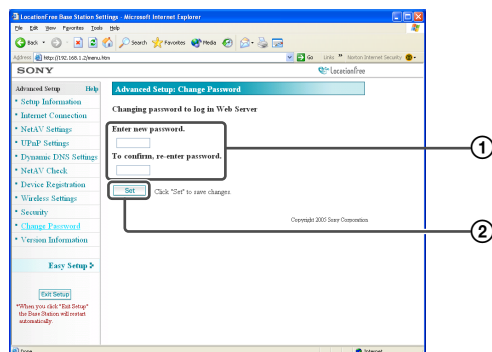
- ^{*1} For details on your router’s security functions, contact the maker of your router.
- ^{*2} Changing the password does not guarantee that an intruder cannot log in.
- ^{*3} Sony Corporation assumes no liability for any such damages arising from the customer’s actions. The customer assumes personal responsibility for making these settings.

Changing the Password

You can change the password needed to log into the base station’s web page.

Note

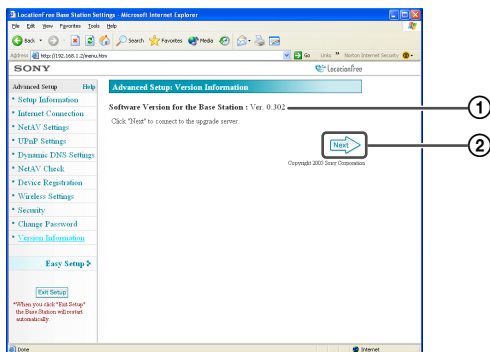
If you forget the new password, the base station will need to be initialized before you can log in.



- ① Enter the new password here.
- ② Click this to save changes.

Upgrading the Base Station Software (Version Information)

You can check the version of the base station software. You can also upgrade the software when a new version is released.



- ① The base station software version appears here.
- ② Click this to upgrade to a newer version of the base station software.

An upgrade page appears in the right frame when you click this button.

Follow the instructions on the screen to complete the upgrade.

Notes

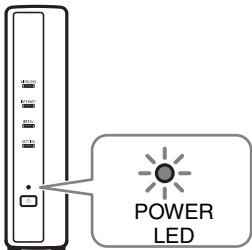
- Do not turn off the base station or computer, close the Web browser, or operate other items while the base station software is being upgraded to a newer version.
- It is not possible to register a device or use the NetAV function while the base station software is being upgraded to a newer version. Nor can changes be made to the base station settings.
- The base station restarts automatically after the version upgrade ends.


About Self-Diagnostics Displays

If an error occurs during use, the POWER LED on the front panel of the base station alerts you to the problem. Refer to the following table for descriptions of problems and possible solutions. If the problem persists, contact your Sony dealer.

Self-diagnostics LED

Base station front panel



POWER LED on the base station	Problem	Causes and remedies
<div>Blinks red</div> <div> (Red)</div>	There may be a hardware malfunction or a settings file error.	<div>1 Turn the base station power off and then on again.</div> <div>2 Initialize the network and wireless settings (ⓘ page 48)</div> <div>3 If the problem persists, contact your Sony dealer.</div>

Initializing the Base Station

If you initialize the base station, all settings are reset to factory default.

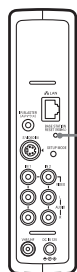
.....

1 Turn off the base station.

.....

2 While pressing the BASE STATION RESET button on the rear of the base station, turn on the POWER.
Hold down the BASE STATION RESET button until the NETAV LED on the front of the base station lights red.

Rear of base station



BASE STATION RESET button

Front of base station



NETAV LED

.....

Troubleshooting

If a problem occurs during use, refer to the information provided in this section. If the problem persists, contact Sony LocationFree Customer Support. (☎ page 59)

LocationFree Player Software Installation

Problem	Causes and remedies
Installation fails.	<ul style="list-style-type: none"> • LocationFree Player must be installed from a user account with administrator privileges. Before performing the installation, log on to Windows as a user with administrator privileges. • If non-alphanumeric characters are entered for [User Name] or [Organization] on the [Customer Information] screen during installation, the software cannot be installed. • If non-alphanumeric characters are included in the destination folder name specified on the [Destination Folder] screen during installation, the software cannot be installed. • Does the computer meet all the system requirements for installing LocationFree Player. (☎ page 32)

Base station

Problem	Causes and remedies
Cannot turn the base station power off.	Keep the Power button pressed for 3 seconds or longer. This forcibly turns the power off.
Cannot switch to setup mode.	<ul style="list-style-type: none"> • Make sure that the base station is powered on. • Check whether the SETUP MODE LED is blinking or turned on.
The NETAV LED is always blinking amber.	When you are using a Dynamic DNS service for a NetAV connection, the base station needs to periodically connect to the DNS server to update the information. If you performed an [Easy Setup], the dynamic DNS is updated every five minutes and the NETAV LED blinks amber during the update (which takes about 1 minute).
The power turned off.	The power turns off if the installation environment of the base station becomes very hot. Check the installation location.
Base station makes noise.	This is the sound of the cooling fan inside the base station. It is not a malfunction.
NETWORK LED on the base station does not turn on.	<ul style="list-style-type: none"> • Check whether the connection type is correct. See “Connecting to the router” (☎ page 18) and check to make sure you have selected the correct connection type. • Check whether the modem power and router power are turned on. If the power is turned on, try turning the power off, waiting for a short while, and then turning the power on again. • Make sure the LAN cable is securely connected. • Make sure you are using the correct type of LAN cable (straight-wired or cross-wired). To determine the cable type you need, refer to the operating instructions for the device you want to connect or contact your ISP. • Your Internet service contract may only allow one device to connect to the Internet at a time. Make sure no other device is already online.
Cannot automatically receive an IP address (no value displayed).	<ul style="list-style-type: none"> • Make sure the LAN cable is securely connected. • Make sure the router’s DHCP server is enabled. • See “Internet Connection” (☎ page 37). Set the IP address manually.

LocationFree Player

Problem	Causes and remedies
Cannot connect a computer to the base station via a wireless connection.	<ul style="list-style-type: none"> • Is the wireless LAN set up properly? Configure the same information on the computer as you set on page 42. • Check the frequency band (2.4 GHz band or 5 GHz band) supported by your computer or wireless LAN card and set the base station to operate at that frequency band.
Cannot register a computer on the base station.	<ul style="list-style-type: none"> • Switch the base station to setup mode after you connect the computer to the base station via a wireless connection or router. • When connecting to one base station from multiple computers, a separate serial key is required for each computer. • To register a computer to a base station that is not on the same LAN, you need to generate a password in [Device Registration] under [Advanced Setup] on the base station settings screen and then enter the password during registration. A password also needs to be entered when registering a computer to the LF-X1/X5 base station. For details on how to generate a password for LF-X1/X5 registration, refer to the operating instructions for the LF-X1/X5.
Nothing is shown on the [Base Station Selection] screen.	<ul style="list-style-type: none"> • Directly enter the IP address or domain name, or check the following items. <ul style="list-style-type: none"> - Is the base station turned on? - Is the base station connected to the network? - Check the settings of security software because the base station may be blocked by the firewall function in anti-virus software or other types of software. - When connected via a wired LAN, make sure the base station and computer are connected properly to the LAN ports of the router. - If the connection settings of the base station were set manually, check the IP address setting. - Is a global IP address set for the WAN side of the router and a private address set for the base station? • If you are using a LAN with global IP addresses and the base station is not detected for security reasons, you need to enter the IP address assigned to the base station in the address field of your web browser.
Can connect at home, but cannot connect to the base station while away from home.	<ul style="list-style-type: none"> • Did you configure the network settings for when you are away from home? • Are the NetAV settings configured properly? (☞ page 18) • Are the base station and connected devices such as the router turned on? • NetAV cannot be used via a proxy server. • Have the devices you are currently using been deleted from the device registration list on the base station? Check the device registration list in the base station settings. (☞ page 41) • Have you initialized the base station? If so, the device registration information has been deleted. Perform the setup again from device registration. (☞ page 41)

General video

Problem	Causes and remedies
No color, poor color.	Make sure the AV cable and antenna cable are connected properly to the base station.
Picture appears but there is no sound.	<ul style="list-style-type: none"> • Make sure the volume of LocationFree Player is not turned all the way down. • Make sure the volume of the computer is not set to the minimum level or mute.
No picture.	Check the causes and remedies described in “Watching TV at Home” (☞ page 52) or “Watching TV Away from Home” (☞ page 52).

Problem	Causes and remedies
Picture freezes frequently.	Depending on your network, check the causes and remedies described in “Watching TV at Home” (🔗 page 52) or “Watching TV Away from Home” (🔗 page 52).
Block noise appears.	This is due to video compression processing. It is not a malfunction.
When you change the rate, video is not smooth.	It is because of video compression, not a breakdown.
Compared with usual, the video or sound quality gets worse.	Disconnect NetAV and reconnect it again.
Picture is distorted.	Check the latest driver of video card (graphic card) on the manufacturer’s support pages. (🔗 page 32)
Disconnected when switching to another rate.	<p>When you click [Rate] and switch between [Auto] and [Manual], change the rate from [1] (lowest rate) or [6] (highest rate) to another rate, or change from another rate to [1] or [6] while connected, the NetAV connection is disconnected and then reconnected.</p> <p>In addition, when connected to an LF-X1/LF-X5 base station, the following occurs:</p> <ul style="list-style-type: none"> • “Auto” cannot be selected. • The NetAV connection is disconnected and then reconnected only when switching the rate from [1] to another rate or from another rate to [1].

TV

Problem	Causes and remedies
Cannot get any TV channels to appear (screen appears to be filled with snow).	<ul style="list-style-type: none"> • Make sure the antenna cable is securely connected to the base station (🔗 page 7). • Try selecting different channels in the [Channel Settings] window (🔗 page 29)
Cannot get specific TV channels to appear.	Try selecting different channels in the [Channel Settings] window (🔗 page 29)
Cable TV channels do not display properly.	The base station supports cable TV channels 1 to 125. If you want to watch other channels or the channel signal is scrambled, connect a cable set-top box to a video input terminal on the base station.
Double images or ghosts.	<ul style="list-style-type: none"> • Make sure the antenna cable or CATV cable is securely connected to the base station (🔗 page 7). • Adjust the position, orientation, and angle of the antenna.
Snow or dim pictures.	<ul style="list-style-type: none"> • Make sure the antenna is not damaged or broken. • Make sure the base station is connected properly to the antenna with the antenna cable or CATV cable. • Make sure the selected channel is currently broadcasting.
Stripes and noise.	<ul style="list-style-type: none"> • Make sure the antenna cable or CATV cable is securely connected to the base station (🔗 page 7). • Keep the antenna cable or CATV cable away from the power cord and other connection cables.

Video

Problem	Causes and remedies
No picture from the connected device.	<ul style="list-style-type: none"> Firmly attach the connection cables. Check that the connections to the red, white, yellow, and S-Video jacks are correct (☞ page 9). Non-interlaced signals from computers or other equipment cannot be displayed. Make sure the device is connected to the correct input terminal (☞ page 9). Make sure that the power of the video device is on.
The on-screen remote control does not work.	<ul style="list-style-type: none"> Connect the IR Blaster to the IR BLASTER port on the base station (☞ page 10). Make sure the IR Blaster is positioned so that it faces the infrared receiver correctly (☞ page 10). Move the device's infrared receiver away from any bright light, such as a fluorescent light or direct sunlight. The on-screen remote control may not work properly when the wireless connection between the device and base station is poor. Check whether operation is possible using the buttons of the connected device. Also, reconfigure the remote control settings. (☞ page 30). (Some devices cannot be operated, or can only be partially operated, by the on-screen remote control.) Make sure the remote control settings for [Video 1] and [Video 2] are configured correctly in the [Remote Settings] window.

Watching TV at Home

Problem	Causes and remedies
Operations are delayed.	<ul style="list-style-type: none"> Changing channels and operations performed from the remote control on the screen take place via the network, so response is delayed. This is normal and not a malfunction. When the rate is too high for the actual speed of your connection, delay is even more likely to occur. Set the rate to auto or lower the rate if you want to use manual.
Video stops or skips.	<ul style="list-style-type: none"> If another wireless LAN device connects to and communicates with the base station during your NetAV session, it may not be possible to send and receive video smoothly. If your computer is connected on a wireless LAN to the base station or to a wireless router and the power save mode is enabled in the computer's wireless LAN settings, it may not be possible to send and receive video smoothly. Check the computer's wireless LAN settings, and disable the power save mode. For details on these settings, refer to the instruction manual for the wireless LAN device, such as your computer or wireless LAN card.
The NetAV connection is disconnected suddenly.	<ul style="list-style-type: none"> Has security software been installed? If so, the firewall function of the security software may be causing NetAV to disconnect. Problems with the Internet connection may cause the NetAV connection to be disconnected.

Watching TV Away from Home

Problem	Causes and remedies
The video keeps stopping and starting, and frames are dropped.	<ul style="list-style-type: none"> As NetAV uses the Internet for communication, the video may not be able to be transmitted smoothly depending on whether the connection is overloaded. Click [Rate] and make sure the rate is set to auto. If it is set to manual, select auto.

Problem	Causes and remedies
Operations are delayed.	<ul style="list-style-type: none"> Changing channels and operations performed from the remote control on the screen take place via the network, so response is delayed. This is normal and not a malfunction. When the rate is too high for the actual speed of your connection, delay is even more likely to occur. Set the rate to auto or lower the rate if you want to use manual.
Cannot use NetAV.	<p>Have never once been able to connect:</p> <ul style="list-style-type: none"> Is the setting for watching TV away from home enabled? (ⓘ page 18) Did you click [Connect] in the bottom left of the LocationFree Player screen? <p>Can connect to the Internet from a computer at home, but there is no picture while away from home:</p> <ul style="list-style-type: none"> A communication connection with a download speed at least 300 kbps is recommended. Check your communication connection. Is the computer you are using away from home connected to the Internet? Did you click [Connect] on the bottom left of the LocationFree Player screen?
The NetAV connection is disconnected suddenly.	<ul style="list-style-type: none"> Has security software been installed? If so, the firewall function of the security software may be causing NetAV to disconnect. Problems with the Internet connection may cause the NetAV connection to be disconnected.

Base Station Settings (Common)

Problem	Causes and remedies
Cannot open the base station settings screen.	<ul style="list-style-type: none"> [Base Station Settings] cannot be clicked when connecting to the base station for the first time. Try connecting first. [Base Station Settings] cannot be clicked when the base station and computer are not on the same LAN. If [Base Station Settings] cannot be clicked when you are using a wireless connection, make sure the wireless network is connected to the SSID of that base station. When connecting the base station to a network that requires a proxy, click [LAN Settings] under [Local Area Network (LAN) settings] on the [Connections] tab of [Internet Options] in Internet Explorer, then click [Advanced] and set the IP address of the base station as an address that does not use a proxy. LocationFreeTV FAQ pages: http://www.sony.com/locationfree/faq/ If you set the wrong IP Address to your Base Station connecting with a Wired LAN, you cannot connect to the Base Station any more. In this case, change the settings by connecting to the Base Station directly with wireless or, initialize the Base Station.
Authentication of the user name and password for opening the setup screen fails.	<ul style="list-style-type: none"> Did you enter uppercase letters instead of lowercase letters, or vice versa? The base station distinguishes between uppercase and lowercase letters. Did you enter the correct user name? The user name is lfx (lowercase letters). Did you enter the correct password? The default password is printed on the label on the side of the base station.
Forgot the password for opening the setup screen.	<ul style="list-style-type: none"> The default password is printed on the label on the side of the base station. If you changed the password and forgot the new password, the base station will need to be initialized (ⓘ page 48). After initializing the base station, enter the password printed on the label on the side of the base station.

Easy Setup

Problem	Causes and remedies
NETWORK LED of the base station does not light up.	Check the “Cannot connect to the Internet” (☞ page 49) section of “Base Station.”
NETAV LED of the base station blinks amber, then does not turn off but stays lit amber.	Make sure the modem and router are turned on and connected properly.
The NetAV Check page does not appear.	Check the “Cannot connect to the Internet” (☞ page 49) section of “Base Station.”
The NetAV Check page failed.	<ul style="list-style-type: none"> Check the settings in accordance with the information displayed on the NetAV Check page, then perform the test again.
NetAV LED stays green.	Another device is connected by NetAV.

Advanced Setup

Problem	Causes and remedies
The setup screen disappears soon after configuring settings.	<ul style="list-style-type: none"> If you change the IP address of [Internet Connection] while using a wired LAN to configure the base station settings, the setup screen will no longer be able to be accessed. If this happens, select [Base Station Settings] from the [Base Station Selection] window and reset the setting. The base station is restarted automatically when you click [Exit Setup]. Perform the following operation to check the base station settings again. When connected to the base station via a wireless connection: Try establishing a wireless connection to the base station again and then click [Base Station Settings] from the [Base Station Selection] screen. When connected to the base station via a wired LAN: Switch the base station to setup mode, then click [Base Station Settings] from the [Base Station Selection] screen.

- For questions about Internet connections, contact your Internet Service Provider (ISP) or cable TV company.
- LocationFree FAQ pages <http://www.sony.com/locationfree/faq/>

Specifications

(LocationFree Base Station LF-B1)

System

Television system	NTSC
Channel coverage	VHF: 2 - 13, UHF: 14 - 69, CATV: 1 - 125
Tuning system	PLL synthesizer

Input/output

VHF/UHF	75-ohm external terminal
S-VIDEO	4-pin mini DIN

VIDEO INPUT1

Y:	1 Vp-p, 75 ohms unbalanced, sync negative
C:	0.286 Vp-p (burst), 75 ohms
Video:	1 Vp-p, 75 ohms unbalanced, sync negative
Audio:	500 mVrms, Impedance: 47 kilohms

VIDEO INPUT2

Video:	1 Vp-p, 75 ohms unbalanced, sync negative
Audio:	500 mVrms, Impedance: 47 kilohms

DC IN	12 V DC
ETHERNET	10BASE-T/100BASE-TX Ethernet with RJ-45 interface (1)
IR BLASTER	Minijack (1)

AC power adapter (AC-LX1B)

Power requirements	100 - 240 V AC, 50/60 Hz
Rated output	12 V DC, 3 A
Operating temperature	32°F to 95°F (0°C to 35°C)
Storage temperature	14°F to 140°F (-10°C to 60°C)
Dimensions	Approx. 4 × 1 ¹ / ₁₆ × 2 inches (99.5 × 25.5 × 49.5 mm) (w/h/d, excluding protrusions)

Mass	Approx. 6 oz. (180 g)
------	-----------------------

General

Power consumption

Approx. 15 W (watching TV)
Approx. 0.7 W (power off, using AC power adapter)
32°F to 95°F (0°C to 35°C)

Operating temperature

Storage temperature

Dimensions

14°F to 113°F (-10°C to 45°C)
Approx. 1 ¹³ / ₁₆ × 7 ¹ / ₄ × 5 ¹ / ₈ inches (46 × 182.8 × 128.3 mm) (excluding rear protrusions)

Mass

Wireless LAN Standard

Frequency range

Modulation

Power requirements

Supplied accessories

IEEE802.11a/b/g
2.4 GHz band: 1, 6, and 11 channels
5 GHz band: 36, 40, 44, 48, 52, 56, 60 and 64 channels
DS-SS Modem and OFDM Modem
AC power adapter: 100 - 240 V AC, 50/60 Hz
AC-LX1B AC power adapter (1)
Power cord (1)
IR Blaster (1)
Base station stand (1)
LocationFree Player software CD-ROM (LocationFree Player, Operating Instructions PDF, and License (text file))
Quick Start Guide (1)
Dynamic DNS Terms-of-Use Agreement (1)

Optional Accessories

Audio/video cables YC-810S

PC-232S plug adapter

RK-G138 IR Blaster extension cable

VM-50 IR Blaster

VMC-N320TP, VMC-N120TT AV cable

These accessories are available as of 8. 2005.

Note that these accessories may not be immediately available and that production of them may be stopped at any time.

Design and specifications are subject to change without notice.

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LocationFree Customer Support

1-866-925-SONY (7669) - U.S. & Canada

1-239-768-7688 - International

9:00 a.m. - 9:00 p.m. EST, Mon.-Fri. (English Only)

LocationFree Web sites

<http://www.sony.com/locationfree/> - U.S.

<http://www.sonystyle.ca/locationfree/> - Canada