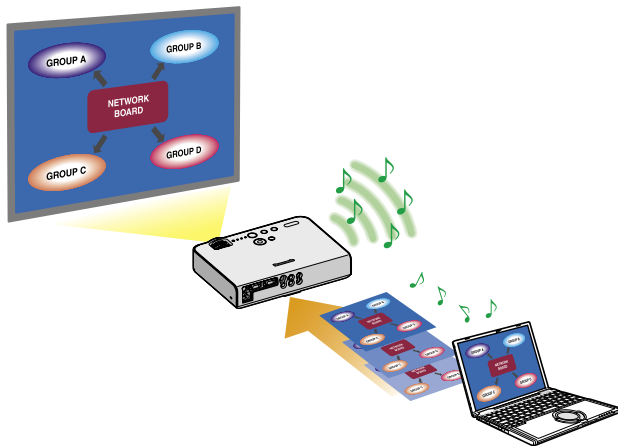


Wireless Function Edition

(PT-LB50NTE/PT-LB55NTE/PT-LB60NTE)

(PT-LB50NTU/PT-LB60NTU)



※ The projectors illustrated as examples are PT-LB50NTE.

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Please note the following.

- Panasonic cannot be held liable for any direct or indirect damages resulting from the use or malfunction of this projector.
- Panasonic cannot be held liable for damages arising from data corruption or loss as a result of using this projector.

Notes on Using Wireless Connection

Wireless connection function of the projector uses radio waves in the 2.4 GHz band. A radio station license is not required, but be sure to read and fully understand the following items before use.

■ Do not use near other wireless equipment.

The following equipment may use radio waves in the same band as the projector. When the projector is used near these devices, radio wave interference may make communication impossible, or the communication speed may become slower.

- Microwave ovens, etc.
- Industrial, chemical and medical equipment, etc.
- In-plant radio stations for identifying moving objects such as those used in factory manufacturing lines, etc.
- Designated low-power radio stations

■ If at all possible, avoid the use of cellular phones, TV sets or radios near the projector.

Cellular phones, TV sets, radios and similar devices use different radio bands from the projector, so there is no effect on wireless communication or the transmission and reception of these devices. However, radio waves from the projector may produce audio or video noise.

■ Wireless communication radio waves cannot penetrate steel reinforcements, metal, concrete, etc.

Communication is possible through walls and floors made from materials such as wood and glass (except glass containing wire mesh), but not through walls and floors made from steel reinforcements, metal, concrete, etc.

Notes on Using Wireless Connection (cont.)

■ Using the projector outside the country

It is forbidden to take the projector outside the country or region where you purchased it, so use it only in the said country or region. Also, note that depending on countries or regions there are restrictions on the channels and frequencies at which you can use the wireless LAN.

■ Channels that can be used

The channels (frequency range) that can be used differ according to the country or region. Refer to the table below.

Country or region	Standard	Channels used	Frequency band (Center frequency)
Japan	ARIB STD-T66	1 - 13	2,412 MHz - 2,472 MHz
China	SRRRC		
England, Germany, France, Spain Italy, Belgium, Austria, Sweden, Norway, Denmark, Switzerland, Holland, Finland, Portugal, Greece, Thailand, South Korea	ETSI 300.328		
Singapore	IDA		
Australia, New Zealand	C-Tick		
Malaysia	SIRIM		
United States	FCC part 15		
Taiwan	DGT		

What you can do with Wireless Manager mobile edition 3.0

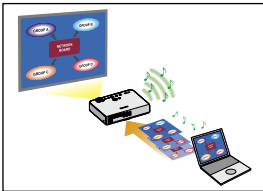
● Wireless Transmission

If you install Wireless Manager mobile edition 3.0 (hereafter called “Wireless Manager ME3.0”), you can connect the projector to a computer via the wireless LAN, and send moving and still images.

- Easy Wireless Set Up (See page 14)
- When connecting without the administrator authority (See page 17)
- Sending data by wireless transmission while the projector is connected to the wireless LAN. [When connecting through the wireless access point (hereafter called “access point”*)] (See page 19)
- ※ “Glossary” (See page 61)

● Project with various methods

<Live mode> (See page 25)



Used for normal presentations.

<Multi live mode>

<4-screen multi style> (See page 27)



Used for presentations involving multiple computers.

<4-screen index style> (See page 28)



This style is convenient in cases where you wish to focus attention on one of four presentations displayed simultaneously.

<16-screen index style> (See page 30)



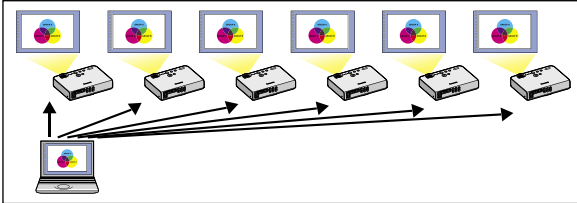
This style is convenient in cases where you wish to display a large number of presentations as a list.

What you can do with Wireless Manager mobile edition 3.0 (cont.)

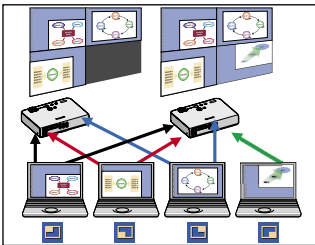
● Project with multiple projectors

<Multiple source live mode> (See page 31)

This arrangement can be used when a number of projectors are installed in a large conference room, or when holding simultaneous presentations in several conference rooms, for example.



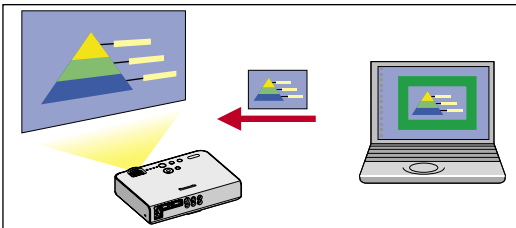
<Multiple source multi live mode> (See page 33)



This arrangement can be used when you wish to simultaneously display multiple presentations using multiple projectors.

● Useful functions

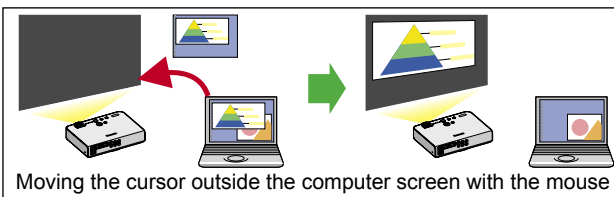
<Selective area transmission> (See page 35)



By using the selective area window, you can specify the necessary information alone from the computer screen, and display it on the projection screen.

<Secondary display transmission> (See page 36)

You can set the computer screen and the projector screen to the multi-monitor mode, and use the computer screen as the primary monitor and the projector screen as the secondary monitor. This is convenient for when holding a presentation using the projector screen while displaying reference material on the computer screen.



Check your computer

Necessary environment for computers to be connected

- First, check your computer to see whether or not it has a built-in wireless LAN* function. ※LAN : “Glossary” (See page 61)
- Before connecting the projector to the computer, be sure to check the following settings.
- Operation is not guaranteed for all wireless cards and built-in wireless LAN adapters.

Check 1 Wireless LAN settings

<Computer with a built-in wireless LAN function>

- Is your wireless LAN switched on?
- If your computer has a built-in wireless LAN function, use the built-in wireless LAN. Do not insert a different wireless LAN card.

<Computer without a built-in wireless LAN function>

- Is your wireless LAN card properly recognized?
- Is the wireless LAN card switched on?
- Install the wireless card driver beforehand. For details on how to install the driver, refer to the instructions accompanying the wireless card.
- Refer to the following URL for the types of wireless LAN cards that system operation capabilities are confirmed.
<http://panasonic.co.jp/pavc/global/projector/>

Check 2 Logon user's settings

- Have you logged in as the Administrator?

Check 3 Computer's settings

- When security (firewall) software and utilities for network cards are installed, these may prevent connection of the projector.

<Windows XP>

- Is Network Bridge enabled?
- Has your firewall been disabled?

Note

- This manual describes how the computer is operated using Windows XP as the operating system.

Software Installation

System requirements

The computer must meet the following requirements in order to use the supplied software.

- OS: Microsoft Windows 2000 Professional/XP Home Edition/XP Professional
- CPU: Pentium III or faster or compatible processor (800 MHz or faster is recommended when using live mode and 1 GHz or faster is recommended when playing movies.)
- RAM: 256 MB or more
- Empty hard disk capacity: 60 MB or more
- Hardware conditions:
 - CD or DVD drive (for software installation and viewing the user's manual)
 - An 802.11 b/g built-in wireless LAN system or an 802.11 b/g wireless LAN card must be installed and running properly.
 - However, some 802.11 b/g wireless LAN may not allow connection to 802.11 g projectors.
- Web browser: Internet Explorer 6.0 or newer
Netscape Communicator 7.0 or newer
- DirectX: Environment required for running DirectX 8.1b or newer

Note

Note that operation is not guaranteed when used with system environments other than the above or on homemade computers.

Operation is not guaranteed for all computers that meet the above conditions.

Software Installation (cont.)

Contents on Provided CD-ROM

When inserting the provided CD-ROM into the computer, the installer starts up automatically and the following screen appears.



Notes

- Shut down all software currently active on Windows. Otherwise, installation may not be possible.
- Administrator authority is required for installation.
- If the installer does not start up automatically, double-click [EasyInstall] → [Easy_Inst.exe] in the CD-ROM.
- If Wireless Manager ME 1.0 or 2.0 has been installed, uninstall it by following the instructions on the screen.

Wireless Manager ME 3.0

This software is used to send screen images from a computer to the projector via a wireless LAN.

1

Click [Wireless Manager ME 3.0].

Follow the instructions on the screen and install the software.

Software Installation (cont.)

DirectX 9.0c

This CD-ROM includes DirectX 9.0c. To transfer moving picture using the projector, your computer must have DirectX 8.1b or newer.

Caution

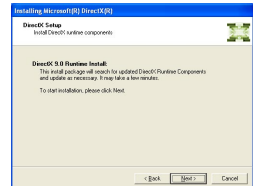
- Once installed, the DirectX 9.0c Runtime cannot be uninstalled.
- DirectX 9.0c is already installed in Windows XP SP 2, so there is no need to install it again. (How to check the version of installed DirectX : Click [start]→[Run], input [dxdiag], and click [OK]. [DirectX Diagnostic Tool] dialogue box appears, then you can confirm the [DirectX version] in [System Information] of [System] tab.)
- In rare cases, installing DirectX 9.0c may prevent your computer from starting up properly. Before installing, be sure to verify with the customer support office of the manufacturer that the video card of your computer is compatible with DirectX 9.0c.
- No guarantees are made for the operation of Wireless Manager ME 3.0 with a version newer than DirectX 9.0c.

1 Click [DirectX 9.0c] on page 10.
The License Agreement for DirectX appears.



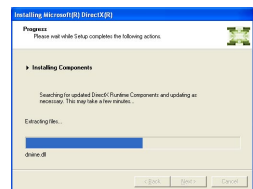
2 Place a check in the [I accept the agreement] checkbox and click [Next].

The DirectX Runtime component install window appears.

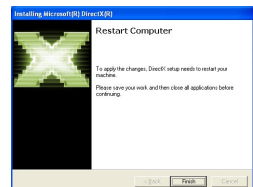


3 Click [Next].

- The DirectX component install progress bar appears.
- Do not perform any other operations until installation is complete.



4 Click [Finish] when the window to the right appears.



Installation free Wireless Manager ME 3.0 set up

You can use Wireless Manager ME 3.0 without installing it in the computer. If you copy Wireless Manager ME 3.0 to a removable medium, such as an SD card, you can use Wireless Manager ME 3.0 without installing it in any computer that permits you to access this removal medium.

1 Insert provided CD-ROM into the CD-ROM drive.

Setup screen appears.

2 Click [Installation Free Set Up].

[Direct CD-ROM Startup] and [Other Media Source Startup, Make Copy Here] appear on the window.

3 (A) When using Wireless Manager ME 3.0 without copying the program: Click [Direct CD-ROM Startup].

Wireless Manager ME 3.0 starts up, and the “Select Access Port” window appears.

Operation is the same as when operating after installing CD-ROM.

(B) When copying Wireless Manager ME 3.0 : Click [Other Media Source Startup, Make Copy Here].

A window opens to select the destination to save.

<If you chose (B) in step 3, follow steps 4-5.>

4 Select the destination to save, and click [OK].

CD-ROM data is copied to the destination.

After the copy ends, click [End] of the setup screen.

5 Double-click the Wireless Manager ME 3.0 icon (WM.exe) in the destination to save chosen in step 4.

Wireless Manager ME 3.0 starts up.

Operation is the same as when operating after installing CD-ROM.

If selecting removable medium as the destination to save, ensure that the removable medium is recognized by the computer to which you wish to connect the projector.


Some removable mediums start the program automatically.

Notes

- When using without installing, following functions are not available.
 - Selective area transmission (See page 35)
 - Secondary display transmission (See page 36)
 - Motion streaming mode (See page 38)
 - Producing audio along with video at live mode
- Operation is slower compared to when the computer is used with Wireless Manager ME 3.0 installed.

Connect

Select Access Port window

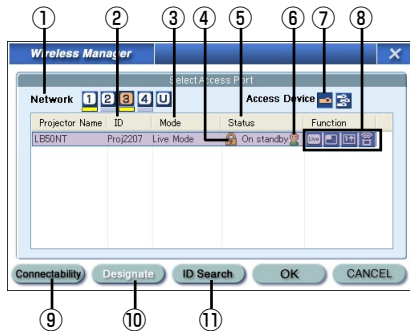
Click  on the desktop, or select [Start] → [All Programs] → [Panasonic Wireless Display] → [Wireless Manager mobile edition 3.0].

Wireless Manager ME 3.0 starts up, and the “Select Access Port” window appears.

① Network

When you specify the network number (See page 46) set on the projector from one of [1], [2], [3], [4], and [U (USER)]*1, projectors that are presently switched on in the selected network number are displayed in [Projector Name]. The initial value for both the computer and the projector is [1]*2.

※1-2 (See page 15)



⑩ Designate (See page 20)

Designate projectors to be connected when ① is set to [U].

⑪ ID Search (See page 21)

When you click [ID Search], a search for the projector of the specified ID is carried out from among the projectors that are presently switched on, from all channels other than [U].

■ How to connect


- Easy Wireless Set Up (See page 14)
- When connecting without the administrator authority (See page 17)
- Sending data by wireless transmission while the projector is connected to the wireless LAN (When connecting through the access point) (See page 19)

② ID (See page 21)

Display projector's ID

③ Mode (See page 25)



Display projector's mode or style

④  appears when password entry is needed for connection. (See page 20)


⑤ The status of this projector

⑥ The number of people connected to this projector.

⑦ Access Devices

When only one projector is connected, select . When multiple projectors are connected, select .

⑧ Available mode and functions

Among [Live mode], [Multi live mode], [One shot], and [Motion streaming], unavailable one is displayed with .

⑨ Connectability

When you click [Connectability], the projector name and ID are displayed at top left of the projector screen. If the projector name and ID are displayed correctly, the message “Projector is available.” will appear on the computer screen.

Connect (cont.)

Easy Wireless Set Up

If the computer has built-in wireless LAN or has a wireless LAN card installed, the necessary settings will be made automatically when Wireless Manager ME 3.0 is started.

1 Turn on the projector.

2 Press the [WIRELESS] button on the remote control.

Input signal is switched to Wireless on the projector.

([INPUT SELECT] button on the remote control or [INPUT] button on the projector are also available to switch input signals.)

3 Turn on the computer.

4 Click  on the desktop, or select [Start] → [All Programs] → [Panasonic Wireless Display] → [Wireless Manager mobile edition 3.0].

Wireless Manager ME 3.0 starts up, and the “Select Access Port” window appears.

5 Select the network number of the desired projector from [Network].

Projectors powered on in the chosen network group are listed.

6 Select the desired projectors, and click [OK].

The launcher shown below appears and the connection with the projector is established. (“Description of the launcher” →See page 23)

The launcher always appears on the computer screen, and can be used to perform various operations.

The launcher appears only on the computer screen and is not projected by the projector.



Connect (cont.)

Notes

- Wireless connection cannot be made between the projector and the computer. (See page 63)
- Automatic connection setting (See page 44)

※1

- When a user logs on a computer without the administrator authority, selectable network number is only [U].
- Depending on the computer and wireless LAN card used, easy wireless set up may not be possible. If this is the case, the [Network] setting of “Select Access Port” window will be switched to [U] automatically. For details of the connection procedure, first close Wireless Manager ME 3.0, and then refer to pages 17-19.

※2

- The initial network number for both the projector and Wireless Manager ME 3.0 is [1]. These numbers must match for the connection.
To check the network number, refer to the wireless menu of the projector.
- When importance is placed on security, select the network number [2]-[4], because WEP (wireless communication encryption) is set on these network numbers.
- Important video/audio data is protected because AES* encryption processing takes place in advance for all network numbers, even if [ENCRYPTION] is set to [NONE].
※ “Glossary” (See page 62)
- Other network adapters may not be usable under easy wireless set up connections.
- Connections to other networks connected through the wireless LAN card are broken during easy wireless set up connections.

Connect (cont.)

Connection error messages

One of the following windows may appear when a wireless connection cannot be made.

When a setting error for the wireless LAN card has been detected (See page 63)



- Is the wireless LAN card effective?
- Is your wireless LAN card properly recognized?
- Some wireless cards may allow easy wireless set up connections to function if drivers are updated.

When the Network Bridge setting has been detected (See page 64)



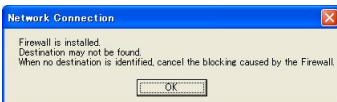
If you do not expect ever to use Network Bridge and see no need for it, delete it from your system.

When Windows Firewall has been detected (See page 65)



- Has your firewall in Windows XP been disabled?
- Is Wireless Manager ME 3.0 registered in [Exceptions] ([Control Panel] → [Security Center] → [Windows firewall]) with the Windows XP SP 2?

When another firewall has been detected (See page 66)



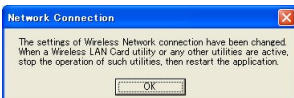
Are any firewall-containing applications installed?

When the user does not have the administrator authority (Next page)



If you have logged onto a computer as a [GUEST] or a restricted user who does not have administrator authority, you can not perform easy wireless set up (Network No. [1] – [4]). If you must perform easy wireless set up without administrator authority, designate [U] as the network number.

When a change in the settings made by the utility has been detected



The wireless LAN utility used by the computer may have changed the wireless settings. Close the utility, and then make the connection again using easy wireless set up connection.

Connect (cont.)

Connect without easy wireless set up

When logging on without administrator authority

Before starting Wireless Manager ME3.0, it is necessary to carry out “Computer settings” (② on this page) under the administrator authority in advance.

Next, logon as a restricted user or [GUEST], and start Wireless Manager ME 3.0.

Confirm to your system administrator before changing any settings.

Following settings are examples of when using a default setting projector.

① **Projector settings** ※“Glossary” (See pages 61-62)

1 Turn on the projector and press the [WIRELESS] button on the remote control.

2 Select [USER 1]- [USER 3] from [NETWORK] at the wireless menu and press the [ENTER] button.

3 Set the details of network and select [OK].

As for network setting items, see pages 49-52.

Confirm to your system administrator before changing any settings.

<Example>

DHCP*	OFF
IP ADDRESS*	192.168.10.100
SUBNETMASK*	255.255.255.0
SSID*	Panasonic Projector
MODE	AD HOC*
AUTHENTICATION	OPEN* (Some computers may require connection by [SHARED*] authentication.)
ENCRYPTION	NONE...When not performing encryption WEP...When performing encryption
ENCRYPTION KEY SETTING	When [ENCRYPTION] setting is [WEP*]: DEFAULT KEY : Set 1 – 4 numerals for the default key. KEY 1 – 4 : Set these to match the WEP key registered in [DEFAULT KEY].

② **Computer settings**

4 Turn on the computer and log on with the administrator authority.

Click [Start] → [Control Panel] → [Network and Internet Connections] → [Network Connections], right click [Wireless Network Connections], and click [Properties], then [Wireless Network Connection Properties] window appears.

5 Select [Internet Protocol (TCP/IP*)] on [General] tab, and click [Properties].

[Internet Protocol (TCP/IP) Properties] window appears.

Connect (cont.)

- 6** Select [Use the following IP address] on [General] tab, enter the IP address and Subnetmask, and click [OK].

Make the IP addresses of the upper three of the four break points the same value as that of the projector, and change the value of the last break point alone.

Make the Subnetmask as the same value as that of the projector.

- 7** Click [Add] of [Preferred networks] on [Wireless Networks] tab in [Wireless Network Connection Properties] window.

[Wireless network properties] window appears.

- 8** Make the SSID, network authentication, data encryption and communication mode settings the same as those of step 3, and click [OK].

- 9** Click [OK] in [Wireless Network Connection Properties] window.

The connection with the projector is established.

- 10** Click [Start]→[Log Off] and log off from the computer.

③ Computer operation

- 11** Log on with the user who operates Wireless Manager ME 3.0.

- 12** Start Wireless Manager ME 3.0, and select [U] from [Network] of “Select Access Port” window.

Note

If the projector is not displayed, click [Designate] followed by [ADD], then enter the IP address set in the projector using the “Access Port Registration” window, and click [REGISTER]. (See page 20)

- 13** Select the desired projector, and click [OK].

The launcher appears and the connection with the projector is established. (“Description of the launcher” →See page 23)

Connect (cont.)

Connecting through the access point

You can make the setting for infrastructure mode* (connection through the access point); however, confirm to your system administrator on network settings before changing any settings.

※“Glossary” (See page 62)

① Projector settings

1 Turn on the projector and press the [WIRELESS] button on the remote control.

2 Select [USER 1]- [USER 3] from [NETWORK] at the wireless menu and press the [ENTER] button.

3 Set the details of network and select [OK].

As for network setting items, see pages 49-52.

Confirm to your system administrator on network settings before changing any settings.

② Computer settings

4 Turn on the computer.

5 Make the network setting according to your system administrator.

6 Connect to your access point.

7 Start Wireless Manager ME 3.0, and select [U] from [Network] of “Select Access Port” window.

Note

If the projector is not displayed, click [Designate] followed by [ADD], then enter the IP address set in the projector using the “Access Port Registration” window, and click [REGISTER]. (See page 20)


8 Select the desired projector, and click [OK].

The launcher appears and the connection with the projector is established. (“Description of the launcher” →See page 23)

Connect (cont.)

Other operations for connection

Operations when password entry is required for connection

When a projector with the  mark is selected, the window shown to the right appears. Enter the password and click [OK]. (See page 47)



Notes

- Click [CANCEL] at the password entry window to return to launcher (See page 23).
- When an incorrect password is entered, an error message appears. Click [OK] to return to the password entry window and enter the correct password again.

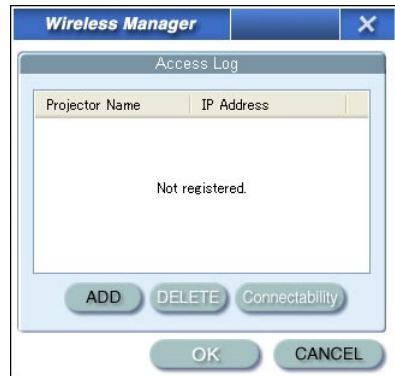
Adding and deleting connections

When [Network] is set to [U] and the desired projector is not displayed at the “Select Access port” window, connections can be added and deleted by the following operations.

■ Adding a connection

1 Click [Designate] at the “Select Access Port” window.

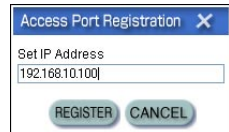
The window shown to the right appears.



2 Click [ADD] and enter the IP address* (including its periods) of the connection to be added, and then click [REGISTER].

* “Glossary” (See page 61)

The newly registered connection is added to the connection list in the window shown in step 1.



■ Deleting a connection

Select the connection to be deleted at the window shown in step 1 and click [DELETE].

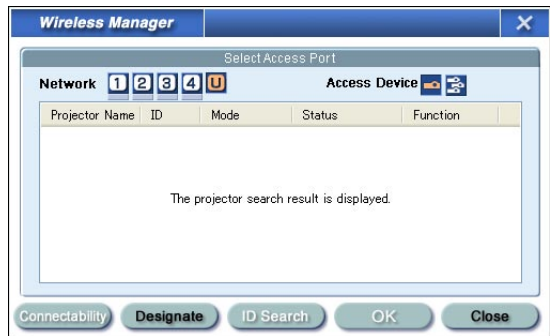
Connect (cont.)

Searching by projector's ID

Even if there are two or more projectors with the same name, an ID ([Proj] + 4-digit number) is assigned to each projector to enable the projectors to be identified. When you click [ID Search], a search for the projector of the specified ID is carried out from among the projectors that are presently switched on, from all channels other than [U]. It is necessary to know ID in advance. When input selection is switched to WIRELESS on a projector, the ID appears on the upper right of the projection screen for approximately 5 seconds. If you write down the ID displayed on the "Select Access Port" window in advance, you can search a projector by the ID from next time.

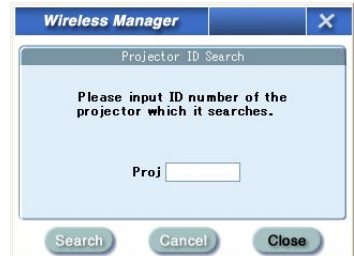
1 Click on the launcher.

The "Select Access Port" window appears.



2 Click [ID Search].

[Projector ID Search] window appears.



3 Enter four figures of desired projector's ID, and click [Search].

Start Searching.

4 When the projector of the applicable ID is found, the computer will be connected to that projector, and the status display of the launcher will turn green.

If appropriate ID is not found, an error message appears.

Connect (cont.)

Canceling the connection

1 Click on the launcher.

The following window appears.




2 Click **[Yes]**.

The computer returns to the original network settings when the connection is ended.

However, note that some time may be needed to return to the original network settings.


Note

When the launcher is minimized, right click  on the notification area to display pop up menu and click [End].


Various projection methods

Description of the launcher

The launcher always appears on the computer screen, and can be used to perform various operations.


- Two types of launchers are available in the launcher display mode, the “simple launcher” and the “full launcher”. By default, the “simple launcher” is displayed. The launcher display mode can be toggled by clicking  on the right side of the launcher window.

The display mode that the system was in when Wireless Manager ME 3.0 was exited is activated the next time the program is started.

- Two launcher button sizes are allowed, the [Small button] and the [Large button]. This is controlled in [Launcher size setting] in “Option” window. (See page 44)
- Right-click  on the notification area to display the menu.








■ Status indication






- ① **Status** : Indicate the connecting status.
 Connected computers' names, IDs, and their status are displayed in the pop up window when the cursor is on  of the launcher.

```
Sendable
Projector Name : [ ID ] : Status
LB50NT          : [Proj2207] : OK
```

When connected to one projector

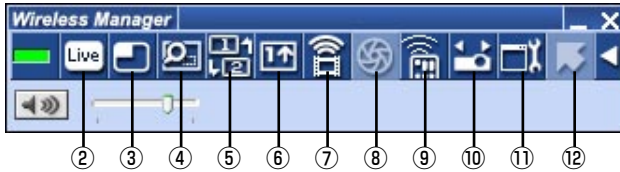
-  (Green, lit): Transmission possible
-  (Blue, blinking): Own computer currently transmitting (in the live mode or motion streaming mode)
-  (Yellow, lit): Other user currently transmitting
-  (Red, lit): Communication impossible
-  (Black, lit): When the projector has not been selected

When connected to multiple projectors



-  (Green, lit): All transmission possible
-  (Blue, blinking): Currently transmitting
-  (Yellow, blinking): Communication impossible for more than one unit
-  (Red, lit): All communication impossible
-  (Black, lit): When the projector has not been selected

Various projection methods (cont.)

Full launcher



■ Projection mode select buttons

- ② **Live Mode:** Displays the computer screen over the entire projection screen.
(See page 25)
- ③ **Multi Live Mode:** Display the screens of multiple computers on the divided projection screen. In 16-screen index style,  changes to . (See page 26)

■ Function buttons

- ④ **Selective area transmission:**
By using the selective area window, you can specify the necessary information alone from the computer screen, and display it on the projection screen.
(See page 35)
- ⑤ **Secondary display transmission:**
You can set the computer screen and the projector screen to the multi-monitor mode, and use the computer screen as the primary monitor and the projector screen as the secondary monitor. (See page 36)
- ⑥ **One Shot function:** The screen displayed when you click the mouse is projected as a still image. (See page 37)
- ⑦ **Motion streaming mode:** Projects a moving picture over the entire projection screen. (See page 38)
- ⑧ **Shutter function:** Blanks the screen for a moment. (See page 40)
- ⑨ **WEB control:** Control a projector through the WEB browser of a computer. (See page 53)
- ⑩ **Select Access Port:** Displays the "Select Access Port" window.
(See page 13)
- ⑪ **Option:** Displays the "Option" window. (See page 42)
- ⑫ **Pointer function:** You can change the shape of the pointer appearing on the projection screen. (See page 40)

Various projection methods (cont.)

Live mode

Connect a computer to a projector, and display the computer screen over the entire projection screen.


- 1 Press the [MULTI-LIVE SELECT] button on the remote control to turn the projection screen into a full screen display (the status when no index window is displayed).**

If you press the [MULTI-LIVE SELECT] button once or twice when index windows are displayed on the projection screen, the screen will switch over to a full screen display.

- 2 Check the status indication on the launcher to make sure that transmission is possible (check that the green lamp is lit).**

- 3 Click  on the launcher.**


The current computer screen is transmitted to the selected projector. In the live mode the projector is occupied by a single computer, so operations from other computers are not possible.

Picture quality or other options can be set on the “Option” window by clicking  on the launcher.

Notes

- For presentations in live mode, the [PAGE ▲▼] buttons on the remote control will function in the same way as the computer’s Page Up and Page Down keys. (When using “Presenter View” of “PowerPoint”, the [PAGE ▲▼] buttons of the remote control correspond to Back space key and Space key.) This means that if you run a computer application that supports the Page Up and Page Down keys, the presentation screen can be changed using the remote control.
- Movie play is slowed if [High Definition] is selected in the “Option” window.
- Some portions of images are not projected under some applications (MS Office Assistant, IME Bar, animation and locus of the mouse cursor, and others).
- If the connection error occurs during projection, the message ‘Stop “Live mode”’ will appear, then restart projection by clicking launcher buttons.

■ Quitting live mode

Click  on the launcher again.

Various projection methods (cont.)

Multi live mode

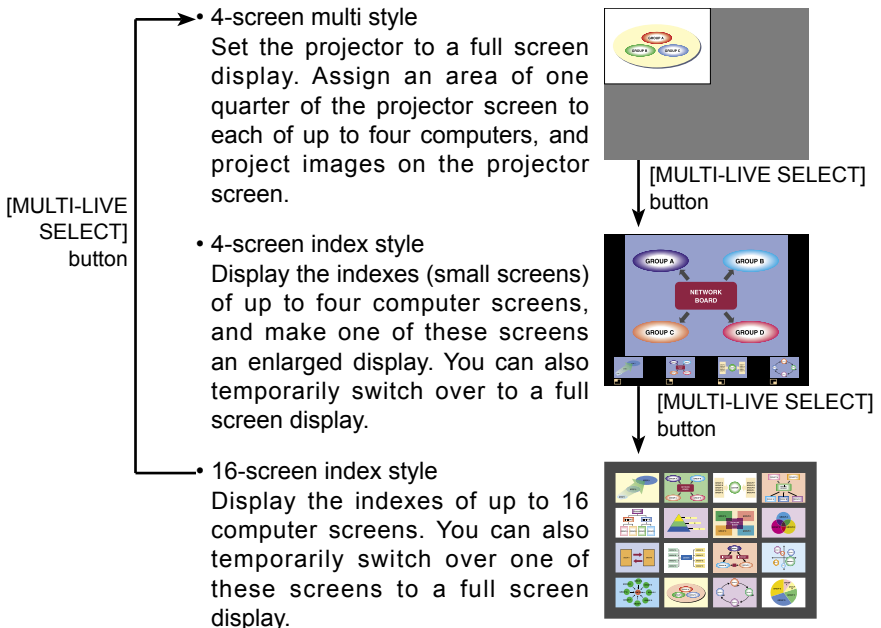
Switching from one style to another

Multi live mode has “4-screen multi style”, “4-screen index style” and “16-screen index style”.

Styles are switched by the projector or the remote control.

■ How to switch styles

Either press the [MULTI-LIVE SELECT] button on the remote control or select [OPTION] → [DETAILED SETUP] → [INDEX WINDOW] on the projector’s main menu and press the [ENTER] button.



Notes

- When the projector starts up, it resumes in the current style the last time the projector was turned off.
- When transferring to the live mode, first select the 4-screen multi style, and then click **[Live]** on the computer. Please note the connections to the second and higher numbered computers will be nullified.
- If you switch over to a 4-screen multi style when five or more computers are connected in a 16-screen index style, the connections to the fifth and higher numbered computers will be nullified.

Various projection methods (cont.)

4-screen multi style

Connect up to four computers to one projector, and then divide the projector screen into four parts, and simultaneously display the screens for the four computers on the projector screen.

1 Press the [MULTI-LIVE SELECT] button on the remote control to turn the projection screen into a full screen display (the status when no index window is displayed).

If you press the [MULTI-LIVE SELECT] button once or twice when index windows are displayed on the projection screen, the screen will switch over to a full screen display.

2 Check the status indication on the launcher to make sure that transmission is possible (check that the green lamp is lit).

3 Click  on the launcher.

The window shown to the right appears.



4 Select and click the projection position.




The computer image is transmitted to the selected quarter of the projection screen.



■ Switching to a different position

Select and click a different projection position in step 4 above.


■ Enlarged display

If  is clicked with a computer, projector screens temporarily change to full screen display. To return to the original display, click  with the computer that click  and select original projection positions with each computer.

■ Quitting 4-screen multi style

Select and click the checked position in step 4 above.

Notes

- In the 4-screen multi style, the computer screens from all the computers connected to the projector can be transmitted to the projector. (If an image from another computer has been sent to the image position where an image is already displayed, the existing image is replaced by the new image.)
- If the connection error occurs during projection, the message 'Stop "Live mode"' will appear, then restart projection by clicking launcher buttons.
- Picture quality or other options can be set on the "Option" window by clicking  on the launcher.

Various projection methods (cont.)

4-screen index style

When the projector is set to “4-screen index style”, connect up to four computers to one projector, and then simultaneously display the screens for the four computers on the index windows and also on a large screen.

1 Press the [MULTI-LIVE SELECT] button of the remote control to switch the projection screen to “4- screen index style”. (See page 26)

2 Check the status indication on the launcher to make sure that transmission is possible (check that the green lamp is lit).

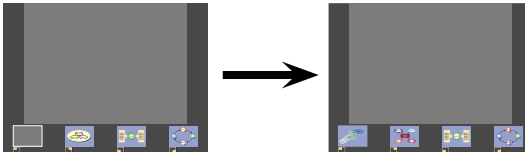
3 Click  on the launcher.

The window shown to the right appears.



4 Select and click the projection position.

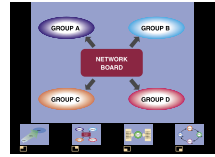
The computer image is transmitted to the area of corresponding window.



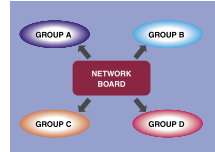
Various projection methods (cont.)

■ Enlarged display


- Use the [◀ ▶] buttons on the remote control to move the focus (yellow box) to the image to be enlarged, and press the [ENTER] button. The image is enlarged and displayed at the top of the projection screen.



- The image display will fill the entire screen if the [ENTER] button is pressed again.
- To return to the 4-screen index style, press the [ENTER] button again.



Notes

- While an enlarged image is displayed, the [PAGE ▲ ▼] buttons on the remote control will function in the same way as the computer's Page Up and Page Down keys. (When using "Presenter View" of "PowerPoint", the [PAGE ▲ ▼] buttons of the remote control correspond to Back space key and Space key.) This means that if you run a computer application that supports the Page Up and Page Down keys, the presentation screen can be changed using the remote control.
- Picture quality or other options can be set on the "Option" window by clicking  on the launcher.
- If the connection error occurs during projection, the message 'Stop "Live mode"' will appear, then restart projection by clicking launcher buttons.

■ Quitting 4-screen index style

Select and click the checked position in step 4 on the previous page.



Note

In the 4-screen index style, the green status display lamp remains lit. Other computers can send images only to the windows which are not being used.

Various projection methods (cont.)

16-screen index style

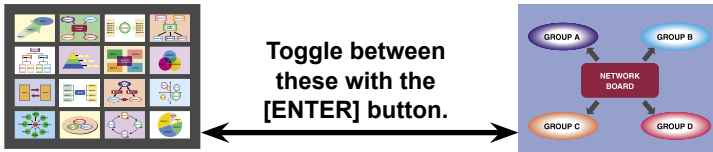
When the projector is set to “16-screen index style”, connect up to 16 computers to one projector, and simultaneously display the screens for the 16 computers on index windows and also on a large screen.

- 1 Press the [MULTI-LIVE SELECT] button of the remote control to switch the projection screen to “16-screen index style”. (See page 26)**
- 2 Check the status indication on the launcher to make sure that transmission is possible (check that the green lamp is lit).**
- 3 Click [16] on the launcher.**

The computer images are automatically sent to the empty windows on the 16-screen display. Display position is not selectable.

■ Enlarged display

- Use the [◀▶▲▼] buttons on the remote control to move the focus (yellow box) to the image to be enlarged and press [ENTER] to expand that image to fill the display.
- Press [ENTER] again to return to the 16-screen index style.



Notes

- While an enlarged image is displayed, the [PAGE ▲▼] buttons on the remote control will function in the same way as the computer’s Page Up and Page Down keys. (When using “Presenter View” of “PowerPoint”, the [PAGE ▲▼] buttons of the remote control correspond to Back space key and Space key.) This means that if you run a computer application that supports the Page Up and Page Down keys, the presentation screen can be changed using the remote control.
- Picture quality or other options can be set on the “Option” window by clicking [Option] on the launcher.
- If the connection error occurs during projection, the message “Stop “Live mode”” will appear, then restart projection by clicking launcher buttons.

■ Quitting 16-screen index style

Click [16] on the launcher again.

Various projection methods (cont.)

Multiple Source Live Mode

You can simultaneously project one computer's screen on up to eight projectors.

- 1 Press the [MULTI-LIVE SELECT] button on the remote control to turn the projection screen into a full screen display (the status when no index window is displayed).**

If you press the [MULTI-LIVE SELECT] button once or twice when index windows are displayed on the projection screen, the screen will switch over to a full screen display.

- 2 Click  of the launcher.**

The "Select Access Port" window appears.

- 3 Click  of [Access Device].**



- 4 Select the network number of the desired projectors from [Network].**

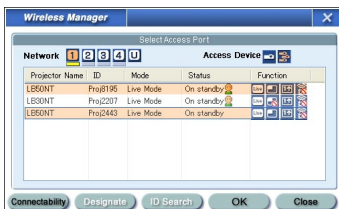
Projectors powered on in the chosen network group are listed.

- 5 Select the desired projectors, and click [OK].**

Selected projectors are displayed in pink.

If click again, selected items are canceled.

If click [OK], the connection with the projectors is established.




Various projection methods (cont.)

6 Check the status indication on the launcher to make sure that transmission is possible (check that the green lamp is lit).


7 Click  on the launcher.

The projectors selected in step 5 will begin displaying.

Notes

- Projectors in the same network are selectable.
- When one of the selected projectors is communicating with another computer, or its projection screen is not set to full screen display, the images are projected onto the other selected projectors.
- The greater the number of projectors, the slower the transmission.
- Picture quality or other options can be set on the “Option” window by clicking  on the launcher.
- Sound cannot be output in the multiple source live mode.
- If the connection error occurs during projection, the message ‘Stop “Live mode”’ will appear, then restart projection by clicking launcher buttons.

■ Quitting multiple source live mode

Click  on the launcher again.

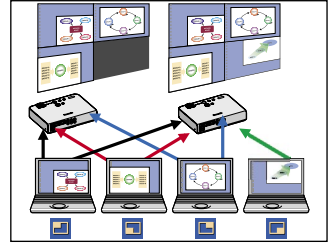
Various projection methods (cont.)

Multiple Source Multi Live Mode

Connect up to four computers to each of up to eight projectors, and project in each projector by the 4-screen multi style.

- 1 Press the [MULTI-LIVE SELECT] button on the remote control to turn the projection screen into a full screen display (the status when no index window is displayed).**

If you press the [MULTI-LIVE SELECT] button once or twice when index windows are displayed on the projection screen, the screen will switch over to a full screen display.



- 2 Click [] of the launcher.**

The “Select Access Port” window appears.

- 3 Click [] of [Access Device].**



- 4 Select the network number of the desired projectors from [Network].**

Projectors powered on in the chosen network group are listed.

- 5 Select the desired projectors, and click [OK].**

Selected projectors are displayed in pink. If click again, selected items are canceled. If click [OK], the connection with the projectors is established.



- 6 Check the status indication on the launcher to make sure that transmission is possible (check that the green lamp is lit).**

- 7 Click [] on the launcher.**

The window shown to the right appears.



Various projection methods (cont.)




8 Select and click the projection position.

The computer image is transmitted to the selected quarter of the projection screen.

■ Switching to a different position

Select and click a different projection position in step 8 above.

■ Enlarged display

If  is clicked with a computer, projector screens temporarily change to full screen display. To return to the original display, click  with the computer that click  and select original projection positions with each computer.



■ Secondary viewer function

If another computer enlarged the display, your screen is out of the projection screen and displayed in the secondary viewer on your computer. (See pages 36-37)

■ Quitting multiple source multi live mode

Select and click the checked position in step 8 above.

Notes

- Projectors only in the same network are selectable.
- If LB10NT/20NT/30NT or a projector whose projection screen is not set to full screen display is included among the selected projectors,  will be grayed out, preventing the projector from being selected.
- The greater the number of projectors, the slower the transmission.
- During the multiple source multi live mode, operation will not take place when either you press the [MULTI-LIVE SELECT] button on the remote control of the projector, or select [OPTION] in the main menu of the projector and press [DETAILED SETUP], [INDEX WINDOW], and [ENTER].
- Picture quality or other options can be set on the “Option” window by clicking  on the launcher.
- If the connection error occurs during projection, the message “Stop “Live mode”” will appear, then restart projection by clicking launcher buttons.

Useful Functions

Selective area transmission

By using the selective area window, you can specify the necessary information alone from the computer screen, and display it on the projection screen.




1 Click on the launcher.

Selective area window (green) appears on computer screen.



2 Surround the desired part to be sent to the projector with the selective area window.

You can perform operations in the selective area window with the same operation for moving or changing the window on the computer screen.

- If clicking , the selective area window automatically fit the inside window's size.
- If clicking , the selective area window changes to its default size.
- If clicking , the selective area transmission function ends.

3 Check the status indication on the launcher to make sure that transmission is possible (check that the green lamp is lit).



4 Click , , or on the launcher.

The picture in the selective area window is projected.

Note

The picture inside the selective area window is displayed as big as possible with keeping the original aspect ratio to be fit for the resolution of projection screen.




■ Quitting selective area transmission

Click  on the launcher again, or click  on the upper right of the selective area window.

Useful Functions (cont.)

Secondary display transmission

You can set the computer screen and the projector screen to the multi-monitor mode, and use the computer screen as the primary monitor and the projector screen as the secondary monitor.


- 1** Click  on the launcher.
- 2** Check the status indication on the launcher to make sure that transmission is possible (check that the green lamp is lit).
- 3** Click  or  on the launcher.

The secondary screen on the computer is projected.

Notes

- Like the normal multi-monitor function, you can change the relative positions of the primary monitor (computer screen) and the secondary monitor (projector screen) by using [Display Properties] (right-click on the desktop of the computer screen).
- It is impossible to send images to the secondary monitor by the selective area transmission (See page 35).
- The one shot function is not available when the secondary display transmission is activated.
- If the computer has been set to the multi-monitor mode, the monitor for the display switch-over function will be displayed as the third monitor in [Display Properties] of Windows.

■ Quitting secondary display transmission

Click  on the launcher again.

Useful Functions (cont.)

Secondary viewer

If you are using secondary display transmission function and projecting a secondary monitor screen in multiple source multi live mode, once [Live] is pressed on one of the computers the full screen display from that computer will override all the rest and the secondary screens of the other computers no longer be possible to verify on the projector screen(s).

In this case, the secondary screen that you were projecting will appear on your desktop as a secondary viewer in reduced form.

Also, while using the secondary display transmission in the 4-screen index style and the 16-screen index style, the secondary viewer appears.



Notes

- You can perform operations on the secondary monitor while observing the secondary viewer on the computer screen, however an image will not appear on the projection screen(s) until the projection screen(s) goes back to the original projection style.
- When the projector screen(s) return to its original status, the contents of the secondary viewer are displayed on the projection screen(s), and the secondary viewer is closed as well.

One shot function

A snapshot of the current computer screen is transmitted to the projector.

- 1 Cancel all live mode transmission.**
- 2 Press the [MULTI-LIVE SELECT] button on the remote control to turn the projection screen into a full screen display (the status when no index window is displayed).**

If you press the [MULTI-LIVE SELECT] button once or twice when index windows are displayed on the projection screen, the screen will switch over to a full screen display.
- 3 Check the status indication on the launcher to make sure that transmission is possible (check that the green lamp is lit).**
- 4 Click [Live] on the launcher.**

Note

To project only the required parts of the computer screen as still images, you can use the one shot function to send the parts which you have selected using the selective area transmission function.

Useful Functions (cont.)

Motion streaming mode

Transmit moving pictures to projection screen. You can display moving images more efficiently than in the case when displaying the Windows Media Player screen on the projector.

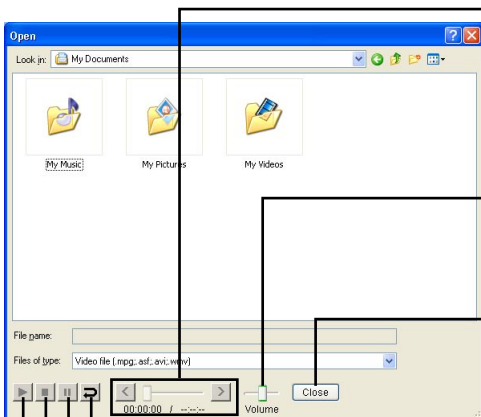
- 1 Cancel all live mode transmission.**
- 2 Press the [MULTI-LIVE SELECT] button on the remote control to turn the projection screen into a full screen display (the status when no index window is displayed).**

If you press the [MULTI-LIVE SELECT] button once or twice when index windows are displayed on the projection screen, the screen will switch over to a full screen display.

- 3 Check the status indication on the launcher to make sure that transmission is possible (check that the green lamp is lit).**

- 4 Click [] on the launcher.**

“Open” window appears.



Seek Bar
This enables jumping to the desired place during movie play. Seek bar does not move during movie play.

Volume
This enables the level of the volume supplied to the projector to be adjusted.

Exit motion streaming mode
The motion streaming mode is exited.

Continuous play/ON-OFF
Use this to set continuous play to ON or OFF.

Pause

Stop

Play

The movie will be displayed by the projector.
It will not be displayed on the computer screen.

Useful Functions (cont.)

5 Select a movie file and click [].

Transmit moving pictures to projection screen.
Adjust volume or other setting on “Open” window if required.

Notes

- This mode cannot be used while any other computer connected over the wireless network to the projector in use is transmitting a snapshot.
- The allowed formats are those accepted by Windows Media Player, including asf, wmv, avi and mpeg. However, contents protected by DRM* cannot be projected nor can such DVDs be played.
 - ※DRM (Digital Rights Management): Technology for protecting the copyrights of digital data
- Some frames may be lost or the audio may be disrupted in some computing environments.
- Moving picture is not displayed on the computer screen.

Useful Functions (cont.)

Shutter function

Blanks the screen for a moment.

1 Click on the launcher.

The image is turned off.

When sound is output, the sound also goes out.

2 Click again.

The image comes back.

Note


The shutter function is available only in live mode or in multiple source live mode.

Pointer function















You can change the shape of the pointer appearing on the projection screen in live mode or multiple source live mode to one that can be used for presentation purposes.

Click on the launcher.















■ Quitting pointer function















Click  on the launcher again.

Functions used with each projection method

[When using LB50NT/LB55NT/LB60NT]			Selective area transmission	Secondary display transmission	Shutter	Pointer	Note
							
When connected to one projector 	Live mode		✓	✓	✓	✓	
	Multi live mode		✓	✓	×	×	
	One shot		✓	×	×	×	※
	Motion streaming mode		×	×	×	×	※
When connected to multiple projectors 	Multiple Source Live Mode		✓	✓	✓	✓	
	Multiple Source Multi Live Mode		✓	✓	×	×	
	One shot		✓	×	×	×	※
	Motion streaming mode		—	—	—	—	Unavailable

Useful Functions (cont.)

[When using LB20NT/LB30NT]			Selective area transmission	Secondary display transmission	Shutter	Pointer	Note
							
When connected to one projector 	Live mode		×	✓	✓	✓	
	Multi live mode		×	✓	×	×	
	One shot		×	×	×	×	※
	Motion streaming mode		×	×	×	×	※
When connected to multiple projectors 	Multiple Source Live Mode		×	✓	✓	✓	
	Multiple Source Multi Live Mode		—	—	—	—	Unavailable
	One shot		×	×	×	×	※
	Motion streaming mode		—	—	—	—	Unavailable

[When using LB10NT]			Selective area transmission	Secondary display transmission	Shutter	Pointer	Note
							
When connected to one projector 	Live mode		×	✓	✓	✓	
	Multi live mode		×	✓	×	×	
	One shot		×	×	×	×	※
	Motion streaming mode		—	—	—	—	Unavailable
When connected to multiple projectors 	Multiple Source Live Mode		×	✓	✓	✓	
	Multiple Source Multi Live Mode		—	—	—	—	Unavailable
	One shot		×	×	×	×	※
	Motion streaming mode		—	—	—	—	Unavailable

✓= Yes, ×= No

※One shot and motion streaming are available when no live is done.

You can operate them by the launcher, when no live is done and projection screen is set to be full screen display (the status when no index is displayed).

- Sound can be output only in live mode. (See page 43)

Setting options

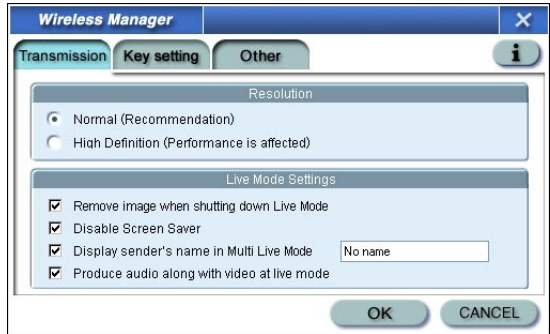
You can make various settings related to Wireless Manager ME 3.0.

Setting option window

1 Click  on the launcher.

The “Option” window shown to the right appears.

2 Click the desired tab to be set.



3 Click [OK].

Transmission

■ Picture quality selection

Select the quality of the image transmitted from the computer to the projector.

Notes

Selecting [High Definition] imposes the following limits on operation.

- During the motion streaming, operations are performed in the normal mode.
- When a movie is playing in the live mode, it may not be projected smoothly.

■ Live mode settings

- [Remove image when shutting down Live Mode]
Check this box to clear the projection screen from the projector when live mode ends.
- [Disable Screen Saver]
This disables the computer screen saver function while Wireless Manager ME 3.0 is operating. Check this box to disable screen saver operation during live mode.

Setting options (cont.)

- [Display sender's name in Multi Live Mode]
The characters (max. 8) which have been entered are displayed at the upper right of the transmitted screen.
In the 4-screen and 16-screen index style modes, they are also displayed at the bottom of each image.
(Alphanumerics are not displayed when the check mark has been removed.)
[No name] is set by default.
- [Produce audio along with video at live mode]
You can set this when you want to output audio data from a projector while in live mode. However, the sound in the motion streaming mode does not reflect this setting but it is determined by the volume level which was adjusted on the motion streaming window. (See page 38)
Also, volume setting operated from the launcher or "Open" window is effective only for wireless connection. When finishing Wireless Manager ME 3.0, Windows' volume setting becomes active.
Sound can be output only in live mode.

Key setting

You can set shortcut key combinations that let you control the Wireless Manager ME 3.0 functions by computer keyboard operations.

1 Select the mode or the function to be set for the shortcut key, and click it.

2 Select one from [Ctrl], [Alt], and [Shift].

3 Select one alphabet to be used with the key chosen in step 2.

4 Click [Setting].

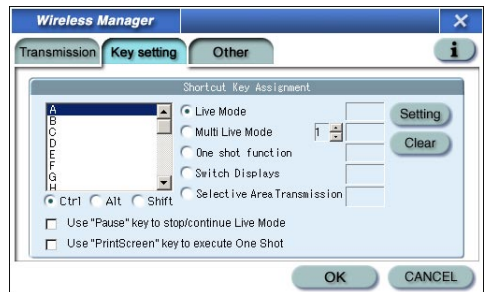
The shortcut key set in step 2-3 appears in the blank space.
If click [Clear], the shortcut settings are canceled.

[Use "Pause" key to stop/continue Live Mode] : Stops live mode and multi live mode.

[Use "PrintScreen" key to execute One Shot] : Transmits the entire computer screen one time.

Note

In live mode and multi live mode, the shortcut key switches the mode without stopping live mode.



Setting options (cont.)

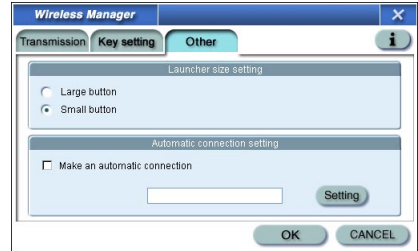
Other

■ Launcher size setting

You can select the launcher button size.

■ Automatic connection setting


You can perform automatic settings for newly connected projectors.



- If the [Make an automatic connection] box is checked and a projector is registered as a destination for automatic connection when Wireless Manager ME 3.0 is started, “Select Access Port” window does not appear and connection is performed automatically.
- When [Setting] is clicked, “Access Log” window appears and you can select projector(s) for automatic connections. Up to 5 projectors may be displayed in the order of most recent connection history.
- When it is desired to remove a projector from the display list, select it and press the [DELETE] → [OK] button.



Version information

The version information of Wireless Manager ME 3.0 is displayed when [] on the “Option” window is clicked.

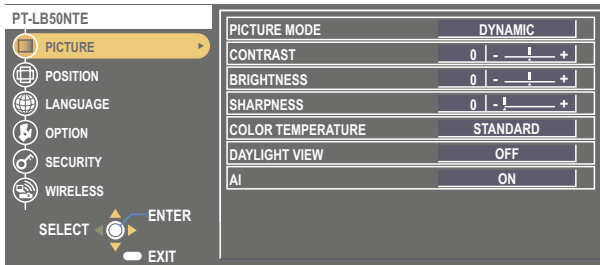
Network setting of the projector

When making a wireless connection between a computer and a projector with settings other than the default settings, perform the procedure below to display the wireless menu required when changing the initial settings.

Displaying the Wireless Menu

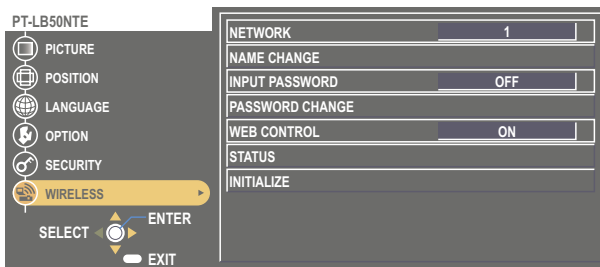
1 Press the [MENU] button on the projector.

The main menu appears.



2 Select [WIRELESS] with the [▲▼] buttons.

The wireless menu appears.



Note

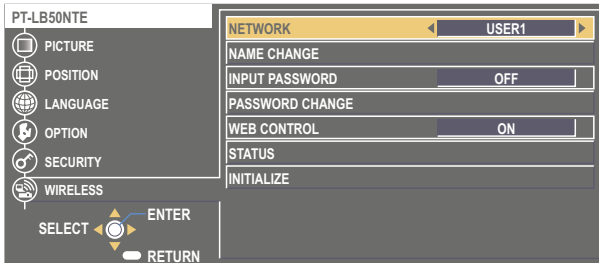
Depending on the signals which are input to the projector, it may not be possible to adjust some of the items and use some of the functions.

In the case of an item that cannot be adjusted or a function that cannot be used, the corresponding on-screen item will not be displayed, and you will not be able to execute it even when you press the [ENTER] button.

Network setting of the projector (cont.)

Changing the network number

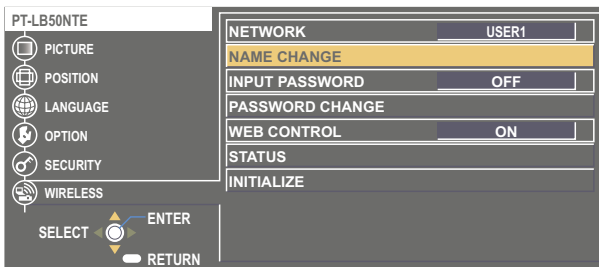
- 1 Select [NETWORK] at the wireless menu.
- 2 Select the number to be connected with the [◀▶] buttons.



Changing the projector name

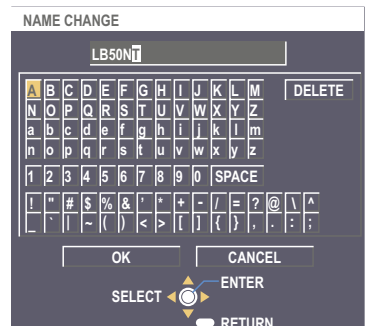
You can change the projector name on the network.
It makes easy to recognize projectors in “Select Access Port” window.

- 1 Select [NAME CHANGE] at the wireless menu and press the [ENTER] button.



- 2 Enter the projector name using the [◀▶▲▼] buttons.
- 3 After entering the projector name, select [OK] and click [ENTER].

To cancel the change, select [CANCEL] and press the [ENTER] button.

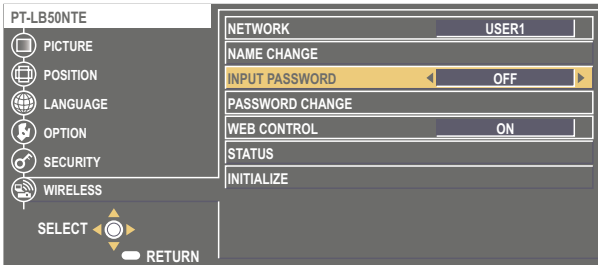


Network setting of the projector (cont.)

Password setting

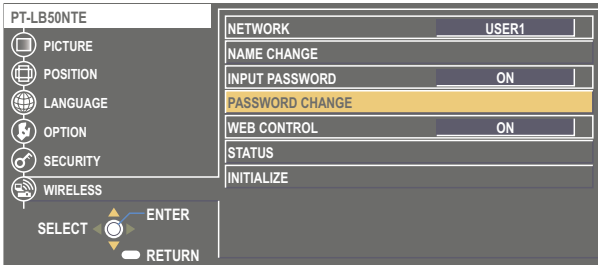
This setting is used to limit the users that can connect to the projector.

- 1 Select [INPUT PASSWORD] at the wireless menu.



- 2 Select [ON] with the [◀ ▶] buttons.

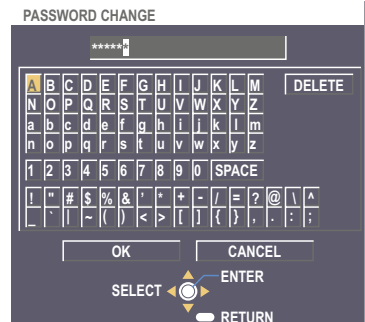
- 3 Select [PASSWORD CHANGE] at the wireless menu and press the [ENTER] button.



- 4 Enter the password using the [◀ ▶ ▲ ▼] buttons.

- 5 After entering the password, select [OK] and click [ENTER].

To cancel the change, select [CANCEL] and press the [ENTER] button.

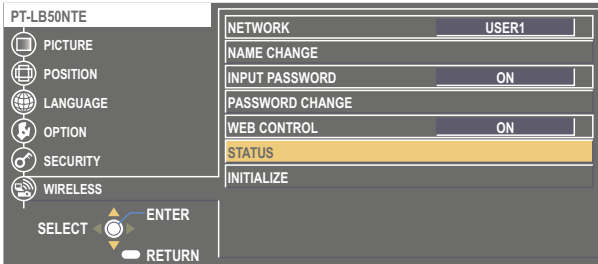


Network setting of the projector (cont.)

Verifying settings

Select **[STATUS]** at the wireless menu and press the **[ENTER]** button.

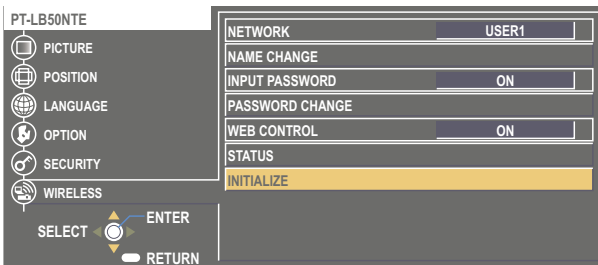
Your current settings appear.



Returning to the Initial Settings

You can return the changed settings to the initial conditions.

1 Select **[INITIALIZE]** at the wireless menu and press the **[ENTER]** button.



Note

You will be prompted to enter the password if **[ON]** has been selected as the **[INPUT PASSWORD]** setting on the security menu.

2 Select **[OK]** with the **[◀▶]** buttons and press the **[ENTER]** button.



Network setting of the projector (cont.)

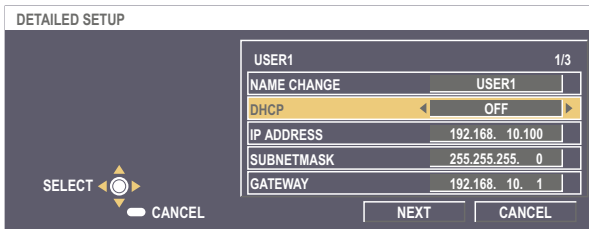
[User] settings

If you selected one of [USER1] to [USER3] for [NETWORK] in the wireless menu, you can make detailed network settings. Confirm to your system administrator before changing any settings.

IP address settings

■ How to display IP address setting menu

Press [NETWORK]→[USER1]-[USER3]→[ENTER] on wireless menu.



DHCP*:

ON: If a DHCP server exists in the network to which the projector is connected, the IP address will automatically be acquired.

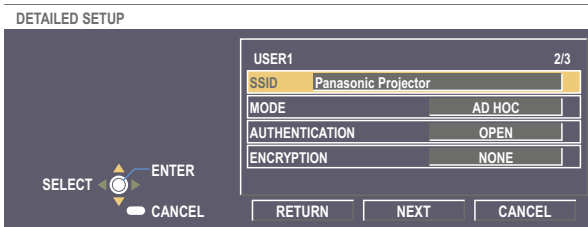
OFF: If a DHCP server does not exist in the network to which the projector is connected, additionally set [IP ADDRESS*], [SUBNETMASK*] and [GATEWAY*].

※ "Glossary" (See page 61)

Network setting of the projector (cont.)

Wireless settings

Select [NEXT] on the IP address setting screen, then wireless setting menu appears. Make the settings related to the wireless LAN connection between the projector and the network.



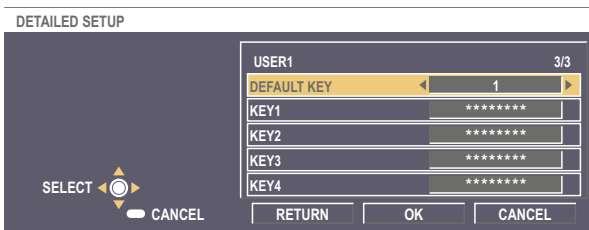
- **MODE** : Select [AD HOC] or [INFRASTRUCTURE].
 - AD HOC* : Connect projector and computer directly without access point.
 - INFRASTRUCTURE* : Connect through access point.
- **SSID*** : If the mode is [INFRASTRUCTURE], enter the SSID registered at the access point. If the mode is [AD HOC], enter the same character string as that of SSID set on the computer to be connected.
- **AUTHENTICATION** : Set the user authentication method used by the network to be connected.
 - OPEN : Select when making a connection using [AD HOC], or when the access point authentication method is OpenSystem*.
 - SHARED : Select when making a connection using [AD HOC], or when the access point authentication method is Shared Key*.
 - WPA-PSK* : Select when the access point authentication method is WPA-PSK.

※ “Glossary” (See page 62)

Network setting of the projector (cont.)

- ENCRYPTION : Select the encryption method to be used for communication between the projector and the network.
 - NONE : Select when transmit without encryption. It is selectable only when [AUTHENTICATION] is [OPEN] or [SHARED].
 - WEP* : Select when ENCRYPTION is WEP.
 - TKIP* : Select when ENCRYPTION is TKIP.
Selectable when [AUTHENTICATION] is [WPA-PSK].
 - AES* : Select when ENCRYPTION is AES.
Selectable when [AUTHENTICATION] is [WPA-PSK].

Additionally perform the following setting using the [AUTHENTICATION] setting.



- When setting [OPEN] or [SHARED] as authentication and setting [WEP] as the encryption method:
 - DEFAULT KEY : Set 1 – 4 numerals for the default key.
 - KEY 1 – 4 : Set these to match the WEP key registered in [DEFAULT KEY].
Either the 64-bit or 128-bit WEP key can be set. For the 64-bit key, input five alphanumerics (or a 10-digit string for the hexadecimal format) for the 128-bit key, input 13 alphanumerics (or a 26-digit string for the hexadecimal format).
- When setting [WPA-PSK] as authentication : Set key and select [OK].
Input either 8 to 63 alphanumerics or a 64 digit string in the hexadecimal format.

※ “Glossary” (See page 62)

Note

Important video/audio data is protected because AES* encryption processing takes place in advance for all network numbers, even if [ENCRYPTION] is set to [NONE].

※ “Glossary” (See page 62)

Network setting of the projector (cont.)

Default settings of [USER1]-[USER3]

The following is set as [USER1]-[USER3] in the wireless menu before the projector leaves the factory.

SSID	: Panasonic Projector
DHCP	: OFF
IP ADDRESS	: 192.168.10.100
SUBNETMASK	: 255.255.255.0
GATEWAY	: 192.168.10.1
MODE	: AD HOC
AUTHENTICATION	: OPEN
ENCRYPTION	: NONE

Using WebBrowser

Control a projector through the WEB browser of a computer. It is called "WEB Control".
(The example is when using Microsoft Internet Explorer.)

Before using the WEB control

- Connect projector and computer. (See page 14)
- Release the proxy settings of the Web Browser used. (See next page)
- Enable JavaScript. (See page 55)

① Projector settings

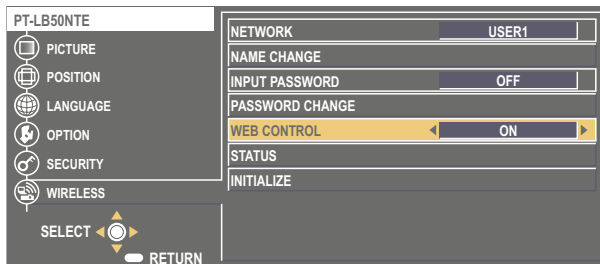
Set the [WEB CONTROL] of wireless menu [ON].

1 Select [WEB CONTROL] on the wireless menu.

2 Select [ON] or [OFF] with the [◀ ▶] buttons.

ON : This enables control on the WebBrowser.

OFF : This disables control on the WebBrowser.



Notes

- When the projector settings have been changed using a WebBrowser, the projector will not appear on the connection list until the projector network is switched to [USER 1] - [USER 3].
- After the projector network has been switched to [USER 1] - [USER 3], manually release the proxy settings of the WebBrowser used.

Using WebBrowser (cont.)

② Computer settings

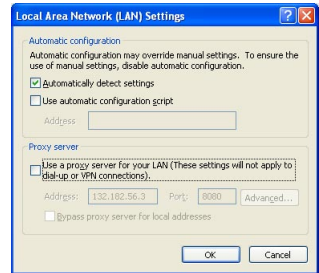
■ Proxy server settings

Release the proxy settings of the WebBrowser used.

1 Open “Internet Properties” window.

Click [Start] → [Control Panel] → [Network and Internet Connections] → [Internet Option].

2 Open [Connections] → [LAN Settings].



3 If [Use a proxy server for your LAN] has been checked, remove the check.

If [Use automatic configuration script] has been checked, remove the check.

4 Click [OK].

Using WebBrowser (cont.)

■ Enabling JavaScript

If JavaScript has been set to disable, enable it.


1 Open “Internet Properties” window.

Click [Start] → [Control Panel] → [Network and Internet Connections] → [Internet Option].

2 Select [Security] and set the security level to [Default Level], or select [Custom Level] and check the [Enable] checkbox under [Active scripting].

Using WebBrowser (cont.)

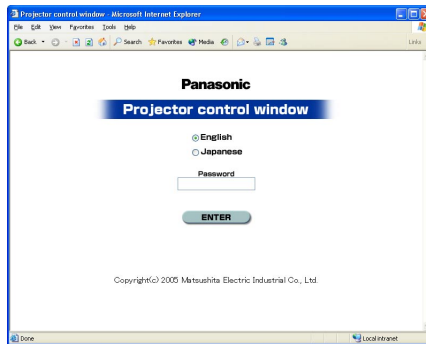
Accessing from the Web browser

- 1 Click  on the launcher.
Or start up the WebBrowser, and enter the IP address set by the projector.

WebBrowser starts up and the page of “Projector control window” appears.



<Top window>



- 2 Select the language to be displayed, and if a web access password has been set, enter that password.
- 3 Click [ENTER].
“Basic control window” appears. (Next page)

Notes

- Password used in this page is for accessing the web control window. (See page 58)
This password is different from the password set in page 47 for accessing a projector.
- If you forget the password, perform [INITIALIZE] using the wireless menu of the projector, and set a password once again using the “Change Password” window on the web browser (See page 58).
- The top window may not appear depending on the WebBrowser. In this case start up WebBrowser again, or press the [Ctrl] + [R] keys for example to update the screen.
- Connection cannot be made while the WebBrowser is set to dial-up network.
Cancel the dial-up network setting.
- It may take some moments for WebBrowser to start up.

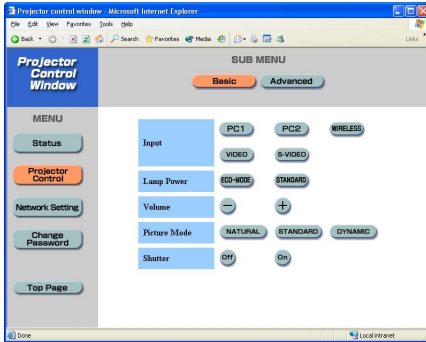
Using WebBrowser (cont.)

Projector control window

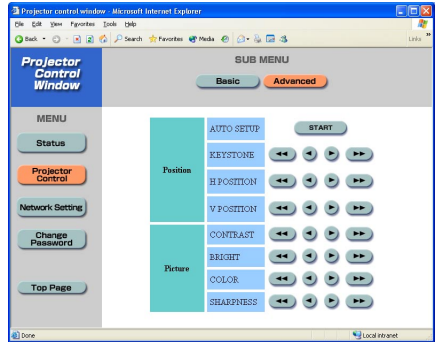
You can make various projector settings.

Click [Projector Control]→[Basic] or [Advanced], when moving from other pages.

Basic control window



Option control window



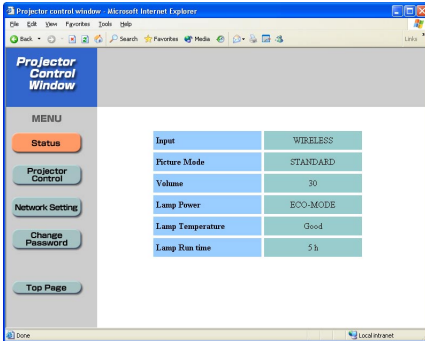
Note

Connection with the projector may not be possible immediately after the power is turned on. In this case wait a bit and then make the connection again.

Using WebBrowser (cont.)

Monitor information window

This page indicates the projector status.
Click [Status].

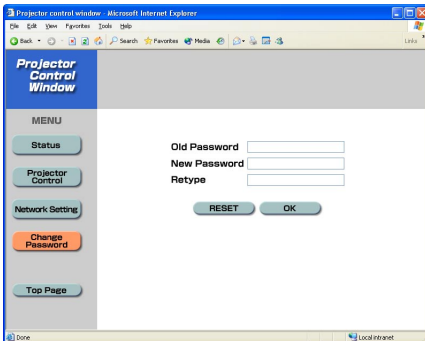


Note

The monitor information is refreshed at fixed intervals, but the current exact information can be checked by clicking [View] → [Refresh].

Password changing window

Set the password to access to "Projector control window".
Enter the old password and new password, and click [OK].
You can enter a password up to 16 characters (upper case/lower case) and symbols.



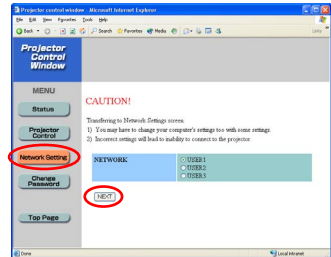
Using WebBrowser (cont.)

Network setting window

You can make detail network settings on projector, when connecting without the administrator authority or when connecting through an access point (infrastructure mode).

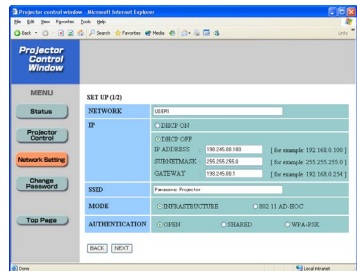
1 Click [Network setting] on the menu and click [NEXT].

The setting window appears.



2 Set detail network settings.

Settings in this page are the same when setting [USER 1]-[USER 3] from wireless menu of the projector. (See page 49)



3 Click [NEXT].

The settings will be registered.

■ Making the above settings effective

Select [NETWORK] in the wireless menu of the projector, and use the [◀ ▶] buttons to select the network set in this page and press the [ENTER] button.

Note

Important video/audio data is protected because AES* encryption processing takes place in advance for all network numbers, even if [ENCRYPTION] is set to [NONE].

* "Glossary" (See page 62)

Software Uninstall

Wireless Manager ME 3.0

From the desktop, select [Start] → [All Programs] → [Panasonic Wireless Display] → [Uninstall Wireless Manager mobile edition 3.0].

Follow the instructions appearing on the screen and uninstall the software.

Glossary

Category	Item	Description	Page
Common Setting of connections	LAN	Abbreviation for Local Area Network. This is a network with a relatively narrow range such as inside a company.	8
	Access point	These are stations for relaying electromagnetic signals between computers in a wireless LAN. When a computer is connected to an access point, it can communicate through the network connected to the access point.	6
	TCP/IP	Abbreviation for Transmission Control Protocol/Internet Protocol. This is the standard internet protocol. This protocol is a set of rules and agreements governing data communications between computers.	17
	IP address	Internet Protocol (IP) is a protocol for distributing data, and the address corresponding to the data distribution destination is called the IP address. The same IP address cannot be used within the same LAN.	17/ 20/ 49
	DHCP	Abbreviation for Dynamic Host Configuration Protocol. This function automatically assigns IP addresses to the connected equipment. If a device with the DHCP server function is present within a LAN, it automatically assigns IP addresses to the connected equipment.	17/ 49
	Subnetmask	This limits the range of the IP addresses assigned to computers in order to divide the network into a number of sections during TCP/IP connection. The value used to divide the network at this time is called the subnetmask.	17/ 49
	Gateway	This is a relay point for connecting different networks. This refers to the hardware and software used when connecting a network with a network that uses a different protocol, etc. It adjusts the protocol and other differences between networks to allow connection with other networks.	49

Glossary (cont.)

Category	Item	Description	Page
Advanced setting of connection	AD_HOC	This is the mode in which computers communicate with each other directly, rather than via access points.	17/50
	INFRASTRUCTURE (infrastructure mode)	This is the mode in which communications are performed via the access point.	19/50
	SSID	Abbreviation for Service Set ID. The SSID identification code must be set to distinguish equipment included in a wireless LAN that uses access points from equipment not included in that LAN. This may appear as the “ESSID” or the “network name” for wireless LAN cards made by some manufacturers.	17/50
	Open System/OPEN	This is an authentication of wireless signals employing a public key cryptosystem.	17/50
	Shared Key/SHARED	This is a secret key cryptosystem for wireless signals in which authentication is performed with a key pre-set in the WEP. Other terms for this method, in which the same key is used for both encryption and decryption, are “shared key cryptosystem” and “common key cryptosystem”.	17/50
	WPA-PSK	This is a standard covering encryption methods used in wireless LAN. It provides greater security than WEP, and has functions such as a user authentication function and also TKIP (encryption protocol) which automatically changes the encryption key at fixed intervals.	50
	WEP	Abbreviation for Wired Equivalent Privacy. This is a method for encrypting communication data. The encryption key is created and notified only to the communicating user, so the communication data cannot be decrypted by a third party.	17/51
	TKIP	Abbreviation for Temporal Key Integrity Protocol. This encryption protocol provides even greater security than WEP because it changes the encryption key at fixed intervals.	51
	AES	These are the US Government’s next-generation standard encryption methods, the selection work of which is performed by the National Institute of Standards and Technology (NIST).	15/51/59

Frequently Asked Questions

Check the following points once more before requesting repair.

No wireless connection can be made between my projector and my computer.

- **Is Wireless Manager ME 3.0 running?**

Wireless Manager ME 3.0 must be started in the computer in order to enable wireless transmissions of images to the projector.

<When a setting error for the wireless LAN card has been detected>

- ① **Is the wireless LAN card effective?**

Even if your computer has built-in wireless LAN, the wireless LAN may still be turned OFF. If so, turn it ON and re-start Wireless Manager ME 3.0. See the User's Manual of your computer to learn how to turn the wireless LAN power ON/OFF.

- ② **Is your wireless LAN card properly recognized on the network?**

Sometimes, cards are not correctly recognized by the computer. Check Windows [Device Manager] to make sure your card has been recognized.

If the Network Adapter is indicated with [?] in [Device Manager], wireless LAN card installation is not complete. See the User's Manual of your card and re-install the card driver.

■ **To display [Device Manager]**

Click [Start] → [Control Panel] → [Performance and Maintenance] → [System]. This will bring up the [System Properties] dialog box. Click [Device Manager] in the [Hardware] tab.

- ③ **Some wireless LAN cards may allow easy wireless set up connections to function if drivers are updated.**

(Consult the manufacturer of your driver about updates.)

Frequently Asked Questions (cont.)

No wireless connection can be made between my projector and my computer. (cont.)

<When the Network Bridge setting has been detected>

Is Network Bridge enabled?

Some computers with Windows XP may have Network Bridge (a built-in function of Windows XP) enabled; this will prevent a wireless connection. The settings in Network Bridge must be changed in order to make a wireless connection. If you do not expect ever to use Network Bridge and see no need for it, delete it from your system.

■ To verify whether your system has Network Bridge

Choose [Connect to] on the [Start] menu and click [Show all connections]. Verify that [Network Bridge] is displayed in the [Network Connections] window.

■ How to change settings in Network Bridge

1. Select [Connect to] on the [Start] menu and click [Show all connections].
2. Right-click [Network Bridge] and click [Properties].
3. Remove the check mark from the [Wireless Network Connection] box in the [Network Bridge Properties] dialog box (if the box is not checked, proceed to step 4.)
4. Click [Properties] in [Internet Protocol (TCP/IP)] in the [Network Bridge Properties] dialog box.
5. Click the [Alternate Configuration] tab in the [Internet protocol (TCP/IP) properties] dialog box.
6. Check the [User configured] box and set the [IP address] and [Subnet mask] as follows:

IP address : 10. 10. 10. 101

Subnet mask : 255.255. 0. 0

(If the above IP address is already in use in the LAN environment, change it as appropriate in Class A. Confirm to your system administrator on network settings before changing any settings.)

7. Click [OK] → [Close].
8. Close the [Network Connections] dialog box.

■ How to delete the network bridge

1. Select [Connect to] on the [Start] menu and click [Show all connections].
2. Right-click [Network Bridge] and click [Delete].

Frequently Asked Questions (cont.)

No wireless connection can be made between my projector and my computer. (cont.)

<When Windows Firewall has been detected>

① **Has your firewall in Windows XP been disabled?**

The firewall in Windows XP must be disabled in order to connect to a wireless network.

■ **How to disable the firewall in Windows XP**

1. Click [Start] → [Control Panel] → [Network and Internet Connections] → [Network Connections].
2. Right-click [Wireless Network Connection] and click [Properties] in the pulldown menu.
3. Click the [Advanced] tab and set the [Internet Connection Firewall] checkbox to OFF.

② **Is Wireless Manager ME 3.0 registered in [Exceptions] ([Control Panel] → [Security Center] → [Windows firewall]) with the Windows XP SP 2?**

Register Wireless Manager ME 3.0 in the Exceptions to Application List of the firewall.

■ **How to register**

1. Click [Start] → [Control Panel].
2. Click [Security Center] → [Windows Firewall] when [Control Panel] window opens.
3. Click the [Exceptions] tab and then [Add Program...] when the [Windows Firewall] window opens.
4. Click [Wireless Manager mobile edition 3.0 (WM.exe)] to allow connection with external devices under [Programs] when the [Add a Program] window opens.
If [Wireless Manager mobile edition 3.0 (WM.exe)] does not appear on the list of programs, click [Browse...] and select [WM.exe].
5. Click the [Change scope...] button at the lower left of the window.
When the [Change Scope] window opens, select the desired network as described below.
6. Select [Any computer (including computers on the internet)].
7. Select the scope and click [OK].
8. Click [OK] in the [Add a Program] window.
9. Click [OK] in the [Windows Firewall] window.

With this, the Wireless Manager ME 3.0 firewall will be deleted.

Frequently Asked Questions (cont.)

No wireless connection can be made between my projector and my computer. (cont.)

<When another firewall has been detected>

Are any firewall-containing applications installed?

If any applications which contain firewalls are installed, the installation may hang up at the [Projector search in progress] display (some firewalls function even when not started).

If this occurs, firewall settings must be changed in order to allow connection to the wireless network. See the User's Manuals for all applications containing firewalls to perform these settings.

<When the user does not have the administrator authority>

Have you logged in as the Administrator?

If you have logged onto a computer as a [GUEST] or a restricted user who does not have administrator authority, you can not perform easy wireless set up (Network No. [1] – [4]). If you must perform easy wireless set up without administrator authority, designate [U] as the network number.

See page 49 or 51 for instructions in how to set [U] as the network number.

<Network setting error>

When connecting with Network number [U], make sure whether wireless menu setting of the projector is correct or not. (See page 49)

Wireless connection is lost shortly.

- ① The wireless LAN utility used by the computer may have changed the wireless settings. Close the utility, and then make the connection again using easy wireless set up connection.
- ② Connection may be broken receiving influence from wireless environment around.
- ③ When connection is broken, PT-LB50NT/PT-LB55NT/PT-LB60NT automatically work to reconnect, but when it can not, live is cancelled.
When live is cancelled with PT-LB50NT/PT-LB55NT/PT-LB60NT or connection is broken with projectors other than PT-LB50NT/PT-LB55NT/PT-LB60NT, start live from the launcher again.

Frequently Asked Questions (cont.)

The connection has been lost in the multi live mode.

- If a computer with a certain version of the Intel Centrino mobile technology (wireless LAN) is connected to the unit, the multi live mode may be released. If this is the case, re-establish the connection from the launcher of Wireless Manager ME 3.0. (See page 23)

The connection cannot be established with IEEE802.11 g.

- Connection is sometimes established under the IEEE802.11 b standard even when an IEEE802.11 g wireless LAN card or a computer with built-in wireless LAN that supports the IEEE802.11 g standard is used. This is, therefore, not an indication of trouble.

The transfer rate is slow.

- The transfer rate may be slower in some operating environments (depending on such factors as the location, radio signal conditions or distance).
- Avoid placing metal objects or other conductors near the wireless LAN antenna of a personal computer, otherwise the transfer rate may be slower.
- When WEP is set the image data is converted, so transfer takes time.

Image display is slow or movie/animation is not displayed smoothly.

- Is the computer CPU speed slow? (See page 9)
Live mode depends largely upon the computer CPU performance.
- Adverse effects may be exerted if there is any wireless communication in the vicinity.
- When [Resolution] is set to [High Definition] in the "Option" window, it may take longer time to display images.
- The Windows Media Player window should be active.
- Did you start up Microsoft PowerPoint or Windows Media Player before starting up Wireless Manager ME 3.0?
If so, start up the application only after you have started up Wireless Manager ME 3.0.
- The speed may drop significantly if the user does not have administrator authority.
- The speed may be slower when any other applications are running concurrently.

Frequently Asked Questions (cont.)

There is a time lag between operations at the computer and results in the projected image.

- Wireless Manager ME 3.0 reads the screen, compresses the data and transmits it to the projector. In the projector, the received data are extracted and then projected. Some delays occur in this system, due to the processing time and factors in the wireless environment. Different computers may also produce varying lag times.


I can't hear the computer sound from the projector in the live mode.

- Check whether the check mark has been entered for [Produce audio along with video at live mode] from [Live Mode Settings] under the [Transmission] tab selected from Wireless Manager ME 3.0's "Option" window.
- Did you start up a player (Windows Media Player, Real Player or Quick Time, etc.) before starting live mode?
If so, start the application only after starting live mode.

Some contents in movies are not displayed.

- Basically, files which can be played on Windows Media Player can be displayed with this projector. However, contents protected by DRM* cannot be projected nor can such DVDs be played.
※ DRM (Digital Rights Management): Technology for protecting the copyrights of digital data

Don't know to which projector the computer is connected in multiple source live mode or multiple source multi live mode.

- Connected computers' names, IDs and their status are displayed in the pop up window when the cursor is on  of the launcher.

Frequently Asked Questions (cont.)

Changing the display style
<ul style="list-style-type: none">• Either press the [MULTI-LIVE SELECT] button on the remote control or select [OPTION] → [DETAILED SETUP] → [INDEX WINDOW] on the projector's main menu (See page 45) and press the [ENTER] button.
The Wireless Manager ME 3.0 color display is strange and characters are difficult to read.
<ul style="list-style-type: none">• Click [Start] → [Control panel] → [Appearance and Themes] → [Display]. Then, open the [Settings] tab of the [Display Properties] window and set [Color quality] to [Medium (16 bit)] or higher.
Screen saver is not displayed properly in live mode.
<ul style="list-style-type: none">• Some screen savers may not be displayed properly in the live mode. Disable screen saver function using [Live Mode Settings] in "Option" window of Wireless Manager ME 3.0. (See page 42)
Making a wireless connection while using the internet
<ul style="list-style-type: none">• If you have a wireless LAN environment which allows an internet connection, placing the projector on that network will allow you to use the internet and the wireless connection at the same time. (See page 19)• If you have a wired internet connection (Ethernet), this projector allows wireless use with simultaneous wired connection to the internet.
The remote control window does not appear.
<p><When easy wireless set up connection is used></p> <ul style="list-style-type: none">• When any WebBrowser except Internet Explorer is used, the proxy settings of the WebBrowser must be manually released. <p><When [USER] connection is used></p> <ul style="list-style-type: none">• Manually release the proxy settings of the WebBrowser used.

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TQBH0168-1 (E/U)

M0306-1036