Operating Instructions
Network Operations
High Definition Plasma Display

Please read these instructions before operating your set and retain them for future reference.
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</tbody>
</table>
Request Regarding Security

When using this product, security breaches of the type described below are conceivable.

- Leakage of your private information via this product
- Illegal operation of this product by a malicious third-party
- Harm to or cessation of operation of this product by a malicious third-party

Be sure to implement sufficient security measures.

- Set passwords, and limit the users that are permitted login access.
- Make sure the password is as hard to guess as possible.
- Change the password periodically.
- Panasonic Corporation and its affiliated companies never directly ask customers for their password. Do not give out your password even if directly asked by a third-party representing themselves as Panasonic Corporation.
- Always use on a network that has safety protection such as a firewall implemented.

About Wireless LANs

The advantage of a wireless LAN is that information can be exchanged between a PC or other such equipment and an access point using radio waves as long as you are within range for radio transmissions. On the other hand, because the radio waves can travel through obstacles (such as walls) and are available everywhere within a given range, problems of the type listed below may occur if security-related settings are not made.

- A malicious third-party may intentionally intercept and monitor transmitted data including the content of e-mail and personal information such as your ID, password, and/or credit card numbers.
- A malicious third-party may access your personal or corporate network without authorization and engage in the following types of behavior.
  - Retrieve personal and/or secret information (information leak)
  - Spread false information by impersonating a particular person (spoofing)
  - Overwrite intercepted communications and issue false data (tampering)
  - Spread harmful software such as a computer virus and crash your data and/or system (system crash)

Since most wireless LAN adapters or access points are equipped with security features to take care of these problems, you can reduce the possibility of these problems occurring when using this product by making the appropriate security settings for the wireless LAN device.

Some wireless LAN devices may not be set for security immediately after purchase. To decrease the possibility of occurrence of security problems, before using any wireless LAN devices, be absolutely sure to make all security-related settings according to the instructions given in the operation manuals supplied with them. Depending on the specifications of the wireless LAN, a malicious third-party may be able to break security settings by special means. Please contact Panasonic if you need help taking care of security settings or other such. If you cannot perform security settings for your wireless LAN by yourself, please contact the Panasonic Support Center.

Panasonic asks customers to thoroughly understand the risk of using this product without making security settings, and recommends that the customer make security settings at their own discretion and responsibility.
What you can do

This unit supports wired LAN and wireless LAN enabling the network functions as below.

<WEB control> (See page 19)
The following operations are possible when using WebBrowser.
- Setting and adjusting the Display
- Displaying the Display status

<PJLink> (See page 27)
Compatible with PJLink Class 1. The following operations can be performed from a computer when PJLink protocol is used.
- Setting the Display
- Querying the Display status

<Command control>
Network function of the unit can control the unit in the same way as serial control from a network.

Supported commands
Commands used in the serial control are supported. (See page 14 of “Operating Instructions, Display Operations”)

Note
When using [WEB control], [PJLink] and [Command control], set [Control I/F Select] to [LAN] and [WEB Control] to [On] in the [Network Setup] menu. (See page 17)

● Wireless Manager mobile edition 5.5 (Windows/Macintosh)
Software for sending the computer screen via wireless/wired LAN.
To use this function, the software included in the wireless module (ET-WM200E) (sold separately) is necessary. For more information, see the instructions of the software contained in the CD-ROM supplied with the wireless module.

Note
This unit does not support the following functions.
- Virtual remote control function
- USB display function

● Wireless Projector for iOS
Software for sending PDF files/JPEG images saved in an iPad/iPhone/iPod touch to this unit via wireless LAN (WiFi).
For more information, see the website below.
http://panasonic.net/avc/projector/ios/
Notes on Using Wireless Connection

Wireless connection function of the Display 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. The wireless module (part number: ET-WM200E) sold separately needs to be mounted when using the wireless LAN function with the Display.

■ **Do not use near other wireless equipment.**
  The following equipment may use radio waves in the same band as the Display. When the Display 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 Display.**
  Cellular phones, TV sets, radios and similar devices use different radio bands from the Display, so there is no effect on wireless communication or the transmission and reception of these devices. However, radio waves from the Display 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.

■ **Avoid using the Display in locations prone to static electricity.**
  If the Display is used in a location prone to static electricity, such as on a carpet, the wireless LAN or wired LAN connection may be lost.
  If this happens, eliminate the source of static electricity or electromagnetic noise and reconnect to the wireless LAN or wired LAN.

■ **Using the Display outside the country**
  It is forbidden to take the Display 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.
### Notes on Using Wireless Connection

**Wired LAN**

- Use straight or crossover LAN cable that is compatible with category 5 or above.
- Whether straight cable, crossover cable or both can be used varies depending on the system configuration. For details, consult your system administrator.

**Available wireless LAN channels**

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

<table>
<thead>
<tr>
<th>Country or region</th>
<th>Standard</th>
<th>Channels used</th>
<th>Frequency band (Center frequency)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>ETSI 300.328</td>
<td>1 – 13</td>
<td>2,412 MHz - 2,472 MHz</td>
</tr>
<tr>
<td>Singapore</td>
<td>IDA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia, New Zealand</td>
<td>C-Tick</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>SIRIM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note**

The separately sold wireless module (product number: ET-WM200E) needs to be attached to use wireless LAN with this device (See page 8).
Check your computer

Necessary environment for computers to be connected

- First, check your computer to see whether or not it has a wired LAN or a built-in wireless LAN function.
- Before connecting the Display to the computer, be sure to check the following settings.
- Operation is not guaranteed for all wireless LAN adapters and built-in wireless LAN adapters.

### Wired LAN

**Check 1** For LAN cable
- Is the cable properly connected?
- Use LAN cable that is compatible with category 5 or above.

**Check 2** Wired LAN settings
- **<Computer with a built-in wired LAN function>**
  - Is your wired LAN switched on?
  - **<Computer without a built-in wired LAN function>**
  - Is your wireless LAN adapter properly recognized?
  - Is your wireless LAN adapter switched on?
  - Install the wireless LAN adapter driver beforehand.
  For details on how to install the driver, refer to the instructions accompanying the wireless LAN adapter.

### Wireless LAN

**Check 1** Wireless LAN settings
- **<Computer with a built-in wireless LAN function>**
  - Is your wireless LAN switched on?
- **<Computer without a built-in wireless LAN function>**
  - Is your wireless LAN adapter properly recognized?
  - Is the wireless LAN adapter switched on?
  - Install the wireless LAN adapter driver beforehand.
  For details on how to install the driver, refer to the instructions accompanying the wireless card.

**Check 2** Computer’s settings
- When security (firewall) software and utilities for network cards are installed, these may prevent connection of the Display.
- **<Windows XP/Windows Vista/Windows 7>**
  - Is Network Bridge enabled?
  - Has your firewall been disabled?

### For WebBrowser
- WebBrowser is necessary to use WEB control.
- **Compatible OS :** Windows XP/Windows Vista/Windows 7, Mac OS X v10.4/v10.5/v10.6/v10.7
- **Compatible WebBrowser :** Internet Explorer 7.0/8.0/9.0, Safari 4.0/5.0 (Mac OS)
**Connection**

**Example of Network Connection (Wired LAN)**

![Diagram of network connection](image)

**Notes**
- Make sure the broadband router or hub supports 10BASE-T/100BASE-TX.
- To connect a device using 100BASE-TX, use "category 5" LAN cable.
- Touching the LAN terminal with a statically charged hand (body) may cause damage due to its discharge.
- Do not touch the LAN terminal or a metal part of the LAN cable.
- For instructions on how to connect, consult your network administrator.

**Connecting Wireless Module (Wireless LAN)**

To use the wireless function, the wireless module (ET-WM200E) (sold separately) is necessary.

When connecting the wireless module to the display, remove the protective film and cap.

**Connecting procedure**

Hold the wireless module with its LED on the near side and connect it to the wireless module connection terminal.

**Note**

Do not connect any other device than the wireless module (ET-WM200E).
Network Setup

Make the various settings to use the network function.

Note

For network settings, contact your network administrator.

Displaying the Network Setup menu

1 Press to display [Setup] menu.

2 Select [Network Setup] with the ▲▼ and press button.

3 Press ▲▼ to select the item and set with◄►.

Press to display sub menu.

[Starting up the network]
It takes some time for the network to start up just after the Display power is turned on. During that time, “Network Setup” in the “Setup” menu is grayed out and cannot be set.
Network Setup

Wired Lan
You can make detailed wired LAN settings.


2 Set [DHCP].
When [Off] is selected, IP address and other settings can be set manually.

<table>
<thead>
<tr>
<th>Address settings</th>
<th>On:</th>
<th>Off:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHCP</td>
<td>If a DHCP server exists in the network to which the display is connected, the IP address will automatically be acquired.</td>
<td>If a DHCP server does not exist in the network to which the display is connected, additionally set [IP address], [Subnet mask] and [Gateway].</td>
</tr>
<tr>
<td>IP address</td>
<td>Enter the IP address if DHCP server is not used.</td>
<td></td>
</tr>
<tr>
<td>Subnet mask</td>
<td>If not using a DHCP server, enter the subnet mask.</td>
<td></td>
</tr>
<tr>
<td>Gateway</td>
<td>Enter the gateway address if DHCP server is not used.</td>
<td></td>
</tr>
</tbody>
</table>

Note
If [DHCP] is set to [On], the IP address and other items are not displayed. Check the [Status] page for the current IP address and other items. (See page 17)

3 Select [Save] and press button.
Save the current network settings.
If message indicating a duplicate IP address is displayed in [Status] (see page 17), check the same IP address is not used within the same network.

Notes
• Before using the DHCP server, make sure the DHCP server is already functioning.
• For details of IP address, subnet mask, and gateway, ask the network administrator.
• A wired LAN and wireless LAN cannot be used in the same segment.

Default wired LAN settings
The following settings are set before the Display leaves the factory.

<table>
<thead>
<tr>
<th>Default wired LAN settings</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP address</td>
<td>192.168.10.100</td>
</tr>
<tr>
<td>Subnet mask</td>
<td>255.255.255.0</td>
</tr>
<tr>
<td>Gateway</td>
<td>192.168.10.1</td>
</tr>
</tbody>
</table>
Network Setup

Wireless Lan
You can make detailed wireless LAN settings.
You can configure settings when the wireless module (ET-WM200E) is mounted.

Setting network number


2 Select the number to be connected for [Wireless Lan].
   • [Off], [S-MAP], [1]-[4], [USER1]-[USER3]

Notes
• Selecting [Off] disables the wireless LAN.
• Network number: [S-MAP] and [1]-[4] are available only when connecting via wireless LAN with the application software the “Wireless Manager mobile edition 5.5”. [S-MAP] is for showing connectable displays on the network according to their levels of radio wave intensity. For details, refer to the operation manual of the “Wireless Manager mobile edition 5.5”.

USER settings
You can configure more precise network settings, if you select from [USER1] to [USER3] (user) for [Wireless Lan].


2 Set [DHCP].
   When [Off] is selected, IP address and other settings can be set manually.

| Name Change | You can change the user name. Entering characters ➨ page 14 |
| DHCP (DHCP client function) | On: If a DHCP server exists in the network to which the display is connected, the IP address will automatically be acquired. Off: If a DHCP server does not exist in the network to which the display is connected, additionally set [IP address], [Subnet mask], and [Gateway]. |
| IP address (Display of IP address and setting) | Enter the IP address if DHCP server is not used. |
| Subnet mask (Displaying and setting the subnet mask) | If not using a DHCP server, enter the subnet mask. |
| Gateway (Display of gateway address and setting) | Enter the gateway address if DHCP server is not used. |

Notes
• If [DHCP] is set to [On], the IP address and other items are not displayed. Check the [Status] page for the current IP address and other items. (See page 17)
• Before using the DHCP server, make sure the DHCP server is already functioning.
• For details of IP address, subnet mask, and gateway, ask the network administrator.
• A wired LAN and wireless LAN cannot be used in the same segment.
Network Setup

Press ▼ to go to the next item.
Make the settings related to the wireless connection between the Display and the network.

| SSID | 
| --- | --- |
| Mode | AD HOC |
| Authentication | Open |
| Encryption | None |
| Channel | 10 |

**SSID**
- If the mode is [AD HOC], enter the same character string as that of SSID set on the computer to be connected. If the mode is [INFRASTRUCTURE], enter the SSID registered at the access point.
- **Entering characters** page 14

- SSID has to be entered in alphanumeric letters.
- You cannot set “any” or “ANY” for SSID.

**Mode**
- AD HOC: Connect Display and computer directly without access point.
- INFRASTRUCTURE: Connect through access point.

**Authentication**
- Open: Set the user authentication method used by the network to be connected.
- Shared: Select when making a connection using [AD HOC], or when the access point authentication method is Shared Key.
- WPA-PSK *
- WPA2-PSK *
- WPA-EAP /
- WPA2-EAP *
- WPA-EAP *
- WPA2-EAP *

* : Available when the mode is set to [INFRASTRUCTURE].

**Encryption**
- Select the encryption method to be used for communication between the Display 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 either [WPA-PSK], [WPA2-PSK], [WPA-EAP], [WPA2-EAP].
- AES: Select when Encryption is AES. Selectable when [Authentication] is either [WPA-PSK], [WPA2-PSK], [WPA-EAP], [WPA2-EAP].

**Channel**
- Refer to page 6 for usable channels.

**Note**
Important video/audio data is protected because AES encryption programming takes place in advance for all network numbers, even if [Encryption] is set to [None].
Network Setup

4 Press ▼ to go to the next item.
   In addition, further perform the following setting depending on [Authentication] and [Encryption] settings.

<table>
<thead>
<tr>
<th>Default Key</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key 1</td>
<td>—</td>
</tr>
<tr>
<td>Key 2</td>
<td>—</td>
</tr>
<tr>
<td>Key 3</td>
<td>—</td>
</tr>
<tr>
<td>Key 4</td>
<td>—</td>
</tr>
</tbody>
</table>

- **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 a WEP key to the key number selected with [Default Key].
  - Either the 64-bit or 128-bit WEP key can be set. For the 64-bit key, input five alphanumeric(s) or a 10-digit string for the hexadecimal format. For the 128-bit key, input 13 alphanumeric(s) or a 26-digit string for the hexadecimal format.

- **When using [WPA-PSK] or [WPA2-PSK]:**
  - Set a key.
  - Input either 8 to 63 alphanumeric(s) or a 64 digit string in the hexadecimal format.

- **When the authentication method is [WPA-EAP/WPA2-EAP], [WPA-EAP], [WPA2-EAP]:**
  - Set [EAP], [User name], and [Password].
  - EAP: Select the EAP setup in the RADIUS server. Types of EAP that can be selected are as follows.
    - PEAP (MS-CHAPv2), PEAP (GTC), EAP-TTLS (MD5), EAP-TTLS (MS-CHAPv2), EAP-FAST (MS-CHAPv2), EAP-FAST (GTC), EAP-TLS *
  - User name: Input a user name used for authentication (excluding spaces) (maximum 64 characters).
  - Password: Input a password used for authentication (maximum 64 characters).

  * : When [EAP-TLS] is selected as EAP, it is required to setup “USER NAME”, “PASSWORD”, “DIGITAL CERTIFICATE”, and “CA CERTIFICATE” with the WEB browser. (See page 24 – 25)

**Notes**
- If you are unable to connect to the wireless LAN through the access point, contact the manufacturer of the access point.
- When using EAP, the display needs to be set according to the setting of the RADIUS server. Check with the network administrator for the setting of the RADIUS server.
- When using an EAP together with an access point with invalid SSID broadcast, select WAP-EAP or WAP2-EAP for the authentication method even if the authentication method of the access point is WPA-EAP/WPA2-EAP.

5 Select [Save] and press ▼ button.
Save the current network settings.

**Default wireless LAN settings**
The following settings are set before the Display leaves the factory.

<table>
<thead>
<tr>
<th>SSID</th>
<th>Panasonic Display</th>
<th>Mode</th>
<th>AD HOC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Panasonic Display</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DHCP</td>
<td>Off</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IP address</td>
<td>192.168.11.100</td>
<td></td>
<td>Open</td>
</tr>
<tr>
<td>Subnet mask</td>
<td>255.255.255.0</td>
<td></td>
<td>Encryption</td>
</tr>
<tr>
<td>Gateway</td>
<td>192.168.11.1</td>
<td></td>
<td>Channel</td>
</tr>
</tbody>
</table>
Network Setup

Name Change

You can change the Display name to be displayed on the network.

1. **Select [Name Change] in [Network Setup] menu and press  button.**
   - The keyboard is displayed.
   - Up to 8 characters can be entered for the Display name.

   ![Keyboard Display]

   **[Entering characters]**
   - To enter text, select characters in the on-screen keyboard.
   - Example: Specifying "PDP 01"
   - ① Select “All delete”.
     - Name0000
     - All text is deleted.
     - To delete individual characters, select “Delete”.
   - ② Select “P”.
   - ③ Select “D” and “P”.
   - ④ Select “Space”.
   - ⑤ Select “0” and “1”.
   - PDP 01

2. **When you finished entering the Display name, select [Ok] and press  button.**
   - To cancel saving the Display name, select [Cancel].
Network Setup

**Password**
Set to [On] to perform password check when connecting with the Display using "Wireless Manager mobile edition 5.5".
By controlling connection with password setting, it is possible to prevent an external device from accidentally connecting and interrupting images, etc.


**Password Change**
Password can be registered or changed. No password is set in the default setting.

1. Select [Password Change] and press button.
   - The keyboard is displayed.
   - Up to 8 characters can be entered for the password.
   - Entering characters ➔ page 14

2. When you finished entering the password, select [Ok] and press .
   - To cancel saving the password, select [Cancel].

   **Note**
   It is recommended to change password on a regular basis for keeping it private.
Network Setup

Computer Search

You can search computers that can connect using the “Wireless Manager mobile edition 5.5”. See the “Wireless Manager mobile edition 5.5” operation manual for details.

* You can configure settings when the wireless module (ET-WM200E) is mounted.


The list of connectable computers on the network is displayed.

2. Select the computer to be connected and press .

Multi-Live

Switch to the MULTI-LIVE mode when using the “Wireless Manager mobile edition 5.5”. See the “Wireless Manager mobile edition 5.5” operation manual for details.


Live mode Cut In

Set this [On] to allow interrupt of the Live mode by other users while the Live mode is active (sending image) by the “Wireless Manager mobile edition 5.5”. For details, refer to “Wireless Manager mobile edition 5.5” operating manual.


2. Select [On] or [Off].
Network Setup

Control I/F Select
Set whether to control with RS-232C (serial) or LAN. When [LAN] is set, the slot power is turned on, and power indicator is lit orange under the condition of power off with remote control (stand-by state), regardless of the [Slot power] setting.


2. Select [RS-232C] or [LAN].

WEB Control
Select [On] to control the display from the web browser. When [On] is set, the slot power is turned on, and power indicator is lit orange under the condition of power off with remote control (stand-by state), regardless of the [Slot power] setting.


2. Select [On] or [Off].

Status
Displays the current network status.

The Display information, settings of wired LAN and wireless LAN are displayed.

Reset
You can reset the network setting to the factory default of the Display.


2. Select [Ok] and press .

Note
It takes some time to restart network while the network settings are initialized. During that time, “Network Setup” in the “Setup” menu is grayed out and cannot be set.
Connecting with Wired LAN

Notes

To use the network function, make the necessary settings in [Network Setup] and be sure to set [Control I/F Select] to [LAN]. (See page 9)

When [LAN] is set, the slot power is turned on, and power indicator is lit orange under the condition of power off with remote control (stand-by state), regardless of the [Slot power] setting.

Computer operation

Connection can be made with wired LAN. However, confirm to your system administrator on network settings before changing any settings.

1 Turn on the computer.

2 Make the network setting according to your system administrator.

If the Display settings are the default settings (See page 10), the computer can be used with the following network settings.

<table>
<thead>
<tr>
<th>IP address</th>
<th>192.168.10.101</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subnet mask</td>
<td>255.255.255.0</td>
</tr>
<tr>
<td>Gateway</td>
<td>192.168.10.1</td>
</tr>
</tbody>
</table>

Connecting with Wireless LAN

You can configure settings when the wireless module (ET-WM200E) is mounted.

Computer operation

1 Make the network setting according to your system administrator.

If the Display settings are the default settings (See page 13), then the computer can be used with the following network settings.

<table>
<thead>
<tr>
<th>IP address</th>
<th>192.168.11.101</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subnet mask</td>
<td>255.255.255.0</td>
</tr>
<tr>
<td>Gateway</td>
<td>192.168.11.1</td>
</tr>
</tbody>
</table>

2 Click [Start]→[Connect To]→[Wireless Network Connection*], select the wireless network of [SSID] set with the Display, and then click [Connect*].

If the Display setting is the factory setting, then [SSID] is [Panasonic Display].
* The names are for Windows XP. In Windows Vista/Windows 7, the procedure will be [Start]→[Connect To].

Notes

• If you use any wireless utility other than Windows [Wireless Network Connection], follow its operation procedure for connection.
• If you use the access point, configure the Display and each network setting of the computer following the instruction of the network administrator.
Using Web Browser

Accessing from the Web browser

1  Activate the Web browser in the personal computer.

2  Enter the IP address set by the Display into the URL input field of the Web browser.

3  Enter your “User name” and “Password”.

   The factory default settings are user1 (user privileges) or admin1 (administrator privileges) for the
   user name and Panasonic for the password.

4  Click [OK] to display the Display status page.

   “Display status” page is displayed.

Notes

* Avoid activating two or more Web browser simultaneously to work out setting or control actions.
* Change the password first of all.
* Administrator privileges enable the use of all functions. User privileges enable the use of only “Display status”,
  “Network status”, “Basic control”, “Advanced control”, and “Change password”.
* If the password is incorrectly entered three times in a row, the lock is set for several minutes.
* If you want to control the Display using a Web browser, set [WEB Control] in [Network Setup] menu to [On].
Using Web Browser

Description of each item

1. Page tab
   Click these to switch pages.

2. Status
   Click this item, and the status of the Display is displayed.

3. Display control
   Click this item to display the Display control page.

4. Detailed setup
   Click this item to display the advanced settings page.

5. Change password

Display status page

Click [Status], then [Display status] to display the Status information page. This page displays the Display statuses established for the items shown below.

1. Displays the type of Display.
2. Displays the firmware version of the Display main unit.
3. Displays the firmware version of the network.
Using Web Browser

Network status page

Click [Status], then [Network status] to display the Status information page. Displays the current configuration information of the network.

① Displays the configuration details of wireless LAN.
  ※ You can configure settings when the wireless module (ET-WM200E) is mounted.

② Displays the configuration details of wired LAN.
Using Web Browser

Basic control page
To move from another page, click [Display control], then [Basic control].

![Basic control page diagram]

1. Power On/Off control
2. Use these to select the input signals
3. Operation of AV mute
4. Switches aspect mode

Detail control page
Click [Display control], then [Advanced control] to display the Detail control page.

![Detail control page diagram]

1. Enter a command. Use the same command used for the serial control.
   (refer to “Operating Instructions, Display Operations”)
2. Response from the unit is displayed.
3. Command is sent and run.

**Note**
After the settings are changed, it may take a while till the display status is displayed.
Using Web Browser

Change Password page
Click [Change password].

Administrator mode

User account

User mode
A user can change password only.

Note
When changing the administrator account, both “Current user name” and “Current password” are required.
Using Web Browser

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

■ LAN settings

1 Click [Detailed set up] in the menu.

2 Select the items to change and click [Next].
The settings window appears, showing the current settings.
• To change the LAN settings, click [Change].
• To return to the previous window, click [Back].

3 Complete the detailed settings and click [Next].
When [Next] is clicked, the next page appears, enabling you to complete the detailed settings as desired.
Settings performed here are the same as the settings performed with the [Network Setup] menu of the Display, except when “EAP-TLS” is selected as the EAP.
• Wired Lan (See page 10)
• Wireless Lan (See page 11)

Notes
• Register user name, password, digital certificate, and CA certificate when the authentication method is “EAP-TLS”.
  USER NAME : Input a user name used for authentication (excluding spaces) (maximum 64 characters).
  PASSWORD : Input a password used for authentication (maximum 64 characters).
  DIGITAL CERTIFICATE : Register a digital certificate (extension: PFX) to be used for authentication.
  CA CERTIFICATE : Register a CA certificate (extension: CER) to be used for authentication.
• Authentication error occurs if the time of the Display is not set correctly. Check Adjust clock page (Adjust clock). (See page 25)

After all required items have been entered, a confirmation window appears.
Using Web Browser

4 Click [Submit].

The settings will be registered.

(Making the above settings effective (Only for wireless LAN)

Notes
• Important video/audio data is protected because AES encryption processing takes place.
• Changing the setting of LAN while connected with LAN might disconnect the connection.

Adjust clock page

Click [Detailed set up], then [Adjust clock] to display the Adjust clock page.

① Time zone selection
② Button to update time zone setting
③ Turn this [ON] to set the date and time automatically.
④ When setting the date and time automatically, input the IP address or name of the NTP server. (When inputting the server name, the DNS server must be set.)
⑤ New date field
⑥ New time field
⑦ Button to update time and date settings

Note
If the time becomes incorrect immediately after setting the correct time, contact the dealer where you bought the Display.
Using Web Browser

Ping test page
This page makes it possible to check whether the network is connected to the DNS server, etc.
Click [Detailed set up], then [Ping test] to display the Ping test page.

Display which appears when the connection was successful.

Display which appears when the connection failed.

① Enter the IP address of the server to be tested.
② Button for conducting the test.

Command port set up page
Set the port number to be used with command control.
Click [Detailed set up] → [Command port set up].

① Input the port number to be used with command control
② Setting update button
PJLink™ Protocol

The network function of the unit conforms with PJLink™ class 1 and you can operate the following actions from your computer using PJLink™ protocol.
- Display setup
- Display status query

Supported commands
Commands to control the unit with PJLink™ protocol are shown in the table below.

<table>
<thead>
<tr>
<th>Command</th>
<th>Control</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER</td>
<td>Power control</td>
<td>Parameter 0 = Standby 1 = Power &quot;On&quot;</td>
</tr>
<tr>
<td>POWR?</td>
<td>Power status query</td>
<td>Parameter 0 = Standby 1 = Power &quot;On&quot;</td>
</tr>
<tr>
<td>INPT</td>
<td>Input switch</td>
<td>Parameter</td>
</tr>
<tr>
<td>INPT?</td>
<td>Input switch query</td>
<td>See the parameter for command INST?</td>
</tr>
<tr>
<td>AVMT</td>
<td>Shutter control</td>
<td>Parameter 10 = Picture On (picture mute deactivated), 11 = Picture Off (picture on mute) 20 = Audio On (audio mute deactivated), 21 = Audio Off (audio on mute) 30 = Shutter mode Off (picture and audio mute deactivated) 31 = Shutter mode On (picture and audio on mute)</td>
</tr>
<tr>
<td>AVMT?</td>
<td>Shutter control query</td>
<td>Parameter 11 = Picture Off (picture on mute) 21 = Audio Off (audio on mute) 30 = Shutter mode Off (picture and audio mute deactivated) 31 = Shutter mode On (picture and audio on mute)</td>
</tr>
<tr>
<td>ERST?</td>
<td>Error status query</td>
<td>Parameter First byte: Means fan error. 0 or 2. Second byte: 0 Third byte: 0 Fourth byte: 0 Fifth byte: 0 Sixth byte: Means other error. 0 or 2. Meaning of the 0 – 2 settings: 0 = Error is not detected, 2 = Error</td>
</tr>
<tr>
<td>LAMP?</td>
<td>Lamp status query</td>
<td>Not supported</td>
</tr>
<tr>
<td>INST?</td>
<td>Input switch list query</td>
<td>Parameter Numbers 11 to 13 are depending on the slot installation condition 11: PC IN input (PC) When a single input terminal board is attached 11: SLOT input (SLOT INPUT) 12: PC IN input (PC) When a dual input terminal board is attached 11: SLOT input (SLOT INPUT) 12: SLOT input (SLOT INPUT B) 13: PC IN input (PC) 21: VIDEO input (VIDEO) 22: COMPONENT/RGB IN input (COMPONENT) 31: HDMI input (HDMI) 32: DVI-D IN input (DVI) 51: Network input (NETWORK)</td>
</tr>
<tr>
<td>NAME?</td>
<td>Display name query</td>
<td>The name set for [Name Change] in [Network Setup] is returned.</td>
</tr>
<tr>
<td>INF?</td>
<td>Manufacturer name query</td>
<td>Returns “Panasonic”</td>
</tr>
<tr>
<td>INF2?</td>
<td>Model name query</td>
<td>Returns “TH-50PF50” (for 50-inch model)</td>
</tr>
<tr>
<td>INFO?</td>
<td>Other information query</td>
<td>Returns version number</td>
</tr>
<tr>
<td>CLSS?</td>
<td>Class information query</td>
<td>Returns “1”</td>
</tr>
</tbody>
</table>

PJLink™ security authentication
When using PJLink with security authorization, either of the password set for administrator privileges and the password set for user privileges with Web browser control can be used as the password for PJLink (See page 19). When using PJLink without security authorization, set use without the password for administrator privileges and the password for user privileges of Web browser control.

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