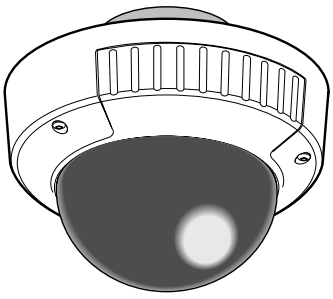
Panasonic



Colour CCTV Camera
Operating Instructions

Model No. WV-CW474FE

Before attempting to connect or operate this product,
please read these instructions carefully and save this manual for future use.

N0502-0 3TR001106AAA Printed in Japan
Ⓝ 19

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is interned to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

We declare under our sole responsibility that the product to which this declaration relates is in conformity with the standards or other normative documents following the provisions of Directives EEC/73/23 and EEC/89/336.

Vi deklarerar härmed vårt fulla ansvar för att den produkt till vilken denna deklaration hänvisar är i överensstämmelse med standarddokument, eller andra normativa dokument som framställs i Direktiv 73/23/EEC och 89/336/EEC.

Ilmoitamme yksinomaisella vastuullamme, että tuote, jota tämä ilmoitus koskee, noudattaa seuraavia standardeja tai muita ohjeellisia asiakirjoja, jotka noudattavat direktivien 73/23/EEC ia 89/336/EEC. säädöksiä.

Vi erklærer oss alene ansvarlige for at produktet som denne erklæringen gjelder for, er i overensstemmelse med følgende normer eller andre normgivende dokumenter som fælger bestemmelsene i direktiven 73/23/EEC og 89/336/EEC.

Wij verklaren als enige aansprakelijke, dat het product waarop deze verklaring betrekking heeft, voldoet aan de volgende normen of andere normatiefve dokumenten, overeenkomstig de bepalingen van Richtlijnen 73/23/EEC en 89/336/EEC.

Vi erklærer os eneansvarlige for, at dette produkt, som denne deklaration omhandler, er i overensstemmelse med den følgende standarder eller andre normative dokumenter i følge bestemmelserne i direktivene 73/23/EEC og 89/336/EEC.

The serial number of this product may be found on the top of the unit.
You should note the serial number of this unit in the space provided and retain this instruction as a permanent record of your purchase to aid identification in the event of theft.

Model No. _____

Serial No. _____

WARNING:
To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

PREFACE

Panasonic's WV-CW474FE colour digital camera introduces a new level of high picture quality and high resolution through the use of a 1/3-inch interline transfer CCD image sensor having 752 horizontal pixels (picture elements), and digital signal processing LSIs. This model offers cutting-edge technology for advanced video surveillance.

PRECAUTIONS

1. **Do not attempt to disassemble the camera.**
   To prevent electric shock, do not remove screws or covers.
   There are no user-serviceable parts inside. Ask qualified service personnel for servicing.

2. **Handle the camera with care.**
   Do not abuse the camera. Avoid striking, shaking, etc. The camera could be damaged by improper handling or storage.

3. **The following installation should be made by qualified service personnel or system installers.**

4. **Do not use strong or abrasive detergents when cleaning the camera body.**
   Use a dry cloth to clean the camera when dirty. When the dirt is hard to remove, use a mild detergent and wipe gently. Then wipe off the remaining detergent with a dry cloth.

5. **Clean the CCD faceplate with care.**
   Do not clean the CCD with strong or abrasive detergents. Use lens tissue or a cotton tipped applicator and ethanol.

6. **Never face the camera towards the sun.**
   Do not aim the camera at bright objects. Whether the camera is in use or not, never aim it at the sun or other extremely bright objects. Otherwise, blooming or smear may be caused.

7. **Do not operate the camera beyond the specified temperature, humidity or power source ratings.**
   Use the camera at temperatures within –10 °C to +50 °C (14 °F - 122 °F), and humidity below 90 %. The input power source is 24 V AC.

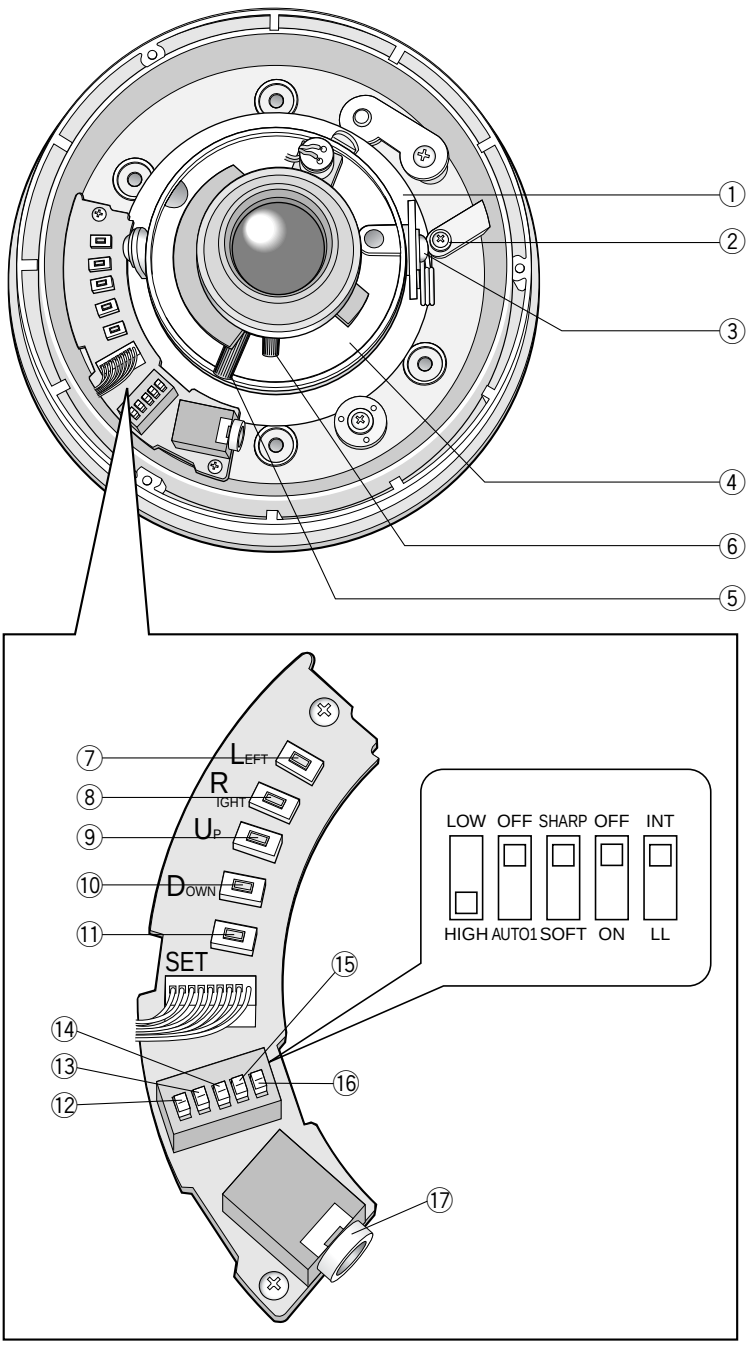
8. **Turn the circuit breaker off which supplies the camera with the power when abnormal conditions are encountered.**

Caution:
To prevent fire or electric shock hazard, use a UL listed cable (VW-1, style 1007) for the 24 V AC Input Cable.

FEATURES

1. The following functions are built in.
   (1) Auto Light Control (ALC)
   (2) The SUPER-D Ⅱ function eliminates interference by strong background lighting which makes the camera picture dark, such as a spotlight.
   Dynamic range of 48 dB (Typ)
   (3) Internal, Line-Locked, Multiplexed Vertical Drive (VD2) Sync
   (4) Auto/Manual White Balance Function
   (5) Electronic Shutter Function
2. Signal-to-noise ratio of 50 dB (Equivalent to AGC Off)
3. Minimum illumination of 2.4 lx (0.24 footcandle) (WIDE) (Colour mode)
   Minimum illumination of 0.3 lx (0.03 footcandle) (WIDE) (Black-and-white mode)
   Minimum illumination of 0.8 lx (0.08 footcandle) (WIDE) with the WV-CW1CE optional dome cover (Colour mode)
   Minimum illumination of 0.1 lx (0.01 footcandle) (WIDE) with the WV-CW1CE optional dome cover (Black-and-white)
4. 480 lines of horizontal resolution (Colour mode)
   570 lines of horizontal resolution (Black-and-white mode)
5. High quality picture:
   (a) 2H type vertical enhancer for greater picture sharpness
   (b) Chroma averaging circuit for better colour signal-to-noise ratio
   (c) Minimum of aliasing on fine objects
   (d) Expanded dynamic range by use of knee circuit
   (e) Highlight aperture correction for greater picture detail of bright objects
6. Selectable electronic sensitivity enhancing modes including AUTO, MANUAL and OFF
7. Built-in Digital Motion Detector
8. Auto black-and-white mode enables the camera to switch between colour and black-and-white picture in response to Light input.
9. Electronic zoom function magnifies a scene 2-fold and changes the angle of view.

MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS



① **Panning table**
Adjusts the panning angle of the camera.

② **Pan lock screw**
Fixes the panning position.

③ **Tilting lock screw**
Fixes the tilting position.

④ **AZIMUTH (Angle adjuster)**
Shoots in a straight-angle field of view when aiming at an object in a slanting direction even if the tilt angle has been set.

⑤ **Zoom lock lever**
Fixes the zoom position.

⑥ **Focus lock lever**
Fixes the focus position.

⑦ **LEFT button (▣) (L)**
Moves the cursor to the left, selects the mode and adjusts some levels.

⑧ **RIGHT button (▣) (R)**
Moves the cursor to the right, selects the mode and adjusts some levels.

⑨ **UP button (▣) (U)**
Moves the cursor upward and selects items in the CAM SET UP menu.

⑩ **DOWN button (▣) (D)**
Moves the cursor downward and selects items in the CAM SET UP menu.

⑪ **SET button (▣) (S)**
Activates an item selected in the CAM SET UP menu.

⑫ **BW AUTO1 LEVEL switch (SW5)**
Selects the illuminance level in LOW or HIGH mode for B/W. The factory default setting is HIGH.

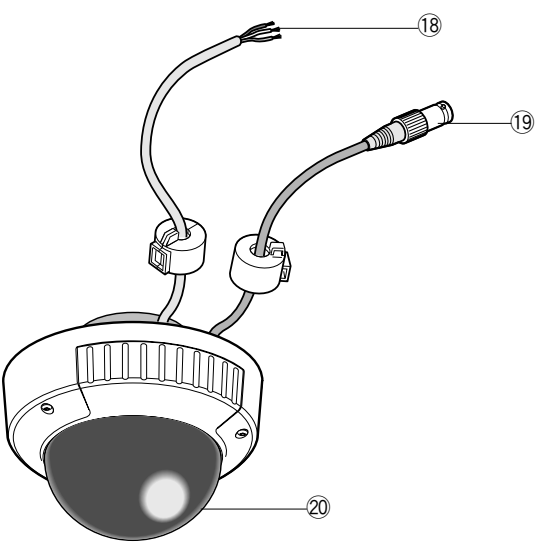
⑬ **BW switch (SW4)**
Switches to AUTO1 between colour and black-and-white picture in response to light input. The factory default setting is OFF.

⑭ **AP gain switch (SW3)**
Selects the aperture gain level to SHARP or SOFT. The factory default setting is SHARP.
Note: SHARP and SOFT are selectable only with this switch. Toggling between SHARP and SOFT cannot be executed on the menu.

⑮ **UPSIDE DOWN switch (SW2)**
Turns the picture upside down by selecting ON. The factory default setting is OFF.

⑯ **Sync switch (SW1)**
Switches internal sync (INT) mode or line-lock (LL) mode. The factory default setting is INT.

⑰ **Monitor output Jack (3.5 Diam. mini jack)**
Connects the LCD monitor and such devices with 3.5 diam. 2-pole L-type plug for checking images.



⑱ **Power cable**

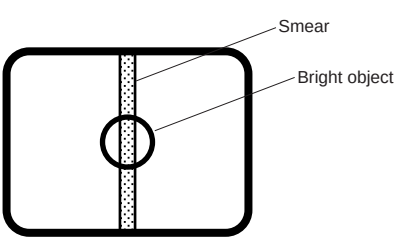
⑲ **Video output cable with BNC connector**
Connects with the video connector of the monitor.

⑳ **Dome cover**

Cautions:
1. Connect to 24 V AC (19.5 V-28 V) class 2 power supply only. Make sure to connect the grounding lead to the GND terminal.
2. To prevent fire or electric shock hazard, use a UL listed cable (VW-1, style 1007) for the Input Terminal.

PREVENTION OF BLOOMING AND SMEAR

When the camera is aimed at a bright light, such as a spotlight, or a surface that reflects bright light, smear or blooming may appear. Therefore, the camera should be operated carefully in the vicinity of extremely bright objects to avoid smear or blooming.



1. CAMERA SETUP MENU

This camera utilizes an on-screen user setup menu.

• Opening the Setup Menu

Press and hold down (S) for 2 seconds or more.

The CAM SET UP menu appears on the monitor as shown at right.
Check the current settings on the menu.

```
    ** CAM SET UP **
CAMERA ID    OFF ┐
ALC          ALC ┐
SHUTTER      ---
AGC          ON(DNR-H)
SENS UP      OFF
SYNC         INT
WHITE BAL    ATW1┐
MOTION DET   OFF

DIP SW
 END     SET UP DISABLE
```

• Returning to Previous Menu or Page

Move the cursor to RET and press (S).

• Closing the Setup Menu

Move the cursor to END in the bottom line, and press (S) to close the setup menu.

Note: If no button is pressed for 6 minutes while a setup menu is being displayed on the monitor screen, it is automatically closed and the mode returns to the normal camera picture.

2. SETUP OPERATION

To set items on the CAM SET UP menu, use the following buttons.

Left Button **( ) (L)**: Moves the cursor to the left. Use this button to select or adjust the parameters of the selected item. The parameter changes each time this button is pressed.

Right Button **( ) (R)**: Moves the cursor to the right. Use this button to select or adjust the parameters of the selected item. The parameter changes each time this button is pressed.

Up Button **( ) (U)**: Moves the cursor upwards. Use this button to select an item or adjust the parameters.

Down Button **( ) (D)**: Moves the cursor downwards. Use this button to select an item or adjust the parameters.

Set Button **( ) (S)**: Executes selections and displays a submenu for an item with the ┐ mark.

• All Reset Operation

All Reset allows you to reset all setup menu items to the factory default settings if you are unsure about the correct settings. Proceed as follows:

(1) Make sure that the CAM SET UP menu is not displayed (a camera picture is displayed).
(2) While pressing both (L) and (R), press (S) for a few seconds. The message ALL RESET momentarily appears on the monitor screen.
This resets all adjustments and parameters to the factory default settings.

• Editing the CAM SET UP Menu

Enabling/Disabling the editing operations

The settings are protected from changing when SET UP DISABLE appears on the bottom line in the menu.
Move the cursor to SET UP DISABLE and press (S) to change it to SET UP ENABLE. Editing the settings will be enabled. When editing is finished, return the menu to SET UP DISABLE by the above procedure.

Using Menu or Five Switches

The DIP switches from SW1 to SW5 can select the parameters of the allocated functions by their positions while these five functions are also included in the menu screen. Depending on which you use for setting, select DIP SW or MENU on the second bottom line in the menu.
Move the cursor to DIP SW and press (S) to change it to MEMU. You can change it from MENU to DIP SW in the same way.

```
    ** CAM SET UP **
CAMERA ID    OFF ┐
ALC          ALC ┐
SHUTTER      ---
AGC          ON(DNR-H)
SENS UP      OFF
SYNC         INT
WHITE BAL    ATW1┐
MOTION DET   OFF

DIP SW
 END     SET UP DISABLE
```

➡

```
    ** CAM SET UP **
CAMERA ID    OFF ┐
ALC          ALC ┐
SHUTTER      ---
AGC          ON(DNR-H)
SENS UP      OFF
SYNC         INT
WHITE BAL    ATW1┐
MOTION DET   OFF

MENU
 END     SET UP ENABLE
```

Note: When the setup menu is closed after changing the parameters in the menu, the new values are stored in the EEPROM (Electrically Erasable and Programmable Read-Only Memory). These values remain valid until new values are stored, even if the power of the camera is off.

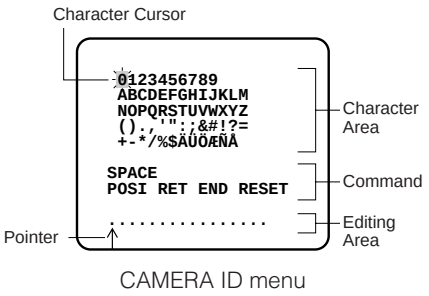
SETTING PROCEDURES

1. Camera Identification (CAMERA ID) Setting

You can use the camera identification (CAMERA ID) to assign a name to the camera. The camera ID consists of up to 16 alphanumeric characters. The camera ID display can be switched on or off on the monitor screen.

To edit the CAMERA ID

1. Move the cursor to CAMERA ID.
   The factory default setting is OFF.
2. Press [▭](S). The CAMERA ID menu appears. The cursor on the letter "0" is highlighted.
3. Move the cursor to the character you want to edit by pressing [▭](L) / [▭](R) / [▭](U) / [▭](D).
4. After selecting the character, press [▭](S). The selected character appears in the editing area. (The pointer in the editing area moves to the right automatically at this moment.)
5. Repeat the steps above until all characters are edited.



CAMERA ID menu

To enter a blank space in the CAMERA ID
Move the cursor to SPACE and press [▭](S).

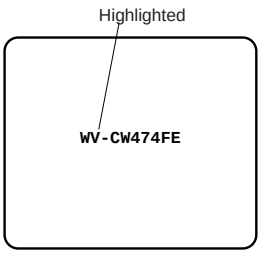
To replace a specific character in the CAMERA ID

1. Move the cursor to the editing area by pressing [▭](D).
2. Move the pointer to the character to be replaced by pressing [▭](L) or [▭](R). Then move the cursor to the character area and select a new character.
3. Press [▭](S) to determine the CAMERA ID.

To erase all characters in the editing area
Move the cursor to RESET and press [▭](S). All characters in the editing area disappear.

To determine the display position of the CAMERA ID

1. Move the cursor to POSI, and press [▭](S). The display at right appears and the CAMERA ID is highlighted.
2. Move the CAMERA ID to the desired position by pressing [▭](L) / [▭](R) / [▭](U) / [▭](D).
3. Press [▭](S) to fix the position of the CAMERA ID. The mode returns to the previous CAMERA ID menu.



Notes:

- The CAMERA ID stops at the edges of the monitor screen.
- The CAMERA ID moves faster if any of [▭](L) / [▭](R) / [▭](U) / [▭](D) is kept pressed for a second or more.

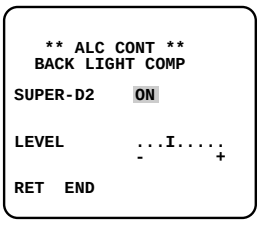
2. Light Control Setting (ALC)

2-1. ALC Mode with SUPER-D2 ON

Super Dynamic2 Function (SUPER-D2)

The important object in a scene is usually placed in the centre of the monitor screen. In the SUPER-D2 mode, more photometric weight is given to the centre of the screen (where the important object is located) than to the edge of the screen (where a bright backlight would most likely be located). The SUPER-D2 function eliminates interference by strong background lighting which makes the camera picture dark, such as a spotlight.

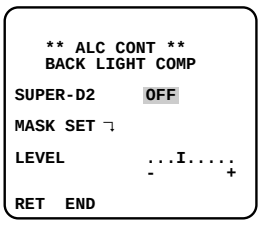
1. Move the cursor to ALC and press [▭](S). The ALC CONT menu appears.
2. Move the cursor to SUPER-D2 and select ON.
3. If you want to adjust the video output level, move the "I" cursor for LEVEL. Adjust to the desired level by pressing [▭](L) or [▭](R).



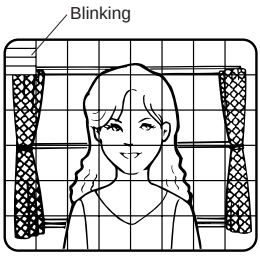
(To be continued reverse page)

2-2. ALC Mode with SUPER-D2 OFF

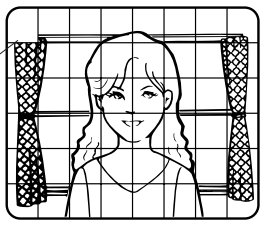
1. Move the cursor to SUPER-D2 and select OFF. The MASK SET appears on the menu.



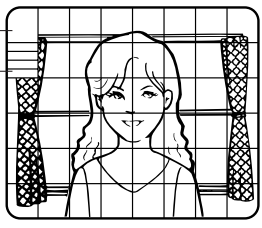
2. Move the cursor to MASK SET and press ▣(S). The 48 mask areas appear on the monitor screen. The cursor is blinking in the upper left corner of the screen.



3. Move the cursor to the area where backlight is bright and press ▣(S) to mask that area. The mask turns to white. (When the cursor is moved on an area that has already been masked, the mask and cursor start blinking.)



4. Repeat step 3 to mask the desired area. To cancel masking, move the cursor to that area and press ▣(S).
5. After masking is completed, press ▣(S) for 2 seconds or more. The ALC CONT menu appears.
6. If you want to change the video output level (picture contrast), move the "I" cursor for LEVEL and adjust the level.



Note: If ON is selected for SUPER-D2, a shadow (black line) may appear at the boundary between the bright and the dim scene. This is a natural phenomenon and does not indicate trouble.

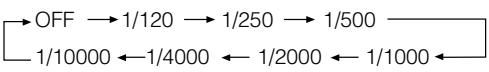
3. Shutter Speed Setting (SHUTTER)

Note: To select electronic shutter speed, select OFF for SUPER-D2 in the ALC CONT menu.

Move the cursor to SHUTTER and select the electronic shutter speed.

The preset values for SHUTTER (electronic shutter speed) change by pressing ▣(L) or ▣(R) as follows:

The factory default setting is ---.



4. Gain Control Setting (AGC ON (DNR-L, DNR-H)/OFF)

You can set the gain (brightness level portion of an image) to automatic level adjustment. Move the cursor to AGC and select automatic level adjustment ON (DNR-H), ON (DNR-L) or fixed level (OFF).

ON (DNR-L): Selects lower noise reduction level.
ON (DNR-H): Selects higher noise reduction level.
OFF (Fixed Level): Disables the gain control function.
The factory default setting is ON (DNR-H).

Notes:

- If ON (DNR-H) is selected for the AGC, the noise reduction function is automatically activated under low light conditions to reduce noise. In pictures containing a moving object, this may result in an afterimage.
- DNR-L is recommended for pictures containing a moving object that results in an afterimage. However, the noise slightly increases.
- DNR-H and DNR-L do not appear for AGC on the system controller setup menu.

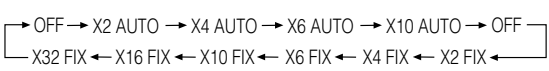
5. Electronic Sensitivity Enhancement (SENS UP)

There are two modes for SENS UP.

AUTO: If you select X10 AUTO, for example, the sensitivity is automatically raised to X10 max. When AUTO is selected, AGC is automatically set to ON.
FIX: If you select X32 FIX, for example, the sensitivity is raised to just X32.
The factory default setting is OFF.

Move the cursor to SENS UP and select the parameter for electronic sensitivity enhancement.

The preset values for SENS UP (electronic sensitivity enhancement) change by pressing ▣(L) or ▣(R) as shown right:



Notes:

- When ON is selected for SUPER-D2 in the ALC CONT menu, FIX is not available for this item.
- When you select AUTO for SENS UP and ON for SUPER-D2, the SENS UP function has priority so that the SUPER-D2 function is not activated automatically.
- While the SENS UP function is selected, noise, spots or a whitish phenomenon may appear in the picture when the sensitivity of the camera is increased. This is a normal phenomenon.

6. Synchronization Setting (SYNC)

Select one of the three sync source modes. The priority is as follows.
(1) Multiplexed Vertical Drive (VD2) (Highest priority)
(2) Line-lock (LL)
(3) Internal Sync (INT) (Lowest priority)

6-1. Line-lock Sync Mode (LL)

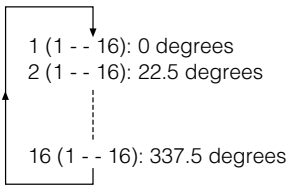
The line-lock mode has a submenu for line-lock vertical phase adjustment. If the camera installation is relocated, check the vertical phase adjustment again since the AC line phase may be different.

1. Move the cursor to SYNC and select LL.
   Note: The settings in this menu can be made only when the multiplexed vertical drive signal (VD2) is not supplied to the camera.
2. After confirming that the cursor is on LL, press [▭](S). The vertical phase adjustment menu appears on the monitor screen.

```
      ** SYNC **
V PHASE
COARSE          1(1--16)
FINE            I........
                -       +

RET  END
```

3. Supply the video output signal of the camera to be adjusted and the reference camera video output signal to a dual-trace oscilloscope.
4. Set the oscilloscope to the vertical rate and expand the vertical sync portion on the oscilloscope.
5. Move the cursor to COARSE. The cursor is highlighted.
6. Press [▭](L) or [▭](R) to match the vertical phase for both video output signals as closely as possible. (COARSE adjustment can be incremented in 16 steps by 22.5 degrees by pressing [▭](L) or [▭](R).)
   Note: After the sixteenth step, the adjustment returns to the first step.



7. Move the cursor to FINE.
8. Press [▭](L) or [▭](R) to match the vertical phase for both video output signals as closely as possible.
   (FINE adjustment can be made by up to 22.5 degrees by pressing [▭](L) or [▭](R).)
   Notes:
   - When the "I" cursor reaches the "+" end, it jumps back to "–". At the same time, COARSE is incremented by one step to enable a continuous adjustment. The reverse takes place when the "I" cursor reaches the "–" end.
   - When [▭](L) or [▭](R) is kept pressed for a second or more, the "I" cursor moves faster.
   - To reset COARSE and FINE to the values preset at the factory, press [▭](L) and [▭](R) simultaneously. COARSE and FINE adjustments are preset at the factory to zero-crossing of the AC line phase.
   - If the AC line contains noise (spike noise, etc.), the stability of the vertical phase of the camera video output signal may be disturbed.

7. White Balance Setting (WHITE BAL)

You can select one of four modes for white balance adjustment as follows.
The factory default setting is ATW1.

7-1. ATW1 (Auto-Tracing White Balance 1)

Move the cursor to WHITE BAL and select ATW1.
In this mode, the colour temperature is monitored continuously and thereby white balance is automatically set. The colour temperature range for the proper white balance is approximately 2 600 - 6 000K. Proper white balance may not be obtained under the following conditions:

1. The colour temperature is out of the 2 600 - 6 000K range.
2. When the scene contains mostly high colour temperature objects, such as a blue sky or sunset.
3. When the scene is dim.

In these cases, select the AWC mode.

```
    ** CAM SET UP **
CAMERA ID     OFF ┐
ALC           ALC ┐
SHUTTER       ---
AGC           ON(DNR-H)
SENS UP       OFF
SYNC          INT
WHITE BAL     ATW1┐
MOTION DET    OFF

MENU
 END      SET UP ENABLE
```

7-2. ATW2 (Auto-Tracing White Balance 2)

Auto-tracing white balance in sodium light mode (ATW2)
When you select ATW2 for sodium light, white balance is set automatically (no operation needed).
Note: ATW1 and ATW2 do not appear for WHITE BAL on the system controller setup menu.

7-3. Automatic White Balance Control Mode (AWC)

In this mode, accurate white balance is obtained within a colour temperature range of approximately 2 300-10 000K.

1. Move the cursor to WHITE BAL and select AWC → PUSH SW.
2. Press [▭](S) to start the white balance setup. The PUSH SW is highlighted to indicate that the white balance is being set.

```
    ** CAM SET UP **
CAMERA ID     OFF ┐
ALC           ALC ┐
SHUTTER       ---
AGC           ON(DNR-H)
SENS UP       OFF
SYNC          INT
WHITE BAL     AWC→PUSH SW
MOTION DET    OFF

MENU
 END      SET UP ENABLE
```

Highlighted

3. When the white balance setting is completed, the PUSH SW returns to normal display.
   Note: If white balance is not set, the PUSH SW is being highlighted.
4. When you want to adjust the white balance manually, press [▭](R) to select AWC and press [▭](S). The AWC menu appears on the monitor screen. (When ATW1 or ATW2 is selected, pressing [▭](S) displays the ATW1 or ATW2 menu.)

```
      **  AWC  **
R             ....I....
              -       +
B             ....I....
              -       +

MASK SET ┐


RET  END
```

7-4. Manual Fine Adjustment for AWC (ATW1/ATW2)

You can set the white balance items manually.

1. To set MASK SET, proceed as described in steps 2 to 4 of “ALC mode with SUPER-D2 OFF".
2. Move the cursor to R.
3. Press (L) or (R) to obtain the optimum amount of red gain.
4. Move the cursor to B.
5. Press (L) or (R) to obtain the optimum amount of blue gain.

Note: When you need to set MASK SET, re-adjust to obtain the optimum amount of red and blue gain.

8. Motion Detector Setting (MOTION DET)

The motion detector detects the moving objects in the scene by monitoring changes in brightness level. You can select the level of sensitivity for motion detection.
When this camera is connected to a compatible intelligent CCTV system, the camera transmits an alarm signal by multiplexing it with the video signal.

1. Move the cursor to MOTION DET and select ON.
   The factory default setting is OFF.
2. Press (S). The MOTION DETECT menu appears on the monitor screen.

```
** MOTION DETECT **
LEVEL          .......I
                -      +
DISPLAY MODE ┐
    ALARM    OFF
MASK SET ┐

RET  END
```

3. Move the cursor to MASK SET and press (S). MASK SET lets you set 48 mask areas. To set MASK SET, proceed as described in steps 2 to 4 of “ALC mode with SUPER-D2 OFF”.
4. Move the cursor to ALARM and select ON or OFF to set the alarm for DISPLAY MODE.
   Note: When using the WV-RM70, WV-CU550 series, WV-CU161 or WV-CU360 controller with this model, select OFF for ALARM.
5. Move the cursor to DISPLAY MODE and press (S) to see the current setting. The masks that detect the brightness changes start blinking.
6. To raise detection sensitivity, press (S) to return to the MOTION DETECT menu.
7. To obtain the optimum detection level, move the “I” cursor to adjust the level.
8. Repeat the procedures above to obtain a satisfactory setting.

Notes:

- Masking or adjusting the detection level is needed to prevent malfunction under the following conditions:
- When shooting an object under flickering fluorescent light.
- When leaves or curtains etc. are swayed by the wind.
- When the object is lighted by lighting equipment that constantly turns on and off.
- It takes about 0.2 seconds for the alarm signal to reach the alarm terminal of the VTR after the camera detects the object.
  Because the alarm signal is multiplexed on the video signal, it may be mistakenly interpreted by other video equipment as a time code signal.
  Therefore, when the camera is not used in a Panasonic Intelligent CCTV System, select OFF to prevent the above from occurring.
- The camera will deactivate the detector for a few minutes after the power of the camera is turned on or the BW setting in the Special Menu is set to something other than OFF.
- The motion detection function is not designed specifically for prevention of theft, fire, etc.

9. Special Menu

This menu lets you adjust and set up the video signal of the camera to meet your requirements.
Move the cursor to END in the bottom line of the CAM SET UP menu and press (L) and (R) simultaneously (holding down (L) and press (R)) for 2 seconds or more. The SPECIAL menu appears on the monitor screen.

```
** CAM SET UP **
CAMERA ID     OFF ┐
ALC           ALC ┐
SHUTTER       ---
AGC           ON(DNR-H)
SENS UP       OFF
SYNC          INT
WHITE BAL     ATW1┐
MOTION DET    OFF

MENU
 END      SET UP ENABLE
```

```
** SPECIAL **
UP SIDE DOWN OFF
CHROMA GAIN   ....I....
AP SHARP      ...I.....
PEDESTAL      ......I..
                -      +

EL-ZOOM       OFF
BW            OFF
BURST(BW)     ON
CAMERA RESET  ➡PUSH SW
RET  END
```

9-1. Camera Picture Upside Down Positioning (UP SIDE DOWN)

1. Move the cursor to UP SIDE DOWN.
2. Select ON when you want to turn the picture upside down.

9-2. Chroma Level Setting (CHROMA GAIN)

1. Move the cursor to CHROMA GAIN.
2. While observing the vectorscope or colour video monitor, move the “I” cursor to adjust the chroma level.

9-3. Aperture Gain Setting

1. Move the cursor to AP SHARP.
2. While observing the waveform monitor or colour video monitor, move the “I” cursor to adjust the aperture gain level.

9-4. Pedestal Level Setting (PEDESTAL)

1. Move the cursor to PEDESTAL.
2. While observing the waveform monitor or colour video monitor, move the “I” cursor to adjust the pedestal level (black level).

9-5. Electronic Zoom (EL-ZOOM)

1. Move the cursor to EL-ZOOM.
2. Select ON or OFF using ▣(L) or ▣(R).
   The factory default setting is OFF.
   ON: x2 electronic zoom is available with the ZOOM switch on the controller.
   OFF: The electronic zoom function is disabled.
3. While the cursor is on EL-ZOOM, press ▣(S). The EL-ZOOM setting menu appears.
4. Move the cursor to PUSH SET for ZOOM and press ▣(S) to display the ZOOM setting menu.
5. Press ▣(U) or ▣(D) to zoom in or out the image.
6. Move the cursor to PUSH SET for PAN/TILT and press ▣(S). The PAN/TILT setting menu appears.
7. Press ▣(U) or ▣(D) ▣(L) or ▣(R) to change the angular field of view.
8. To return to the EL-ZOOM setting menu, press ▣(S).

```
** EL-ZOOM **

PAN/TILT    →PUSH SET
ZOOM        →PUSH SET

   U ZOOM D



RET END
```

```
** EL-ZOOM **

PAN/TILT    →PUSH SET
ZOOM        →PUSH SET

   U TILT D/L PAN R



RET END
```

9-6. BW

This function lets you switch from colour to black-and-white picture automatically in low light conditions such as at night.

1. Move the cursor to BW.
2. Select AUTO1, AUTO2, ON or OFF using ▣(L) or ▣(R).
   The factory default setting is OFF.
   AUTO1: The camera selects black and white mode if the picture is dark, or colour mode if the picture is bright enough.
   AUTO2: Applying AUTO1 may cause malfunction when using a source of near-infrared light at night because the illuminance changes significantly when switching between the colour picture and a black-and-white picture. This can be prevented by using the AUTO2 setting to detect the type of light source.
   Notes:
   - Because the type of light source is detected based on information received from the CCD image pickup element, an object that is constantly moving or has the same colour as its background may not always be properly recognized. When choosing the AUTO2 mode, make sure to use a light source having a wavelength of 800 nm or more.
   - The object may be out of focus when using a source of near-infrared light than using the visible light.

   ON: Black-and-white mode enabled.
   OFF: Colour mode enabled.
3. Select AUTO1 or AUTO2 using ▣(L) or ▣(R).
4. Press ▣(S).
   The AUTO1 or AUTO2 menu appears on the monitor screen.
5. Move the "I" cursor to LEVEL to select the illuminance level using ▣(L) or ▣(R).
   The factory default setting is HIGH.
   LOW: Colour picture switches to black-and-white picture at approx.2 lx.
   HIGH: Colour picture switches to black-and-white picture at approx.5 lx.
6. Move the "I" cursor for DURATION TIME to set the switching time using ▣(L) or ▣(R).
   The following switching times are available:
   10s--30s--60s--300s
   (S) (L)

```
** BW AUTO1 **

LEVEL          HIGH
DURATION TIME .I..
               S  L



RET END
```

9-7. BURST (BW)

1. Move the cursor to BURST (BW).
2. Select ON or OFF using ▣(L) or ▣(R).
   ON: The burst signal is supplied along with the black-and-white composite video signal.
   OFF: The burst signal is not output.
   The factory default setting is ON.
   Notes:
   - We recommend that you usually select ON.
   - When the camera is used to synchronize the system for external sync, select ON to prevent a malfunction.

To reset to the factory settings (CAMERA RESET)

1. Move the cursor to CAMERA RESET. The PUSH SW is highlighted.
2. While holding down ▣(L) and ▣(R), press ▣(S) for 2 seconds or more. The camera is reset to the factory settings.

To reset a specific parameter

- To reset the parameter to the factory default setting, move the cursor to the parameter to be reset and press ▣(L) and ▣(R) simultaneously.

SPECIFICATIONS

Pick-up Device:	752 (H) x 582 (V) pixels, Interline Transfer CCD
Scanning Area:	4.8 (H) x 3.6 (V) mm (Equivalent to scanning area of 1/3" pick-up tube)
Scanning:	625 lines/50 fields/25 frames
Horizontal:	15.625 kHz
Vertical:	50.00 Hz
Synchronization:	Internal, Line-locked or Multiplexed vertical drive (VD2) Sync selectable
Video Output:	1.0 V[p-p] PAL composite 75 Ω/BNC connector
Horizontal Resolution:	480 lines (C/L), 570 lines (B/W)
Signal-to-Noise Ratio:	50 dB (Equivalent to AGC Off, weight On, AP On)
Dynamic Range:	48 dB (Typ)
Minimum Illumination:	2.4 lx (0.24 footcandle) (WIDE) (C/L), 0.3 lx (0.03 footcandle) (WIDE) (B/W) When the optional WV-CW1CE dome cover is installed. 0.8 lx (0.08 footcandle) (WIDE) (C/L), 0.1 lx (0.01 footcandle) (WIDE) (B/W)
Gain Control:	ON (DNR-H), ON (DNR-L) or OFF (SET UP MENU) selectable
White Balance:	ATW1, ATW2 or AWC (SET UP MENU) selectable
Aperture:	Set Variable (SET UP MENU)
Super Dynamic Ⅱ:	ON or OFF (SET UP MENU) selectable
Electronic Shutter Speed:	OFF, 1/120, 1/250, 1/500, 1/1 000,1/2 000, 1/4 000, 1/10 000 s selectable
Lens	
Focal length:	3.8 mm - 8 mm
Maximum aperture ratio:	1:1.4 (Wide), 1:1.8 (Tele)
Angular field of view:	Horizontal: 35.6 ˚ - 73.6 ˚ Vertical: 26.6 ˚ - 53.4 ˚
Focusing range:	1.2 m - ∞ (3.9 ft - ∞)
Ambient Operating Temperature:	–10 °C - +50 °C (14 °F - 122 °F)
Ambient Operating Humidity:	Less than 90 %
Power Source and Power Consumption:	24 V AC 50 Hz, 4.6 W
Dimensions:	133 mm (H) x 152.5 mm (D) 5-1/4" (H) x 6" (D)
Weights:	1.1 kg (2.4 lbs.)

Weights and dimensions indicated are approximate.
Specifications are subject to change without notice.

STANDARD ACCESSORIES

Tamperproof screw bit ..... 1 pc.

OPTIONAL ACCESSORIES

WV-CW1CE	Clear Dome Cover
WV-Q112E	Camera mounting bracket

Matsushita Electric Industrial Co., Ltd.

Web Site : http://www.panasonic.co.jp/global/