

MEMO

A large rectangular area with rounded corners, containing 20 horizontal dotted lines for writing a memo.

2.9

To Configure the SET UP

Various functions for watching TV can be configured.
(Language, Transparency, ISM Method, Timer, Caption, Parental etc.)

▶ Selecting the Main Screen Language

- 1 Press the <MENU> button on the remote control.
- 2 Press the <VOL> button on the remote control to navigate to the 'SET UP' menu.
- 3 Press the <OFF> button on the remote control to navigate to the 'Language' submenu. Press the <VOL> button on the remote control to select the preferred language. When selection is complete, press the <OK> button.
(English, Deutsch, Français, Español, Italiano, Korean)



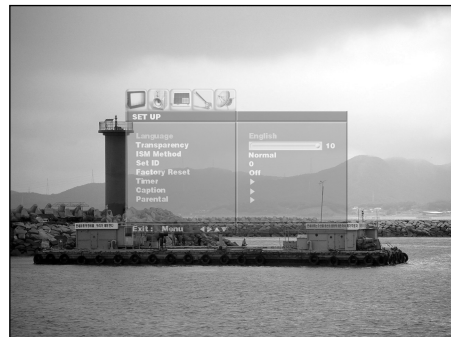
- 4 When configuration is complete, press the <MENU> button to close the 'Menu' screen.

▶ Adjusting Image Transparency

- 1 Press the <MENU> button on the remote control.
- 2 Press the <VOL> > button on the remote control to navigate to the 'SET UP' menu.
- 3 Press the <CH> > button on the remote control to navigate to the 'Transparency' submenu. Press the <VOL> > button on the remote control to adjust the Image Transparency. When adjustment is complete, press the <OK> button (the settings possible are 0~10).



<Before Adjusting Image Transparency: 0>



<After Adjusting Image Transparency: 10>

- 4 When configuration is complete, press the <MENU> button to close the 'Menu' screen.

▶ Setting Sleep Timer

Set the sleep timer to switch the TV power to the standby mode automatically when a specified time has elapsed.








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▶ Press the <SLEEP TIMER> button on the remote control to set the sleep timer.

- 1 Press the <MENU> button on the remote control.
- 2 Press the <VOL> > button on the remote control to navigate to the 'SET UP' menu.
- 3 Press the <CH> > button on the remote control to navigate to the 'Timer' submenu, and press the <VOL> > button on the remote control. The 'Time Selection' screen will be displayed.






- 4 Under 'Clock', press the <VOL> > button and the <CH> > button on the remote control to set the current time. (When setting time, press the <CH> > button on the remote control to set 'Hour', press the <VOL> > button to move to 'Minutes', press the <CH> > button to set 'Minutes', press the <VOL> > button to move to 'AM/PM', and press the <CH> > button to select 'AM/PM'.)
- 5 Select Auto to specify the Time Zone.
- 6 When setting is complete, press the <VOL> > button on the remote control to navigate to 'Clock', and press the <CH> > button to navigate to 'Off Timer'.

- 7** In 'Off Timer', press the  button and the  button on the remote control to set the 'TV Off' timer. (When setting time, press the  button on the remote control to set 'Hour', press the  button to move to 'Minutes', press the  button to set 'Minutes', press the  button to move to 'AM/PM', and press the  button to select 'AM/PM'.)

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- ▶ To turn the TV off automatically, see the section on 'Off Timer' settings for visual settings. The program channel and volume level can also be configured for cases when the LCD TV is turned on.


- 8** When configuration is complete, press the  button on the remote control to navigate to 'Off Timer', and press the  button on the remote control to navigate to 'Auto Off'. Press the  button on the remote control to select 'On'.
- 9** When configuration is complete, press the <MENU> button to close the 'Menu' screen.

▶ Viewing Closed Captions

The LCD TV can decode and display the closed caption that are broadcast with certain TV shows. These captions are usually subtitles for the hearing impaired or foreign-language translations. All VCRs record the closed caption signal from television program, so home-recorded video tapes also provide closed captions. Most prerecorded commercial video tapes provide closed captions as well. Check for the closed caption symbol in television schedule and on the tape's packing : CC

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- ▶ The Caption feature does not work with PC signals.

- 1** Press the <MENU> button on the remote control.
- 2** Press the  button on the remote control to navigate to the 'SET UP' menu.

- 3 Press the <CH> button on the remote control to navigate to the 'Caption' submenu.



- 4 Press the <VOL / VOL> buttons on the remote control.

- 5 Press the <CH> buttons to move to 'Analog Caption'. And the press the <VOL / VOL> buttons to select 'CC1~4' or 'TEXT1~4'.



- 6 The options available for Digital Caption are Option, Font Setup and Font Style.

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- ▶ In Caption mode, captions appear at the bottom of the screen, and they usually cover only a small portion of the picture.
- ▶ In TEXT mode, information is not related to the program, such as news or weather, is displayed. Text often covers a large portion of the screen.

- 6 When you have finished, press the <MENU> button to close the 'Menu' screen.

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- ▶ Different Channel and Field display different information :
Field 2 carries additional information that supplements the information in Field 1.(for example, Channel 1 may have subtitles in English, while Channel 2 has subtitles in Spanish.)

▶ Using the Parental

The Parental feature automatically locks out programming that is deemed inappropriate for children. The user must enter a PIN(Personal ID Number) before any of the Parental restriction can be changed.

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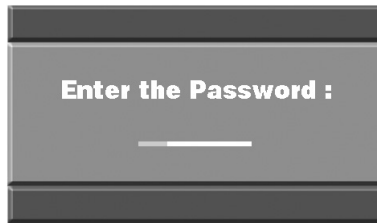
- ▶ The Parental feature does not work with PC signals.

▶ Setting Up Your PIN (Personal ID Number)

- 1 Press the <MENU> button on the remote control.
- 2 Press the <VOL> button on the remote control to navigate to the 'SET UP' menu.
- 3 Press the <CH> button on the remote control to navigate to the 'Parental' submenu.



- 4 Press the <VOL> button. The 'Enter the Password : —' screen is displayed.

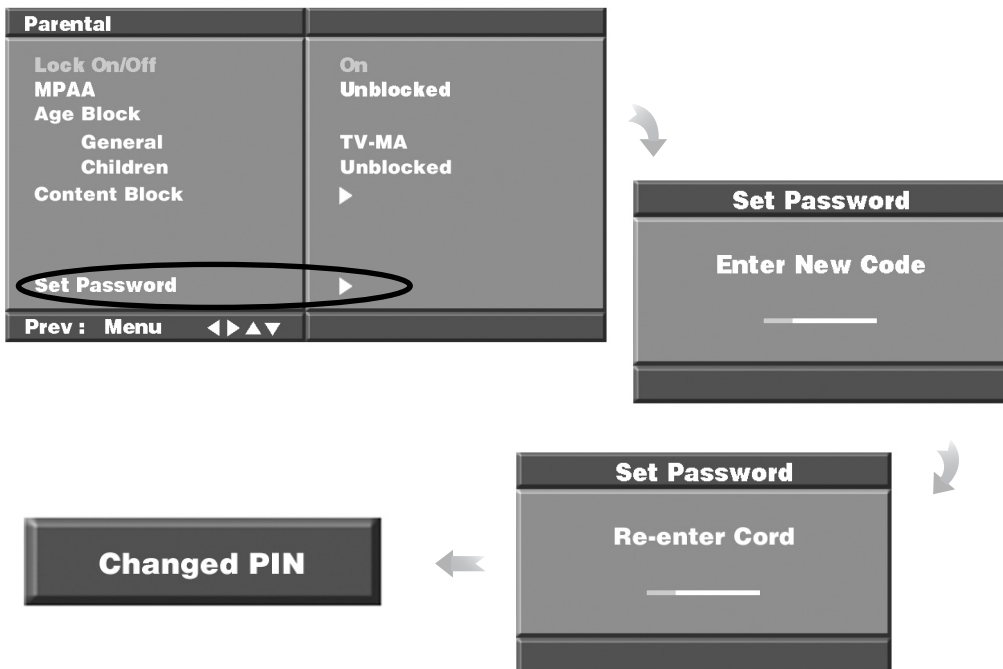


- 5 Enter 4-digit PIN number.

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▶ The default PIN number for a new set is '1-1-1-1'.

- 6 After entering a valid PIN number, the 'Parental' menu screen will appear. Press the <CH- / CH+> buttons to select 'Set Password'.



- 7 When you have finished, press the <MENU> button to close the 'Menu' screen.

▶ How to On/Off the Parental

- ❶ Press the <MENU> button on the remote control.
- ❷ Press the <VOL> button on the remote control to navigate to the 'SET UP' menu.
- ❸ Press the <CH> button on the remote control to navigate to the 'Parental' submenu.

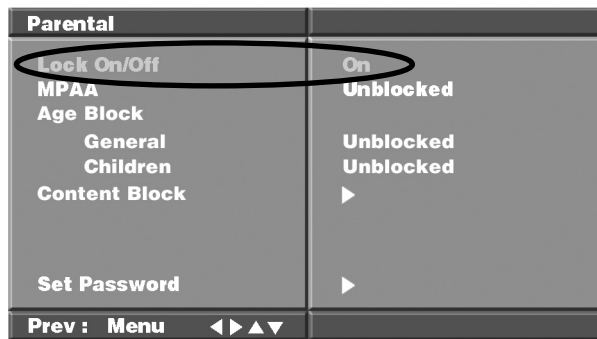


- ❹ Press the <VOL> button. The 'Enter the Password : ___' screen is displayed.



- ❺ Enter 4-digit PIN number.
- ❻ After entering a valid PIN number, the Parental menu is displayed and the Parental Lock will be highlighted.

To turn On or Off the Parental feature, press the <VOL> buttons to select Parental Lock On/Off.



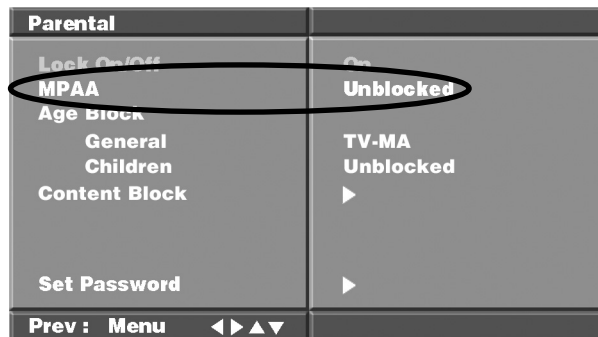
- ⑦ When you have finished, press the <MENU> button to close the 'Menu' screen.

▶ How to Setup Restriction Using the MPAA

- ① Press the <MENU> button on the remote control.
- ② Press the <VOL> button on the remote control to navigate to the 'SET UP' menu.
- ③ Press the <CH> button on the remote control to navigate to the 'Parental' submenu.
- ④ Press the <VOL> button. The 'Enter the Password : —' screen is displayed.



- ⑤ Enter 4-digit PIN number.
- ⑥ After entering a valid PIN number, the Parental sub menu screen will appear. Press the <CH> button to move to 'MPAA' submenu.



- 7 Press the <VOL> buttons to select particular MPAA category. The <VOL> buttons will cycle through the MPAA categories.

MPAA	
G & Above	General audience (no restrictions).
PG & Above	Parental guidance suggested.
PG-13 & Above	Parents strongly cautioned.
R & Above	Restricted. Children under 17 should be accompanied by an adult.
NC-17 & Above	No Children under age 17.
X	Adults only
Unblocked	Not rated

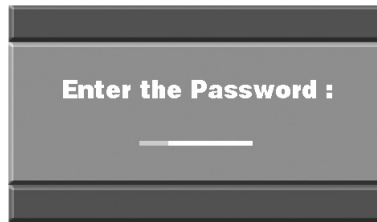
- 8 When you have finished, press the <MENU> button to colse the 'Menu' screen.

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- The Parental will automatically block any category that is 'More restrictive'. For example, if you block the PG-13 & Above category, then R & Above, NC-17 & Above, and X will be automatically blocked also.

▶ How to Setup Restriction Using the TV Guidelines

- ❶ Press the <MENU> button on the remote control.
- ❷ Press the <VOL> button on the remote control to navigate to the 'SET UP' menu.
- ❸ Press the <CH> button on the remote control to navigate to the 'Parental' submenu.
- ❹ Press the <VOL> button. The 'Enter the Password : —' screen is displayed.



- ❺ Enter 4-digit PIN number.
- ❻ After entering a valid PIN number, the Parental sub menu screen will appear. Press the <CH> button to move to 'Age Block'.



Age Block		
General	TV-G & Above	General audience
	TV-PG & Above	Parental guidance
	TV-14 & Above	Viewers 14 and over
	TV-MA	Mature audience
	UnbloCked	Not rated
Children	TV-Y	Young Children
	TV-Y7	Children 7 and over
	Unblocked	Not rated

- 7 Press the <VOL> buttons to move to one of the six age-based categories in column and press the <CH> buttons will cycle through the MPAA categories.

For example, if you block TV-Y category, then TV-Y7 will be automatically blocked. Similarly, if you block TV-G & Above category, then all the categories in the 'young adult' will be blocked (TV-G & Above, TV-PG & Above, TV-14 & Above and TV-MA).

- 8 Press the <CH> button to select 'content Block' and press the <VOL> button. The 'content Block' submenu screen will appear.



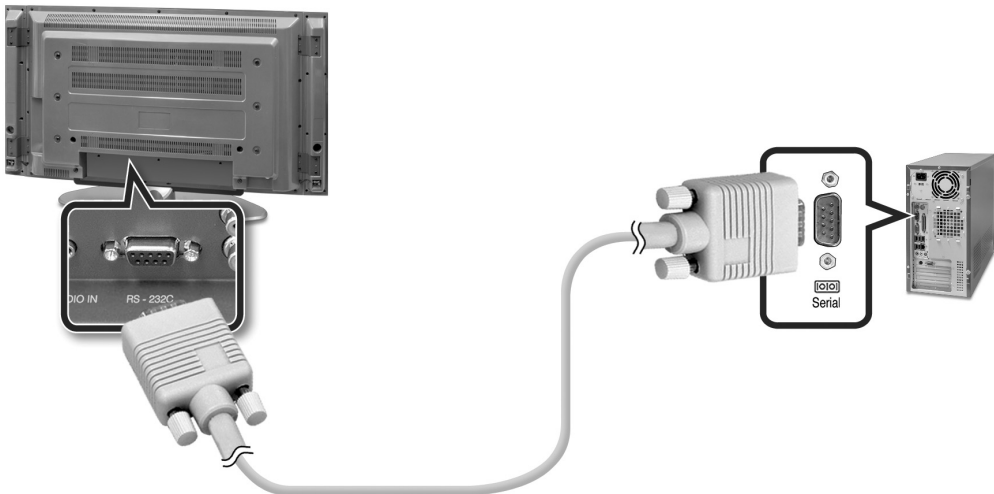
- 9 To set the 'Content Block'.

Content Block	
Dialogue (Sexual Suggestive Dialog)	TV-PG & Above
	TV-14 & Above
	Unblocked
Language (Adult Language)	TV-PG & Above
	TV-14 & Above
	TV-MA
	Unblocked
Sex (Sexual Situation)	TV-PG & Above
	TV-14 & Above
	TV-MA
	Unblocked
Violence	TV-PG & Above
	TV-14 & Above
	TV-MA
	Unblocked
F.Violence (Fantasy Violence)	TV-Y7
	Unblocked

- 10 When you have finished, press the <MENU> button to close the 'Menu' screen.

2.10 External Control Device Setup

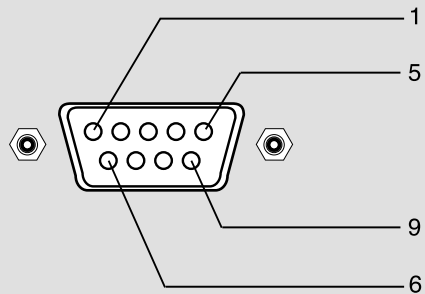
- 1 Connect the RS-232C input jack to an external control device (such as a computer or an A/V control system) and control the Monitor's functions externally.
- 2 Connect the serial port of the control device to the RS-232C jack on the Monitor back panel.
- 3 RS-232C connection cables are not supplied with the Monitor.

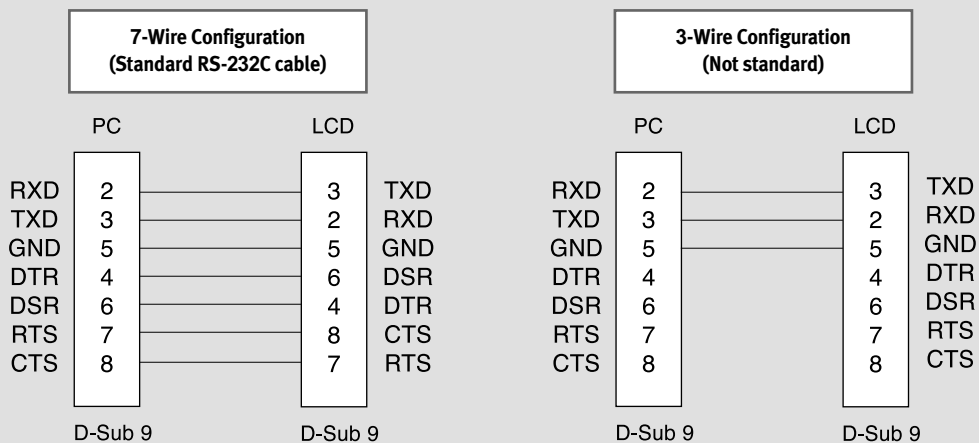


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► Type of Connector : D-Sub 9-pin Male

No.	Pin Name
1	No Connection
2	RXD (Receive data)
3	TXD (Transmit data)
4	DTR (DTE side ready)
5	GND
6	DSR (DCE side ready)
7	RTS (Ready to send)
8	CTS (Clear to send)
9	No Connection



N · O · T · E**▶ RS-232C Configurations****▶ Set ID**

- Use this function to specify a monitor ID number.

- Refer to 'Real Data Mapping 1'.

- ❶ Press the <MENU> button and then use the ▲/▼ button to select the SPECIAL menu.
- ❷ Press the ▶ button and then use ▲/▼ button to select **Set ID**.
- ❸ Press the ▶ button and then use ◀/▶ button to adjust **Set ID** to choose the desired monitor ID number.
 - The adjustment range of **Set ID** is 0 ~ 99.

▶ Communication Parameters

- Baud rate : 9600 bps (UART)
- Data length : 8 bits
- Parity : None
- Stop bit : 1 bit
- Communication code : ASCII code

▶ Command Reference List

	COMMAND 1	COMMAND 2	DATA(Hexadecimal)
Power	k	a	0 ~ 1
Input Select	k	b	0 ~ 7
Volume Mute	k	e	0 ~ 1
Volume Control	k	f	0 ~ 64
Contrast	k	g	0 ~ 64
Brightness	k	h	0 ~ 64
Color	k	i	0 ~ 64
Tint	k	j	0 ~ 64
Sharpness	k	k	0 ~ 64
PIP/POP/PBP	k	n	0 ~ 4
PIP Position	k	q	0 ~ 3
Treble	k	r	0 ~ 14
Bass	k	s	0 ~ 14
Balance	k	t	0 ~ 64
Color Temperature	k	u	0 ~ 3
AV and HD H Position	k	v	0 ~ 64
AV and HD V Position	k	w	0 ~ 64
PIP Input Source	k	y	0 ~ 7

- Menu doesn't display on screen when setting the 4, 12, 13, and 26 ~ 32.

N · O · T · E**► Transmission / Receiving Protocol**Transmission

[Command1][Command2][][Set ID][][Data][Cr]

[Command 1] : k,

[Command 2] : To control LCD set.

[Set ID] : You can adjust the Set ID to choose desired monitor ID number in Special menu. Adjustment range is 0 ~ 99. When selecting Set ID '0', every connected LCD set is controlled. Set ID is indicated as decimal (0~99) on menu and as Hexadecimal (0x0~0x63) on transmission/receiving protocol.

[DATA] : To transmit command data.

Transmit 'FF' data to read status of command.

[Cr] : Carriage Return ASCII code '0x0D'

[] : ASCII code 'space (0x20)'

► OK Acknowledgement

[Command2][][Set ID][][OK][Data][x]

The Monitor transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.

► Error Acknowledgement

[Command2][][Set ID][][NG][x]

The Monitor transmits ACK (acknowledgement) based on this format when receiving abnormal data from non-viable functions or communication errors.

Data

1	: Illegal Code
2	: Not supported function
3	: Wait more time

▶ Power (Command2 : a)

- To control Power On/Off of the Monitor.

- Transmission

[k][a][][Set ID][][Data][Cr]

Data

0	: Power Off
1	: Power On

- Acknowledgement

[a][][Set ID][][OK][Data][x]

- To show Power On/Off.

- Transmission

[k][a][][Set ID][][FF][Cr]

Data 0 : Power Off
 1 : Power On

- Acknowledgement

[a][][Set ID][][OK][Data][x]

In a like manner, if other functions transmit 'FF' data based on this format, Acknowledgement data feedback presents status about each function.

▶ Input Select (Command2 : b) (Main Picture Input)

- To select input source for the Monitor. You can also select an input source using the INPUTSELECT button on the Monitor's remote control.

- Transmission

[k][b][][Set ID][][Data][Cr]

Data	0 : TV	1 : AV1	2 : AV2
	3 : AV3	4 : COMPONENT	
	6 : RGB	7 : DVI	

- Acknowledgement

[b][][Set ID][][OK][Data][x]

▶ Volume Mute (Command2 : e)

- To control volume mute on/off. You can also adjust mute using the MUTE button on remote control.

- Transmission

[k][e][][Set ID][][Data][Cr]

Data 0 : Volume mute on (Volume off)
 1 : Volume mute off (Volume on)

- Acknowledgement

[e][][Set ID][][OK][Data][x]

▶ Volume Control (Command2 : f)

- To adjust volume. You can also adjust volume with the volume buttons on remote control.

- Transmission

[k][f][][Set ID][][Data][Cr]

Data Min : 0 ~ Max : 64

Refer to 'Real data mapping1' as shown below.

- Acknowledgement

[f][][Set ID][][OK][Data][x]

▶ Contrast (Command2 : g)

- To adjust screen contrast. You can also adjust contrast in the Video menu.

- Transmission

[k][g][][Set ID][][Data][Cr]

Data Min : 0 ~ Max : 64

Refer to 'Real data mapping1' as shown below.

- Acknowledgement

[g][][Set ID][][OK][Data][x]

Real data mapping 1

0 : Step 0

⋮

A : Step 10 (SET ID 10)

⋮

F : Step 15 (SET ID 15)

10 : Step 16 (SET ID 16)

⋮

64 : Step 100

▶ Brightness (Command2 : h)

- To adjust screen brightness. You can also adjust brightness in the Video menu.

- Transmission

[k][h][][Set ID][][Data][Cr]

Data Min : 0 ~ Max : 64

Refer to 'Real data mapping 1'.

- Acknowledgement

[h][][Set ID][][OK][Data][x]

▶ Color (Command2 : i)

- To adjust the screen color. You can also adjust color in the Video menu.

- Transmission

[k][i][][Set ID][][Data][Cr]

Data Min : 0 ~ Max : 64

Refer to 'Real data mapping 1'.

- Acknowledgement

[i][][Set ID][][OK][Data][x]

▶ Tint (Command2 : j)

- To adjust the screen tint. You can also adjust tint in the Video menu.

- Transmission

[k][j][][Set ID][][Data][Cr]

Data Red : 0 ~ Green : 64

Refer to 'Real data mapping 1'.

- Acknowledgement

[j][][Set ID][][OK][Data][x]

▶ Sharpness (Command2 : k)

- To adjust the screen sharpness. You can also adjust sharpness in the Video menu.

- Transmission

[k][k][][Set ID][][Data][Cr]

Data Min: 0 ~ Max: 64

Refer to 'Real data mapping 1'.

- Acknowledgement

[k][][Set ID][][OK][Data][x]

▶ PIP/POP/PBP (Command2 : n)

- To control the PIP (Picture-in-Picture) or Twin Picture. You can also control the PIP/Twin picture mode using the PIP or TWIN PICTURE button on the remote control or in the Twin menu.

- Transmission

[k][n][][Set ID][][Data][Cr]

Data	0 : PIP OFF	1 : PIP		
	2 : POP	3 : PBP1	4 : PBP2	

- Acknowledgement

[n][][Set ID][][OK][Data][x]

▶ PIP Position (Command2 : q)

- To select sub picture position for PIP. You can also adjust the sub picture position using Win.position on the remote control or in the Twin menu.

- Transmission

[k][q][][Set ID][][Data][Cr]

Data	0: Right down on screen
	1: Left down on screen
	2: Left up on screen
	3: Right up on screen

- Acknowledgement

[q][][Set ID][][OK][Data][x]

▶ Treble (Command2 : r)

- To adjust treble. You can also adjust treble in the Audio menu.

- Transmission

[k][r][][Set ID][][Data][Cr]

Data	Min: 0 ~ Max: 64
	Refer to 'Real data mapping 1'.

- Acknowledgement

[r][][Set ID][][OK][Data][x]

(Operates only when SSM is set to USER.)

▶ Bass (Command2 : s)

- To adjust bass. You can also adjust bass in the Audio menu.

- Transmission

[k][s][][Set ID][][Data][Cr]

Data Min: 0 ~ Max: 64

Refer to 'Real data mapping 1'.

- Acknowledgement

[s][][Set ID][][OK][Data][x]

(Operates only when SSM is set to USER.)

▶ Balance (Command2 : t)

- To adjust balance. You can also adjust balance in the Audio menu.

- Transmission

[k][t][][Set ID][][Data][Cr]

Data Min: 0 ~ Max: 64

Refer to 'Real data mapping 1'.

- Acknowledgement

[t][][Set ID][][OK][Data][x]

▶ Color Temperature (Command2 : u)

- To adjust color temperature. You can also adjust CSM in the PC menu.

- Transmission

[k][u][][Set ID][][Data][Cr]

Data 0: Normal 1: Cool

 2: Warm 3: User

- Acknowledgement

[u][][Set ID][][OK][Data][x]

▶ AV and HD H Position (Command2 : v)

- To adjust AV and HD mode H Posion

- Transmission

[k][v][][Set ID][][Data][Cr]

Data 0 ~ 64

- Acknowledgement

[v][][Set ID][][OK][Data][x]

▶ AV and HD V Position (Command2 : w)

- To adjust AV and HD mode V Posion

- Transmission

[k][w][][Set ID][][Data][Cr]

Data 0 ~ 64

- Acknowledgement

[w][][Set ID][][OK][Data][x]

▶ PIP Input Select (Command2 : y)

- To select input source for sub picture in PIP mode.

- Transmission

[k][y][][Set ID][][Data][Cr]

Data	0 : TV	1 : AV1	2 : AV2
	3 : AV3	4 : COMPONENT	
	6 : RGB	7 : DVI	

- Acknowledgement

[y][][Set ID][][OK][Data][x]