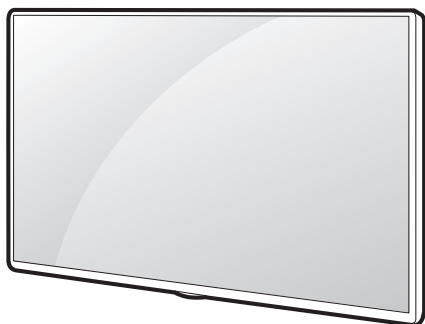




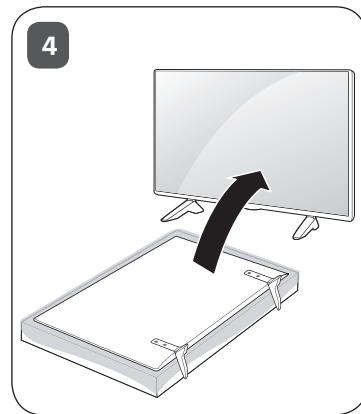
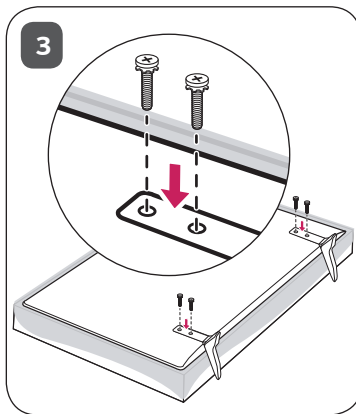
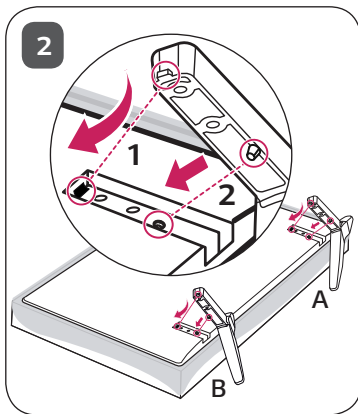
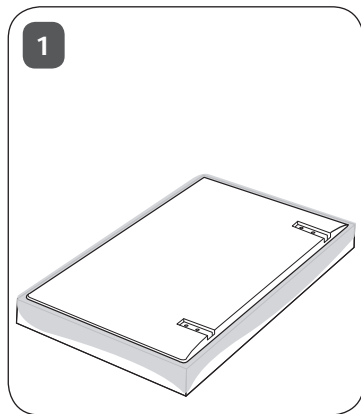
English

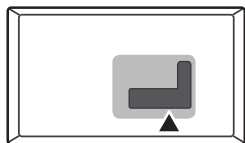
- Read **Safety and Reference**.
- For the power supply and power consumption, refer to the label attached to the product.

• قراءة الأمان والمرجع .

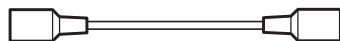
• لمعرفة المزيد حول مصدر الإمداد بالطاقة المطلوب ومعايير استهلاك الطاقة، راجع الملصق الموجود على المنتج .

العربية

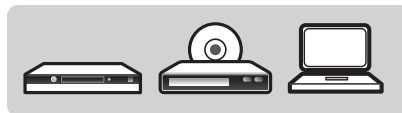
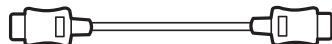




ANTENNA/
CABLE IN



HDMI IN



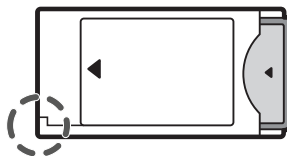
USB IN

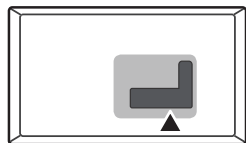


H/P OUT

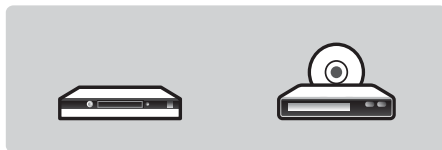
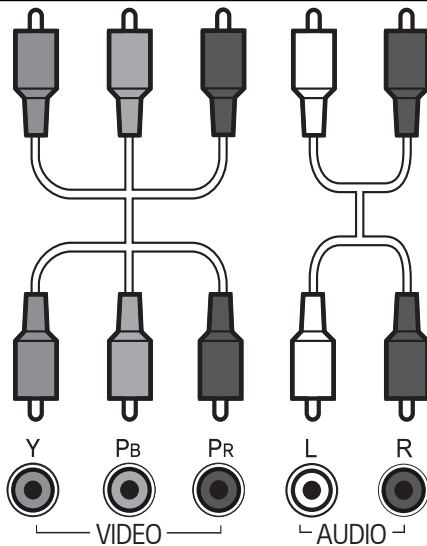
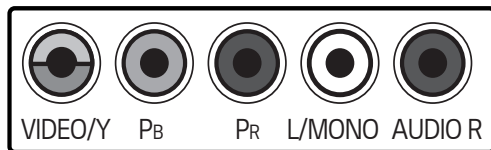


PCMCIA CARD SLOT

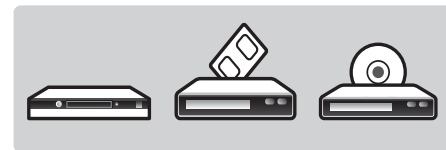
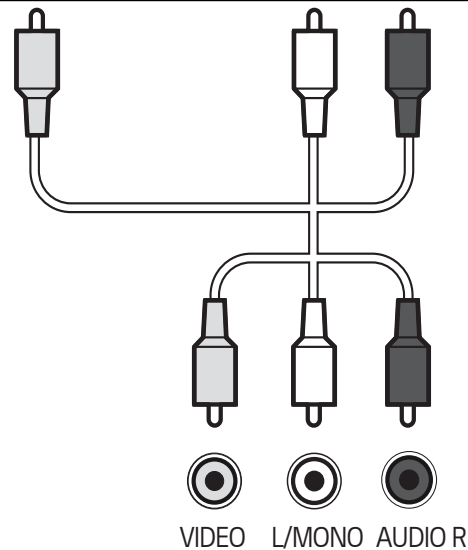
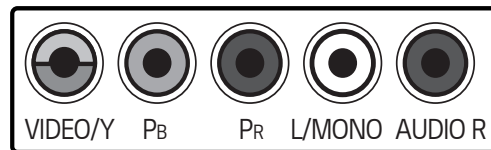


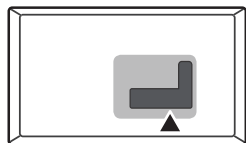


COMPONENT IN

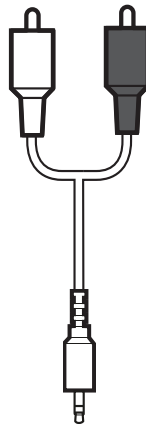
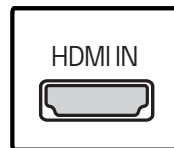
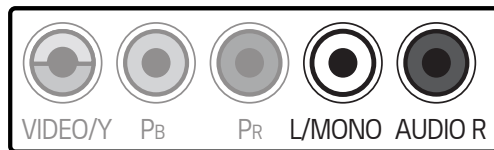


AV IN

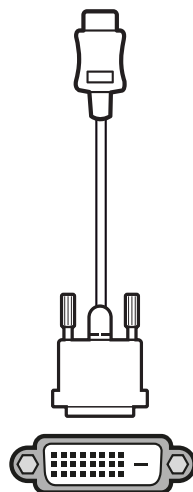




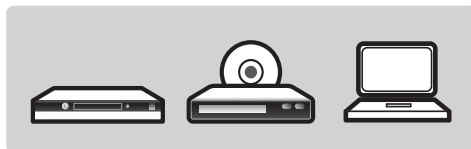
HDMI-DVI IN

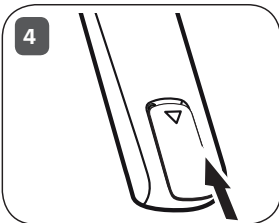
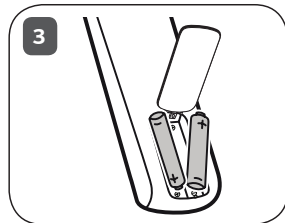
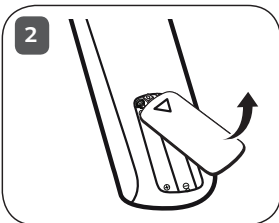
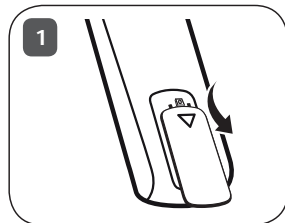
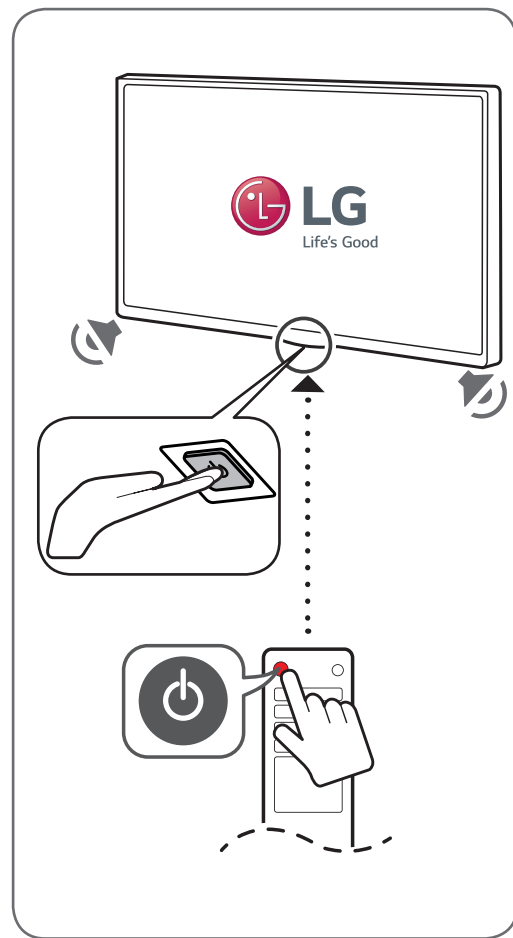
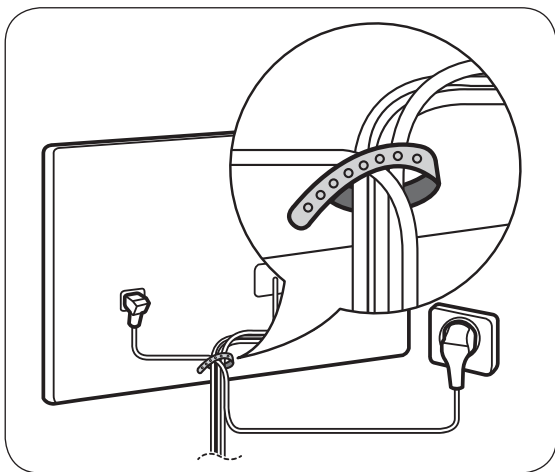


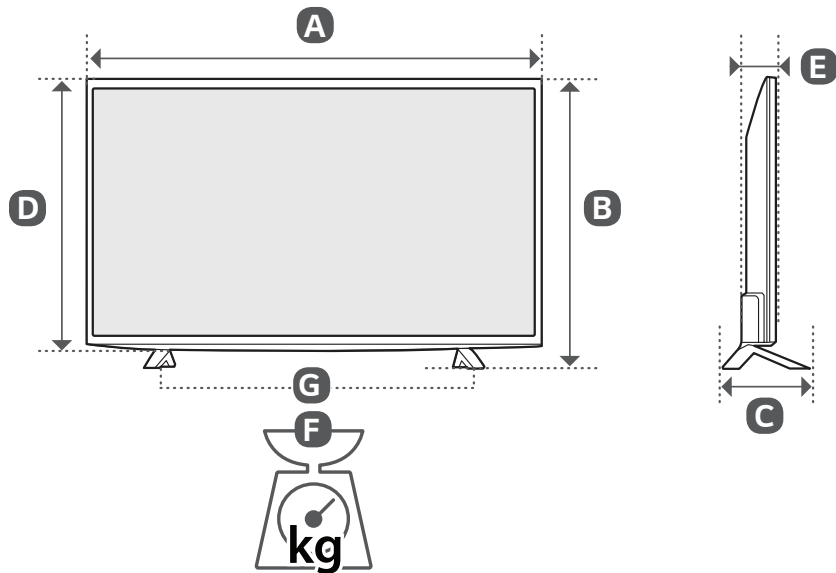
AUDIO OUT



DVI OUT







	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (kg)	F - G (kg)
49LV300C-TA	1108	696	208.7	657	81.5	10.9	10.6
Power requirement / متطلبات الطاقة					AC 100-240 V ~ 50 / 60 Hz تيار متردد 240-100 فولت ~ 60 / 50 هرتز		

IR CODES

- This feature is not available for all models.

Code (Hexa)	Function	Note
08	 (POWER)	Remote control Button (Power On/Off)
F0	TV/RAD 	Remote control Button
39	SUBTITLE	Remote control Button
91	AD	Remote control Button
79	 RATIO / RATIO	Remote control Button
0B	 (INPUT) /  INPUT	Remote control Button
10-19	Number Key 0-9	Remote control Button
53	LIST	Remote control Button
1A	Q.VIEW	Remote control Button
02	 +	Remote control Button
03	 -	Remote control Button
1E	FAV	Remote control Button
AB	GUIDE	Remote control Button
09	 (MUTE) / MUTE 	Remote control Button
00	P  / PAGE  / PAGE 	Remote control Button
01	P  / PAGE  / PAGE 	Remote control Button
20	 TEXT	Remote control Button
21	T.OPT	Remote control Button
43	 (SETTINGS) / SETTINGS	Remote control Button
45	Q.MENU	Remote control Button
AA	 INFO / INFO 	Remote control Button
5B	EXIT	Remote control Button
28	BACK /  (BACK)	Remote control Button
44	 OK / OK 	Remote control Button
40	 / 	Remote control Button
41	 / 	Remote control Button
07	 / 	Remote control Button
06	 / 	Remote control Button

Code (Hexa)	Function	Note
72		Remote control Button
71		Remote control Button
63		Remote control Button
61		Remote control Button
B1		Remote control Button
B0		Remote control Button
BA		Remote control Button
8E		Remote control Button
8F		Remote control Button
7C	 (HOME) / SMART	Remote control Button
BD	 REC / 	Remote control Button
95	 ENERGY SAVING	Remote control Button
30	 AV MODE	Remote control Button
0C	PORTAL	Remote control Button
7E	 SIMPLINK	Remote control Button
E8	ALARM	Remote control Button

EXTERNAL CONTROL DEVICE SETUP

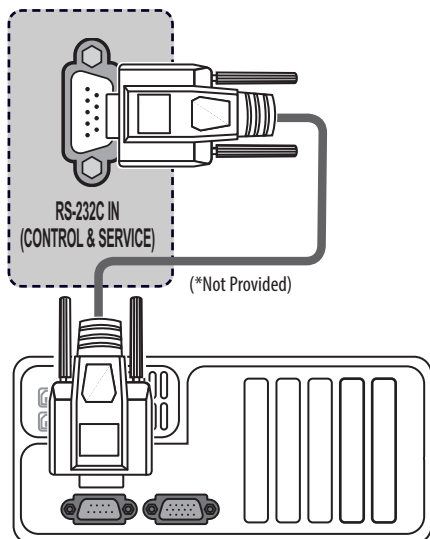
RS-232C Setup

- Image shown may differ from your TV.

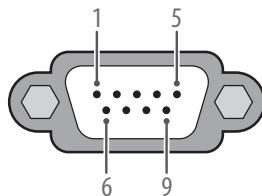
Connect the RS-232C (serial port) input jack to an external control device (such as a computer or an A/V control system) to control the product's functions externally.

Connect the serial port of the control device to the RS-232C jack on the product back panel.

- RS-232C connection cables are not supplied with the product.



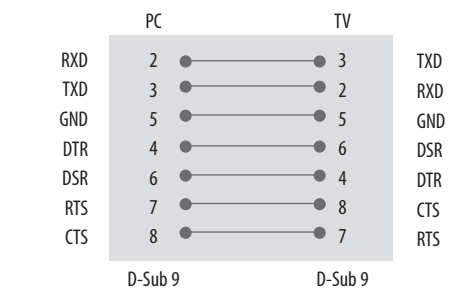
Type of Connector : D-Sub 9-Pin Male



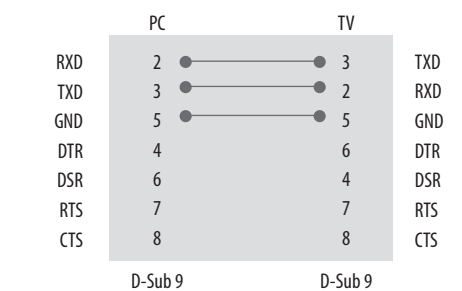
No.	Pin name
1	3.5 V
2	RXD (Receive data)
3	TXD (Transmit data)
4	IR OUT from TV
5	GND
6	No Connection
7	No Connection (5 V available in some models)
8	No Connection
9	No Connection (12 V available in some models)

RS-232C Configurations

7-Wire Configurations (Standard RS-232C cable)



3-Wire Configurations (Not standard)



Communication Parameters

- Baud rate: 9600 bps (UART)
- Data length: 8 bits
- Parity : None
- Stop bit: 1 bit
- Communication code: ASCII code
- Use a crossed (reverse) cable.

Command Reference List

(Depending on model)

	COMMAND1	COMMAND2	DATA (Hexadecimal)
01. Power	k	a	00 to 01
02. Aspect Ratio	k	c	(See p. 4)
03. Screen Mute	k	d	(See p. 5)
04. Volume Mute	k	e	00 to 01
05. Volume Control	k	f	00 to 64
06. Contrast	k	g	00 to 64
07. Brightness	k	h	00 to 64
08. Colour	k	i	00 to 64
09. Tint	k	j	00 to 64
10. Sharpness	k	k	00 to 32
11. OSD Select	k	l	00 to 01
12. Remote Control Lock Mode	k	m	00 to 01
13. Balance	k	t	00 to 64
14. Colour Temperature	x	u	00 to 64
15. Energy Saving	j	q	(See p. 7)
16. Auto Configuration	j	u	01
17. Equalize	j	v	(See p. 7)
18. Tune Command	m	a	(See p. 7)
19. Programme Add/Skip	m	b	00 to 01
20. Key	m	c	(See p. 8)
21. Control Back Light	m	g	00 to 64
22. Input select (Main Picture Input)	x	b	(See p. 8)

- During USB operations such as DivX or EMF, all commands except Power(ka) and Key(mc) are not executed and treated as NG.

Transmission / Receiving Protocol

(Depending on Model)

Transmission

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

[Command 1] : First command to control the TV. (j, k, m or x)

[Command 2] : Second command to control the TV.

[Set ID] : You can adjust the set ID to choose desired monitor ID number in option menu. Adjustment range is 1 to 99. When selecting Set ID '0', every connected set is controlled. Set ID is indicated as decimal (1 to 99) on menu and as Hexa decimal (0 x 0 to 0 x 63) on transmission/receiving protocol.

[Data] : To transmit command data. Transmit 'FF' data to read status of command.

[Cr] : Carriage Return
ASCII code '0 x 0D'

[] : ASCII code 'space (0 x 20)'

OK Acknowledgement

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

* The set 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][Data][x]

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

Data 00 : Illegal Code

01. Power (Command: k a)

► To control Power On/Off of the set.

Transmission

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

Data 00 : Power Off

01 : Power On

Ack

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

► To Show TV is Power On/Off.

Transmission

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

Ack

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

* Similarly, if other functions transmit '0 x FF' data based on this format, Acknowledgement data feed back presents status about each function.

* OK Ack., Error Ack. and other message may display on the screen when TV is power On.

02. Aspect Ratio (Command: k c) (Depending on model)
(Main Picture Size)

► To adjust the screen format. (Main picture format) You can also adjust the screen format using the Aspect Ratio in the Q.MENU. or PICTURE menu.

Transmission

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

Data 01 : Normal screen (4:3)
(Just Scan Off)

06 : Original (Just Scan Off)
09 : Just Scan

02 : Wide screen (16:9)
(Just Scan Off)

* Please make sure that the model doesn't support both Vertical Zoom and All-Direction Zoom mode.

Ack

[c][][Set ID][][OK/NG][Data][x]

* Using the PC input, you select either 16:9 or 4:3 screen aspect ratio.

* In DTV/HDMI (1080i 50 Hz / 60 Hz, 720p 50Hz / 60 Hz, 1080p 24 Hz / 30 Hz / 50 Hz / 60 Hz), Component(720p, 1080i, 1080p 50 Hz / 60 Hz) mode, Just Scan is available.

* Full Wide is supported only for Digital, Analogue, AV.

03. Screen Mute (Command: k d)

- To select screen mute on/off.

Transmission

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

Data 00 : Screen mute off (Picture on)
Video mute off
01 : Screen mute on (Picture off)
10 : Video mute on

Ack

[d][][Set ID][][OK/NG][Data][x]

- * In case of video mute on only, TV will display On Screen Display(OSD). But, in case of Screen mute on, TV will not display OSD.

04. Volume Mute (Command: k 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 00 : Volume mute on (Volume off)
01 : Volume mute off (Volume on)

Ack

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

05. Volume Control (Command: k 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 : 00 to Max : 64

- * Refer to Real data mapping.

Ack

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

06. Contrast (Command: k g)

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

Transmission

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

Data Min : 00 to Max : 64

- * Refer to Real data mapping.

Ack

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

07. Brightness (Command: k h)

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

Transmission

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

Data Min : 00 to Max : 64

- * Refer to Real data mapping.

Ack

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

08. Colour (Command: k i)

- To adjust the screen Colour.
You can also adjust colour in the PICTURE menu.

Transmission

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

Data Min : 00 to Max : 64

- * Refer to Real data mapping.

Ack

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

09. Tint (Command: k j)

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

Transmission

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

Data Red : 00 to Green : 64

- * Refer to Real data mapping.

Ack

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

10. Sharpness (Command: k k)

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

Transmission

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

Data Min : 00 to Max : 32

- * Refer to Real data mapping.

Ack

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

11. OSD Select (Command: k l)

- To select OSD (On Screen Display) on/off when controlling remotely.

Transmission

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

Data 00 : OSD off

01 : OSD on

Ack

[l][][Set ID][][OK/NG][Data][x]

12. Remote control lock mode (Command: k m)

- To lock the front panel controls on the monitor and remote control.

Transmission

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

Data 00 : Lock off

01 : Lock on

Ack

[m][][Set ID][][OK/NG][Data][x]

- * If you are not using the remote control, use this mode. When main power is on/off, external control lock is released.
- * In the standby mode, if key lock is on, TV will not turn on by power on key of IR & Local Key.

13. Balance (Command: k t)

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

Transmission

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

Data L : 00 to R : 64

- * Refer to Real data mapping.

Ack

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

14. Colour Temperature (Command: x u)

- To adjust colour temperature. You can also adjust Colour Temperature in the PICTURE menu.

Transmission

[x][u][][Set ID][][Data][Cr]

Data Warm: 00 to Cool: 64

- * Refer to Real data mapping.

Ack

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

15. Energy Saving (Command: j q)

- To reduce the power consumption of the TV. You can also adjust Energy Saving in PICTURE menu.

Transmission

[j][q][][Set ID][][Data][Cr]

Power Saving Function				Level				Description
7	6	5	4	3	2	1	0	
0	0	0	0	Low Power	0	0	0	Off
0	0	0	0	Low Power	0	0	0	Minimum
0	0	0	0	Low Power	0	0	1	Medium
0	0	0	0	Low Power	0	0	1	Maximum
0	0	0	0	Low Power	0	1	0	Screen Off
0	0	0	0	Low Power	0	1	0	Auto

- 'Auto' is available in TV that supports 'Intelligent Sensor'.

Ack

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

16. Auto Configuration (Command: j u) (Only RGB support model)

- To adjust picture position and minimize image shaking automatically. It works only in RGB (PC) mode.

Transmission

[j][u][][Set ID][][Data][Cr]

Data 01 : To set

Ack

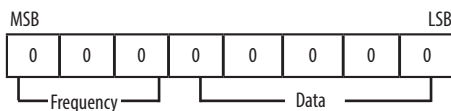
[u][][Set ID][][OK/NG][Data][x]

17. Equalize (Command : j v)

- To adjust equalize.

Transmission

[j][v][][Set ID][][Data][Cr]



7	6	5	Frequency	4	3	2	1	0	Step
0	0	0	1st Band	0	0	0	0	0	0(decimal)
0	0	1	2nd Band	0	0	0	0	1	1(decimal)
0	1	0	3rd Band	...	...	...	...	...	...
0	1	1	4th Band	1	0	0	1	1	19(decimal)
1	0	0	5th Band	1	0	1	0	0	20(decimal)

Ack

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

18. Tune Command (Command: m a)

- Select channel to following physical number.

Transmission

[m][a][][Set ID][][Data 00][][Data 01][][Data 02][Cr]

Data 00 : High channel data

Data 01 : Low channel data

ex. No. 47 -> 00 2F (2FH)

No. 394 -> 01 8A (18AH),

DTV No. 0 -> Don't care

Data 02 : [Antenna]

0 x 00 : Analogue Main

0 x 10 : DTV Main

0 x 20 : Radio

[Cable]

0 x 80 : Analogue Main

0 x 90 : DTV Main

0 x A0 : Radio

[Satellite]

0 x 40 : DTV Main

0 x 50 : Radio Main

Channel data range
Min : 00 Max : 270F (0 to 9999)

Ack

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

19. Programme Add/Skip (Command: m b)

► To set skip status for the current Programme.

Transmission

[m][b][][Set ID][][Data][Cr]

Data 00 : Skip 01 : Add

Ack

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

20. Key (Command: m c)

► To send IR remote key code.

Transmission

[m][c][][Set ID][][Data][Cr]

Data IR CODES

Ack

[c][][Set ID][][OK/NG][Data][x]

21. Control Back Light (Command: m g)

► To control the backlight.

Transmission

[m][g][][Set ID][][Data][Cr]

Data Min : 00 to Max : 64

Ack

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

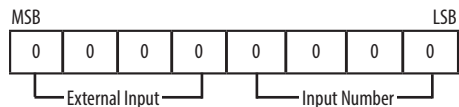
22. Input select (Command: x b)
(Main Picture Input)

► To select input source for main picture.

Transmission

[x][b][][Set ID][][Data][Cr]

Data Structure



External Input				Data
0	0	0	0	DTV
0	0	0	1	Analogue
0	0	1	0	AV
0	1	0	0	Component
0	1	1	0	RGB
0	1	1	1	HDMI
1	0	0	0	
1	0	0	1	
1	0	1	0	

Input Number				Data
0	0	0	0	Input1
0	0	0	1	Input2
0	0	1	0	Input3
0	0	1	1	Input4

Ack

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

*** Real data mapping**

00:	Step 0
:	
A:	Step 10 (Set ID 10)
:	
F:	Step 15 (Set ID 15)
10:	Step 16 (Set ID 16)
:	
64:	Step 100
:	
6E:	Step 110
:	
73:	Step 115
74:	Step 116
:	
CF:	Step 199
:	
FE:	Step 254
FF:	Step 255