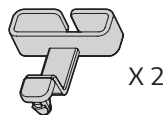
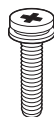
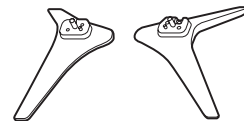


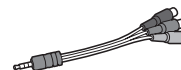
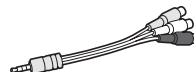
AAA



X 2



X 4
(M4 X L20)

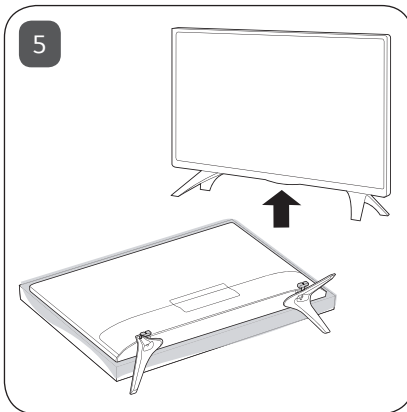
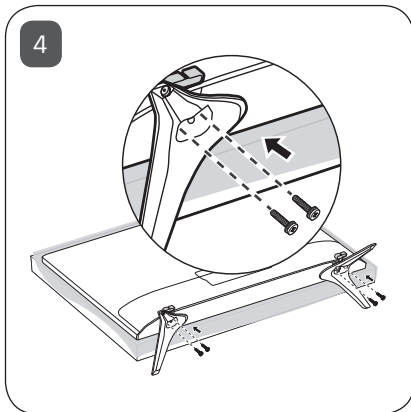
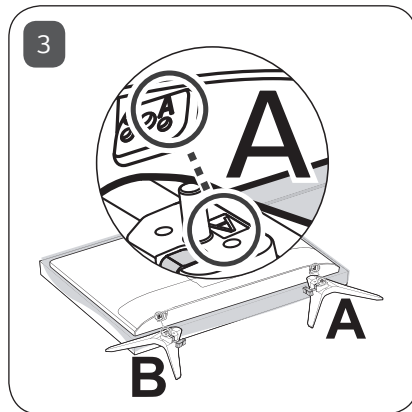
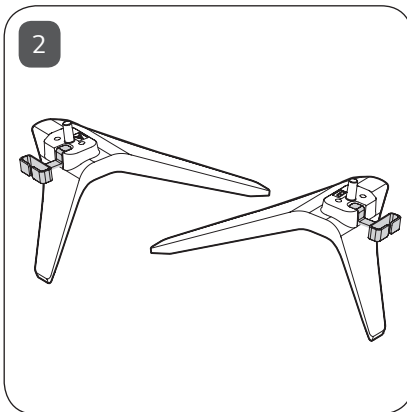
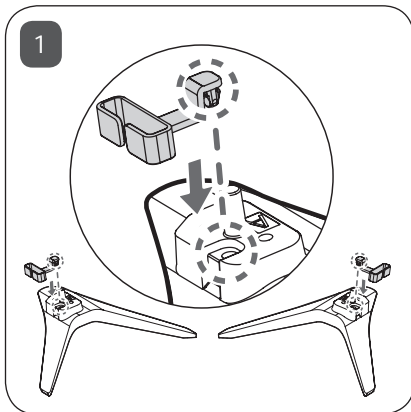


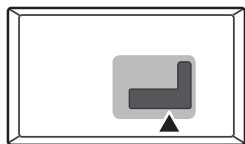


English

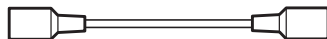
粵語

- Read **Safety and Reference**.
- For the power supply and power consumption, refer to the label attached to the product.
- 閱讀安全及參考資料。
- 關於電源供應及耗電量，參閱於產品上的標籤。





ANTENNA/
CABLE IN



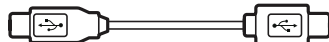
HDMI IN



HDMI IN
/ ARC



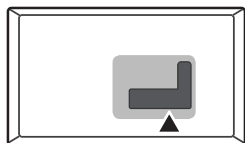
USB IN



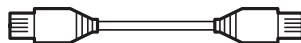
OPTICAL DIGITAL
AUDIO OUT



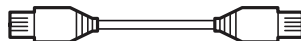
⊕ : Depending on model / 視乎型號而定



AUX LAN



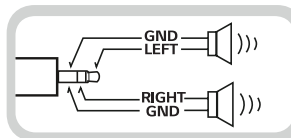
LAN



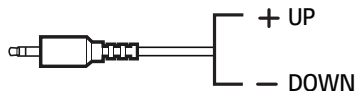
H/P OUT

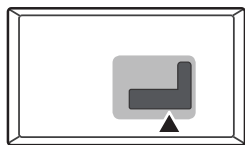


SPEAKER OUT
(STEREO)



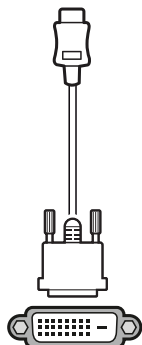
SPEAKER OUT
(VOLUME
CONTROL)





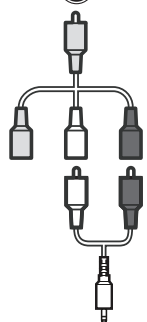
HDMI/DVI IN

HDMI IN



DVI OUT

AV IN



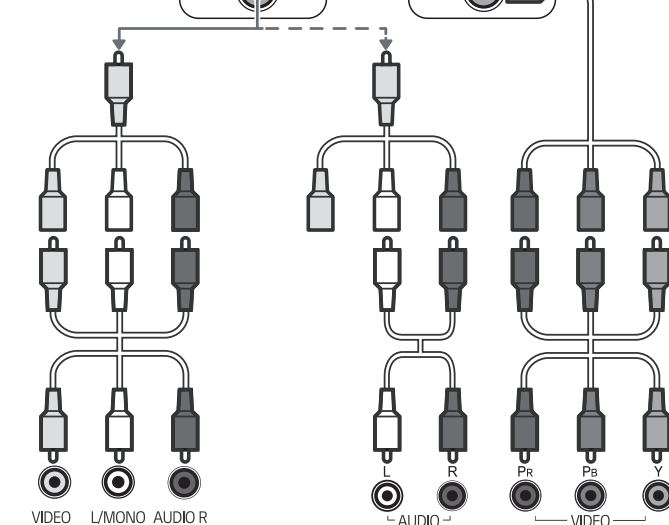
AUDIO OUT



AV IN



COMPONENT IN



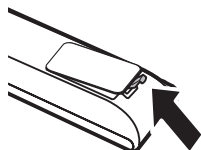
VIDEO L/MONO AUDIO R



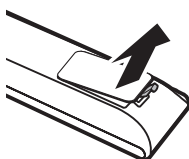
L AUDIO R Pb Pr VIDEO



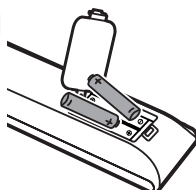
1



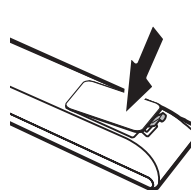
2

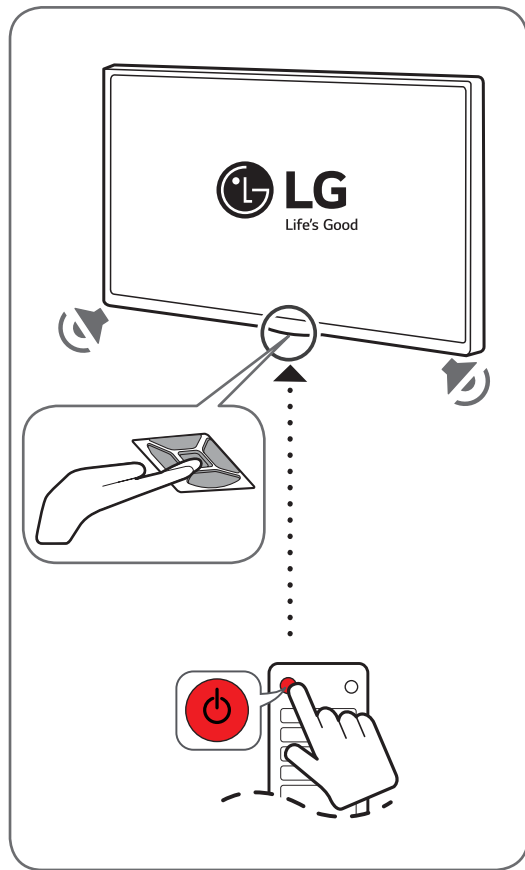
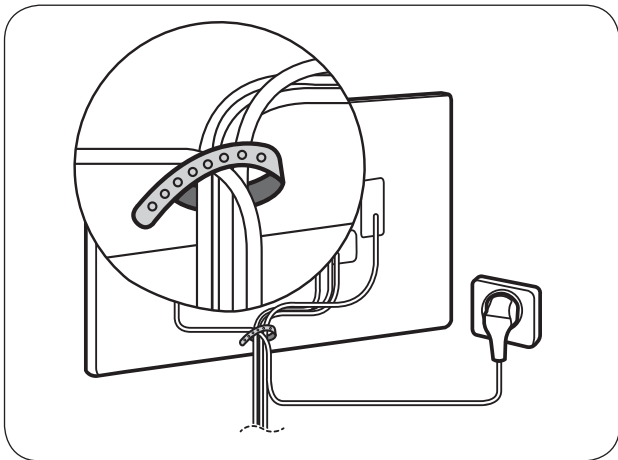
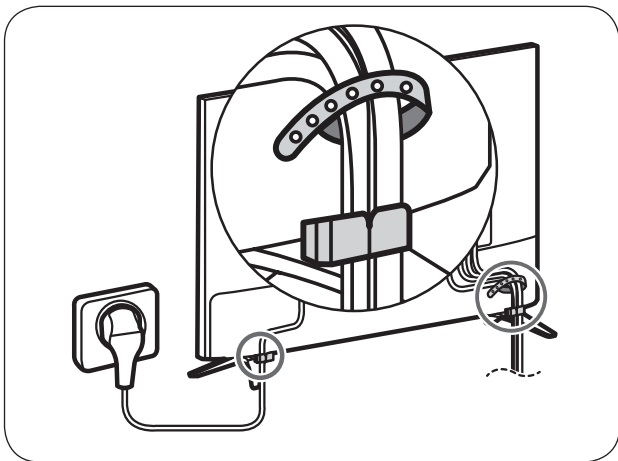


3



4







	寬 (毫米) / W (mm)	含底座 (毫米) / With stand (mm)		不含底座 (毫米) / Without stand (mm)		含底座 (公斤) / With stand (kg)	不含底座 (公斤) / Without stand (kg)
		高 / H	深 / D	高 / H	深 / D		
43UW760H-CB	973	622	199	572	77.2	9.7	9.5
49UW760H-CB	1106	701	216	646	77.2	12.3	12.0
55UW760H-CB	1240	776	216	721	60.9	16.8	16.5
電源要求 / Power requirement					AC 100-240 V~ 50 / 60 Hz		



用戶手冊

安全及參考

LED TV*

* LG LED TV 使用的是帶LED背光的LCD螢幕。

請於操作產品前仔細閱讀本手冊並將其保留以供未來參考之用。



www.lg.com

P/NO : MFL69412526 (1612-REV02)

安全指示

使用本產品前，請仔細閱讀安全注意事項。



警告



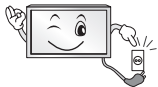
請勿將電視及遙控器放置於下列環境：

- 陽光直接照射之位置
- 高濕度範圍，例如浴室
- 發熱源附近例如煮食爐及其他發熱裝置
- 輕易暴露於蒸氣或油煙如廚房工作範圍或放濕器附近
- 暴露於雨水或當風位置
- 靠近儲水容器例如花樽

否則，可能導致火災、觸電、產品不能正常運作或變形。



請勿將產品放置在暴露於灰塵的地方。將可能引致火災。



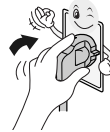
從裝置拔下電源插頭。插頭必須保持易於操作。



請勿以濕手接觸電源插頭。若插頭蘇腳沾濕或被灰塵覆蓋，請徹底弄乾電源插頭或擦拭灰塵。過於潮濕有可能導致觸電。



確保將電源線連接接地電流。（未有設置安全地線的裝置除外。）有可能導致觸電或受傷。



徹底固定電源線。
如電源線未徹底固定，則可能引起火災。



確保電源線並無與發熱源（如暖爐）接觸。這可能會導致火災或觸電危險。



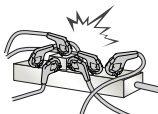
切勿將重物或產品本身置於電源線上。
否則，可能導致火災或觸電。



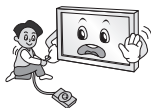
將天線屈疊於建築物之間以防止雨水流入產品。
此有可能引致水分損壞產品內部並導致觸電。



於將電視安裝於牆上時，確保不要以電視背部之電源及信號線懸掛安裝。此有可能導致火災、觸電。



請勿於單個多重電力輸出插座使用過多電力裝置。否則將有可能因過熱引發火災。



請勿讓產品跌落或使其於與外部裝置連接時翻倒。否則將可能導致受傷或產品損壞。



請將包裝防潮材料或乙烯基包裝物料放置在兒童無法觸及的地方。防潮材料為有害物質，不可吞食。若不小心吞食，請用力使其吐出，並前往鄰近醫院就醫。乙烯基包裝物亦可引起窒息。請放置於兒童無法觸及的地方。



切勿讓孩童攀爬於電視上。否則將導致電視翻倒並引致嚴重受傷。



於廢棄電池時注意以防止孩童吞食。如小孩不慎吞食電池請尋求醫生協助即時就醫。



切勿於輸入端口連接至入牆插座時以任何金屬物體/導電體（例如金屬筷子/刀具/螺絲批）插入電源線插頭及入牆輸入插座間。另外，插入牆壁的輸入端口後，請勿立即接觸電源線。將可能導致觸電。（視乎型號而定）



請勿於產品附近放置或儲存易燃物品。可導致因不慎處理易燃物品而引致着火/爆炸或火災。



請勿將金屬物體（例如錢幣、髮夾、筷子或金屬絲等）或易燃物（如紙張及火柴）投入產品內部。請特別格注意兒童安全。可能導致觸電、發生火災或受傷。若有異物掉入產品內，請拔除電源線，並聯絡服務中心。



請勿於本產品上噴水，或用易燃物質（苯或稀釋劑）拭擦。可導致火災或觸電。



請勿撞擊本產品，勿使任何物件掉入本產品中，不可用物件拋擲屏幕。可能引致受傷或產品損壞。



雷電或颱風時，嚴禁觸碰本產品或天線。可能導致觸電。



於氣體洩漏時，嚴禁觸碰入牆電源插座，並打開窗戶通風。可能因火花引起火災或燒毀。



請勿隨意自行拆開、維修或修改產品。可導致火災或觸電。

聯絡服務中心進行檢查、校準或維修。



如發生任何下列情況，即時切斷產品電源並聯絡當地服務中心。

- 產品曾受震盪而產生撞擊
 - 產品曾受損毀
 - 產品曾被異物進入
 - 產品曾產生煙霧或不尋常氣味
- 可能導致火災或觸電。



若長時間不使用產品，請拔除產品電源線。灰塵覆蓋可導致火災，或絕緣層受損可導致漏電、觸電或火災。



不可將產品暴露於滴水或水環境下；不可於產品上放置任何裝有液體的物件，例如花瓶。

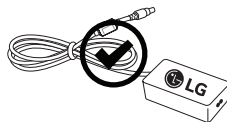
如牆壁會暴露於油或油霧，請勿在上面安裝此產品。此舉可能會損壞產品，並導致產品掉落。

如水或其他物質進入了產品（如 AC 充電器、電源線、電視機），請中斷連接電源線並馬上聯絡服務中心。

否則，可能導致火災或觸電。



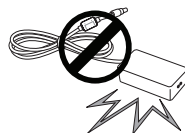
僅可使用經 LG Electronics 認可的 AC 適配器和電源線。否則，可能導致火災、觸電、產品無法正常運作或變形。



切勿拆開 AC 適配器或電源線。這樣可能導致火災或觸電。



請小心處理適配器避免掉落或被撞擊遭到撞擊可能會對產品造成損害。





警告



將產品安裝於不存在無線電波的地方。



請於電源線及天線間預留足夠空間以防止當天線掉落時觸及電源線。此將可能導致觸電。



請勿將產品安裝於不穩固的層架或斜面上。亦應避免將產品放置於震動或不能安全承托產品的位置。否則，可能因產品跌落或翻倒而導致受傷或產品損壞。



如將電視安裝於底座上，請採取措施以預防產品翻倒。否則，將可能導致電視翻倒並引致受傷。

如希望將產品安裝於牆上，請於產品背面安裝 VESA 標準掛牆介面（選購配件）。於安裝套件以使用掛牆架（選購配件）時請注意固定以防墜落。

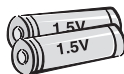
只使用製造商指定的附件/配件。



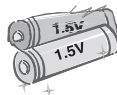
於安裝天線時請諮詢認可技師。此可能引起火災或觸電危險。



建議於觀看電視時保持最少為螢幕對角線長度 2 至 7 倍之距離。如長時間觀看電視有可能導致視力模糊。



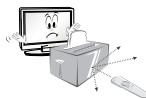
規定使用特定類型電池。此可能導致遙控器損壞。



請勿將新舊電池混合使用。此可導致電池過熱及洩漏。

電池不應暴露於高溫的地方。例如，避免產品暴露於直射陽光下，開放式火爐及電暖爐邊。

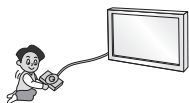
請勿將非充電式電池放置於充電裝置中。



確保遙控器與感應器之間並無物件。



遙控器信號有可能受陽光或其他強光干擾。如此情況發生，將室內環境調暗。



當連接外部裝置如電視遊戲機時，確保連接線有足夠長度。否則，可能因產品跌落或翻倒而導致受傷或產品損壞。



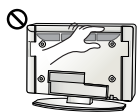
請勿以插入或拔除電源插頭方式開啓/關閉產品。
(請勿使用電源插頭作為開關用途。) 此可導致機件損壞或觸電可能。



請遵從下列安裝指示以防止產品過熱。

- 產品與牆壁的距離應超於 10 厘米。
- 請勿將產品安裝於不通風位置 (例如：書櫃或櫥櫃內)。
- 請勿將產品安裝於地毯或軟墊上。
- 確保桌布或窗簾並無妨礙通風口。

否則可能引致火災。



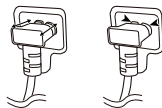
請注意於長時間觀看電視期間避免接觸通風口因其可能散發熱力。此並不影響產品的運作或性能。請定期檢查設備纜線，如外表受損或變形，請立即拔除電源，停止使用設備，並請授權服務商更換受損部份。



防止灰塵積聚於電源插頭或插座上。將可能引致火災。



保護電源線以防止受到物理性如扭曲、折彎、緊夾、受到門的擠壓或踩踏或機件受損。請加倍留意插頭、入牆插座以及裝置的電線出口。



確保電源線穩固地連接到電視的電源插頭。



請勿以手或指甲、鉛筆或鋼筆等尖銳物件用力按壓屏幕，或使其刮花。



避免長時間接觸或以手指、握緊屏幕。如不遵從將可導致螢幕短暫變形。



請於清洗產品及其組件時先拔除電源並以軟布拭擦。使用力度過大將可能導致磨損或褪色。請勿以水噴灑或以濕布拭刷。嚴禁使用會對產品及其面板構成損壞的化學品如玻璃清潔劑、汽車或工業增亮劑、磨光劑或蠟劑、苯、酒精等。否則，將可能導致火災、觸電或產品損壞 (變形、腐蝕或破裂)。

當裝置連接到交流電入牆插座，即使以開關關閉裝置，也不會與交流電源斷開。



於拔除電源插頭時，抓緊插頭以將其拔除。
如電源線內的金屬線脫離將可能引致火災。



於移動產品時，確保先將電源關閉。然後，拔除電源線、天線纜線及所有連接纜線。
電視組合或電源線有可能受損並因此引發火災或觸電可能。



當移動產品或移除產品包裝時因產品重量需二人同時進行。否則可能導致受傷。



向合資格服務人員諮詢所有有關維修事宜。當產品受到任何形式的損壞時，例如電源線或插頭損壞，液體濺入或物件落入裝置中，裝置暴露於雨水或潮濕環境，裝置不能正常工作，或裝置掉落摔壞，均需進行維修服務。



如接觸產品時感覺冰冷，於開啓時可能出現「跳線」情況。此為正常情況，產品並無異常。



本螢幕面板是擁有數百萬像素的先進產品。微細黑點及/或高亮彩色光點（紅色、藍或綠色）可能以每百萬分一單位出現於顯示面板上。此並不代表非正常運作及並不影響產品之性能及其可靠性。
此現象亦會於第三方產品出現並不接受更換或退款。



於不同位置（左/右/上/下方）觀看時可能感受到面板不同亮度及顏色顯示。
此現象的出現乃顯示面板的特性。此與產品性能無關，並其運作正常。

長時間顯示靜態圖像可能會引致殘像。請避免長時間在電視螢幕顯示固定畫面。

產生聲音

「咔嚓」斷裂雜音：於觀看或關閉電視時出現的斷裂雜音乃因溫度與濕度而導致塑料的熱收縮所產生。此等雜音於遇熱膨脹之產品較為常見。電路嗡嗡聲/面板訊噪：低水平雜音乃由高速切換電路以產生大量電流令產品運作時發出。其因應產品會有所不同。

雜音之產生並不影響產品的性能及可靠性。

請勿在電視旁使用高壓電器（例如，電蚊拍）。這可能引起產品故障。

警告!

請勿將電視機置於搖晃不穩的位置，因為電視機可能會掉落並導致嚴重個人傷害及傷亡。只要採取下列預防工作便可避免傷害事故發生（特別是兒童傷害）：

- 使用製造商建議的儲存櫃及支架置放電視。
- 只選用可安全支撐電視機的家具。
- 確保電視機不會懸在支撐家具的邊沿。
- 切勿將電視機置放在家具高處（如櫥櫃或書架），除非以適當的支撐物固定家具和電視。
- 電視機和支撐家具之間不要夾置布料或其他材料。
- 告訴兒童爬上家具觸碰電視機或其控制器的危險性。

如要收藏並將電視機置放於其他地方，建議一律採用上述建議。

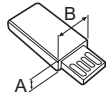
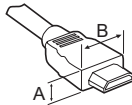
符號

⎓	AC 代表交流電。
==	DC 代表直流電。
□	代表第二級設備。
⏻	代表待機。
	代表「開啓」（電源）。
⚡	代表危險電壓。

準備中

注意

- 如電視從廠商運出後首次開啓，電視初始化可能需要數分鐘。
- 插圖可能與實際情況有差異。
- 您電視的 OSD（螢幕顯示）可能與此手冊中顯示的內容略有不同。
- 可用的功能表及選項可能與您使用的輸入來源或產品型號有所不同。
- 新功能或將添加至此電視。
- 產品隨附的部件視乎型號而可能有所不同。
- 本手冊的產品規格或內容或會因產品功能升級而隨時變更，恕不另行通知。
- 爲了獲得最好的連接效果，HDMI 纜線和 USB 裝置接頭厚度應少於 10 毫米，寬度應少於 18 毫米。如果 USB 纜線或 USB 記憶卡與您的電視的 USB 端口尺寸不符，請使用支援 USB 2.0 的延長線。



*A ≤ 10 mm

*B ≤ 18 mm

- 使用附有 HDMI 標誌的獲認證的纜線。
- 如您並非使用獲認證的纜線，可能無法於螢幕顯示畫面，或發生連接錯誤。
- 建議的 HDMI 纜線類型 (3m 或以下)
 - 高速 HDMI®/™ 纜線
 - 設有 Ethernet 的高速 HDMI®/™ 纜線

警告

- 請勿使用任何未經批准部件，以確保安全和產品壽命。
- 因使用未經批准物品而造成的任何損壞或傷害並不包括在保修範圍內。
- 某些型號在螢幕上附有一層保護薄膜，它是螢幕的一部分，不要將其移除。

另外購買

另購項目可因改善品質而隨時變更或修改，恕不另行通知。

如要購買這些項目，請聯絡經銷商。這些裝置僅配合某些型號使用。此等裝置的名稱和設計會因功能更新，出廠情況或政策而有所改變。

(視乎型號而定)

AN-MR650

神奇遙控器

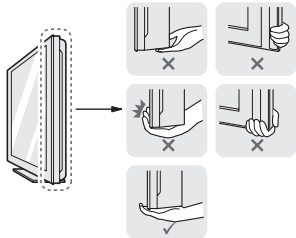
抬起與移動電視

不論任何類型及大小，抬起或移動電視時，請閱讀下文，確保安全搬運，以防電視刮花或受損。

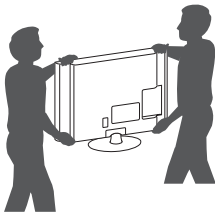
- 建議以包裝箱或連同電視原有的包裝材料移動電視。
- 移動或抬起電視前，中斷電源線和所有纜線的連接。
- 當握住電視時螢幕應面向外側以避免損壞。



- 握穩電視的頂部和底部。確保不要握住透明部分、喇叭或喇叭排孔區域。



- 大型電視需最少二人共同運送。
- 使用人手搬運電視時，請根據以下圖示握住電視。



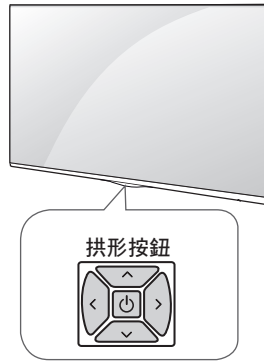
- 搬運電視時，請勿搖動或令電視受過度震動。
- 搬運電視時，保持電視直立，切勿轉向電視的側面，或向左方或右方傾斜電視。
- 請勿過份用力，否則可能導致外框底座屈曲 / 折彎，會損壞螢幕。
- 處理電視時，請勿損壞突起的操縱桿按鈕。

警告

- 避免時常點按畫面，否則會導致畫面受損。
- 請勿握住纜線整理器移動電視，因其可能斷裂而導致受傷及電視損壞。(視乎型號而定)

使用按鈕

只需輕按或移動按鈕，就能簡易操作電視功能。



基本功能

	開機（按一下） 關機（按住） ¹
	調校音量
	調校節目

¹ 所有操作中的應用程式將會關閉，令正在進行中的所有錄影將會停止。

調整功能表

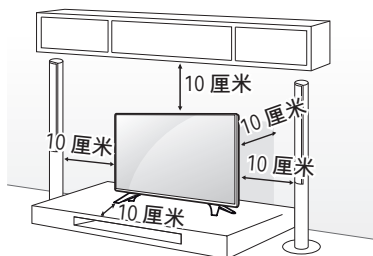
當電視開啓時，按一下 按鈕。您可以按住或移動按鈕以調整選單項。

	關閉電源。
	清除畫面所有顯示，返回觀看電視。
	改更輸入來源。
	進入設定目錄。

安裝到桌面

- 1 將電視機抬起並擺放在桌子上，保存機身豎直方向。

- 與牆壁保留最少 10 厘米空間以保持空氣流通。



- 2 將電源線連接至牆上電源插座。



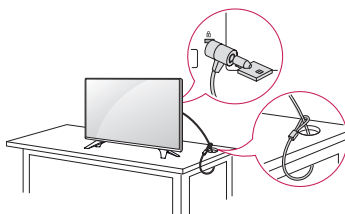
警告

- 請勿將電視置於發熱源附近，因此可能引發火災或其他損害。

使用Kensington保安系統

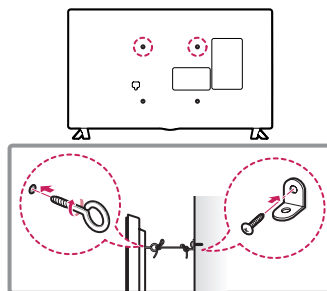
(此功能不是所有型號都適用)

Kensington保安系統連接器位於電視後面。有關詳細的安裝和使用信息，請參閱Kensington保安系統使用手冊或瀏覽 <http://www.kensington.com>。把Kensington保安系統連接在電視和桌子之間。



安全地將電視安裝到牆壁上

(此功能不是所有型號都適用)



- 1 在電視背面插入並擰緊環首螺絲或固定片和螺絲。

- 如果在環首螺絲位置中插入了螺絲，請先將這些螺絲取出。

- 2 用螺絲將固定片安裝到牆上。將掛牆架的位置對準電視背面的環形螺絲。

- 3 以堅固繩索將環形螺絲及掛牆架連接。確保繩索與平面保持水平。



警告

- 確保孩童不要攀附於電視上。



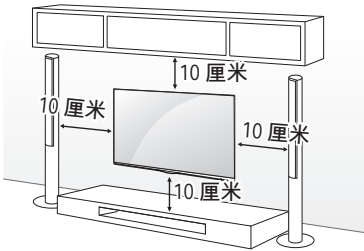
注意

- 使用堅固平臺或矮櫃以穩固承托電視。
- 掛牆架、螺絲及繩索需另行購買。您可從本地經銷商取得其他配件。

安裝在牆上

將選購的掛牆架小心安裝在電視後方，再將掛牆架安裝在與地面垂直的堅固牆壁上。將電視安裝在其他建築物料時，請聯絡合格的人員。LG 建議應由合資格的專業安裝人員進行掛牆安裝。建議使用 LG 掛牆架。LG 掛牆架調整容易，連接纜線亦非常方便。如不使用 LG 掛牆架，請使用能將裝置穩固於牆上並有足夠空間連接外部裝置的掛牆架。

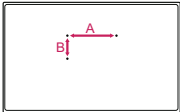
如使用無法調整的支架，請將支架掛牆。先將纜線連接至電視，再將電視放到支架上。



確保使用符合 VESA 標準的螺絲及掛牆底座托架。掛牆底座套件的標準尺寸如下表所述。

另外購買（掛牆架）

型號	43UW76**
VESA (A x B)	200 x 200
標準螺絲	M6
螺絲數目	4
掛牆架	LSW240B MSW240
型號	49/55UW76**
VESA (A x B)	300 x 300
標準螺絲	M6
螺絲數目	4
掛牆架	LSW350B MSW240

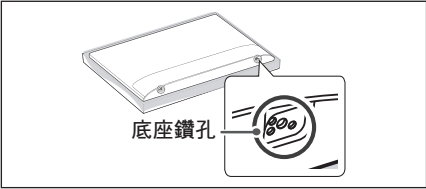


警告

- 將電視安裝於掛牆架前需反方向轉動底座以將之移除。

注意

- 如要使用支架掛牆擺放，我們建議您使用膠紙貼在鑽孔上，避免灰塵和昆蟲進入孔內。（視乎型號而定）



連線（通知）

將不同的外置裝置連接至電視，並切換輸入模式以選取外置裝置。有關外置裝置連接的詳情，請參閱個別裝置隨附的手冊。

可用的外置裝置為：HD 接收器、DVD 播放器、VCR、音效系統、USB 儲存裝置、電腦、遊戲裝置及其他外置裝置。

！ 注意

- 外置裝置連接視乎型號而有所不同。
- 不論電視連接埠順序為何，連接外部裝置至電視。
- 如果您在 DVD 錄影機或 VCR 錄製電視節目，請確保電視訊號輸入纜線已連接電視及 DVD 錄影機或 VCR。有關錄影的詳情，請參閱連接裝置隨附的手冊。
- 有關操作說明，請參閱外部裝置手冊。
- 如果您將遊戲裝置連接至電視，使用遊戲裝置隨附的纜線。
- 於電腦模式，可能產生由解像度、垂直格式、對比度或亮度引致的雜音。如出現雜訊，將電腦輸出變更為其他解像度或將刷新率變更為其他頻率、或於 PICTURE 功能表中調整亮度和對比度，直至影像變為清晰。
- 於電腦模式，部份解像度設定可能未能正常運作，視乎顯示卡而定。
- 如您在電腦上播放 Ultra HD 內容，視乎電腦性能，視訊或音訊可能會間歇性中斷。

天線連接

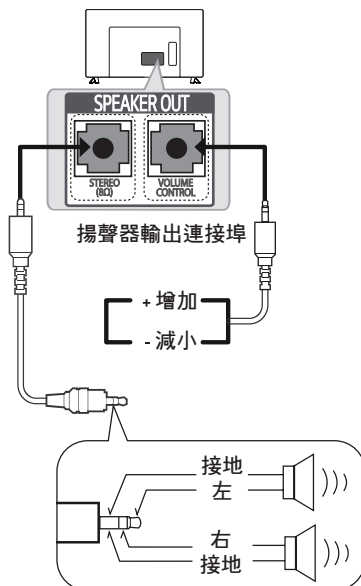
使用 RF 線 (75 Ω) 將電視連接至牆壁天線插座。

- 如使用兩部電視以上，使用訊號分線器。
- 如畫面品質惡劣，正確安裝訊號放大器以改善圖像品質。
- 如有連接天線，但畫面品質惡劣，嘗試以正確方向重新對準天線。
- 天線及轉換器並不提供。
- 支援的數碼電視音效：MPEG、Dolby Digital、Dolby Digital Plus、HE-AAC
- 由於相關標準尚未確認，此電視不能直接接收超高清 (3840 x 2160 像素) 廣播。

其他連接

將電視連接至外部裝置。為達到最佳圖片及音訊質素，請使用 HDMI 纜線將外置裝置及電視連接。不提供部份獨立纜線。

音頻輸出連接



！ 注意

- 只可使用3極式3.5 mm立體聲插頭。
- 連接至外部揚聲器時，請勿連接耳機或耳筒至連接埠。

音量控制

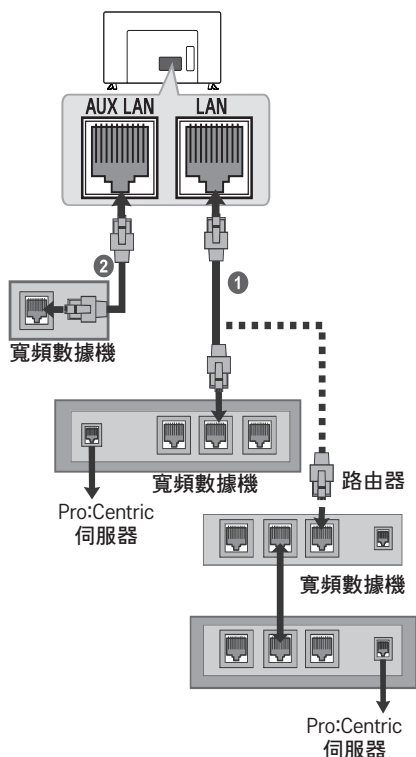
- 連接線規格

	每個增加或減小鍵都上拉3.3V連接到控制晶片。 控制晶片偵測3.3V與「地」之間的電壓水平來調節音量。
--	---

有線網絡連接

(視乎型號而定)

可透過 LAN 連接埠將此電視連接至 Pro:Centric 伺服器。完成連接後，此電視需要設定網絡連接。請將數據機或 Pro:Centric 伺服器的 LAN 線連接埠連接至電視機的 LAN 線連接埠。



- 1 連接寬頻數據機或路由器與電視的網絡連接埠。
- 2 連接電腦的網絡連接埠至電視的AUX網絡連接埠。

警告

- 不要把電話線連接到網絡連接埠
- 因應網絡連接方式不同，請根據你的網絡供應商提供的方法進行連接。

遙控器

(視乎型號而定)

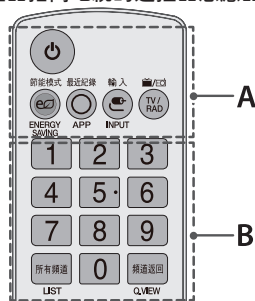
本手冊的描述基於遙控器的按鍵而定。請仔細閱讀本手冊並正確使用電視。

如需安裝電池，打開電池蓋，更換電池 (1.5 V AAA) 時配對電池格內的 ⊕ 及 ⊖ 端標籤，然後關上電池蓋。如要移除電池，以相反步驟執行動作。

警告

- 遙控器將不包含在所有的銷售市場。

確保將遙控器指向電視的遙控器感應器。

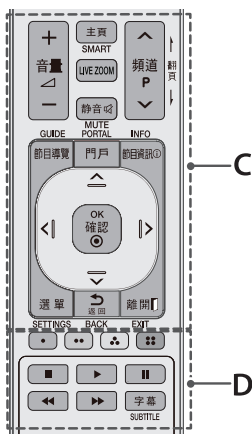


A

⏻ (電源) 開啓或關閉電視。
⚡ (節能模式) ENERGY SAVING 調整畫面亮度以減少能源消耗。
📅 (最近紀錄) APP 顯示歷史記錄。
🔊 (輸入) INPUT 更改輸入來源。
📺 (TV / RAD) 選擇收音機、電視和數碼電視節目。

B

數字鍵 輸入數字
所有頻道 **LIST** 進入已儲存節目列表。
頻道返回 **Q.VIEW** 轉到上次觀看的頻道。



C

+ 音量 / - 調整音量。

主頁 SMART 選擇智能選單。

LIVE ZOOM 放大指定畫面即可進行全螢幕觀看。

靜音 MUTE 打開或關閉聲音。

頻道 P 捲動已儲存的節目。

翻頁 移至上一屏幕或下一屏幕。

節目導覽 GUIDE 顯示節目指南。

選單 SETTINGS 進入主功能表。

門戶 PORTAL 顯示及移除 Pro:Centric 程式。

導航按鍵 (上/下/左/右) 滾動閱覽選單或選項。

OK 確認 選擇選單或選項並確認輸入。

返回 BACK 返回至上一畫面。

節目資訊 INFO 檢視目前節目及畫面的資訊。

離開 EXIT 清除所有畫面顯示並返回電視檢視。

D

訪問某些選單中的特殊功能。

■, ►, II, ◀, ▶ 媒體內容控制按鍵。

字幕 SUBTITLE 在數碼模式調用所需字幕。

使用 HDMI ULTRA HD Deep Color

選單 **SETTINGS** ➡ 一般 ➡ HDMI ULTRA HD Deep Color ➡ HDMI (1/2) ➡ 開/關

- 開: 支援 4K @ 50/60 Hz (4:4:4, 4:2:2, 4:2:0)
- 關: 支援 4K @ 50/60 Hz 8 位元 (4:2:0)

• 如果連接到輸入的設備也支援 ULTRA HD Deep Color, 您的圖像會更清晰。不過, 如果設備不支援, 可能無法正常運作。若是該狀況, 請將設備連接到不同 HDMI 連接埠, 或者將電視的 ULTRA HD Deep Color 設定變更為「關閉」。

- 此功能只適用於支援 ULTRA HD Deep Color 的指定型號。

授權

受支援的授權因型號而有所不同。更多有關授權的詳細資料, 請瀏覽 www.lg.com。



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支援的視訊解碼器

副檔名	副檔名編碼	
.asf .wmv	視訊	VC-1 Advanced Profile (不包括 WMVA), VC-1 Simple and Main Profiles
	音訊	WMA Standard (不包括 WMA v1/ WMA Speech)
.avi	視訊	XViD(3 warp-point GMC 除外), H.264/AVC, Motion Jpeg, MPEG-4
	音訊	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, LPCM, ADPCM, DTS
.mp4 .m4v .mov	視訊	H.264/AVC, MPEG-4, HEVC
	音訊	Dolby Digital, Dolby Digital Plus, AAC, MPEG-1 Layer III (MP3)
.3gp .3g2	視訊	H.264/AVC, MPEG-4
	音訊	AAC, AMR-NB, AMR-WB
.mkv	視訊	MPEG-2, MPEG-4, H.264/AVC, VP8, VP9, HEVC
	音訊	Dolby Digital, Dolby Digital Plus, AAC, PCM, DTS, MPEG-1 Layer I, II, MPEG-1 Layer III (MP3)
.ts .trp .tp .mts	視訊	H.264/AVC, MPEG-2, HEVC
	音訊	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, AAC, PCM
.mpg .mpeg .dat	視訊	MPEG-1, MPEG-2
	音訊	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3)
.vob	視訊	MPEG-1, MPEG-2
	音訊	Dolby Digital, MPEG-1 Layer I, II, DVD-LPCM
① .rm .rmvb	視訊	RV30, RV40
	音訊	Realaudio6(cook), AAC LC, HE-AAC
② .mkv .mp4 .ts	視訊	H.264/AVC, H.265 (HEVC)
	音訊	Dolby Digital, Dolby Digital Plus, AAC

- ① 視乎型號而定
- ② 僅 UHD

支援的音訊格式

檔案格式	項目	信息
.mp3	位元速率	32 Kbps - 320 Kbps
	取樣頻率	16 kHz - 48 kHz
	支援	MPEG1, MPEG2
	頻道	單聲道, 立體聲
.wav	取樣頻率	8 kHz - 48 kHz
	支援	PCM
	頻道	單聲道, 立體聲
.ogg	位元速率	64 Kbps - 320 Kbps
	取樣頻率	8 kHz - 48 kHz
	支援	Vorbis
.wma	頻道	單聲道, 立體聲
	位元速率	128 Kbps - 320 Kbps
	取樣頻率	8 kHz - 48 kHz
	支援	WMA
	頻道	最多 6 頻道

- 所支援的節目數量會因取樣率而不同。

支援的相片格式

檔案格式	格式	解像度	
jpeg, jpg, jpe	JPEG	最低：	64 (W) x 64 (H)
		最大：	15360 (W) x 8640 (H)
		逐步型：	1920 (W) x 1440 (H)
png	PNG	最低：	64 (W) x 64 (H)
		最大：	5760 (W) x 5760 (H)
bmp	BMP	最低：	64 (W) x 64 (H)
		最大：	1920 (W) x 1080 (H)

注意：開放來源程式碼軟件

若要獲取此產品所包含的 GPL、LGPL、MPL 來源程式碼和其他開放來源程式碼認證，請瀏覽 <http://opensource.lge.com>。

除了來源程式碼，所有涉及到的授權條款、免責聲明和版權聲明可供下載。

LG Electronics 亦可以透過收費 CD-ROM 提供開放來源程式碼，費用包括 CD-ROM 成本（例如媒體成本、運費以及處理費），您可透過 opensource@lge.com 索取。此服務由購買產品日期起計算三年內有效。

疑難排解

為改進性能，軟件可能需要更新。客戶有責任確保他們的設備可與任何 LG Electronics 軟件兼容。如有需要，

請諮詢 LG Electronics 並根據其提供的指南更新新的軟件版本。

無法使用遙控器控制電視。

- 請檢查產品上的遙控器感應器，然後再試一次。
- 請檢查產品和遙控器之間是否有任何障礙物。
- 請檢查電池是否仍可使用，且已正確安裝(⊕ 對 ⊕, ⊖ 對 ⊖)。

沒有畫面顯示或沒有聲音。

- 請檢查產品是否已開機。
- 請檢查電線是否已連接至牆上插頭。
- 請連接其他產品，確認牆上插頭是否有問題。

電視突然關機。

- 檢查電源控制設定。電源供應可能中斷。
- 在「定時」設定中檢查睡眠時間設定或定時器電源關閉是否已啟動。
- 如果在電視開機時沒有訊號，15 分鐘後若無任何動作，電視就會自動關機。

連接至電腦 (HDMI) 時顯示「No signal」或「Invalid Format」。

- 使用遙控器關閉/開啓電視。
- 重新連接 HDMI 纜線。
- 在開啓電視的情況下重新啓動電腦。

按鍵編碼

• 此功能不是所有型號都適用。

編碼 (Hexa)	功能	注意	編碼 (Hexa)	功能	注意
00	頻道P 翻頁	R/C 鍵	44	OK 確認	R/C 鍵
01	頻道P 翻頁	R/C 鍵	53	所有頻道LIST	R/C 鍵
02	音量 +	R/C 鍵	5B	離開	R/C 鍵
03	音量 -	R/C 鍵	61	(藍)	R/C 鍵
06	(箭嘴鍵 / 向右鍵)	R/C 鍵	63	(黃)	R/C 鍵
07	(箭嘴鍵 / 向左鍵)	R/C 鍵	71	(綠)	R/C 鍵
7C	主頁 SMART	R/C 鍵	72	(紅)	R/C 鍵
08	(電源)	R/C 鍵	8E	(快進)	R/C 鍵
09	靜音 MUTE	R/C 鍵	8F	(後退)	R/C 鍵
0B	輸入 INPUT	R/C 鍵	AA	節目資訊 INFO	R/C 鍵
0C	門戶 PORTAL	R/C 鍵	AB	節目導覽 GUIDE	R/C 鍵
10~19	* 數字鍵 0 - 9	R/C 鍵	AF	LIVE ZOOM	R/C 鍵
1A	頻道返回 Q.VIEW	R/C 鍵	B0	(播放)	R/C 鍵
28	返回 BACK	R/C 鍵	B1	(停止 / File List)	R/C 鍵
39	字 幕 SUBTITLE	R/C 鍵	B5	最近紀錄 APP	R/C 鍵
40	(箭嘴鍵/ 向上游標)	R/C 鍵	BA	(靜止 / 慢速播放 / 暫停)	R/C 鍵
41	(箭嘴鍵/ 向下游標)	R/C 鍵	F0	/ TV / RAD	R/C 鍵
43	選 單 SETTINGS	R/C 鍵	95	節能模式 ENERGY SAVING	R/C 鍵

* 按鍵編碼 4C (0x4C) 適用於使用主頻道/副頻道的 ATSC/ISDB 型號。(適用於南韓、日本、北美和拉丁美洲，哥倫比亞型號除外)

外置控制裝置設置

- 插圖可能與實際情況有差異。

將 USB 連接至序列轉換器/將 RS-232C 輸入插頭連接至外置控制裝置（如電腦或 A/V 控制系統），從而於外部控制本產品的功能。

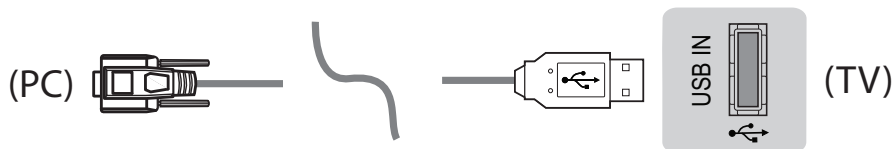
注意：電視控制連接埠的類型可能因型號系列而有所不同。

* 請留意，並非所有型號均支援此類型連接。

* 纜線並無提供。

使用 USB 線將 USB 連接至序列轉換器

USB 類型

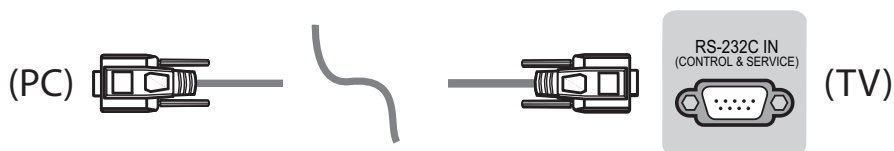


- LGTV 支援將 PL2303 晶片型（供應商 ID：0x0557，產品 ID：0x2008）USB 連接至並非由 LG 製造或提供的序列轉換器。
- 您可於售賣 IT 支援專業配件的電腦用品店購買。

RS232C 配以 RS-232C 線

DE9 (D-Sub 9 針) 類型

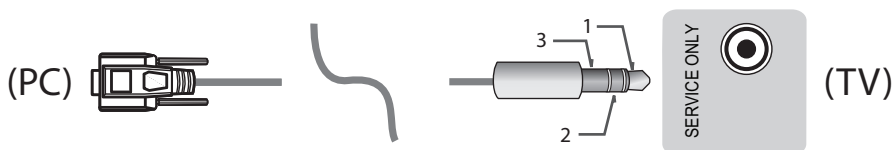
- 您需要購買連接電腦及電視的 RS-232C（DE9，D-Sub 9 針母頭換母頭）換 RS-232C 纜線，其於手冊中有詳細說明



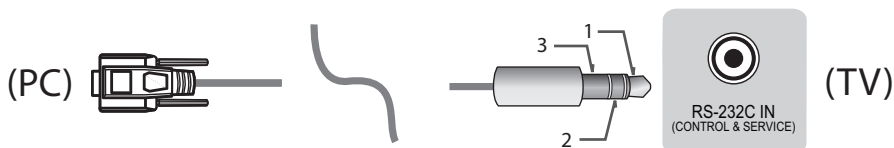
- 連接介面可能與您的電視有所不同。

手機插孔類型

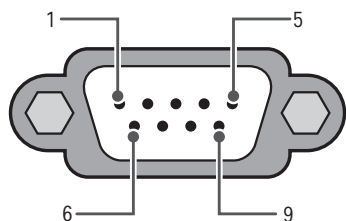
- 您需要購買連接 PC 電腦及電視的耳機插頭換 RS-232 纜線，其於手冊中有詳細說明。
- 其他型號，請連接至 USB 連接埠。
- 連接介面可能與您的電視有所不同。



或



連接器類型9針 D-Sub 公頭



RS-232C
(序列連接埠)

RS-232C 設定

7-線設定

(標準RS-232C電纜)

	電腦	電視	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DTR
DSR	6	4	DSR
RTS	7	8	RTS
CTS	8	7	CTS
	D-Sub 9	D-Sub 9	

3-線設定

(非標準)

	電腦	電視	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DTR
DSR	6	4	DSR
RTS	7	8	RTS
CTS	8	7	CTS
	D-Sub 9	D-Sub 9	

ID 設定

有關設定 ID 號碼，請參閱的「實際數據對應」

- 1 按選單 **SETTINGS**以存取主功能表。
- 2 按方向鍵移到一般並按 **OK** 確認 **⊙**。
- 3 按導覽鍵以捲動至 ID 設定 然後按 **OK** 確認 **⊙**。
- 4 向左或右捲動以選擇已設定的 ID 號然.可調整範圍為 1-99。
- 5 完成後，按下離開 **EXIT**。

* (因應型號而定)

通訊參數

- 傳輸速率：9600 bps (UART)
 - 資料長度：8 位元
 - 同位檢查位元：無
- 停止位元：1 位元
 - 通訊編碼：ASCII 碼
 - 使用交叉（反向）纜線。

指令參考清單

(視乎型號而定)

	COMMAND1	COMMAND2	數據 (十六位元)		COMMAND1	COMMAND2	數據 (十六位元)
01.電源*	k	a	00~01	12.遙控器鎖定 模式	k	m	00~01
02.畫面比例	k	c	(p.23)	13.平衡	k	t	00~64
03.畫面靜音	k	d	(p.23)	14.色溫	x	u	00~64
04.靜音	k	e	00~01	15.等化器	j	v	(p.25)
05.音量控制	k	f	00~64	16.智能節電 模式	j	q	00~05
06.對比度	k	g	00~64	17.調頻指令	m	a	(p.25)
07.亮度	k	h	00~64	18.頻道（節 目）新增/刪除 （略過）	m	b	00~01
08.色彩	k	i	00~64	19.按鍵	m	c	按鍵編碼
09.色調	k	j	00~64	20.控制背光	m	g	00~64
10.銳利度	k	k	00~32	21.輸入選擇 （主影像輸 入）	x	b	(p.27)
11.OSD 選擇	k	l	00~01	22.自動設定	j	u	(p.27)

* 注意：播放或錄製媒體期間，所有除電源 (ka) 及按鍵 (mc) 外的指令將不能運作並作為 NG 處理。
利用 RS232C 纜線，電視可在電源開啓或關閉的狀態下執行「ka 指令」。但使用 USB 至序列轉換纜線，指令只會在電視開啓的情況下運作。

傳送 / 接收協定

傳送

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

[Command 1] 第一指令以控制電視。(j、k、m 或 x)

[Command 2] 第二指令以控制電視。

[Set ID] 您可調整 [Set ID] 以於選項功能表選擇所需顯示器 ID 號。
電視的可調整範圍為 1-99。如 [Set ID] 選擇為「0」，則可控制所有已連接的設定。
* [Set ID] 於功能表上的標示為十位元 (1 至 99) 並於傳送/接收協定以十六位元 (0x00 至 0x63) 顯示。

[DATA] 以傳送指令數據 (十六位元)。傳送「FF」以讀取指令狀態。

[Cr] 返回指令 - ASCII 碼「0x0D」

[] 空格 - ASCII 碼「0x20」

確定 (OK) 確認訊息

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

* 該設定會於接收正常數據時因應此格式傳送 ACK (確認訊息)。此時，如數據處於數據讀取模式，即代表顯示狀況數據。如數據處於數據讀取模式，它將返回電腦的數據。

錯誤確認訊息

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

* 電視接收異常數據或通訊出現錯誤時，將會根據此格式傳送 ACK (確認訊息)。

數據 00：不合法編碼

實際數據對應 (十六位元：十進位元)

* 以十六進制輸入 [data] 時，請參照以下換算表。

* 頻道調校 (ma) 指令使用兩字節十六進制值 ([data]) 以選取頻道編號。

00：步驟 0	32：步驟 50 (Set ID 50)	FE：步驟 254
01：步驟 1 (Set ID 1)	33：步驟 51 (Set ID 51)	FF：步驟 255
...	...	...
0A：步驟 10 (Set ID 10)	63：步驟 99 (Set ID 99)	01 00：步驟 256
...	...	...
0F：步驟 15 (Set ID 15)	C7：步驟 199	27 0E：步驟 9998
10：步驟 16 (Set ID 16)	C8：步驟 200	27 0F：步驟 9999
...	...	...

* 指令可能因應型號及訊號而運作不同。

01 電源 (Command: k a)

- ▶ 要控制電視機的電源 *開啓或關閉。

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

數據 00 : 關閉電源 01 : *開啓電源

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

- ▶ 要顯示電視的電源開啓或 *關閉

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

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

* 同樣地，如果其他功能根據此格式傳送「FF」數據，通知反饋展示每個功能的狀態。

02 畫面比例 (Command: k c) (主影像大小)

- ▶ 以調整畫面格式。(主影像格式)
您亦可於影像功能表中使用畫面比例調整畫面格式。

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

數據 01 : 正常畫面 (4:3) 09 : 點對點掃描
(Just Scan 關) 06 : 原始 (Just Scan 關)
02 : 寬畫面
(Just Scan 關)

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

* 使用電腦輸入，您可選擇 16:9 或 4:3 螢幕畫面比例。

03 畫面靜音 (Command: k d)

- ▶ 選擇畫面靜音開啓/關閉。

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

數據 00 : 畫面靜音關閉 (影像開啓)
視訊靜音關閉
01 : 畫面靜音開啓 (影像關閉)
10 : 視訊靜音開啓

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

* 若只開啓視訊靜音，電視將顯示螢幕上顯示 (OSD)。但若開啓畫面靜音，電視將不會顯示 OSD。

04 靜音 (Command: k e)

- ▶ 控制靜音開啓/關閉。
您亦可以利用遙控上的靜音鍵調整靜音功能。

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

數據 00 : 音量靜音開啓 (音量關閉)
01 : 音量靜音關閉 (音量開啓)

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

05 音量控制 (Command: k f)

- ▶ 調整音量。
您亦可以利用遙控器上的音量鍵調整音量。

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

數據最小 : 00 至最大 : 64

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

06 對比度 (Command: k g)

- ▶ 調整畫面對比度。
您亦可在影像功能表調整對比。

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

數據最小 : 00 至最大 : 64

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

07 亮度 (Command: k h)

- ▶ 調整畫面亮度。
您亦可在影像功能表調整亮度。

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

數據最小 : 00 至最大 : 64

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

08 色彩 (Command: k i)

- ▶ 調整畫面色彩。
您亦可在影像功能表調整色彩。

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

數據最小: 00 至最大: 64

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

09 色調 (Command: k j)

- ▶ 調整畫面色調。
您亦可在影像功能表調整色調。

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

數據紅: 00 至綠: 64

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

10 銳利度 (Command: k k)

- ▶ 調整畫面銳利度。
您亦可在影像功能表調整銳利度。

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

數據最小: 00 至最大: 32

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

11 OSD 選擇 (Command: k l)

- ▶ 於遙距控制時選擇 OSD (螢幕上顯示) 開啓/關閉。

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

數據 00: 關閉 OSD 01: 開啓 OSD

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

12 遙控器鎖定模式 (Command: k m)

- ▶ 鎖定於顯示器及遙控器上前置面板的控制。

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

數據 00: 關閉鎖定 01: 啓動鎖定

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

- * 如您不使用遙控器，可使用此模式。
當主電源關閉及開啓（拔除及插入插頭，20 至 30 秒後），外置控制鎖定將會解除。
- * 在備用模式中（以關閉計時器或「ka」、「mc」指令關閉 DC），並如果開啓按鍵鎖，按 IR 或本地按鍵的電源鍵將不會開啓電視。

13 平衡 (Command: k t)

- ▶ 調整平衡。
您可在音訊功能表調整平衡。

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

數據最小: 00 至最大: 64

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

14 色溫 (Command: x u)

- ▶ 調整色溫。您亦可於影像功能表調整色溫。

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

數據最小: 00 至最大: 64

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

► 調整設備的 EQ。

Diagram illustrating a 10-bit shift register configuration. The register is divided into two sections: 頻率 (Frequency) and 數據 (Data). The 頻率 section contains the first four bits (0, 0, 0, 0) and the 數據 section contains the next six bits (0, 0, 0, 0, 0, 0).

7	6	5	頻率	4	3	2	1	0	音級
0	0	0	第一 波段	0	0	0	0	0	0 (十進 位元)
0	0	1	第二 波段	0	0	0	0	1	1 (十進 位元)
0	1	0	第三 波段	...	...	...	...	...	...
0	1	1	第四 波段	1	0	0	1	1	19 (十 進位 元)
1	0	0	第五 波段	1	0	1	0	1	20 (十 進位 元)

* 因應型號而定，並當聲音模式為 EQ 可調整數值時可調整。

► 以減低電視的耗電量。您亦可於影像功能表調整智能節電模式。

數據

- 00:關閉
01:最低
02:中等
03:最高
04:自動 (適用於 LCD 電視 / LED 電視)

05:關閉畫面

* (視乎型號而定)

* 此指令可能因應型號及訊號而運作不同。

- 適用於歐洲、中東、哥倫比亞、亞洲（除南韓及日本以外）的型號
- ▶ 根據具體頻道編號以選擇頻道。

* 類比地面訊號接收/有線

數據 00：高位元頻道數據

數據 00：高位元頻道數據
數據 01：低位元頻道數據

- 00 00 ~ 00 C7 (十進位元: 0 ~ 199)

- 00: 地面訊號接收電視 (ATV)

- 80: 有線電視 (CATV)

* 數碼地面訊號接收/有線/衛星

數據 00：高頻道數據

數據 01：低頻道數據

- 00 00 ~ 27 0F (十進位元: 0 ~ 9999)

- 10: 地面訊號接收電視 (數碼電視)

- 20: 地面訊號接收電台 (電台)

- 40: 衛星電視 (衛星數碼電視)

-50: 衛星電台 (衛星電台)

- 90: 有線電視 (有線電視)

- a0: 有線電台 (有線電台)

* 調頻指令例子：

1. 調校至類比地面訊號接收 (PAL) 頻道 10。

Set ID = 全部 = 00

數據 00 & 01 = 頻道數據為 10 = 00 0a

數據 02 = 類比地面訊號接收電視 = 00

結果 = ma 00 00 0a 00

2. 調校至類比地面訊號接收 (DVB-T) 頻道 01.

Set ID = 全部 = 00

數據 00 & 01 = 頻道數據為 1 = 00 01

數據 02 = 類比地面訊號接收電視 = 10

結果 = ma 00 00 01 10

3. 調校至衛星 (DVB-S) 頻道 1000。

Set ID = 全部 = 00

數據 00 & 01 = 頻道數據為 1000 = 03 E8

數據 02 = 數碼衛星電視 = 40

結果 = ma 00 03 E8 40

Ack [a][][Set ID][][OK][Data 00][Data 01]
[Data 02][x][a][][Set ID][][NG][Data 00][x]

• 適用於南韓、北美/拉丁美洲 (除哥倫比亞以外) 的型號

► 將頻道調至以下具體頻道/主頻道/副頻道號碼。

Transmission [m][a][][0][][Data00][][Data01]
[][Data02][][Data03][][Data04][][Data05][Cr]

數碼頻道分為具體頻道號碼、主要、及次要頻道號碼。具體頻道號碼為實際數碼頻道，主頻道號碼為該頻道的對應號碼，而次要頻道號碼為副頻道的號碼。由於 ATSC 調諧器會自動從主/次編號映射頻道，於數碼發送指令時無需實際編號。

* 類比地面訊號接收/有線

數據 00：具體頻道號碼

- 地面訊號接收 (ATV)：

02~45 (十進位元：2 ~ 69)

- 有線 (CATV)：01, 0E~7D (十進位元：1, 14~125)

[Data 01 ~ 04]：主頻道/副頻道號碼

數據 01 & 02：xx (任何)

數據 03 & 04：xx (任何)

數據 05：輸入來源 (類比)

- 00：地面訊號接收電視 (ATV)

- 01：有線電視 (CATV)

* 數碼地面訊號接收/有線

數據 00：xx (任何)

[Data 01][Data 02]：主頻道號碼

數據 01：高位元頻道數據

數據 02：低位元頻道數據

- 00 01 ~ 27 0F (十進位元：1 ~ 9999)

[Data 03][Data 04]：副頻道號碼

數據 03：高位元頻道數據

數據 04：低位元頻道數據

數據 05：輸入來源 (數碼)

- 02：地面電視 (DTV) – 使用實際頻道編號

- 06：有線電視 (CADTV) – 使用實際頻道編號

- 22：地面電視 (DTV) – 不使用實際頻道編號

- 26：有線電視 (CADTV) – 不使用實際頻道編號

- 46：有線電視 (CADTV) – 僅使實際/用主頻道編號 (一部分頻道)

- 66：有線電視 (CADTV) – 僅使用主頻道編號 (一部分頻道)

兩字節可用於各個主及次頻道數據，但通常只單獨使用低字節 (高字節為 0)

* 調頻指令例子：

1. 調頻至類比有線 (NTSC) 頻道 35。

Set ID = 全部 = 00

數據 00 = 頻道數據為 35 = 23

數據 01 & 02 = 並無主頻道 = 00 00

數據 03 & 04 = 並無副頻道 = 00 00

數據 05 = 類比地面訊號接收有線電視 = 01

總計 = ma 00 23 00 00 00 01

2. 調頻至數碼地面訊號接收 (ATSC) 頻道 30-3。

Set ID = 全部 = 00

數據 00 = 具體頻道號碼 = 00

數據 01 & 02 = 主頻道號碼為 30 = 00 1E

數據 03 & 04 = 副頻道號碼為 3 = 00 03

數據 05 = 數碼地面訊號接收電視 = 22

總計 = ma 00 00 00 1E 00 03 22

Ack [a][][Set ID][][OK][Data 00][Data 01]
[Data 02][Data 03][Data 04][Data 05]
[x][a][][Set ID][][NG][Data 00][x]

• 適用於日本型號

► 將頻道調至以下具體頻道/主頻道/副頻道號碼。

Transmission [m][a][][0][][Data00][][Data01]
[][Data02][][Data03][][Data04][][Data05][Cr]

* 數碼地面訊號接收/衛星

數據 00：xx (任何)

[Data 01][Data 02]：主頻道號碼

數據 01：高位元頻道數據

數據 02：低位元頻道數據

- 00 01 ~ 27 0F (十進位元：1 ~ 9999)

[Data 03][Data 04]：副頻道/支線頻道號碼
(衛星頻道內任何)

數據 03：高位元頻道數據

數據 04：低位元頻道數據

數據 05：輸入來源 (適用於日本的數碼/衛星頻道)

- 02：地面訊號接收電視 (數碼電視)
- 07：BS (衛星廣播頻道)
- 08：CS1 (衛星通訊頻道 1)
- 09：CS2 (衛星通訊頻道 2)

* 調頻指令例子：

1. 調頻至數碼地面訊號接收 (ISDB-T) 頻道 17-1。

Set ID = 全部 = 00

數據 00 = 具體頻道號碼 = 00

數據 01 & 02 = 主頻道號碼為 17 = 00 11

數據 03 & 04 = 副頻道/支線頻道號碼為 1 = 00 01

數據 05 = 數碼地面訊號接收電視 = 02

總計 = ma 00 00 00 11 00 01 02

2. 調至 BS (ISDB-BS) 頻道 30。

Set ID = 全部 = 00

數據 00 = 具體頻道號碼 = 00

數據 01 & 02 = 主頻道號碼為 30 = 00 1E

數據 03 & 04 = 任何 = 00 00

數據 05 = 數碼 BS 電視 = 07

總計 = ma 00 00 00 1E 00 00 07

* 此功能根據型號而有所不同。

Ack [a][][Set ID][][OK/NG][Data 00][Data 01]
[Data 02][Data 03][Data 04][Data 05]
[x][a][][Set ID][][NG][Data 00][x]

18 頻道 (節目) 新增/刪除 (略過)

(Command: m b)

► 要於下一次略過目前頻道 (節目)。

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

數據 00：刪除 (ATSC, ISDB)/ 01：新增
略過 (DVB)

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

* 設定已儲存的頻道狀態，以刪除 (ATSC, ISDB)/
略過 (DVB) 或新增。

19 按鍵 (Command: m c)

► 傳送 IR 遙距按鍵編碼。

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

Data 按鍵編碼 - 頁p.17.

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

20 控制背光 (Command: m g)

* 適用於 LCD 電視/ LED 電視
► 以控制背光。

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

數據最小：00 至 最大：64

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

控制螢幕亮度 (Command: m g)

21 輸入選擇 (Command: x b)

(主影像輸入)

► 為主畫面選擇輸入來源。

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

數據

00：DTV 01：CADTV

02：衛星 DTV 10：ATV

ISDB-BS (日本)

03：ISDB-CS1

(日本)

04：ISDB-CS2

(日本)

11：CATV

20：AV 或 AV1

21：AV2

40：Component1

41：Component2

60：RGB

90：HDMI1

91：HDMI2

92：HDMI3

93：HDMI4

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

* 此功能因應型號及訊號而定。

22 自動設定 (Command: j u) (因應型號而定)

► 自動調整影像位置及減少畫面震動。僅可在
RGB (電腦) 模式使用。

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

數據 01：設定

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

規格

無線模組規格

- 由於每個國家的波段頻道有所不同，用戶無法更改或調整操作頻率。本產品配置之頻率為區域頻率表內。
- 為用戶着想，建議本裝置安裝及使用時，應最少離用戶身體 20 厘米。

無線 LAN 模組 (LGSBWAC61) 規格	
無線 LAN (IEEE802.11a/b/g/n/ac)	
頻率範圍	輸出功率 (最大)
2400 至 2483.5 MHz	15.5 dBm
5150 至 5250 MHz	17.5 dBm
5725 至 5850 MHz	8.0 dBm
藍牙	
頻率範圍	輸出功率 (最大)
2400 至 2483.5 MHz	10 dBm

	數碼訊號	類比訊號
電視制式	DTMB	PAL D/K/B/G/I, NTSC-M
節目範圍	DTMB:21 ~ 69	PAL D/K: VHF/UHF 1 ~ 69, CATV 1~47 PAL B/G/I: VHF/UHF 1 ~ 69, CATV 1~47 NTSC M: VHF/UHF 2 ~ 78, CATV 1~71
節目儲存量 上限	420	
外置天線 抗阻	75 Ω	

環境條件	操作溫度	0 °C 至 45 °C
	操作濕度	低於 80 %
	儲存溫度	-20 °C 至 60 °C
	儲存濕度	低於 85 %

HDMI - PC 所支援的模式

(PC 模式時使用 HDMI IN 1。)

解像度	行頻 (kHz)	場頻 (Hz)
640 x 350	31.46	70.09
720 x 400	31.46	70.08
640 x 480	31.46	59.94
800 x 600	37.87	60.31
1024 x 768	48.36	60.00
1152 x 864	54.34	60.05
1360 x 768	47.71	60.01
1280 x 1024	63.98	60.02
1920 x 1080	67.50	60.00
3840 x 2160	67.50	30.00
	56.25	25.00
	54.00	24.00
4096 x 2160	53.95	23.97
	54.00	24.00

HDMI - DTV 支持模式

解像度	行頻 (kHz)	場頻 (Hz)
640 x 480	31.46	59.94
	31.50	60.00
720 x 480	31.47	59.94
	31.50	60.00
720 x 576	31.25	50.00
1280 x 720	44.96	59.94
	45.00	60.00
	37.50	50.00
1920 x 1080	28.12	50.00
	33.72	59.94
	33.75	60.00
	26.97	23.97
	27.00	24.00
	33.71	29.97
	33.75	30.00
	56.25	50.00
	67.43	59.94
	67.50	60.00
3840 x 2160	53.95	23.98
	54.00	24.00
	56.25	25.00
	61.43	29.97
	67.50	30.00
	112.50	50.00
	135.00	59.94
4096 x 2160	135.00	60.00
	53.95	23.98
	54.00	24.00
	56.25	25.00
	61.43	29.97
	67.50	30.00
	112.50	50.00
	135.00	59.94
	135.00	60.00

Component 端口的連接資訊

(視乎型號而定)

在電視上的 component 端口	Y	P _B	P _R
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在DVD機上的視訊輸出端口	Y	P _B	P _R
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	Pb	Pr

訊號	色差
480i, 576i	0
480p, 576p	0
720p, 1080i	0
1080p	0 (僅 50 Hz / 60 Hz)



記下電視的型號和序列號。
參考後蓋上的標籤，當您要求任何服務時將此資
訊告之經銷商。

型號 _____

序號 _____

OWNER'S MANUAL

Safety and Reference

LED TV*

* LG LED TVs are LCD TVs with LED backlighting.

Please read this manual carefully before operating your set and retain it for future reference.

Safety Instructions

Please read these safety precautions carefully before using the product.

WARNING



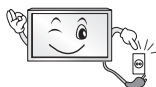
Do not place the TV and/or remote control in the following environments:

- A location exposed to direct sunlight
- An area with high humidity such as a bathroom
- Near any heat source such as stoves and other devices that produce heat
- Near kitchen counters or humidifiers where they can easily be exposed to steam or oil
- An area exposed to rain or wind
- Near containers of water such as vases

Otherwise, this may result in fire, electric shock, malfunction or product deformation.



Do not place the product where it might be exposed to dust. This may cause a fire hazard.



Mains Plug is the TV connecting/disconnecting device to AC mains electric supply. This plug must remain readily attached and operable when TV is in use.



Do not touch the power plug with wet hands. Additionally, if the cord pin is wet or covered with dust, dry the power plug completely or wipe dust off. You may be electrocuted due to excess moisture.



Make sure to connect Mains cable to compliant AC mains socket with Grounded earth pin. (Except for devices which are not grounded on earth.) Otherwise possibility you may be electrocuted or injured.



Insert power cable plug completely into wall socket otherwise if not secured completely into socket, fire ignition may break out.



Ensure the power cord does not come into contact with hot objects such as a heater. This may cause a fire or an electric shock hazard.



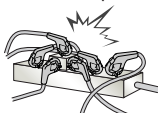
Do not place a heavy object, or the product itself, on power cables. Otherwise, this may result in fire or electric shock.



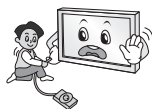
Bend antenna cable between inside and outside building to prevent rain from flowing in. This may cause water damaged inside the Product and could give an electric shock.



When mounting TV onto wall make sure to neatly install and isolate cabling from rear of TV as to not create possibility of electric shock / fire hazard.



Do not plug too many electrical devices into a single multiple electrical outlet. Otherwise, this may result in fire due to over-heating.



Do not drop the product or let it fall over when connecting external devices. Otherwise, this may result in injury or damage to the product.



Keep the anti-moisture packing material or vinyl packing out of the reach of children. Anti-moisture material is harmful if swallowed. If swallowed by mistake, force the patient to vomit and visit the nearest hospital. Additionally, vinyl packing can cause suffocation. Keep it out of the reach of children.



Do not let your children climb or cling onto the TV. Otherwise, the TV may fall over, which may cause serious injury.



Dispose of used batteries carefully to ensure that a small child does not consume them. Please seek Doctor- Medical Attention immediately if child consumes batteries.



Do not insert any metal objects/conductors (like a metal chopstick/ cutlery/screwdriver) between power cable plug and input Wall Socket while it is connected to the input terminal on the wall. Additionally, do not touch the power cable right after plugging into the wall input terminal. You may be electrocuted. (Depending on model)



Do not put or store inflammable substances near the product. There is a danger of combustion/explosion or fire due to careless handling of the inflammable substances.



Do not drop metallic objects such as coins, hair pins, chopsticks or wire into the product, or inflammable objects such as paper and matches. Children must pay particular attention. Electrical shock, fire or injury can occur. If a foreign object is dropped into the product, unplug the power cord and contact the service centre.



Do not spray water on the product or scrub with an inflammable substance (thinner or benzene). Fire or electric shock accident can occur.



Do not allow any impact, shock or any objects to fall into the unit, and do not drop anything onto the screen. You may be injured or the product can be damaged.



Never touch this product or antenna during a thunder or lighting storm. You may be electrocuted.



Never touch the wall outlet when there is leakage of gas, open the windows and ventilate. It may cause a fire or a burn by a spark.



Do not disassemble, repair or modify the product at your own discretion. Fire or electric shock accident can occur. Contact the service centre for check, calibration or repair.



If any of the following occur, unplug the product immediately and contact your local service centre.

- The product has been impacted by shock
- The product has been damaged
- Foreign objects have entered the product
- The product produced smoke or a strange smell

This may result in fire or electric shock.



Unplug the TV from AC mains wall socket if you do not intend to use the TV for a long period of time. Accumulated dust can cause fire hazard and insulation deterioration can cause electric leakage/shock/fire.



Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

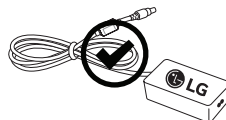
Do not install this product on a wall if it could be exposed to oil or oil mist. This may damage the product and cause it to fall.

If water or another substance enters the product (like a AC adapter, power cord, TV), disconnect the power cord and contact the service centre immediately.

Otherwise, this may result in fire or electric shock.



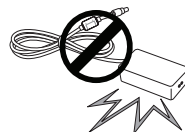
Only use an authorized AC adapter and power cord approved by LG Electronics. Otherwise, this may result in fire, electric shock, malfunction or product deformation.



Never Disassemble the AC adapter or power cord. This may result in fire or electric shock.



Handle the adapter carefully to avoid dropping or striking it. An impact could damage the adapter.



CAUTION



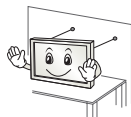
Install the product where no radio wave occurs.



There should be enough distance between an outside antenna and power lines to keep the former from touching the latter even when the antenna falls. This may cause an electric shock.



Do not install the product on places such as unstable shelves or inclined surfaces. Also avoid places where there is vibration or where the product cannot be fully supported. Otherwise, the product may fall or flip over, which may cause injury or damage to the product.



If you install the TV on a stand, you need to take actions to prevent the product from overturning. Otherwise, the product may fall over, which may cause injury.

If you intend to mount the product to a wall, attach VESA standard mounting interface (optional parts) to the back of the product. When you install the set to use the wall mounting bracket (optional parts), fix it carefully so as not to drop.

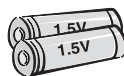
Only use the attachments / accessories specified by the manufacturer.



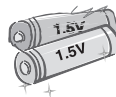
When installing the antenna, consult with a qualified service technician. If not installed by a qualified technician, this may create a fire hazard or an electric shock hazard.



We recommend that you maintain a distance of at least 2 to 7 times the diagonal screen size when watching TV. If you watch TV for a long period of time, this may cause blurred vision.



Only use the specified type of battery. This could cause damage to the remote control.



Do not mix new batteries with old batteries. This may cause the batteries to overheat and leak.

Batteries should not be exposed to excessive heat. For example, keep away from direct Sunlight, open fireplace and electric heaters.

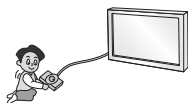
Do not place non-rechargeable batteries in charging device.



Make sure there are no objects between the remote control and its sensor.



Signal from Remote Control can be interrupted due to external/internal lighting eg Sunlight, fluorescent lighting. If this occurs turn off lighting or darken viewing area.



When connecting external devices such as video game consoles, make sure the connecting cables are long enough. Otherwise, the product may fall over, which may cause injury or damage the product.



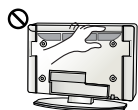
Do not turn the product On/Off by plugging-in or unplugging the power plug to the wall outlet. (Do not use the power plug for switch.) It may cause mechanical failure or could give an electric shock.



Please follow the installation instructions below to prevent the product from overheating.

- The distance between the product and the wall should be more than 10 cm.
- Do not install the product in a place with no ventilation (e.g., on a bookshelf or in a cupboard).
- Do not install the product on a carpet or cushion.
- Make sure the air vent is not blocked by a tablecloth or curtain.

Otherwise, this may result in fire.



Take care not to touch the ventilation openings when watching the TV for long periods as the ventilation openings may become hot. This does not affect the operation or performance of the product.

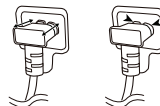
Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by an authorized servicer.



Prevent dust collecting on the power plug pins or outlet. This may cause a fire hazard.



Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance.



Make sure the power cord is connected securely to the power plug on the TV.



Do not press strongly upon the panel with a hand or sharp object such as nail, pencil or pen, or make a scratch on it, as it may cause damage to screen.



Avoid touching the screen or holding your finger(s) against it for long periods of time. Doing so may produce some temporary or permanent distortion/damage to screen.



When cleaning the product and its components, unplug the power first and wipe it with a soft cloth. Applying excessive force may cause scratches or discolouration. Do not spray with water or wipe with a wet cloth. Never use glass cleaner, car or industrial shiner, abrasives or wax, benzene, alcohol etc., which can damage the product and its panel. Otherwise, this may result in fire, electric shock or product damage (deformation, corrosion or breakage).

As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if you turn off this unit by SWITCH.



When unplugging the cable, grab the plug and unplug it, by pulling at the plug.

Don't pull at the cord to unplug the power cord from the power board, as this could be hazardous.



When moving the product, make sure you turn the power off first. Then, unplug the power cables, antenna cables and all connecting cables. The TV set or power cord may be damaged, which may create a fire hazard or cause electric shock.



When moving or unpacking the product, work in pairs because the product is heavy. Otherwise, this may result in injury.



Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



If the product feels cold to the touch, there may be a small "flicker" when it is turned on. This is normal, there is nothing wrong with product.



This panel is an advanced product that contains millions of pixels. You may see tiny black dots and/or brightly coloured dots (red, blue or green) at a size of 1 ppm on the panel. This does not indicate a malfunction and does not affect the performance and reliability of the product.

This phenomenon also occurs in third-party products and is not subject to exchange or refund.



You may find different brightness and color of the panel depending on your viewing position(left/right/top/down).

This phenomenon occurs due to the characteristic of the panel. It is not related with the product performance, and it is not malfunction.

Displaying a still image for a prolonged period of time may cause image sticking. Avoid displaying a fixed image on the TV screen for a long period of time.

Generated sound

"Cracking" noise: A cracking noise that occurs when watching or turning off the TV is generated by plastic thermal contraction due to temperature and humidity. This noise is common for products where thermal deformation is required. Electrical circuit humming/panel buzzing: A low level noise is generated from a high-speed switching circuit, which supplies a large amount of current to operate a product. It varies depending on the product.

This generated sound does not affect the performance and reliability of the product.

Do not use high voltage electrical goods near the TV (e.g. electric mosquito-swatter). This may result in product malfunction.

WARNING!

Never place a television set in an unstable location. A television set may fall, causing serious personal injury or death. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- Using cabinets or stands recommended by the manufacturer of the television set.
- Only using furniture that can safely support the television set.
- Ensuring the television set is not overhanging the edge of the supporting furniture.
- Not placing the television set on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television set to a suitable support.
- Not placing the television set on cloth or other materials that may be located between the television set and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the television set or its controls.

If your existing television set is being retained and relocated, the same considerations as above should be applied.

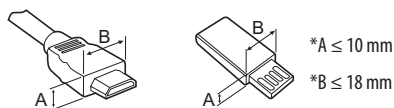
Symbols

	Refers to alternating current(AC).
	Refers to direct current(DC).
	Refers to class II equipment.
	Refers to stand-by.
	Refer to "ON" (power).
	Refers to dangerous voltage.

Preparing

! NOTE

- If the TV is turned on for the first time after it was shipped from the factory, initialization of the TV may take a few minutes.
- Image shown may differ from your TV.
- Your TV's OSD (On Screen Display) may differ slightly from that shown in this manual.
- The available menus and options may differ from the input source or product model that you are using.
- New features may be added to this TV in the future.
- The items supplied with your product may vary depending on the model.
- Product specifications or contents of this manual may be changed without prior notice due to upgrade of product functions.
- For an optimal connection, HDMI cables and USB devices should have bezels less than 10 mm thick and 18 mm width. Use an extension cable that supports USB 2.0 if the USB cable or USB memory stick does not fit into your TV's USB port.



- Use a certified cable with the HDMI logo attached.
- If you do not use a certified HDMI cable, the screen may not display or a connection error may occur.
- Recommended HDMI cable types (3m or less)
 - High-Speed HDMI™ cable
 - High-Speed HDMI™ cable with Ethernet

! CAUTION

- Do not use any unapproved items to ensure the safety and product life span.
- Any damage or injuries caused by using unapproved items are not covered by the warranty.
- Some models have a thin film attached on to the screen and this must not be removed.

Separate purchase

Separate purchase items can be changed or modified for quality improvement without any notification. Contact your dealer to buy these items. These devices only work with certain models. The model name or design may be changed depending on the upgrade of product functions, manufacturer's circumstances or policies.

(Depending on model)

AN-MR650

Magic Remote

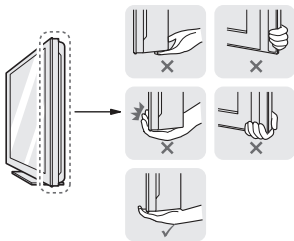
Lifting and moving the TV

Please note the following advice to prevent the TV from being scratched or damaged and for safe transportation regardless of its type and size.

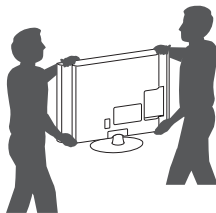
- It is recommended to move the TV in the box or packing material that the TV originally came in.
- Before moving or lifting the TV, disconnect the power cord and all cables.
- When holding the TV, the screen should face away from you to avoid damage.



- Hold the top and bottom of the TV frame firmly. Make sure not to hold the transparent part, speaker, or speaker grill area.



- When transporting a large TV, there should be at least 2 people.
- When transporting the TV by hand, hold the TV as shown in the following illustration.



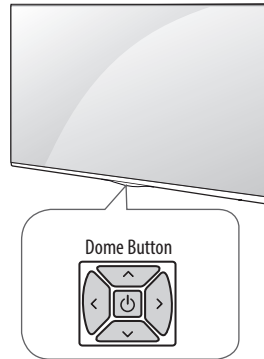
- When transporting the TV, do not expose the TV to jolts or excessive vibration.
- When transporting the TV, keep the TV upright, never turn the TV on its side or tilt towards the left or right.
- Do not apply excessive pressure to cause flexing /bending of frame chassis as it may damage screen.
- When handling the TV, be careful not to damage the protruding joystick button.

CAUTION

- Avoid touching the screen at all times, as this may result in damage to the screen.
- Do not move the TV by holding the cable holders, as the cable holders may break, and injuries and damage to the TV may occur. (Depending on model)

Using the button

You can simply operate the TV functions, pressing or moving the button.



Basic Functions

	Power on (Press) Power Off (Press and hold) ¹
	Volume Control
	Programmes Control

¹ All running apps will close, and any recording in progress will stop.

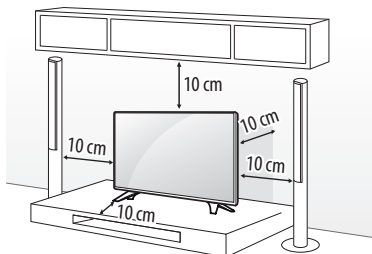
Adjusting the Menu

When the TV is turned on, press the button one time. You can adjust the Menu items pressing or moving the buttons.

	Turns the power off.
	Clears on-screen displays and returns to TV viewing.
	Changes the input source.
	Accesses the setting menu.

Mounting on a table

- 1 Lift and tilt the TV into its upright position on a table.
 - Leave a 10 cm (minimum) space from the wall for proper ventilation.



- 2 Connect the power cord to a wall outlet.



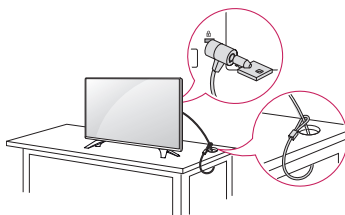
CAUTION

- Do not place the TV near or on sources of heat, as this may result in fire or other damage.

Using the kensington security system

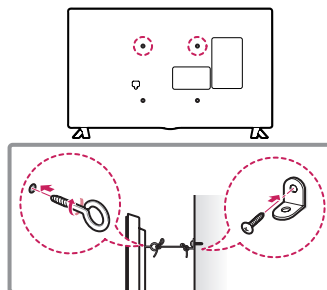
(This feature is not available for all models.)

The Kensington security system connector is located at the rear of the TV. For more information of installation and using, refer to the manual provided with the Kensington security system or visit <http://www.kensington.com>. Connect the Kensington security system cable between the TV and a table.



Securing the TV to a wall

(This feature is not available for all models.)



- 1 Insert and tighten the eye-bolts, or TV brackets and bolts on the back of the TV.
 - If there are bolts inserted at the eye-bolts position, remove the bolts first.
- 2 Mount the wall brackets with the bolts to the wall. Match the location of the wall bracket and the eye-bolts on the rear of the TV.
- 3 Connect the eye-bolts and wall brackets tightly with a sturdy rope. Make sure to keep the rope horizontal with the flat surface.



CAUTION

- Make sure that children do not climb on or hang on the TV.



NOTE

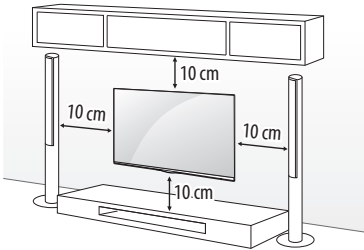
- Use a platform or cabinet that is strong and large enough to support the TV securely.
- Brackets, bolts and ropes are not provided. You can obtain additional accessories from your local dealer.

Mounting on a wall

Attach an optional wall mount bracket at the rear of the TV carefully and install the wall mount bracket on a solid wall perpendicular to the floor. When you attach the TV to other building materials, please contact qualified personnel. LG recommends that wall mounting be performed by a qualified professional installer.

We recommend the use of LG's wall mount bracket. The LG wall mount is easy to adjust or to connect the cables. When you do not use LG's wall mount bracket, please use a wall mount bracket where the device is adequately secured to the wall with enough space to allow connectivity to external devices.

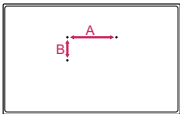
If you are using a non-adjustable mount, attach the mount to the wall. Attach the cables to the TV first, then attach the TV to the mount.



Make sure to use screws and wall mount bracket that meet the VESA standard. Standard dimensions for the wall mount kits are described in the following table.

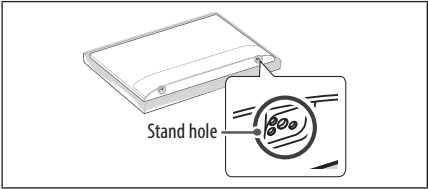
Separate purchase (Wall Mounting Bracket)

Model	43UW76**
VESA (A x B)	200 x 200
Standard screw	M6
Number of screws	4
Wall mount bracket	LSW240B MSW240
Model	49/55UW76**
VESA (A x B)	300 x 300
Standard screw	M6
Number of screws	4
Wall mount bracket	LSW350B MSW240



NOTE

- When using the wall mount, it is recommended that you apply a piece of tape over the Stand holes to prevent dust and bugs from entering the holes. (Depending on model)



CAUTION

- Remove the stand before installing the TV on a wall mount by performing the stand attachment in reverse.

Connections (notifications)

Connect various external devices to the TV and switch input modes to select an external device. For more information of external device's connection, refer to the manual provided with each device.

Available external devices are: HD receivers, DVD players, VCRs, audio systems, USB storage devices, PC, gaming devices, and other external devices.

! NOTE

- The external device connection may differ from the model.
- Connect external devices to the TV regardless of the order of the TV port.
- If you record a TV program on a DVD recorder or VCR, make sure to connect the TV signal input cable to the TV through a DVD recorder or VCR. For more information of recording, refer to the manual provided with the connected device.
- Refer to the external equipment's manual for operating instructions.
- If you connect a gaming device to the TV, use the cable supplied with the gaming device.
- In PC mode, there may be noise associated with the resolution, vertical pattern, contrast or brightness.
If noise is present, change the PC output to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the PICTURE menu until the picture is clear.
- In PC mode, some resolution settings may not work properly depending on the graphics card.
- If Ultra HD content is played on your PC, video or audio may become disrupted intermittently depending on your PC's performance.

Antenna connection

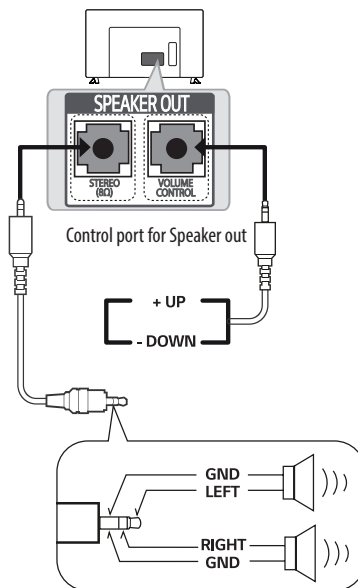
Connect the TV to a wall antenna socket with an RF cable (75 Ω).

- Use a signal splitter to use more than 2 TVs.
- If the image quality is poor, install a signal amplifier properly to improve the image quality.
- If the image quality is poor with an antenna connected, try to realign the antenna in the correct direction.
- An antenna cable and converter are not supplied.
- Supported DTV Audio: MPEG, Dolby Digital, Dolby Digital Plus, HE-AAC
- This TV cannot receive ULTRA HD (3840 x 2160 pixels) broadcasts directly because the related standards have not been confirmed.

Other connections

Connect your TV to external devices. For the best picture and audio quality, Connect the external device and the TV with the HDMI cable. Some separate cable is not provided.

Speaker Output Setup



! NOTE

- Use only with the 3 pole 3.5mm Stereo Jack.
- Do not connect your headphones or earphones to the port for connecting an external speaker.

Method of Volume control port

- Cable Spec.

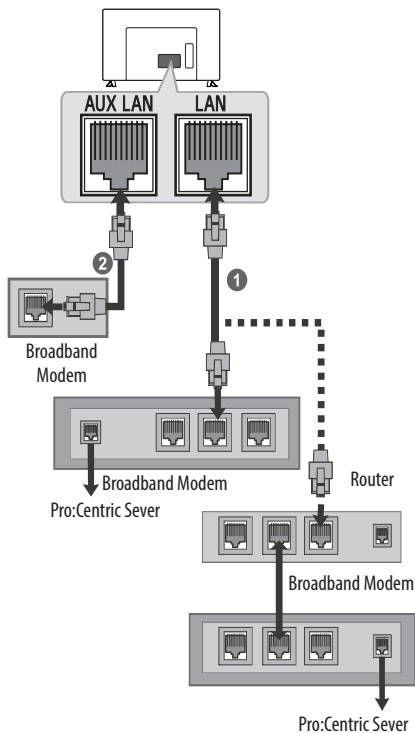
GND / UP / DOWN	Each Up / Down pin is pulled to 3.3V with CPU GPIO.
	CPU detects transition from 3.3V to GND level for volume control.

Wired network connection

(Depending on model)

This TV can be connected to a Pro:Centric server via the LAN port. After making the physical connection, the TV needs to be set up for network communication.

Connect the LAN port of the Modem or Router from Pro:Centric server to the LAN port on the TV.



- ① Connect the LAN port of the Modem or Router to the LAN port on the TV.
- ② Connect the LAN port of the PC to the AUX LAN port on the TV.

CAUTION

- Do not connect a modular phone cable to the LAN port
- Since there various connection methods, please follow the sepecifications of your telecommunication carrier or internet service provider.

Remote control

(Depending on model)

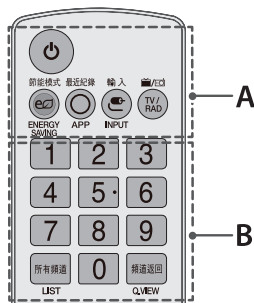
The descriptions in this manual are based on the buttons on the remote control. Please read this manual carefully and use the TV correctly.

To replace batteries, open the battery cover, replace batteries (1.5 V AAA) matching the ⊕ and ⊖ ends to the label inside the compartment, and close the battery cover. To remove the batteries, perform the installation actions in reverse.

CAUTION

- In Analogue TV and some countries, some remote control buttons may not work.

Make sure to point the remote control toward the remote control sensor on the TV.



A

⏻ (POWER) Turns the TV on or off.

節能模式 ENERGY SAVING Adjusts the brightness of the screen to reduce energy consumption.

最近紀錄 APP Shows the previous history.

輸入 INPUT Changes the input source.

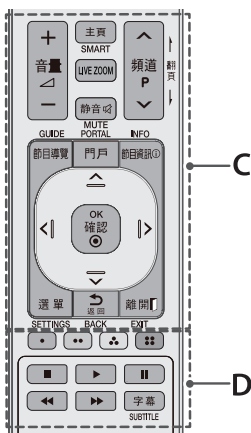
Ⓜ/Ⓜ/Ⓜ TV / RAD Selects Radio, TV, and DTV programme.

B

Number buttons Enters numbers.

所有頻道 LIST Accesses the saved channel list.

頻道返回 Q.VIEW Tunes to the last channel viewed.



C

+ 音量 **-** Adjusts the volume level.

主頁 SMART Selects a smart menu.

LIVE ZOOM By zooming in on the selected area, you can view it in full screen.

靜音 MUTE Mutes all sounds.

頻道 P **頻道 P** Scrolls through the saved channels.

翻頁 Moves to the previous or next screen.

節目導覽 GUIDE Shows programme guide.

選單 SETTINGS Accesses the main menu.

門戶 PORTAL Displays and removes Pro:Centric Application.

Navigation buttons (up/down/left/right) Scrolls through menus or options.

OK 確認 Selects menus or options and confirms your input.

返回 BACK Returns to the previous screen.

節目資訊 INFO Views the information of the current programme and screen.

離開 EXIT Clears all on-screen displays and returns to TV viewing.

D

Color buttons These access special functions in some menus.

Control buttons for media contents

字幕 SUBTITLE Activates your preferred subtitle in digital mode.

To use HDMI ULTRA HD Deep Colour

選單 **SETTINGS** **General** **HDMI ULTRA HD Deep Colour**
 HDMI (1/2) **On/Off**

- **On:** Support 4K @ 50/60 Hz (4:4:4, 4:2:2, 4:2:0)
- **Off:** Support 4K @ 50/60 Hz 8bit (4:2:0)
- If the device connected to Input Port also supports ULTRA HD Deep Colour, your picture may be clearer. However, if the device doesn't support it, it may not work properly. In that case, connect the device to a different HDMI port or change the TV's ULTRA HD Deep Colour setting to Off.
 - This feature is available on certain models which are supported ULTRA HD Deep Colour only.

Licenses

Supported licenses may differ by model. For more information about licenses, visit www.lg.com.



Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.



The terms HDMI and HDMI High-Definition Multimedia interface, and the HDMI logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.



For DTS patents, see <http://patents.dts.com>. Manufactured under license from DTS Licensing Limited. DTS, DTS-HD, the Symbol, & DTS or DTS-HD and the Symbol together are registered trademarks of DTS, Inc. © DTS, Inc. All Rights Reserved.

Supported Video Codec

Extension	Codec	
.asf	Video	VC-1 Advanced Profile (WMVA excluded), VC-1 Simple and Main Profiles
.wmv		Audio
	Video	XViD(except 3 warp-point GMC), H.264/AVC, Motion Jpeg, MPEG-4
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, LPCM, ADPCM, DTS
.mp4	Video	H.264/AVC, MPEG-4, HEVC
.m4v		Audio
.mov		
	Video	H.264/AVC, MPEG-4
	Audio	AAC, AMR-NB, AMR-WB
	Video	MPEG-2, MPEG-4, H.264/AVC, VP8, VP9, HEVC
	Audio	Dolby Digital, Dolby Digital Plus, AAC, PCM, DTS, MPEG-1 Layer I, II, MPEG-1 Layer III (MP3)
.ts	Video	H.264/AVC, MPEG-2, HEVC
.trp		Audio
.tp		
.mts		MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, AAC, PCM
.mpg	Video	MPEG-1, MPEG-2
.mpeg	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3)
.dat		
	Video	MPEG-1, MPEG-2
	Audio	Dolby Digital, MPEG-1 Layer I, II, DVD-LPCM
1 .rm	Video	RV30, RV40
.rmvb	Audio	Realaudio6(cook), AAC LC, HE-AAC
2 .mkv	Video	H.264/AVC, H.265 (HEVC)
	Audio	Dolby Digital, Dolby Digital Plus, AAC

- 1 Depending on model
- 2 UHD only

Supported Audio Formats

File Format	Item	Info
.mp3	Bir rate	32 Kbps - 320 Kbps
	Sample freq.	16 KHz - 48 KHz
	Support	MPEG1, MPEG2
	Channels	Mono, stereo
.wav	Sample freq.	8 Khz - 48 khz
	Support	PCM
	Channels	Mono, stereo
.ogg	Bir rate	64 Kbps - 320 Kbps
	Sample freq.	8 kHz - 48 kHz
	Support	Vorbis
	Channels	Mono, stereo
.wma	Bir rate	128 Kbps - 320 Kbps
	Sample freq.	8 kHz - 48 kHz
	Support	WMA
	Channels	Up to 6 ch

- The number of supported programmes may vary depending on the sample frequency.

Supported Photo Formats

File Format	Format	Resolution	
jpeg, jpg, jpe	JPEG	Minimum:	64 (W) x 64 (H)
		Maximum:	15360 (W) x 8640 (H)
		Progressive Type:	1920 (W) x 1440 (H)
png	PNG	Minimum:	64 (W) x 64 (H)
		Maximum:	5760 (W) x 5760 (H)
bmp	BMP	Minimum:	64 (W) x 64 (H)
		Maximum:	1920 (W) x 1080 (H)

Open Source Software Notice Information

To obtain the source code under GPL, LGPL, MPL, and other open source licenses, that is contained in this product, please visit <http://opensource.lge.com>.

In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to opensource@lge.com. This offer is valid for three (3) years from the date on which you purchased the product.

Troubleshooting

The software may be updated for improvement in performance. The customer is responsible to ensure the compatibility of their equipment with any LG Electronics software. If needed, please consult with LG Electronics and update new software versions according to the guidance provided by LG Electronics.

Cannot control the TV with the remote control.

- Check the remote control sensor on the product and try again.
- Check if there is any obstacle between the product and the remote control.
- Check if the batteries are still working and properly installed (⊕ to ⊕, ⊖ to ⊖).

No image display and no sound is produced.

- Check if the product is turned on.
- Check if the power cord is connected to a wall outlet.
- Check if there is a problem in the wall outlet by connecting other products.

The TV turns off suddenly.

- Check the power control settings. The power supply may be interrupted.
- Check if the **Sleep Timer / Timer Power Off** is activated in the **Timers** settings.
- If there is no signal while the TV is on, the TV will turn off automatically after 15 minutes of inactivity.

When connecting to the PC (HDMI), 'No signal' or 'Invalid Format' is displayed.

- Turn the TV off/on using the remote control.
- Reconnect the HDMI cable.
- Restart the PC with the TV on.

Key Codes

• This feature is not available for all models.

Code (Hexa)	Function	Note	Code (Hexa)	Function	Note
00	頻道P [△] 翻頁	R/C Button	44	OK 確認	R/C Button
01	頻道P [▽] 翻頁	R/C Button	53	所有頻道LIST	R/C Button
02	音量	R/C Button	5B	離開 EXIT	R/C Button
03	音量	R/C Button	61	(Blue)	R/C Button
06	(Arrow Key / Right Key)	R/C Button	63	(Yellow)	R/C Button
07	(Arrow Key / Left Key)	R/C Button	71	(Green)	R/C Button
7C	主頁SMART	R/C Button	72	(Red)	R/C Button
08	(POWER)	R/C Button	8E	(Forward)	R/C Button
09	靜音 MUTE	R/C Button	8F	(Rewind)	R/C Button
0B	輸入 INPUT	R/C Button	AA	節目資訊 INFO	R/C Button
0C	門戶PORTAL	R/C Button	AB	節目導覽GUIDE	R/C Button
10 - 19	* Number Key 0 - 9	R/C Button	AF	LIVE ZOOM	R/C Button
1A	頻道返回Q.VIEW	R/C Button	B0	(Play)	R/C Button
28	返 回BACK	R/C Button	B1	(Stop / File List)	R/C Button
39	字 幕SUBTITLE	R/C Button	B5	最近紀錄 APP	R/C Button
40	(Arrow Key / Cursor Up)	R/C Button	BA	(Freeze / Slow Play / Pause)	R/C Button
41	(Arrow Key / Cursor Down)	R/C Button	F0	TV / RAD	R/C Button
43	選 單SETTINGS	R/C Button	95	節能模式 ENERGY SAVING	R/C Button

* Key code 4C (0x4C) is available on ATSC/ISDB models which use major/minor channel. (For South Korea, Japan, North America, Latin America except Colombia models)

External Control Device Setup

- Image shown may differ from your TV.

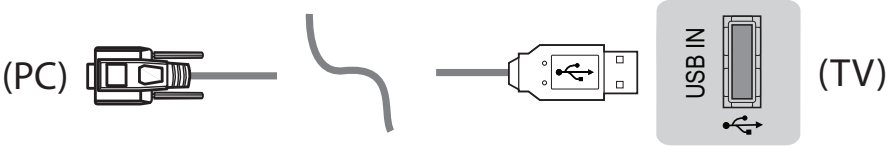
Connect the USB to Serial converter/RS-232C input jack to an external control device (such as a computer or an A/V control system) to control the product's functions externally.

Note: The type of control port on the TV can be different between model series.

- * Please be advised that not all models support this type of connectivity.
- * Cable is not provided.

USB to Serial converter with USB Cable

USB Type

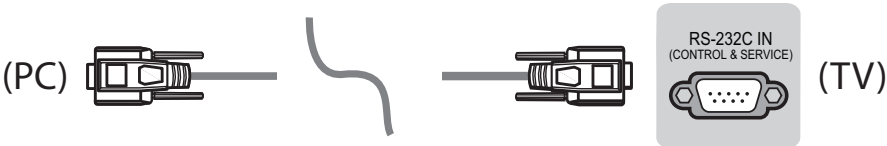


- LGTV supports PL2303 chip-based (Vendor ID : 0x0557, Product ID : 0x2008) USB to serial converter which is not made nor provided by LG.
- It can be purchased from computer stores that carry accessories for IT support professionals.

RS-232C With RS232C Cable

DE9 (D-Sub 9pin) Type

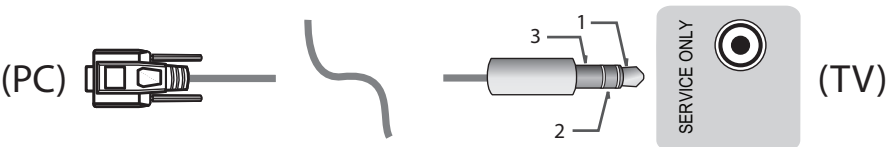
- You need to purchase the RS-232C (DE9, D-Sub 9pin female-to-female type) to RS-232C cable required for the connection between the PC and the TV, which is specified in the manual.



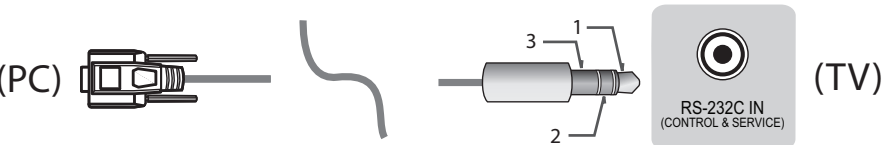
- The connection interface may differ from your TV.

Phone jack Type

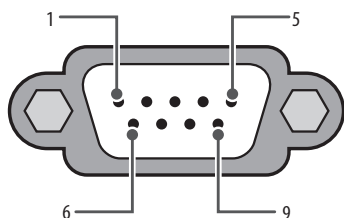
- You need to purchase the phone-jack to RS-232 cable required for the connection between the PC and the TV, which is specified in the manual.
- For other models, connect to the USB port.
- The connection interface may differ from your TV.



or



Type of connector : D-Sub 9-Pin male



RS-232C
(Serial port)

RS-232C Configurations

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

	PC	TV	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DTR
DSR	6	4	DSR
RTS	7	8	RTS
CTS	8	7	CTS
	D-Sub 9	D-Sub 9	

3-Wire Configurations
(Not standard)

	PC	TV	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DTR
DSR	6	4	DSR
RTS	7	8	RTS
CTS	8	7	CTS
	D-Sub 9	D-Sub 9	

Set ID

For Set ID number, see "Real Data Mapping".

- 1 Press 選單 **SETTINGS** to access the main menus.
- 2 Press the Navigation buttons to scroll to **General** and press **OK** 確認.
- 3 Press the Navigation buttons to scroll to **Set ID** and press **OK** 確認.
- 4 Scroll left or right to select a set ID number. The adjustment range is 1-99.
- 5 When you are finished, press 離開 **EXIT**.

*(Depending on model)

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)		COMMAND1	COMMAND2	DATA (Hexadecimal)
01. Power*	k	a	00 to 01	12. Remote Control Lock Mode	k	m	00 to 01
02. Aspect Ratio	k	c	(p.23)	13. Balance	k	t	00 to 64
03. Screen Mute	k	d	(p.23)	14. Color (Colour) Temperature	x	u	00 to 64
04. Volume Mute	k	e	00 to 01	15. Equalizer	j	v	(p.25)
05. Volume Control	k	f	00 to 64	16. Energy Saving	j	q	00 to 05
06. Contrast	k	g	00 to 64	17. Tune Command	m	a	(p.25)
07. Brightness	k	h	00 to 64	18. Channel (Programme) Add/ Del(Skip)	m	b	00 to 01
08. Color/Colour	k	i	00 to 64	19. Key	m	c	Key Codes
09. Tint	k	j	00 to 64	20. Control Backlight, Control Panel Light	m	g	00 to 64
10. Sharpness	k	k	00 to 32	21. Input select (Main)	x	b	(p.27)
11. OSD Select	k	l	00 to 01	22. Auto Configure	j	u	(p.27)

* Note: During playing or recording media, all commands except Power (ka) and Key (mc) are not executed and treated as NG.
With RS232C cable, TV can communicate **ka command** in power-on or power-off status. but with USB-to-Serial converter cable, the command works only if TV is on.

Transmission / Receiving Protocol

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 in TV is 1 to 99. If [Set ID] value is selected to '0', every connected set can be controlled. * [Set ID] is indicated as decimal (1 to 99) on menu and as Hexadecimal (0 x 00 to 0 x 63) on transmission/receiving protocol.
[DATA]	To transmit command data (hexadecimal). Transmit 'FF' data to read status of command.
[Cr]	Carriage Return - ASCII code '0 x 0D'
[]	Space - ASCII code '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

Real data mapping (Hexadecimal : Decimal)

* When you enter the [data] in hexadecimal, refer to following conversion table.
* Channel Tune (ma) Command uses two-byte hexadecimal value([data]) to select channel number.

00 : Step 0	32 : Step 50 (Set ID 50)	FE : Step 254
01 : Step 1 (Set ID 1)	33 : Step 51 (Set ID 51)	FF : Step 255
...	...	...
0A : Step 10 (Set ID 10)	63 : Step 99 (Set ID 99)	01 00 : Step 256
...	...	...
0F : Step 15 (Set ID 15)	C7 : Step 199	27 0E : Step 9998
10 : Step 16 (Set ID 16)	C8 : Step 200	27 0F : Step 9999
...	...	...

* Commands may work differently depending on model and signal.

01 Power (Command: k a)

- To control Power *On or 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 or *Off

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

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

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

02 Aspect Ratio (Command: k c)

(Main Picture Size)

- To adjust the screen format. (Main picture format)
You can also adjust the screen format using the Aspect Ratio in the PICTURE menu.

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

Data 01 : Normal screen (4:3) 09 : Just Scan
(Just Scan Off) 06 : Original (Just Scan Off)
02 : Wide screen (16:9)
(Just Scan Off)

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

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

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

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

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

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

08 Color/Colour (Command: k i)

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

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

Data Min : 00 to Max : 64

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

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

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 off and on (plug-off and plug-in, after 20 - 30 seconds), external control lock is released.

* In the standby mode (DC off by off timer or ka, mc command), and 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 Min : 00 to Max : 64

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

14 Color (Colour) Temperature (Command: x u)

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

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

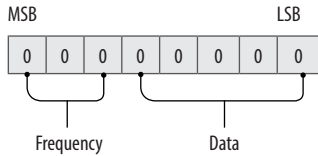
Data Min : 00 to Max : 64

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

15 Equalizer (Command : j v)

- Adjust EQ of the set.

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	1	20(decimal)

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

- * It depends on model, and can adjust when sound mode is EQ adjustable value.

16 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]

Data

- 00 : Off
01 : Minimum
02 : Medium
03 : Maximum
04 : Auto (For LCD TV / LED TV) /
Intelligent sensor (For PDP TV)
05 : Screen off

- * (Depending upon model)

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

17 Tune Command (Command: m a)

- * This command may work differently depending upon model and signal.

- For Europe, Mid-East, Colombia, Asia except South Korea and Japan Model

- Select channel to following physical number.

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

- * Analog Antenna/Cable

[Data 00][Data 01] Channel Data

Data 00 : High byte channel data

Data 01 : Low byte channel data
- 00 00 ~ 00 C7 (Decimal : 0 ~ 199)

Data 02 : Input Source (Analog)

- 00 : Antenna TV (ATV)
- 80 : Cable TV (CATV)

- * Digital Antenna/Cable/Satellite

[Data 00][Data 01]: Channel Data

Data 00 : High Channel data

Data 01 : Low Channel data
- 00 00 ~ 27 0F (Decimal: 0 ~ 9999)

Data 02 : Input Source (Digital)

- 10 : Antenna TV (DTV)
- 20 : Antenna Radio (Radio)
- 40 : Satellite TV (SDTV)
- 50 : Satellite Radio (S-Radio)
- 90 : Cable TV (CADTV)
- a0 : Cable Radio (CA-Radio)

- * Tune Command Examples:

1. Tune to the Analog antenna (PAL) Channel 10.

Set ID = All = 00

Data 00 & 01 = Channel Data is 10 = 00 0a

Data 02 = Analog Antenna TV = 00

Result = ma 00 00 0a 00

2. Tune to the digital antenna (DVB-T) Channel 01.

Set ID = All = 00

Data 00 & 01 = Channel Data is 1 = 00 01

Data 02 = Digital Antenna TV = 10

Result = ma 00 00 01 10

3. Tune to the satellite (DVB-S) Channel 1000.
Set ID = All = 00
Data 00 & 01 = Channel Data is 1000 = 03 E8
Data 02 = Digital Satellite TV = 40
Result = ma 00 03 E8 40

```
Ack [a][ ][Set ID][ ][OK][Data 00][Data 01]
[ ][Data 02][x][a][ ][Set ID][ ][NG][Data 00][x]
```

- For South Korea, North/Latin America except Colombia Model
- ▶ To tune channel to following physical/major/minor number.

```
Transmission [m][a][ ][0][ ][Data00][ ][Data01]
[ ][Data02][ ][Data03][ ][Data04][ ][Data05][Cr]
```

Digital channels have a Physical, Major, and Minor channel number. The Physical number is the actual digital channel number, the Major is the number that the channel should be mapped to, and the Minor is the sub-channel. Since the ATSC tuner automatically maps the channel from the Major / Minor number, the Physical number is not required when sending a command in Digital.

* Analog Antenna/Cable

Data 00 : Physical Channel Number

- Antenna (ATV) : 02~45 (Decimal: 2 ~ 69)
- Cable (CATV) : 01, 0E~7D (Decimal : 1, 14~125)

[Data 01 ~ 04]: Major/Minor Channel Number

Data 01 and 02: xx (Don't care)

Data 03 and 04: xx (Don't care)

Data 05: Input Source (Analog)

- 00 : Antenna TV (ATV)
- 01 : Cable TV (CATV)

* Digital Antenna/Cable

Data 00 : xx (Don't care)

[Data 01][Data 02]: Major Channel Number

Data 01 : High byte Channel Data

Data 02 : Low byte Channel Data

- 00 01 ~ 27 0F (Decimal: 1 ~ 9999)

[Data 03][Data 04]: Minor Channel Number

Data 03 : High byte Channel Data

Data 04 : Low byte Channel Data

Data 05 : Input Source (Digital)

- 02 : Antenna TV (DTV) – Use Physical Channel Number
- 06 : Cable TV (CADTV) – Use Physical Channel Number
- 22 : Antenna TV (DTV) – Don't Use Physical Channel Number
- 26 : Cable TV (CADTV) - Don't Use Physical Channel Number
- 46 : Cable TV (CADTV) – Use Physical/Major Channel Number Only (One Part Channel)
- 66 : Cable TV (CADTV) – Use Major Channel Number Only (One Part Channel)

Two bytes are available for each major and minor channel data, but usually the low byte is used alone (high byte is 0).

* Tune Command Examples:

1. Tune to the Analog cable (NTSC) channel 35.

Set ID = All = 00

Data 00 = Channel Data is 35 = 23

Data 01 & 02 = No Major = 00 00

Data 03 & 04 = No Minor = 00 00

Data 05 = Analog Cable TV = 01

Total = ma 00 23 00 00 00 00 01

2. Tune to the digital antenna (ATSC) channel 30-3.

Set ID = All = 00

Data 00 = Don't know Physical = 00

Data 01 & 02 = Major is 30 = 00 1E

Data 03 & 04 = Minor is 3 = 00 03

Data 05 = Digital Antenna TV = 22

Total = ma 00 00 00 1E 00 03 22

```
Ack [a][ ][Set ID][ ][OK][Data 00][Data 01]
[Data 02][Data 03][Data 04][Data 05]
[x][a][ ][Set ID][ ][NG][Data 00][x]
```

- For Japan Model

- ▶ To tune channel to following physical/major/minor number.

```
Transmission [m][a][ ][0][ ][Data00][ ][Data01]
[ ][Data02][ ][Data03][ ][Data04][ ][Data05][Cr]
```

* Digital Antenna/Satellite

Data 00: xx (Don't care)

[Data 01][Data 02]: Major Channel Number

Data 01: High byte Channel Data

Data 02: Low byte Channel Data

- 00 01 ~ 27 0F (Decimal: 1 ~ 9999)

[Data 03][Data 04]: Minor/Branch Channel Number
(Don't care in Satellite)

Data 03: High byte Channel Data

Data 04: Low byte Channel Data

Data 05 : Input Source (Digital/Satellite for Japan)

- 02 : Antenna TV (DTV)
- 07 : BS (Broadcasting Satellite)
- 08 : CS1 (Communication Satellite 1)
- 09 : CS2 (Communication Satellite 2)

* Tune Command Examples:

1. Tune to the digital antenna (ISDB-T) channel 17-1.

Set ID = All = 00

Data 00 = Don't know Physical = 00

Data 01 & 02 = Major is 17 = 00 11

Data 03 & 04 = Minor/Branch is 1 = 00 01

Data 05 = Digital Antenna TV = 02

Total = ma 00 00 00 11 00 01 02

2. Tune to the BS (ISDB-BS) channel 30.

Set ID = All = 00

Data 00 = Don't know Physical = 00

Data 01 & 02 = Major is 30 = 00 1E

Data 03 & 04 = Don't Care = 00 00

Data 05 = Digital BS TV = 07

Total = ma 00 00 00 1E 00 00 07

* This feature is varied based on the model.

Ack [a][][Set ID][][OK][Data 00][Data 01]
[Data 02][Data 03][Data 04][Data 05]
[x][a][][Set ID][][NG][Data 00][x]

- 18 Channel (Programme) Add/Del(Skip) (Command: m b)

► To skip current channel(programme) for next time.

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

Data 00 : Del(ATSC,ISDB)/Skip(DVB)

01 : Add

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

* Set the saved channel status to del(ATSC, ISDB)/ skip(DVB) or add.

- 19 Key (Command: m c)

► To send IR remote key code.

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

Data Key code - p.17.

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

- 20 Control Backlight (Command: m g)

* For LCD TV / LED TV

► 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]

Control Panel Light (Command: m g)

- 21 Input select (Command: x b)

(Main Picture Input)

► To select input source for main picture.

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

Data

00 : DTV	01 : CADTV
02 : Satellite DTV	10 : ATV
ISDB-BS (Japan)	
03 : ISDB-CS1	
(Japan)	
04 : ISDB-CS2	
(Japan)	
11 : CATV	
20 : AV or AV1	21 : AV2
40 : Component1	41 : Component2
60 : RGB	
90 : HDMI1	91 : HDMI2
92 : HDMI3	93 : HDMI4

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

* This function depends on model and signal.

- 22 Auto Configure (Command: j u)

(Depending upon 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]

Specifications

Wireless module Specification

- As band channels can vary per country, the user cannot change or adjust the operating frequency. This product is configured for the regional frequency table.
- For consideration of the user, this device should be installed and operated with a minimum distance of 20 cm between the device and the body.

Wireless module (LGSBWAC61) Specifications	
Wireless LAN (IEEE802.11a/b/g/n/ac)	
Frequency range	Output power (Max.)
2400 to 2483.5 MHz	15.5 dBm
5150 to 5250 MHz	17.5 dBm
5725 to 5850 MHz	8.0 dBm
Bluetooth	
Frequency range	Output power (Max.)
2400 to 2483.5 MHz	10 dBm

	Digital TV	Analogue TV
Television System	DTMB	PAL D/K/B/G/I, NTSC-M
Programme Coverage	DTMB:21 ~ 69	PAL D/K : VHF/UHF 1 ~ 69, CATV 1 ~ 47 PAL B/G/I : VHF/UHF 1 ~ 69, CATV 1 ~ 47 NTSC M : VHF/UHF 2 ~ 78, CATV 1 ~ 71
Maximum number of storable programmes	420	
External Antenna Impedance	75 Ω	

Environment condition	Operating Temperature	0 °C to 45 °C
	Operating Humidity	Less than 80 %
	Storage Temperature	-20 °C to 60 °C
	Storage Humidity	Less than 85 %

HDMI (PC) supported mode

(Use HDMI IN 1 for PC mode)

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
640 x 350	31.46	70.09
720 x 400	31.46	70.08
640 x 480	31.46	59.94
800 x 600	37.87	60.31
1024 x 768	48.36	60.00
1152 x 864	54.34	60.05
1360 x 768	47.71	60.01
1280 x 1024	63.98	60.02
1920 x 1080	67.50	60.00
3840 x 2160	67.50	30.00
	56.25	25.00
	54.00	24.00
4096 x 2160	53.95	23.97
	54.00	24.00

HDMI (DTV) supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
640 x 480	31.46	59.94
	31.50	60.00
720 x 480	31.47	59.94
	31.50	60.00
720 x 576	31.25	50.00
1280 x 720	44.96	59.94
	45.00	60.00
	37.50	50.00
1920 x 1080	28.12	50.00
	33.72	59.94
	33.75	60.00
	26.97	23.97
	27.00	24.00
	33.71	29.97
	33.75	30.00
	56.25	50.00
	67.43	59.94
	67.50	60.00
3840 x 2160	53.95	23.98
	54.00	24.00
	56.25	25.00
	61.43	29.97
	67.50	30.00
	112.50	50.00
	135.00	59.94
4096 x 2160	135.00	60.00
	53.95	23.98
	54.00	24.00
	56.25	25.00
	61.43	29.97
	67.50	30.00
	112.50	50.00
	135.00	59.94
	135.00	60.00

Component port connecting information

(Depending on model)

Component ports on the TV	Y	P _B	P _R
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Video output ports on DVD player	Y	P _B	P _R
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	Pb	Pr

Signal	Component
480i/576i	0
480p/576p	0
720p/1080i	0
1080p	0 (50 Hz / 60 Hz only)



Record the model number and serial number of the TV.
Refer to the label on the back cover and quote this
information to your dealer when requiring any service.

MODEL _____

SERIAL _____