

联系全球三星公司 如果您对三星的产品有任何疑问或意见,请与三星的客户服务中心联系。 400-810-5858, 010-6475 1880

www.samsung.com

天津通广三星电子有限公司 地址: 天津市西青区微电子工业区

电话: 022-23961234 邮政编码: 300385







数字LED液晶电视 使用说明书

请在www.samsung.com/cn 注册您的产品 在此处记下型号和序列号,以供今后参考之用

켄 믁	序列号



- 不要将盛有水的容器放置在本机器上,因为这样可能导致火患或电击的危险。
- 不要将本机器暴露在雨中或靠近水的地方(例如靠近浴缸、水盆、厨房水槽、洗衣池、潮湿的地下室,或靠近游泳池)。如果本机器被意外弄湿,请立即拔下电源插头然后联系授权经销商。

□ 声明



三星环保型"水晶设计"采用双注模成型技术,在实现完美色彩层次的同时不会产生有害的挥发性有机化合物 (VOC)。



TruSurround HD、SRS 和(●)标志都是 SRS Labs, Inc 的商标。

TruSurround HD 技术由 SRS Labs, Inc 授权使用。

DOLBY.

经杜比实验室授权使用。

杜比和双 D 标志是杜比实验室的商标。

□ 显示静止图像时的注意事项

静止图像可能会导致电视屏幕永久性损坏。

 不要在LCD平板上显示静止图像超过2小时,因为这样会导致出现屏幕图像残影。 此图像残影也称为screen burn(荧光屏灼伤)。

要避免此类图像残影,请在显示静止图像时降低屏幕的亮度和对比度。

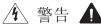
长时间观看4:3格式的液晶电视节目时,在屏幕的左侧、右侧和中央显示的边缘会由于屏幕上发射的不同而留下痕迹。

播放DVD或连接游戏控制台也会对屏幕产生类似的影响。

上述原因导致的损坏不在保修范围之内。

● 显示电子游戏和PC的静止图像的时间超过某段时间后可能会导致局部余像。为避免出现此效果,请在显示静止图像时降低brightness(亮度)和contrast(对比度)。

© 2009 Samsung Electronics Co., Ltd. 保留所有权利。



有电击的危险 请勿打开

注意: 为减少电击的危险,请勿卸下机盖。

内部没有用户可维修的部件。

请让合格的维修人员进行维修。



此符号表示内部存在危险高电压。

与产品内部任何部件的任何形式接触都是危险 的。



此符号提醒您关于操作和保养本产品随附的重要说明。

- 机箱内及后部和底部的开槽和洞孔是为了提供必要的通风而设计。 为了确保本机器的可靠操作和防止它过热,切勿堵塞或遮盖这些开槽和洞孔。
 - 不要用布或其他材料遮盖开槽和洞孔。
 - 不要将本机器放在床上,沙发,地毯或其他类似物体表面上而使开槽和洞孔被堵塞。
 - 不要将本机器放置在受限制的空间,如: 书柜或嵌入的橱柜,除非有适当的通风条件。
 - 安装产品时,注意与墙保持一定距离(请参阅以下信息。)
 - * DLP 电视、直观式电视和投影仪 → 10cm
 - * 显示屏尺寸为 32″ 或以上的产品 → 5cm
 - * 其他产品 → 4cm
- 不要将本机器放置在电暖炉或暖气片附近或上方,或阳光可直射的地方。
- 请勿将蜡烛,烟灰缸,熏香,可燃气体或易爆物质等产热物件放置在产品附近。
- 不要将盛有水的容器放置在本机器上,因为这样可能导致火患或电击的危险。
- 不要将本机器暴露在雨中或靠近水的地方(例如靠近浴缸,水盆,厨房水槽,或洗衣池、潮湿的地下室,或靠近游泳池)。 如果本机器被意外弄湿,请立即拔下电源插头然后联系授权经销商。清洁电视机时,请使用不含挥发性物质的干燥软布。 在进行清洁之前,请确保拔掉电源线。
- 本机器有使用电池。基于环境的考虑,请您正确处置这些电池: 请联系您当地的机构以了解关于处理或回收利用的信息。
- 勿使墙上插座、延长电线或便利插座超载, 因为这样可以导致火灾或电击。
- 电源线应布置在不会被踩到或被上方或旁边物体挤压的位置,应特别注意插头处,便利插座处以及机器接出处的电线。
- 为在雷电天气下或无人看管或长时间不用的情况下为更好地保护本机器,请拔下其插头,并断开天线或电缆系统的连接。 这样可以预防机器在雷电期间或电源线路出现电涌的情况下被损坏。
- 将交流电源线连接到直流电适配器插座前,请确定直流电适配器的电压指示器符合您当地的电源供应。
- 切勿将任何金属物件插入本机器的洞孔, 否则可能会导致电击的危险。
- 为防止电击,切勿接触本机器的内部。只有合格的技术人员可以打开本机器的机盖。
- 请确保将电源线牢固地插入插座。在断开电源线连接时,请确保抓住电源插头,然后将插头从插座拔出。 请勿用湿手触碰电源线。
- 如果本机器操作不正常,特别是如果有发出任何不寻常的声音或气味的时候,请立即拔下电源插座然后联系授权经销商或服务中心。
- 如果打算长时间将电视机搁置不用,或者您要离家外出(特别是有小孩,老人或残障人士被单独留在家中时),一定要将电源插头从插座中拔出。如果长时间不使用遥控器,请取出电池并将它存放在凉爽,干燥的地方。
 - 蓄积的灰尘可能会导致电源线发出火花和热量或者使绝缘老化,从而引起电击,漏电或者失火。
- 避免摔落遥控器。
- 电视机由低温的地方移至温暖的区域后,为使机内结露充分散发干燥,应放置一段时间后再加电开机。

○ 电源电压会在电视机的背面标示,频率为50或60Hz。

- 如果要在多尘、高温或低温,高湿度,含化学物质的环境以及机场或火车站等24小时使用的地方安装产品,请务必与授权的服务中心联系。否则,显示器可能会严重受损。否则,产品可能会严重受损。
- 只使用适当接了地的插头和插座。
 - 接地不好可能造成电击或设备损伤。(仅适用于 1 类设备。)
- 要断开设备的电源,必须将插头从电源插座拔出,因此电源插头应易于操作。
- 请勿允许儿童攀爬本产品。
- 请将附件(电池等)保存在儿童无法靠近的位置。
- 请勿将本产品安装在不稳定的位置,如摇晃的架子,倾斜的地面或受外部振动影响的位置。
- 请勿使产品坠落或受到冲击。如果产品损坏,请断开电源,并与服务中心联系。
- 从电源插座中拔出电源线后用柔软的干布擦拭本产品。 千万不要使用蜡,苯,酒精,稀释剂,杀虫剂,空气清新剂,润滑剂或清洁剂等任何化学品。 这可能会损坏产品外观或擦除产品上印刷的信息。



警告 - 为了防止发生火灾,

请确保本产品始终远离蜡烛或其他明火。

安全使用注意事项

天线隔离器安装说明

由于用户装修时电源的地线与有线信号的地线电压有差异,

可能造成有线信号与电视机连接处会有发热的情况。

情况严重时会导致事故发生。

为避免不安全事故的发生,用天线隔离器是为了提高观看电视的安全性。

- 一旦安装, 请不要将其随意拆下。
- ② 请您根据随机附赠的天线隔离器类型,选择适合的连接方式。
- ② 部分机型随机附赠隔离器连接线,是否附赠视机型而定。

□ 直角型天线隔离器

- 外观



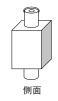
- 连接方式

- 1 将插头1与电视信号线连接
- 2 将插头2与电视后面板中的ANT端口连接



□ 一字型天线隔离器

- 外观



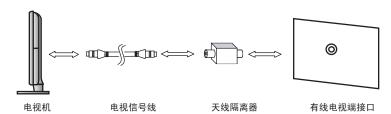




下面(插头2)

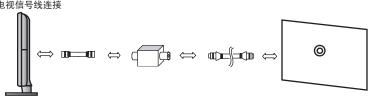
- 连接方式1

- 1 将插头2与有线电视线端口连接
- 2 将插头1与电视信号线连接
- 3 电视信号与电视连接



- 连接方式2

- 1 将插头2与隔离器连接线连接
- 2 将插头1与电视信号线连接



电视机 隔离器连接线 天线隔离器

电视信号线

有线电视端接口

目录

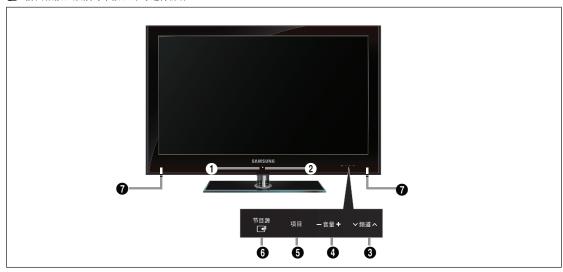
连接电视准备观看	Media play (USB)
■ 查看控制面板. 2 ■ 附件. 3 ■ 查看连接面板. 4 ■ 遥控器. 6 ■ 安装遥控器电池. 6	■连接USB设备. ■Media Play功能. ■相片列表选项菜单. ■查看相片或者幻灯片播放. ■幻灯片播放选项菜单. ■音乐列表.
操作 ■即插即用功能8	■音乐列表选项菜单 ■音乐播放 ■音乐播放选项菜单 ■使用设置菜单
频道控制 ■ 设置频道菜单	ANYNET+
图像控制	■连接Anynet+设备 ■设置 Anynet+ ■在 Anynet+ 设备之间浏览 ■录制.
■配置图像菜单. 13 ■个人电脑显示. 15 ■设置您的PC(个人电脑). 16	■求制 ■通过接收器收听(家庭影院 ■请求维修之前检查以下情况。
伴音控制	建议
■配置伴音菜单	■安装底座 ■拆卸底座 ■安装墙壁安装套件
设置	■装配线缆
■配置设置菜单	■保留安全的安装空间 ■使用 Kensington 防盗锁.
输入/支持	■安全固定装置
■配置输入菜单	■故障诊断:与维修人员联; ■详细规格

连接电视准备观看

② 说明书中图片和说明仅供参考,可以和实际产品外观不同。为了提升产品品质,产品设计和规格变更后恕不另行通知。

查看控制面板

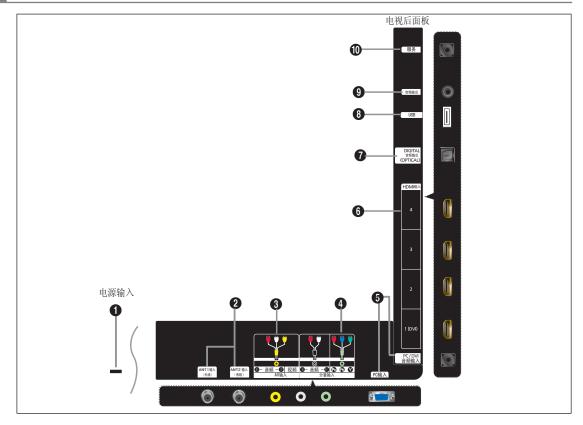
- ② 产品颜色和外形可能随型号的不同而异。
- ② 前面板按钮触摸每个按钮即可进行操作。



- 遥控传感器:将遥控器对准电视机上的这一位置。
- ② (电源)按钮:按此按钮可打开和关闭电视机。
- ③ ^ 频道 ン: 按这两个按钮可更改频道。在屏幕菜单中,面板中 ^ 频道 ン 按钮的功能与遥控器上 ▼ 和 ▲ 按钮的功能相同。
- ◆ + 音量 -:按这两个按钮可提高或降低音量。在屏幕菜单中,面板中+音量-按钮的功能与按遥控器上按扭的▼ 或 ▶ 方位功能相同。
- **⑤** 项目: 按此按钮可查看电视机功能的屏幕菜单。
- 奇 节目源 □:显示所有可用输入节目源。在屏幕菜单中,面板中此按钮的功能与遥控器上确认□ 按钮的功能相同。
- 7 扬声器



- ② 请检查所有物品是否包含在你的电视中。如果有丢失事项,请联系您的经销商。
- ② 保修卡/注册卡(某些地区可能不适用)。
- ② 物件的颜色和形状可能随型号的不同而有所变化。



- ② 产品的颜色和形状可能随型号的不同而有所变化。
- ② 每当将外部设备与电视机连接时,都请确保已将电视机的电源关闭。
- ② 连接外部设备时,请将电缆和与之颜色相同的连接端子相连。
- Kensington 锁 (视型号而定)
 - Kensington 锁(可选)是一种在公共场合固定电视设备的工具。
 - 如果要使用锁定装置,请与销售电视机的经销商联系。
 - Kensington 锁的位置可能随其型号的不同有所不同。
- ② ANT 1 输入/ANT 2 输入
 - 将电视背面的ANT1(无线)端子和室外天线用连接线连接,也可将电视背面的ANT2(有线)端子和有线电视网络连接,来接收电视广播信号。
 - 天线分为两种:有线和无线。
- 3 连接外部A/V(视听)设备
 - 连接外部视听(A/V)输出设备,如DVD、录像机或摄像机。
 - 将附件内的A/V扩展线缆连接到背部面板的A/V端子,再使用适当的连接线(不附赠)来连接外部A/V设备。
- 连接分量设备
 - 连接外部分量设备(视频/音频)。
 - 分量设备背面的Pr, Pb和Y端子有时也标为Y, B-Y和R-Y或Y, Cb和Cr。
 - 将附件内的分量扩展线缆(视频/音频)连接到背部面板的分量端子(视频/音频),再使用适当的连接线(不附赠)来连接外部分量设备。
- ⑤ PC输入端子和PC/DVI音频输入端子,连接到PC上的视频和音频输出端子。
 - 如果您的PC支持HDMI连接,您可将PC上HDMI端子连接到电视HDMI输入1(DVI)、2、3或4端子。
 - 如果您的 PC 支持 DVI 连接,您可将PC连接到电视HDMI 输入 1(DVI)端子和PC/DVI 音频输入端子。
 - 用于外部设备的 DVI 音频输出。

- 6 连接HDMI1/DVI, HDMI2, HDMI3, HDMI4 输入
 - 支持与具备HDMI连接的AV设备(机顶盒, DVD播放器, AV接收器)和数字电视之间进行连接。
 - HDMI 到 HDMI 的连接无需伴音连接。
 - 使用HDMI/DVI连接线时,您必须使用HDMI输入1端子。
 - 请使用小于14mm的HDMI的连接线。
 - 注意



最大值14mm

- 最适合此超薄电视的HDMI 连接接口。
- 「酒碗认使用的HDMI线缆接口的最大厚度为14mm(0.55英寸)

② 什么是HDMI?

HDMI 即高清晰多媒体接口,可以传输高清晰数字视频和多声道数字音频。

HDMI/DVI端子支持DVI连接,即通过匹配的线缆(不附赠)与外接设备相连。HDMI与DVI之间的差别在于:HDMI尺寸较小,内置有HDCP(高带宽数字内容保护)编码功能,同时支持多声道数字音频。

- ② DVD播放器/天线盒/卫星接收器无法支持HDMI1.3版本时,电视机可能无法正常播放声音及影像。连接支持老版本的HDMI电缆却仍无法播放声音时,请将HDMI电缆插入HDMI输入1端子,将音频线缆插入PC/DVI音频输入端子。如果有这种问题出现,请与DVD播放器/天线盒/卫星接收器供应商联系以确认HDMI版本及进行升级。较低版本的HDMI电缆可能导致刺眼的闪烁或无画面显示。建议用户购买质量好的HDMI连接线,若线的质量不好可能会导致电视的图像或声音不正常。
- P HDMI、DVI 和分量输入的支持模式。

	480 i	480p	576 i	576p	720p	1080 i	1080p
HDMI / DVI 50Hz	Х	Х	Х	0	0	0	0
HDMI / DVI 60Hz	X	0	0	Χ	0	0	0
分量输入	0	0	0	0	0	0	0

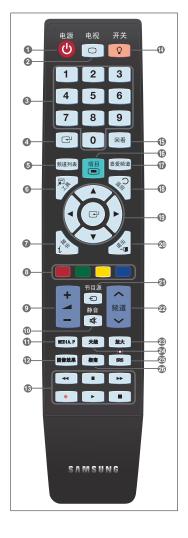
- 7 数字音频输出(光纤)
 - 连接到数字音频分量输出
 - ② 当一个外部数字音频系统连接到数字音频输出(光纤)端子时,适当减小电视的音量并通过外部数字音频系统的音量控制来调节音量的大小。
 - ② 当电视连接一个外部5.1声道设备时,支持5.1声道输出。
 - ② 当外部接收设备(家庭影院)打开时,你可以通过电视的光纤端子与家庭影院连接来输出声音。当电视播放一个数字信号(DTV)时,电视对家庭影院输出5.1声道的声音。而当电视播放的数字信号来源于连接分量端子的设备,如DVD/蓝光播放器/机顶盒/卫星接收机时,或者电视通过HDMI端子连接HDMI设备时,电视通过家庭影院仅输出2声道的声音。如果想要家庭影院输出5.1声道的声音,请把诸如DVD/蓝光播放器/机顶盒/卫星接收机的设备的数字音频输出直接与家庭影院或功放相连,而不是连接到电视。
 - [图] 请选择适合此超薄机型的光纤接口的线缆。
- 8 USB
 - 连接端口可以软件升级和媒体播放等。
- 9 音频输出
 - 可以将音频接收设备与电视后面板的音频输出端口相连。
- 服务
 - 服务端子只能由专业人士进行服务连接。



注意:由于您所购买的电视为超薄机型,在使用连接线连接电视背部面板时,请注意连接线端口的尺寸,选择 使用适当的连接线,以免对电视背部面板和端口造成损害。

- ② 遥控器可在距电视机7米的范围内使用。
- ② 遥控器的性能可能会受到明亮光线的影响。
- ② 产品的颜色和形状可能随型号的不同而有所变化。
- 电源开关: (打开和关闭电视)
- ② 电视:直接选择电视模式。
- **③** 数字按钮:用于直接选取频道的数字按钮。
- 确认键: 当您通过数字键转换频道的时候,在您输入数字后马上按确认键可以立即转换频道。
- 5 频道列表:显示频道列表。
- **6** 工具:用于快速选择常用的功能。
- **7** 显示:按此按钮可在电视屏幕上显示信息。
- ⑧ 彩色按钮:使用频道列表、
 Media Play和Anynet+
 (HDMI-CEC)等。
- **9** +: +音量提高 -音量降低
- **⑩** 静音: 此按钮可暂时关闭声音。
- MEDIA. P: 进入媒体播放功能。
- 图像效果:按此按钮可进行图像效果选择。
- ③ 录像机/DVD功能 (倒带、停止、播放/暂停、快进)
- 开关:按此按钮,遥控器按钮发 光。此功能方便使用者在夜晚和 光线昏暗处使用遥控器。

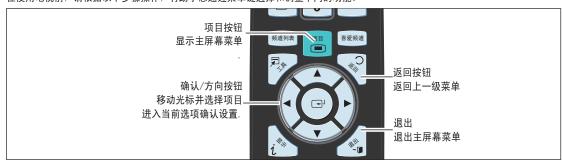
- ⑤ 回看: 电视会转到上次观看的频道。
- 16 项目:显示主屏幕菜单。
- 1 喜爱频道:显示喜爱的频道列表。
- 18 返回:返回到上一级菜单。
- ⑤ 上▲ / 下▼ /左▼ / 右► /
 确认[3]:使用上下左右和确认按
 扭,控制菜单中的光标,分别转到所需菜单选项进行调整。
- ② 退出:退出屏幕菜单。
- 2 节目源: 可用节目源选择。
- ❷ 放大:选择图像尺寸。
- ② 天线:选择所需的天线→有线或无 线。
- ② SRS: 选择 SRS TruSurround 模式。
- 20 指南:频道指南。



操作

□ 查看菜单

在使用电视前,请根据以下步骤操作,有助于您通过菜单键选择和调整不同的功能。



□ 操作屏幕菜单

根据选择的菜单不同,访问菜单的步骤会有不同。

- 1. 按项目键
- 2. 主菜单会显示在屏幕上。菜单的左侧有如下图标:图像,伴音,频道,设置,输入,应用支持。
- 3. 使用 ▲ 或 ▼ 按钮选择其中一个图标。
- 4. 然后按确认 □ 按钮进入该图标的子菜单。
- 5. 使用 ▲ 或 ▼ 按钮选择其中一个图标。
- 6. 使用◀ 或 ▶按钮减小或者增加项目值。根据选择不同菜单显示也会有所不同。
- 7. 使用确认 🖼 按钮完成设置。使用退出按钮退出菜单。







即插即用功能

电视机第一次打开时,会先后出现几个基本设定。

- 按遥控器上的电源按钮。屏幕显示信息:选择菜单的语言。按 ▲ 或 ▼ 按钮选择 合适的语言。按确认按钮确认您的选择。
- 屏幕会自动显示信息:家庭中,请选择家庭使用模式。按 ◀ 或 ▶ 按钮选择商场展示或家庭使用,然后按确认 ☐ 按钮。
 - ② 我们建议将电视设置为家庭使用模式,以便在家庭环境中获得最佳效果。
 - ② 商场展示模式仅适用于零售环境。
 - 如果不小心进入商场展示模式,请按声音按钮,当声音菜单显示的时候,按住电视上的项目按钮5秒钟后,可以进入家庭使用模式。
- 3. 按 ▲ 或 ▼ 按钮选择"无线","有线"或"自动"。按确认按扭选择确定。
 - 无线:无线天线信号。
 - 有线:有线天线信号。
 - 自动:包含无线和有线天线信号。
- 4. ▲ 或 ▼ 按钮选择"数字&模拟","数字"或"模拟"。按确认 🖼 按扭选择"开始"。
 - 数字&模拟:数字和模拟频道。
 - 数字: 数字频道。
 - 模拟:模拟频道。
 - ② 频道搜索会自动开始和结束。
 - 任何时候按确认 母 按钮都会中断搜索。
 - ② 在所有频道存储后会显示设置时钟模式的信息。
- 5. 按确认 → 按钮。按 ▲ 或 ▼ 按钮选择自动,按确认按钮。
 - ② 如果选择手动,屏幕会显示信息:设置当前日期和时间。
 - ② 如果您已经接收到数字信号,时钟会自动设置,如果没有,请手动设置时钟。
- 6. 描述了高清屏幕显示的连接方法,检查描述后按确认 → 按钮。
- 7. 使用◀ 或 ▶按钮选择进入产品指南或者观看电视,然后按确认 🕒 按钮。
 - 观看产品指南: 您可以进入产品指南观看您的新高清电视的新功能。
 - 观看电视:您可以观看电视广播频道。

如果您想重置这些参数...

- 1. 按项目按钮显示菜单。按 ▲ 或 ▼ 按钮选择设置,然后按确认 🕞 按钮。
- 2. 再按确认 🖼 按钮选择即插即用功能。
- 3. 输入4位数字密码。新电视的默认密码是'0-0-0-0'。
 - ② 如果您想改变密码,使用改变密码功能。
 - ② 只有在电视模式下才可以使用即插即用功能。

频道控制

▮ 设置频道菜单

□ 天线

您的电视机可以记忆和储存所有可用频道,包括无线和有线频道。

- ② 如果天线接无线接口,选择无线,如果天线接有线接口,选择有线。
- ② 如果无线和有线天线都连接,选择您希望的天线。





□ 自动选台

您可以搜索您需要的频率(依地域不同)自动分配的电视节目号码会和实际节目号码不对应。

② 如果频道被童锁功能锁定,密码输入窗口会出现。

■ 无线/有线/自动

选择需要记忆的天线

- 无线:只搜索ANT1输入(无线)的电视信号
- 有线:只搜索ANT2输入(有线)的电视信号。
- 自动:搜索ANT1输入(无线)和ANT2输入(有线)的电视信号。

如果天线连接到ANT1 输入(无线),则选择无线;如果天线连接到ANT2 输入(有线),则选择有线;

如果ANT1 输入(无线)及ANT2 输入(有线)均有连接,请选择自动。

■ 数字&模拟:数字和模拟频道

- 数字&模拟:数字和模拟频道。
- 数字: 数字频道
- 模拟:模拟频道
- ② 搜索电视台发送的节目后储存在电视内存中。
- ② 如果想退出自动搜索,请按确认 3 按钮。
 屏幕会显示信息:您愿意放弃自动搜索选择吗?
- 按 ◀ 或 ▶ 按钮选择"是"。

□ 手动选台

- ② 手动搜台后存储在电视中。
- Ø 如果频道被童锁功能锁定,密码输入窗口会出现。

■ 数字频道

手动存储数字频道

- 频道:按 ▲ 或 ▼ 按钮,选择所需要的号码或者按数字按钮选(0~9)。
- 频率: 使用数字按钮设置频率。
- 带宽:按 ▲ 或 ▼ 按钮或者按数字按钮选(0~9)设置带宽。
- ② 当操作完成以后,频道列表将会更新。

■ 模拟频道

手动存储模拟频道

- 节目: 为频道指定的台号。 按 ▲ 或 ▼ 按钮选择频道,直到找到正确的数字。通过按数字按钮选(0~9),可以直接选择频道。
- 彩色制式: 自动/PAL/SECAM/NTSC4. 43/NTSC3. 58按 ▲ 或 ▼ 按钮,选择所需要的彩色制式。
- 伴音制式: BG/DK/I/L/M 按 ▲ 或 ▼ 按钮,选择所需要的伴音制式。
- 频道: 当您知道要存储的频道号时按 ▲ 或 ▼ 按钮,选择C(无线频道)或Z(有线频道)。按 ▶ 按钮,然后按 ▲ 或 ▼ 按 钮,选择所需要的号码。
 - 逻 按数字按钮选(0~9),可以直接选择频道。
 - Ø 如果伴音异常或没有伴音,重新选择需要的伴音标准。
- 搜索: 当您不知道频道号时按 ▲ 或 ▼ 按钮,开始搜索。调谐器会扫描频率范围,直到电视屏幕接收到第一个频道或您选定的频道。
- 存储: 当您存储频道及相关的台号时通过按确认 🕞 按钮设置确定。

□ 时间表指南/迷你指南

② 根据你所在的地区,此功能可以不被支持。

电子节目指南信息由广播公司提供。由于广播信息在给定的频道上,节目条目可能显示为空或无法显示日期。当新的信息可以使用时,显示会自动更新。

您可以通过按指南按键显示指南菜单。(如果想要设置默认指南类型,请参考相关描述信息。)

■ 时间表指南

按照时间顺序,显示一小时时间段内要播放的所有节目的资讯。通过及时向前或向后滚动,可以看到两小时时间段内的节目资讯。

■ 迷你指南

从目前的节目开始,目前频道的迷你指南画面将按照节目开始的时间顺序,逐行显示要播放的每个节目的资讯。

- □ 默认指南 → 时间表指南/迷你指南
 - ② 根据你所在的地区,此功能可以不被支持。

您可以通过按遥控器上的▲/▼ (上/下) 按键按钮来选择是显示迷你指南还是显示时间表指南。

□ 频道列表

为了更详尽的了解频道列表,请参考频道管理说明。

您可以通过按遥控器上的频道列表来选择此功能。

□ 频道模式

当您按频道人/✔按钮,频道将会在选择的频道列表中切换。

□ 微调

如果节目清晰,您可以不进行微调调整,如果信号较弱或者失真,您将不得不进行手动微调调整。

- ② 经过微调的频道保存后,在频道标志上的频道号旁边会有个"*"标记。
- 廖 要重设微调,通过按 ▲ 或 ▼ 按钮选择复位,然后按确认按钮。
- ② 只有模拟频道可以进行微调。

□ 低噪声放大(LNA)

如果在一个信号弱的地方观看电视,低噪声放大功能可以改善接收情况(利用一个低噪声放大器增强接收的信号)。

时间表指南/迷你指南





目的	结果
在电子节目指南列表下观看节目	按▲、▼、◀、▶
退出指南	按蓝色按钮
	『节目预定对话框,按"◀,▶"按钮选择"定时收看",则出现时钟图标,若想 【,▶"按钮选择"取消预定",此时时钟图标也消失。
查看节目资讯	您可以按"▲、▼、◀、▶"按钮可随意选择节目。
	您选择的节目显示为高亮时,按"显示"按钮。
在"迷你指南"和"时间表指南"之间转换	反复按红色按钮。
在时间表指南	
快速向后滚动(24小時)	反复按绿色按钮。
快速向前滚动(24小時)	反复按黄色按钮。
在迷你指南	
快速显示前页	反复按绿色按钮。
快速显示后页	反复按黄色按钮。

频道列表

使用此菜单,您可以添加或删除频道或者设置喜爱的频道等。您还可以使用节目指南查看数字 广播。

■ 全部的频道

显示所有当前可用频道。

■ 添加的频道

显示所有已经添加的频道。

■ 喜爱的频道

显示所有喜爱的频道

图 按遥控器上的喜爱频道按钮显示您已经设置好的喜爱频道。

■ 定时器记录

显示当前所有预约的节目。

- ② 通过按 ▲ 或 ▼ 按钮,然后按确认 3 按钮来选择所有频道,已添加频道或者喜爱频道。
- ② 使用彩色按钮管理频道列表。
 - 红色按钮(天线):在有线和无线之间切换。
 - 绿色按钮(缩放):放大或者缩小频道号码和节目名称。
 - 黄色按钮(选择):选择频道列表中的频道。您可以同时进行添加/删除,添加为喜爱频道/从喜爱的频道中删除,或者锁定/解锁功能。按黄色按钮选择需要操作的频道后按工具按钮来同时对选中频道进行操作。
 - 工具(工具):显示删除(或者添加),添加为喜爱的频道(或者从喜爱的频道中删除),锁定(或者解锁),定时器定时收看,编辑频道名称,变更台号,选择全部,取消选择全部或者自动选台菜单。(根据当地情况选择菜单可以不同)。

Ø 频道状态显示图标

Α	模拟频道	V	按黄色按钮选定一个频道
•	喜爱的频道	(b)	预约收看的频道
	锁定的频道		

频道列表选择菜单(全部的频道/添加的频道/喜爱的频道)

- ② 按工具按钮使用选择菜单。
- 频道状态不同,选择菜单可以不同。

■ 添加/删除

您可以添加或删除频道以便显示您所需的频道。

- 所有已经被删除的频道将被显示在全部频道菜单。
- ② 灰色图标显示该频道已经被删除。
- ② 添加菜单仅对于已经删除频道。
- ② 您可以删除已经添加的频道或者喜爱的频道在相应的菜单中。
- 添加为喜爱的频道/从喜爱的频道中删除

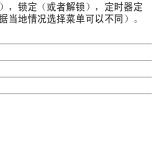
您可以设置您经常看的频道至喜爱的的频道列表。

- ② 喜爱的频道会显示♥标志。
- ② 喜爱的频道菜单会显示全部喜爱的频道。
- **幻** 按工具按钮显示工具菜单。通过工具菜单->添加到喜爱的频道,将频道加入喜爱的频道。

■ 锁定/解锁

为了别人不能观看您可以锁定频道。仅当童锁功能打开的时候,此项功能才有作用。

- ② 密码输入窗口显示,然后输入4位密码。
- ② 默认密码是0-0-0-0。您可以通过改变密码菜单修改密码。
- ② 被锁定的频道会显示 🔒 标记。



■缩放 ■选择 (())页 2 工具

■ 天线

■ 定时收看

如果您预约了想看的节目,在到达预约时间时该频道会在频道列表中自动转换为已预约频道,即使您正在观看其他频道。要预约节目,首先需要设定目前的时间。(请参看20页)

- ② 只有存储的频道才能被预约。
- ② 您可以直接通过遥控器设置要预约的频道,年、月、日、小时和分钟。
- ② 预约节目会显示在节目单上。
- ② 数字节目指南和节目预约。

选择数字频道,按 ▶ 按钮,则出现频道节目指南。参照上述步骤,您可以对节目进行预约。

■ 编辑频道名称(模拟)

如果您对频道进行了标注,标注内容会在您观看该频道时出现。

- ② 数字频道的名称已经被分配好了,不能重命名。
- 频道号码编辑-数字(仅数字频道)
 - ② 您可以通过按遥控器上的数字按钮,进行编辑频道号码。
- 变更台号(仅模拟频道)

此操作可以变更存储的频道号码,在自动搜台后,这个操作是必需的。

- 选择全部/取消全部选择
 - 选择全部: 在频道列表中您可以选择全部频道。
 - 取消全部选择:取消选择全部频道。
 - ② 您可以同时对所有选择的频道进行添加/删除,添加为喜爱频道/从喜爱的频道中删除,或者锁定/解锁功能。选择需要操作的频道然后按黄色按钮来进行多个频道的选取。
 - ☑ 被选择的频道左面会有 ✓ 的标记。
 - ② 如果有被选择的频道,您可以使用取消选择全部功能。
- 自动选台
 - ② 更详细的操作说明请参看第9页。
 - ② 如果频道被童锁锁定,密码输入窗口会出现。

频道列表选择菜单(定时器记录)

您可以查看, 更改, 或删除预约。

- ② 按工具按钮使用选择菜单
- 修改预定

选择更改节目预约

■ 取消定时

选择取消节目预约

■ 预定信息

选择查看节目预约

■ 选择全部

选择全部预约节目



图像控制

| 配置图像菜单

□ 模式

您可以根据您的观看要求选择最适合您的图像类型。

■ 动态

选择在明亮的房间中进行高清晰显示的图像。

■ 标准

选择在正常环境中进行最佳显示的图像。

■ 自然

选择最适宜和使眼部舒适的显示画面。

■ 电影

选择在黑暗的房间中进行舒适显示的图像。

□ 背光、对比度、亮度、清晰度、色度、色调

电视上有几个设定选项可让您控制画质。

- 背光: 调整液晶面板的背光亮度。
- 对比度:调整对象和背景之间的亮度和暗度。
- 亮度:调整整个屏幕的亮度。
- 清晰度:将对象轮廓调整为更加锐化或钝化。PC模式下,清晰度不可选。
- 色度:调整颜色,使颜色更亮或更暗。
- 色调:调整对象的颜色,使对象更红或更绿,从而使其外观更加自然。
- ② 选择一个模式进行调整,调整后的参数将被存在这个模式下。
- ② 当您更改对比度,亮度,清晰度,色度,色调时,屏幕显示也会相应的进行调整。
- ② 模拟电视、AV模式输入的 PAL 制式信号 , 色调功能不可以使用。
- PC模式下您仅仅可以调整背光、对比度和亮度。
- 调整后的值将根据其输入模式分别进行储存。
- ② 降低画面亮度能显著降低电视机在使用过程中的能耗,也能为您降低电视机的运行成本。

□ 高级设置

- 三星的新款电视允许您做出比先前型号更加精确的图像设定。
- ② 高级设置在标准或电影模式可用。
- ② 在 PC 模式下,只能设置高级设置项目中的动态对比度、伽玛和白平衡。
- 黑色色调 → 关闭/暗色/较暗/最暗

您可以选择屏幕的黑色水平以调整屏幕的黑色程度。

■ 动态对比度 → 关闭/低/中/高

您可以调整屏幕对比度,以便实现最佳的效果。

■ 伽玛

您可以调整初始颜色(红色,绿色和蓝色)的敏感度。

■ 色彩空间

色彩空间是指由红,绿,蓝三色组成的颜色矩阵。选择您最喜欢的色彩空间体验最自然的色彩。

- 自动: 自动色彩空间会根据节目源自动调整至最自然的色温。
 - 原始: 广域色彩范围提供深且丰富的色温。
- 个人设定:根据您的喜好调整色彩范围。
 - ② 自订色彩空间
 - 色度 → 红色/绿色/蓝色/黄色/青色/紫红色
 - 根据您的喜好调整色彩范围。在色彩空间设为个人设定时色度才可用。
 - 红色/绿色/蓝色:在色度中,您可以调整所选色彩的值。
 - 复位: 将色彩空间重设为默认值。





■ 白平衡

您可以调整色温,享受更加自然的图像色。

- 红截止/绿截止/蓝截止/红色增益/绿色增益/蓝色增益:变更调整值将会更新已调整的屏幕。
- 复位: 先前调整的白平衡将被重设为出厂默认值。

■ 肤色

您可以在图像中突出粉红肤色。

- ② 变更调整值会更新已调整的画面。
- 边缘增强 → 关闭/开启

您可以强调图像中的物体边缘。

■ xvYCC → 关闭/开启

在连接至 HDMI(YCbCr 4:4:4 和 YCbCr 4:2:2)或分量输入的外部装置(例如: DVD 播放器)观看电影时,将 xvYCC 模式设定为 开启可以丰富细节和色彩范围。

② 在图像模式设为电影,且外部输入设为HDMI或分量模式时,xvYCC才可用。

□ 图像选项

② 在 PC 模式下, 您只能变更图像选项项目中的色温和尺寸。

■ 色温 → 冷/正常/暖1/暖2/暖3

您可以根据您的喜好改变屏幕的颜色。

- ② 调整后的设置将根据其输入模式进行储存。
- ② 暖1、暖2和暖3只有在电影模式下才可选。

■ 尺寸

您可以根据您的观看要求选择最合适的图像尺寸。

- 右 按遥控器上的工具按钮显示工具菜单、您也可以通过工具 → 图像尺寸选择尺寸菜单。
- 您还可以通过遥控器上的放大按钮选择该选项。
- 16:9: 将图像尺寸调整为16:9。
- 宽度放大:利用垂直扩展把4:3图像变化为16:9图像模式。
- 放大:垂直放大16:9宽屏幕以适合屏幕尺寸。
- 4:3: 将图像设置为4:3的正常模式。
- 全屏显示: 在输入来源为分量(10801&1080P)或 HDMI(720P、10801&1080P)输入信号时,使用该功能可以看到完整影像而不会中断。
- ② 图像尺寸选项可能会因输入信号的不同而变化。
- ② 可用的选项可能会因为输入模式的不同而不同。
- ② 在 PC 模式下, 仅可调整 16:9 和 4:3 模式。
- ② 您可对连接至电视输入的各个外部装置的设定进行调整和储存。
- ② 若使用本设备观看静态影像超过两小时,可能会暂时出现屏幕残影现象。
- ② 宽度放大:按 ▶ 按钮选择位置,然后按确认 ☑ 按钮。按 ▲ 或 ▼ 按钮向上/向下移动画面。然后按确认 ☑ 按钮。放大:按 ▶ 按钮选择位置,然后按确认 ☑ 按钮。 按 ▲ 或 ▼ 按钮向上和向下移动图像。然后按确认 ☑ 按钮。按 ▶ 按钮选择尺寸,然后按确认 ☑ 按钮。按 ▲ 或 ▼ 按钮以垂直方向放大或缩小图像尺寸。然后按 ☑ 按钮。在 HDMI(1080i/1080p)或分量(1080i/1080p)模式中选择适合屏幕大小后,按 ◀ 或 ▶ 按钮选择画面位置。 使用 ▲ 、▼、◀ 或 ▶ 按钮移动图像。重设:按 ◀ 或 ▶ 按钮选择重设,然后按确认 ☑ 按钮,你可以初始化设定。
- [P] 若使用全屏显示功能和 HDMI 720p 输入,将会如适合屏幕大小功能一样在顶部、底部、左侧和右侧切掉 1 条线。

■ 数字降噪 → 关闭/低/中/高/自动

若电视接收到的广播讯号微弱,可以启用「数字降噪」功能,帮助减少屏幕上可能出现的任何静态影像和残影。

② 在讯号微弱时,请选择其它选项,直至显示最佳图像为止。

■ HDMI 黑色等級 → 正常/低

您可以直接选择屏幕的黑色等级以调整屏幕的黑色程度。

- ② 只有在HDMI 外部连接 RGB 信号输入时才可使用。
- 电影模式 → 关闭/自动1/自动2

可将电视机设置为自动检测和处理各种视频源的电影信号并调节画面大小以实现最佳显示效果。

- (型) 电影模式在电视, AV, 分量输入(480i/1080i)和HDMI(480i/1080i)模式下可用。
- 100Hz Motion Plus → 关闭/清晰/标准/平滑/个人设定/演示

消除动态场景中的拖影现象,为您提供更清晰的画面。

② 此功能在 PC 模式中不可用。

若启用了 100Hz Motion Plus,屏幕上可能出现噪声。若发生这种情况,请将100Hz Motion Plus设为关闭或选择其它选项。

- 关闭:将 100Hz Motion Plus 功能关闭。
- 清晰:将 100Hz Motion Plus 设为清晰。提供适合快速移动场景的清晰画面。
- 标准:将 100Hz Motion Plus 设为标准。
- 平滑:将 100Hz Motion Plus 设为平滑。提供适合快速移动场景的平滑画面。
- 个人设定:调整模糊和颤动至适合您的首选项。
 - 模糊减少: 在视频信号中设置模糊消减。
 - 颤动减少: 在视频信号中设置颤动消减。
 - 复位:重设个人设定设置。
- 演示:展示 100Hz Motion Plus 功能打开与关闭的区别。
- 仅蓝色模式 → 关闭/开启

此功能供 AV 装置检测专家使用。 此功能透过移除视讯讯号中的红色和绿色讯号而仅显示蓝色讯号,以便提供蓝滤镜效果,该效果用于调整视讯设备(如 DVD 播放器、家庭剧院等)的色调和色度。

通过此功能,您可以使用红/绿/蓝/青/紫/黄色彩条形图、将色调和色彩调整至与每台视频设备的信号电平相适应的优先值、而无需 使用另外的蓝滤镜。

② 在图像模式设为电影或标准时,蓝色模式才可用。

□ 图像复位 → 复位图像模式/取消

把所有的图像设置重设为工厂默认值。

② 复位图像模式: 当前图像模式被重设为工厂默认值。

▮ 个人电脑显示

设置您的PC(个人电脑)软件(以Windows XP为例)

电脑的Windows显示设置一般如右图所示。由于Windows的具体版本和显卡的不同,每个人的实际屏幕显示可能不同。即使实际屏幕看起来有所不同,相同的基本设置信息几乎可应用于所有情况。(如果这里介绍的设置方法对您的电脑不适用,请与您的电脑制造商或者三星经销商联系。)

- 1 在Windows桌面上单击鼠标右键,然后单击 Properties(属性),将显示 DisplayProperties(显示属性)。
- 2. 单击(设置)标签,然后参考显示模式表设置显示模式,无需改变颜色设置。
- 3. 单击(高级),将显示一个新的设置对话框。
- 正确的尺寸设置应为(分辨率) 最优: 1920 X 1080 像素
- 如果您的显示设置对话框还有场频选项,正确的数值为 60 或 60Hz。否则只需单击确定,退出对话框。



显示模式

屏幕位置和尺寸都视PC显示器的类型和分辨率而定。 建议使用表中提供的分辨率。(系统允许使用所支持极限之间的所有分辨率)

■ D-Sub和HDMI/DVI输入

模式	分辨率	行频(khz)	场频(hz)	像素时钟频率	同步极性(水 平/垂直)
IBM	640 x 350	31. 469	70. 086	25. 175	+/-
	720 x 400	31. 469	70. 087	28. 322	-/+
MAC	640 x 480	35. 000	66. 667	30. 240	-/-
	832 x 624	49. 726	74. 551	57. 284	-/-
	1152 x 870	68. 681	75. 062	100. 000	-/-
VESA CVT	720 x 576	35. 910	59. 950	32. 750	-/+
	1152 x 864	53. 783	59. 959	81. 750	-/+
	1280 x 720	44. 772	59. 855	74. 500	-/+
	1280 x 960	75. 231	74. 857	130. 000	-/+
	1280 x 720	56. 456	74. 777	95. 750	-/+
VESA DMT	640 x 480 640 x 480 640 x 480 800 x 600 800 x 600 800 x 600 1024 x 768 1024 x 768 1024 x 768 1024 x 768 1280 x 1024 1280 x 1024 1280 x 1024 1280 x 800 1280 x 800 1280 x 960 1360 x 768 1440 x 900 1440 x 900 1680 x 1050	31. 469 37. 861 37. 500 37. 879 48. 077 46. 875 48. 363 56. 476 60. 023 67. 500 63. 981 79. 976 49. 702 62. 795 60. 000 47. 712 55. 935 70. 635 65. 290	59. 940 72. 809 75. 000 60. 317 72. 188 75. 000 60. 004 70. 069 75. 029 75. 000 60. 020 75. 025 59. 810 74. 934 60. 000 60. 015 59. 887 74. 984 59. 954	25. 175 31. 500 31. 500 40. 000 50. 000 49. 500 65. 000 75. 000 78. 750 108. 000 108. 000 135. 000 83. 500 106. 500 108. 500 106. 500 106. 500 136. 750 146. 250	-///- +/+ +/+ +/+ -//- +/+ +/+
VESA GTF	1280 x 720	52. 500	70. 000	89. 040	-/+
	1280 x 1024	74. 620	70. 000	128. 943	-/-
	1920 x 1080p	67. 500	60. 000	148. 500	+/+

- ② 当使用一个HDMI转DVI连接线连接时候,您必须连接HDMI输入1端子。
- ② 不支持隔行模式。
- ② 如果选择非标准的视频格式,则电视机可能出现异常操作。
- 支持独立模式和复合模式,不支持SOG。
- ② 过长或劣质的VGA线图像在高分辨率下可能会出现噪点。

■ 设置您的PC(个人电脑)

② 按节目源键选择PC模式

□ 自动调整

自动调整可以根据输入的PC信号进行自动的调整,并以最好的方式显示。

- ┲工具键在工具菜单内您可以选择自动调整选项。
- ② 此功能在HDMI/DVI输入下无效。

□ 屏幕

■ 粗调 / 微调

调整屏幕质量是为了减小和消除图像噪声,如果微调后仍无法消除噪声,则尽可能进行频率调整 (粗调),然后再进行微调。在噪声减少以后,请重新调整图像,使之与屏幕中心对齐。

■ PC位置

如果PC的图像的中心位置与屏幕的中心位置不一致,可以通过此功能进行调整。通过上下键调整图像的垂直位置。

通过左右键调整图像的水平位置。

■ 图像复位

您可以把所有的图像设置参数全部恢复到出厂默认值。



伴音控制

■ 配置伴音菜单

- □ 模式 → 标准 / 音乐 / 电影 / 清晰语音 / 个人设定 您可以选择适合您的伴音模式
 - **汀** 按工具键在工具菜单内也可以选择你所需要的伴音模式。
- □ 均衡器

您可以根据个人爱好来调节个性化的伴音设置。

■ 模式

您可以选择一个你所喜爱的模式进行调整。

■ 平衡

可以控制左右扬声器的输出比例。

- 100Hz/300Hz/1KHz/3KHz/10KHz (帯宽调整)
 - 你可以根据音乐特点,对于不同频点的声音的输出水平进行设定。
- 复位

恢复到原来默认的状态。

□ SRS TruSurround HD → 关闭 / 开启

SRS TruSurround HD 是 SRS Technology 的一项在通过两扬声器来播放5.1声道立体声的专利。

續 按工具键在工具菜单内也可以选择关闭/开启。

□ 音频语言(仅数字电视频道有效)

您可以根据所接收到的节目内所包含的语言种类进行选择。

- ② 观看数字电视节目的时候这个功能可以被选择。
- 你仅仅可以在广播信号所提供的语言种类内进行选择。
- □ 音频格式 → MPEG / Dolby Digtal / 高级 (仅数字电视频道有效)

当主扬声器和音频接收器同时发出声音的时候,由于主扬声器和音频接收器的解码速度不同可能会出现环绕回声的现象。在这种情况下,请使用电视扬声器功能。

- ② 观看数字电视节目的时候这个功能可以被选择。
- ② 音频格式是由你所接收到的数字电视信号所决定的。
- □ 伴音自动控制

每个电视台都有自己的信号条件,如果每次更改频道都要调整音量,那就很麻烦。使用此功能,您可以自动调整所需频道的音量, 在调制信号强时,降低伴音输出,而在调制信号弱时,提高伴音输出。



□ 选择扬声器 → 外部扬声器/电视扬声器

如果您想通过外部的扬声器来聆听,请选择外部扬声器。

- ② 静音功能不可以对外部扬声器的声音进行关闭。
- ② 如果您在扬声器菜单中选择外部扬声器,声音设置将被限制。

	电视的内部扬声器	音频输出(光纤输出、音频输出)到 功放系统
	电视、AV、分量输入、PC、HDMI	电视, AV, 分量输入, PC, HDMI
电视扬声器	扬声器输出	声音输出
外部扬声器	静音	声音输出
 无视频信号	静音	静音

□ 伴音复位 → 复位所有/伴音模式复位/取消。

您可以把伴音选项恢复到出厂设定的模式。

② 伴音模式复位: 当前模式的伴音值恢复到出厂模式。

■ 选择伴音模式

您可以在工具菜单选择声音模式。

	音频种类	双语 1/2	默认	
	单声道	单声道	自动变化	
立体声	立体声	立体声←→ 单声道	日初支化	
双语		双语 1 ←→ 双语2	双语1	
NICAM立体声	单声道	单声道	自动变化	
	立体声	立体声←→ 单声道	日初受化	
	双语	→ 单声道←→双语 1 — —— 双语2 ←——	双语1	

- ② 如果立体声信号较弱,电视机将自动切换为单声道。
- ② 此项功能仅在立体声(双语)的信号广播下有效。
- ② 这项功能仅在电视模式下有效。

设置

配置设置菜单

- □ 即插即用
 - 即插即用的内容请参见第8页。
- □ 语言 → 中文 / English 您可以选择所需要的的语言。
- □ 时间
- 时钟

设置时钟是必要的,以便于可以使用电视的各种定时功能,而且您可以在观看电视的时候查看时间。

- ② 在您每次按显示按键的时候将显示当前时间。
- ② 如果您断开电源线,需要重新进行设置。
- 时钟模式

你可以选择手动或者自动两个方式设定时间。

- 自动:是根据数字电视广播信号内所包含的时间信息进行的设定。
- 手动:由您自己根据当前时间进行设定。
- 时钟设定

您可以手动设定当前时间。

- ② 通过遥控器的数字按键来设定日期和时间。
- 睡眠定时器 → 关闭/30分钟/60分钟/90分钟/120分钟/150分钟/180分钟

预设时间过后,睡眠定时器将自动关闭电视机。(30分钟、60分钟、90分钟、120分钟、150分钟和180分钟)

- ② 电视机将根据您的选择,在一段时间内自动关闭。
- ② 需要取消睡眠定时器功能,选择关闭。
- 幻 您也可以通过按工具键在工具菜单内选择睡眠定时器功能。
- 定时器1/定时器2/定时器3

您可以设置三个不同的开关机时间。(需要先设定时间)

- 开机定时器:设定小时和分钟,并选择禁用/启用。(当您设定完成后请选择启用)
- 关机定时器:设定小时和分钟,并选择禁用/启用。(当您设定完成后请选择启用)
- 音量: 选择您所需要的开机音量
- 节目源: → 电视/USB/电视存储器

你可以选择电视、USB、电视存储器作为自动开机时所播放的内容。(只有当USB插入电视机上节目源才可以被选中) ② 当USB或电视存储器内仅有一个图片文件时候,将不可以进行循环播放。

- 天线(当节目源选择电视)
 - 可以选择无线、数字无线、有线
- 频道(当节目源选择电视)
 - 选择您需要的频道
- 资源(当节目源选择 USB 或电视存储器)

你可以选择所要播放的图像或者音乐文件。

- 重复:选择1次、每天、周一~周五、周一~周六、周六~周日、手动
 - ② 当您选择手动模式, 按 ▶ 键来选择一周中的那一天,并按确认 🗗 键来选择屏幕上将在对应的内容显示 🗸 。
- ② 在设定小时、分钟和频道时,可以直接按数字键输入所需要的内容。
- ② 自动关机

当定时开机功能打开的时候,如果超过3个小时没有对电视机进行任何操作,电视机将自动关闭。这个功能仅仅在定时器开的模式下有效,以防止开机时间过长造成电视机过热。



□ 游戏模式 → 关闭 /开启

当您连接游戏机时(如Playstation 或 Xbox), 你选择游戏模式后将会获得更加逼真的效果。

- ② 游戏模式的限制
 - 断开游戏设备的连接,游戏模式将不会在菜单中显示。
 - 如果选择游戏模式,画面可能会轻微抖动。
- 澎 游戏模式在电视和PC输入模式下是无效的。
- ② 当画中画功能开启时,游戏模式功能将被禁用。
- ② 如果外部输入源的效果不好,请确认游戏模式是否为开启状态,请设定为关闭状态并连接外部设备。
- Ø 如果游戏模式设定为开启
 - 图像模式将变为标准,伴音模式将变为个人设定,用户将不可以改变为其他模式。
 - 用户可以通过均衡器来调整所需要的声音设置。
 - 当伴音复位功能被激活,伴音模式方面的设定将恢复到出厂设定状态。

BD wise → 关闭/开启

使用HDMI 连接支持"智能同步"功能的samsung DVD、BD(蓝光DVD)和家庭影院设备。

- ② 当BD wise 设置为开启,画面模式将自动选择最好的分辨率进行显示。
- BD wise仅在HDMI输入下有效。

□ 频道童锁 → 关闭/开启

这个功能是为保护未成年人设置的。可以对不适合的节目进行屏蔽。

- ② 在设定这个功能前需要您键入4位数字的密码。
- ② 这个电视机出厂设定的密码是0-0-0-0, 您可以通过"更改密码"菜单变更密码。
- ② 您可以锁定一些在频道列表内的频道。(请参考 第10页)
- ② 频道童锁仅在电视模式下有效。

□ 更改密码

您可以变更您的个人密码。

- ② 在进入更改密码前需输入4位原有的密码。
- ② 这个初始密码是 0-0-0-0。
- ② 如果你忘记了密码,按照以下顺序按遥控器上的按键,密码将恢复为 0-0-0-0。 电源(关)->静音->8->2->4-电源(开)

□ 字幕

你可以使用这个菜单开启或关闭字幕功能,并设定字幕模式。正常,正常的字幕设置;听力辅助,用于听力障碍者使用。

- 字幕 → 开启/关闭
 - 切换字幕的开启和关闭。
- 模式 → 正常/听力辅助

设置字幕的模式。

■ 字幕语言

设置字幕的语言。

- [②] 当你观看的节目不支持听力辅助功能时,正常模式自动激活以替代听力辅助模式。
- ② 此项功能仅在数字电视广播节目下有效,并根据电视台的电视广播内容来决定。

□ 偏爱

■ 第一音频语言/第二音频语言/第一字幕语言/第二字幕语言

您可以设定一种语言为默认语言。

如果你变更语言设定,这个字幕音频的语言菜单将自动变更为您所选择的语言种类。 字幕语言和音频语言菜单将显示当前频道所支持的语言列表,并且当前所选择的语言为高亮显示。

- □ 光效 → 关闭/待机模式/观看模式/保持
 - ② 可根据情况开/关电视机前面的红色LED光效灯,使用此功能可以省电(或者降低LED引起的视疲劳)。
- □ 开关机旋律 → 关闭/低/中/高

设定电视机开关机时的音乐效果。

- ② 不播放开关机旋律:
 - 选择静音后,电视将无关机旋律
 - 将音量调到最低时,不播放关机旋律。
 - 定时器将电视关闭时。
- □ 省电 → 关闭/低/中/高/自动

通过调整电视机的亮度来降低电视机能耗,当在夜晚看电视机时候,将省电模式设置为高,可以有效防止眼睛的疲劳。 「一按遥控器上的工具键,通过工具菜单也可以选择想要的省电模式。

配置输入菜单

□ 节目源列表

用于选择观看电视和其他外部输入源,如DVD 、蓝光播放器、卫星机顶盒等。

- 管 按遥控器上的节目源键,已连接的外部设备显示为高亮,用户可以通过按遥控器上的确认键选择所需要的设备。
- 电视/AV/分量输入/PC/HDMI1/DVI/HDMI2/HDMI3/HDMI4/USB
 - ② 您可以选择已经连接的外部设备 ,只有设备与电视机连接后节目源对应选项列表会高亮(PC连接除外)
 - ② 在打开节目源列表时,遥控器上的:
 - 红色按键可以刷新节目源列表的信息。
 - 工具按键可以进行节目源的名称编辑和信息显示。

□ 名称编辑

给您所连接的设备进行命名,可以很方便的区分各个设备。

- 录像机、DVD、有线机顶盒、卫星机顶盒、PVR机顶盒、AV接收器、游戏机、摄像机、PC、DVI、DVI PC、电视、网络电视、蓝光高清DVD、DMA。
 - ② 当分辨率为 1920 x 1080@60Hz 的 PC 连接到 HDMI IN 1(DVI) 端口时,您应当在输入模式的名称编辑中将 HDMI1 / DVI 模式设置为 PC。

▮ 配置您的支持菜单

□ 自诊断

■ 图片测试

如果您觉得图像有问题,请运行图片测试,检查在屏幕上的彩色图片,图像问题是否仍然存在。

- 是:如果这些图片不能正常显示或者有很多噪点,请选择是,并根据屏幕上的提示联系 samsung的售后服务人员给你进行确认和修理。
- 否:如果这个测试图片是没有问题的,请选择否。请您确认您的外部连接内容或者参考说明书的相关部分,进行调整。





■ 声音测试

如果您觉得声音有问题,请运行声音片段测试,电视机将会播放一段音乐,帮助您确认是否有问题。

- ② 如果您无法从电视机听到声音,在进行声音测试之前,在伴音菜单内选择扬声器选项中选择电视扬声器。
- ② 在上面的选项中如果选择外部扬声器或者电视机处于静音及音量为0时是无法听到声音的。
- 是:如果您无法听到这段旋律,请选择是,并根据屏幕上的提示联系samsung的售后服务人员给您进行确认和修理。
- 否:如果你听到的这段旋律是正常的,请选择否。请您确认您的外部连接内容或者参考说明书相关部分,进行调整。

■ 信号信息(仅限数字电视频道)

与模拟电视不同(模拟电视的信号强弱变化在电视上通过图像中雪花多少来体现。)数字电视只有正常显示接收到信号和无法接收 到信号两种状态。

因此您很难对数字电视进行细调 ,需要您对于线的摆放进行调整。

如果信号强度显示条表示信号较弱时候,需要您对于天线进行调整已找到一个较好的接收方向和位置。

□ 软件升级

- ② 当前版本是电视中已安装的软件。
- ② 版本改变为(Backup)表示将被替换的先前版本。
- ② 软件表示为'年/月/日 版本',日期越近,软件版本越新。我们建议您安装最新版本。

■ 从USB下载

从 samsung. com 将软件升级程序下载到 USB 驱动器后,将其插入到电视中。执行升级期间,注意不要断开电源或拔下 USB 驱动器。完成软件升级后,电视将自动关机再开机。升级完成后,请检查软件版本(新版本的数字大于旧版本)。软件升级后,您过去对视频和音频进行的设置将恢复为默认(出厂)设置。

我们建议您记录以前的设置,以便能在升级后轻松地重置为以前的状态。

■ 替代软件(Backup)

如果新软件有问题且影响操作,您可以将软件更改为先前版本。

- ② 更改软件后,此处将显示现有软件。
- ② 您可以通过版本改变为将当前软件更改为替代软件。

□ HD连接指南

这个菜单是向用户介绍如何使电视机与外部各种高清播放设备进行连接以获得完美的画面效果的指南。

■ 联系Samsung

为您提供Samsung公司的联系方式及产品介绍的网址,以及售后服务部门的电话及您在申请维修时候所需要的一些关于电视机的产品信息。





MEDIA PLAY (USB)

连接USB设备

- 1. 按电源按钮打开电视机。
- 2. 在电视机侧面的接口处接入一个包括相片、音乐文件的USB设备。
- 3. 当应用界面显示为右图的时候按确认按钮来选择Media Play (USB)。
 - ② 不支持PTP(图片传输协议)和MTP(媒体传输协议)。
 - ② 文件系统仅支持FAT16/32 (不支持NTFS文件系统)某些类型的USB数码照相机和音频设备可能与本电视机不兼容。
 - ② 某些USB数字照相机和音频播放设备可能不支持。
 - Ø Media Play只支持存储类USB设备(MSC)。MSC是大容量存储传输设备。THUMB驱动器和内存卡阅读器都属于MSC(不支持USB HUB)。
 - ② 请把USB设备直接插入电视机,如果使用USB延长线可能发生设备不识别的的现象。
 - ② 将设备连接到电视机前,请备份文件以防止数据损坏或丢失。对于任何数据文件的损坏或数据丢失,三星公司概不负责。
 - ② 在USB装载过程中,请不要拔出。
 - MSC支持MP3格式和JPEG文件,一个PTP设备仅仅支持JPEG文件。
 - ② 图像的分辨率越高将其显示到屏幕上所需的时间就越长。
 - 厂 最大可支持分辨率为15360*8640的JPEG文件
 - ② 不能播放从收费网站下载的受DRM保护的MP3文件。数字版权保护(DRM)技术提供了一种统一全面的管理方式,可支持内容的创建、分发和管理,包括保护内容供应商的版权和利益,防止非法复制内容。
 - ② 加载相片可能需要几秒钟的加载时间,此时屏幕上将会出现加载图标。
 - 如果有电源过载(在添加新设备在USB发生过载)信息指示显示在屏幕上,请您立刻拨出相关设备,否则会对电视机造成永久损坏。

在Media Play项目中使用遥控器按钮

按钮	操作
▲/▼/∢/ ▶	移动光标选择条目
	选择当前条目,在幻灯片或音乐播放模式下
确认🗗	-按确认按钮在播放的时候暂停播放
	-按确认按钮在暂停的时候开始播放
►/II	播放或暂停幻灯片、音乐的播放
返回	回到上一级菜单
工具	运行相片、音乐菜单中的各种功能
	停止当前的幻灯片、音乐的播放
44 / >	跳到前一段 / 推到后一段
显示	显示文件信息
MEDIA. P	退出 Media Play 模式
▲ 频道 ✔, 电视	停止 Media Play 模式并进入电视模式



Media Play 功能

此功能允许您观赏和收听USB大容量存储类别(MSC)设备上保存的相片、音乐或电影文件。

进入 Media Play (USB) 的菜单

- 1. 按项目按钮,按 ▲ 或 ▼ 按钮选择应用然后按确认按钮E。
- 2. 按 ▲ 或 ▼ 按钮选择 Media Play (USB) 然后按确认按钮 🛂。
 - Media Play (USB) 菜单显示。
 - 🖺 可以显示 Media Play (USB) 菜单。
 - 恰 按节目源按钮 ▲ 或 ▼ 观看节目源列表,并选择USB。
- 3. 按 ◀ 或 ▶ 按钮选择图标(图片、音乐、设置)然后按确认按钮 🚭。
 - ② 退出 Media Play 模式按遥控器上的 MEDIA.P 按钮。

安全移除USB存储设备

您可以将设备从电视上安全移除

- 1. 在 Media Play 文件列表上,或在播放幻灯片演示或音乐文件时按工具按钮。
- 2. 按 ▲ 或 ▼ 按钮选择安全移除,按确认按钮 🕞。
- 3. 从电视机上移除 USB 设备。

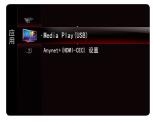
屏幕显示



- 1 检视群组:根据当前的分类标准来展示各个细部的群组。
- 2 当前选择的文件: 显示当前选择的文件。
- 3 当前装置:

显示当前所选的装置名称,按红色按钮选择设备。

- 4 条目选择信息:显示当前有多少个文件被选中。
- 5 帮助信息
 - 黄色(选择)按钮:从电影列表中选择电影,选中的电影会在左侧显示 ✔ 作为标记。再按一下黄色按钮取消所选择的文件。
 - 工具(选项)按钮:显示选项项目(选项项目根据当前状态变化而变化)。



相片列表选项菜单

- 1. 按 MEDIA.P 按钮。
- 2. 按 ◀ 或 ▶ 按钮选择相片, 然后按确认 🕞 按钮。
- 3. 按 ▼ 按钮选择文件夹列表。
- 4. 按 ◀ 或 ▶ 按钮选择目标相片文件夹,按确认按钮。
 - ② 选择多张相片

按 ◀ 或 ▶ 按钮选择所需的相片文件。然后按黄色按钮 重复以上操作,选择多个相片文件。 被选择的照片会出现 ✔ 的标记。

- 5. 按工具按钮。
- □ 幻灯片放映

使用这个菜单,您可以对USB存储设备中的相片进行幻灯片播放。

□ 播放当前组

使用这个菜单,您可以幻灯片播放当前排序组中的相片文件。

□ 取消全部选择(至少选择一个文件) 您可以取消选择所有文件。

圖 表示选定了相应文件的 ✓ 标记将隐藏。

□ 信息

显示的信息包括文件的名称,大小,分辨率,日期和路径。

- ② 在幻灯片播放期间您能够使用相同的步骤查看相片文件信息。
- 🖺 按显示按钮查看信息。
- □ 安全移除

硬件装置可以安全的从电视移除。



幻灯片放映

- 1. 按 ▼ 按钮选择文件夹列表。
- 2. 按工具按钮。
- 3. 按 ▲ 或者 ▼ 选择幻灯片放映, 然后按确认 🕒 按钮。
 - ② 照片列表中的所有文件都会被用于幻灯片播放。
- ② 幻灯片放映期间,将从当前显示的文件开始顺序播放。
- ② 幻灯片放映以相片列表中的顺序演示相片。
- ② 幻灯片放映期间,如果背景音乐被设置打开状态,音乐文件会自动播放。
- 圖 当显示相片列表时,按 ▶ (播放)或者 🕞 (确认)按钮开始进行幻灯片播放。
- ② 幻灯片放映控制按钮

按钮	操作
确认🗗	播放/暂停幻灯片播放。
•	幻灯片播放。
П	暂停幻灯片播放.
	退出幻灯片播放,返回相片列表。
44 / >	改变幻灯片放映速度。
工具	执行相片菜单中的各种功能。



- 1. 按 ▼ 按钮选择文件列表部分。
- 2. 按 ▶ (播放) 按钮。此群组幻灯片开始播放。

对被选择的文件执行幻灯片播放

- 1. 按 ▼ 按钮选择文件列表部分。
- 2. 按 ◀ 或者 ▶ 按钮选择相片列表中的目标相片。
- 3. 按黄色按钮 选定照片。
- 4. 重复上面的操作选择多张相片。
 - ☑ 被选定的相片的左侧显示 ✓ 标记。
 - ② 如果您只是选择一个文件, 幻灯片放映不会被执行。
 - 如果想要取消被选文件,按工具按钮然后选择取消全部选择。
- 5. 按 ▶ (播放)/ 🕒 (确认)按钮。
 - ② 被选文件将会用于幻灯片放映。



■ 幻灯片播放选项菜单

- 1. 幻灯片播放期间,按工具按钮设置选项。
- 2. 按 ▲ 或者 ▼ 按钮选择目标选项, 然后确认 🕒 按钮。
- □ 停止播放幻灯片/开始幻播放幻灯片 您可以开始或者停止幻灯片放映。
- □ 幻灯片播放速度-->慢/正常/快

您可以选择幻灯片放映速度。

- ② 此功能仅在幻灯片播放期间有作用。
- ② 在幻灯片播放期间,您也可以通过按 ◄ (快退)或者 ▶ (快进)改变幻灯片播放速度。



□ 旋转

您可以旋转存储在 USB 设备的相片。

- ② 当你按 ◀ 按钮,相片依次按270°,180°,90°和0°旋转。
- ② 当你按 ▶ 按钮,相片依次按,90°,180°,270°和0°旋转。
- ② 旋转后的文件是不能被保存的。

□ 放大

您可以放大存储在USB设备的相片。(x1 → x2 → x4)

- ② 为了移动放大的相片,按确认按钮 [录,然后按▲/▼/◀/▶按钮。注意当已经被放大的图片比原始屏幕小的时候,位置移动功能不起作用。
- ② 已经被放大的文件不能被保存。

□ 背景音乐

选择此选项可选择是否要在幻灯播放期间播放背景音乐。

- ② 如果使用这个功能,USB存储设备中必须有音乐和相片文件。
- ② 为了加载音乐文件需要改变BGM模式。播放加载在音乐目录中的音乐文件。

■ 背景音乐-关闭/开启

- 关闭:不会播放背景音乐。
- 开启: 当背景音乐有效时,如果打开,音乐将会反复播放。
- □ 选择音乐文件(0个选择文件)

仅在背景音乐选择音乐后可以使用。

- ② 如果您设置背景音乐模式为存档文件,您才可以选择音乐文件。
- □ 图片设置/声音设置

你可以选择设定图像和声音。

□ 信息

显示相片文件信息。

□ 安全移除

硬件装置可以安全的从电视移除。

音乐列表

您可以通过特定的标准排序音乐文件。

- 1. 按 MEDIA.P 按钮。
- 2. 按 ◀ 或 ▶ 按钮选择音乐,然后按确认按钮 🛂。
- 3. 按 ▼ 按钮移动到文件夹列表,按确认按钮 🗗 开始按照用户选择的顺序播放音乐。
 - ☑ 如果想要移动到前面/后面的组,请按 ◄ (快退) 或者 ▶ (快进)的按钮。
 - ② 如果没有标题信息,将会显示文件名。
 - ② 如果没有演唱者、唱片或者类型信息,将会显示无艺术家,无相册,无流派等。

音乐 | Control | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 1

音乐列表选项菜单

- 1. 按 MEDIA.P 按钮。
- 2. 按 ◀ 或 ▶ 按钮选择音乐,然后按确认按钮 🚭。
- 3. 按 ▼ 按钮移动到文件列表。
- 4. 按 ◀ 或 ▶ 按钮选择期望的音乐文件。
 - ② 选择多个音乐文件

按 ◀ 或 ▶ 按钮选择目标音乐文件夹。然后按黄色按钮。重复上述操作,选择多个音乐文件。 被选择的音乐文件会出现 ✔ 的标记。

- 5. 按工具按钮
 - ② 根据当前的状态,选项菜单相应的变化。



□ 播放当前组

使用这个菜单,可以只播放当前所选择的文件夹中的音乐文件。

□ 取消全部选择(至少选择一个文件)

可以取消选定的所有文件。

圖 被选择的文件的 ✓ 指示将会取消。

□ 信息

音乐文件信息包括文件名称、大小、日期、路径。

- ② 播放当前文件夹时可以看到音乐文件信息。
- 图 按下"显示"按钮查看文件信息。

□ 安全移除

硬件装置可以安全的从电视移除。

音乐播放

播放一个音乐文件

- 1. 按下 ▼ 按钮选择文件列表。
- 2. 按下 ◀ 或者 ▶ 按钮选择要播放的音乐文件。
- 3. 按下 ▶ (播放)/ ◄ (确认)按钮。
 - ② 这个菜单只显示MP3格式的文件,其他格式的文件即使存储在同一个USB中也不显示。
 - ② 选定的文件在播放时显示在列表的顶端。
 - 使用遥控器上的音量按钮调节音乐的音量,使用遥控器上的静音按钮实现静音。
 - ② 如果播放的MP3文件声音为单声道。请在声音菜单中调节"均衡器"和"SRS TruSurround HD"。(过度调节 MP3 文件可能会产生声音的问题)
 - ② 如果在文件播放开始时没有找到播放时间信息,音乐文件的播放持续时间将会显示为"00:00:00"
 - ② ◀ (快退)或者 ▶ (快进)按钮在播放过程中无作用。

② 音乐播放控制按钮

按钮	操作
₽	播放/暂停
•	播放
II	暂停
	退出播放模式回到音乐列表
工具	运行音乐菜单各种功能



② 音乐功能信息图标

Ð	此时文件夹中的所有音乐文件(或选定的文件)将重复播放。重复模式打开。
G	此时文件夹中的所有音乐文件(或选定的文件)将仅播放一遍。重复模式关闭。

播放当前组

- 1. 按 ▼ 键或者确认按钮 3 进入文件夹列表部分。
- 2. 按 ▶ (播放) 按键选择的组中的文件将开始播放。

播放被选择的音乐文件

- 1. 按 ▼ 键来选择文件列表部分。
- 2. 按 ◀ 键或者 ▶ 键来选择想要的音乐文件,按黄色键。
- 3. 重复以上操作来选择多个音乐文件。
 - ☑ ✓ 出现在被选择音乐文件的左侧。
 - ② 取消所有已选择的文件,按工具键并选择取消全部选择。
- 4. 按 ▶ (播放)/ 🖳 (确认)按钮
 - ② 被选择的文件将播放。

音乐播放选项菜单

音乐播放选项菜单

- 重复模式 → 开启/关闭 你可以重复播放音乐文件。
- □ 图片设置/声音设置 你可以调整图像设置和声音设置。
- □ 信息 显示音乐文件信息。
- □ 安全移除 硬件装置可以安全的从电视移除。



■ 使用设置菜单

只有被选中的文件会被播放。

- 1. 按 MEDIA.P 按钮。
- 2. 按 ◀ 或 ▶ 按钮移动到设置,然后按确认按钮 🛂。
- 3. 按 ▲ 或 ▼ 按钮选择您需要的选项。
- 4. 按 ◀ 或 ▶ 按钮选择所需项目,然后按确认按钮 🕞。
- ② 按 MEDIA.P 按钮退出 Media Play 模式。
- □ 屏幕保护程序启动时间 → 2 小时 / 4 小时 / 8 小时 选择要设置的屏幕保护等待时间。
- □ 信息 显示当前所使用设备的信息。
- □ 安全移除 硬件装置可以安全的从电视移除。





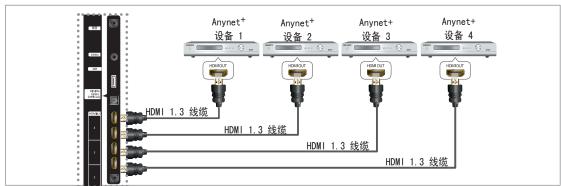
ANYNET+

|连接Anynet+设备

什么是Anynet+?

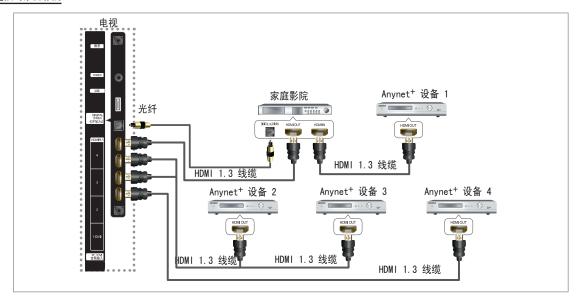
Anynet+是一种 AV 网络系统,可让用户通过三星电视的遥控器控制所有已连接的支持Anynet+的三星设备。

直接连接到电视机



使用HDMI电缆将电视机上的[HDMI 1 (DVI)], [HDMI 2], [HDMI 3]或[HDMI 4]插孔与相应 Anynet+ 设备的 HDMI 输出插孔连接。

连接到家庭影院



- 1. 使用 HDMI 电缆将电视机上的[HDMI1/DVI], [HDMI 2], [HDMI 3]或[HDMI 4]插孔与相应 Anynet+ 设备的 HDMI 输出插孔相连。
- 2. 使用 HDMI 电缆将家庭影院的HDMI输入插孔与相应 Anynet+ 设备的 HDMI 输出插孔相连。
 - ② 连接光纤在电视上的光纤输出接口到家庭影院的光纤输入接口。
 - ② 当按上述图示进行连接时,光纤接口仅有两个通道的音频输出。你只能在家庭影院的前端左右喇叭和低音单元听到声音。如果你想听到5.1声道的声音,把DVD或机顶盒(Anynet设备1、2)的光纤接口直接与功放或家庭影院相连,而不是连接到电视。
 - ② 仅连接一个家庭影院。
 - ② 可使用 HDMI 1.3电缆连接 Anynet+ 设备。 有些 HDMI 电缆可能不支持 Anynet+ 功能。
 - ② 当支持 Anynet+ 的 AV 设备处于"待机"或"开"状态时, Anynet+ 会正常工作。
 - Anynet+总共可支持多达12台AV设备。

设置 Anynet+

按项目按钮显示菜单。按 ▲ 或 ▼ 按钮选择应用,然后按确认按钮 🕞。

按 ▲ 或 ▼ 按钮选择 "Anynet+(HDMI-CEC)设置",然后按确认按钮 🕞。

右 按工具按钮显示菜单,您也可以通过工具 → Anynet+(HDMI-CEC)显示 Anynet+菜单

□ 设置

■ Anynet⁺ (HDMI-CEC) → 开 / 关

应用 Anynet+ 功能必须将 Anynet+(HDMI-CEC) 设置为开。

② Anynet+(HDMI-CEC)设置禁用,所有与 Anynet+ 相关的操作均停用。

■ 自动关闭 → 是 / 否

在关闭电视机的同时,关闭支持 Anynet⁺ 的 HDMI-CEC 设备。当支持Anynet+的HDMI-CEC设备请求电视机关闭时,电视机关闭。(某些Anynet+的HDMI-CEC设备可能不具备此功能。具体请参考该设备的使用说明书或拨打该厂商的客服电话进行咨询。)

- ② 只有遥控器选择控制电视时,才可以使用 Anynet+ 功能。
- 如果将自动关闭设置为开,则关闭电视机时还会关闭连接的外部设备。不过,如果设备正在执行录制,则可能不会关闭该设备。







在 Anynet+ 设备之间浏览和切换

- 1. 按工具按钮,按确认按钮选择 Anynet+ (HDMI-CEC)。
- 2. 按 ▲ 或 ▼ 按钮选择设备列表, 然后按确认按钮 🕞。
 - ② 连接好的 Anynet+ 设备已经显示在菜单中。
 - ② 如果找不到所需设备,请红色按键来搜索设备。
- 3. 按 ▲ 或 ▼ 按钮选择外部设备,然后按确认按钮,就切换到选择的外部设备。
 - ② 只有 Anynet+ (HDMI-CEC) 设置为开时,设备列表菜单才会显示。
- ② 切换到所选设备最多需要2分钟的时间。在执行切换操作期间,您不能取消该操作。
- ② 浏览设备所需的时间是由所连接设备的数目决定的。
- ② 完成设备浏览后,并不显示已找到的设备的数目。
- ② 尽管在使用电源按钮打开电视机时电视机会自动浏览设备,但在电视机开启后或在某种特殊环境下所连接的设备不会显示在设备列表中。因此,请用红色按键来搜索设备。
- ② 如果已经按节目源按钮选择了外部输入模式,则无法使用 Anynet⁺ 功能,请务必使用工具按钮切换到 Anynet⁺ 设备。

Anynet+ 菜单

Anynet⁺ 菜单会随着连接到电视机的 Anynet⁺ 设备的类型和状态的不同而发生变化。

Anynet ⁺ 菜单	说明
观看电视	从 Anynet ⁺ 切换到电视广播模式。
设备列表	电视机连接到相应的设备
(device_name) 项目	显示连接输入的菜单。例如:如果连接一个DVD,DVD的信息就会显示。
(device_name) 显示	显示连接输入的播放菜单。例如:如果连接一个DVD,DVD的播放菜单将会显示。
录制: (*录制)	开始录制(此菜单仅用于支持录制的设备。)
停止录制: (*录制)	停止录制。
接收器	声音通过接收器播放。

多个外部输入连接时,显示模式为(*录制),只有一个外部输入连接时,显示模式为(*device_name)。



Anynet+ 模式下可用的电视机遥控器按钮

设备类型	操作状态	可用按钮
Anynet ⁺ 设备	切换至设备后,相应设备的菜单会显示在 屏幕上时。	数字按钮 ▲/▼/◀/▶/确认按钮 □ 。
	切换至设备后,播放文件时。	(向后搜索) / ► (向前搜索) / ■ (停止)(播放) / Ⅲ (暂停)
—————————————————————————————————————	切换至设备后,观看电视节目时。	频道 ✔ / ▲ 按钮
音频设备	接收器处于激活状态时。	音量 + / - 按钮 / 静音按钮

- ☑ 录制 按钮仅在可录制状态下时可用。
- ② 您不能使用电视机侧面的按钮控制 Anynet+ 设备。只能使用电视机遥控器来控制 Anynet+ 设备。
- ② 电视机遥控器在某些条件下可能无法正常使用。此时,请重新选择 Anynet+ 设备。
- Anynet+功能对于其他制造商生产的产品无效。
- ▼ 和 ▶ 操作可能会随着设备的不同而有所变化。

录制

可以使用三星录像机录制电视节目。

- 1. 按工具按钮。按确认按钮 →选择 Anynet+ (HDMI-CEC)。
- 2. 按 ▲ 或 ▼ 按钮选择录制,然后按确认按钮 🛂,录制开始。
 - ② 当多个录制设备连接时,显示录制设备列表。 按 ▲ 或 ▼ 按钮 选择一个录制设备,然后按确认按钮 3,开始录制。
 - ② 当所连接的设备不显示在设备列表中时。按红色按钮搜索设备。
- 3. 按退出键退出。
- ② 您可以通过录制功能录制节目流。
- ② 按 按钮将录制正在收看的任何节目。如果正在收看其他外部输入的节目,那么该节目也将被录制。
- ② 录制前,请检查无线插孔是否正确连接到录制设备。选择一个正确的无线插孔录制节目,参考录制输入源的说明书。



通过接收器收听(家庭影院)

你可以通过接收器来收听节目来代替电视自身的扬声器。

- 1. 按工具按钮,按确认按钮 ☐ 选择 Anynet+ (HDMI-CEC)。
- 2. 按 ▲ 或 ▼ 按钮选择接收器。按 ◀ 或 ▶ 按钮选择"开"或者"关"。
- 3. 按退出键退出。
 - ② 如果你的接收器只支持音频,那么它将不在设备列表中显示。
 - ② 如果你正确连接到电视的数字音频输出(光纤)接口,你的扬声器将正常工作。
 - 如果接收器设置为开,你可以听到从光纤传出的声音。如果电视显示的是数字电视(无线)信号,电视将会传送5.1声道的声音到接收器。如果节目源是数字信号如DVD或者通过HDMI连接的电视节目时,家庭影院只能通过2声道接收伴音。
 - 如果接收器设置为开时电源受到影响(电源线未连接或者电源连接错误),重新开启电视时"选择扬声器"可能会被设置成"外部扬声器"。



故障状态	解决方法
Anynet ⁺ 不能工作	 检查设备是否为 Anynet⁺ 设备。Anynet⁺ 系统仅支持 Anynet⁺ 设备。 仅连接一个接收器。 检查 Anynet⁺ 设备电源线的连接是否正确。 检查 Anynet⁺ 设备的视频/音频/HDMI 1.3 电缆连接。 检查是否在 Anynet⁺ 设置菜单中将 Anynet⁺ (HDMI-CEC) 设置为开。 检查电视机遥控器是否处于电视模式。 检查是否为 Anynet⁺ 专用的遥控器。 Anynet⁺ 在特定条件下不起作用。 连接或移去 HDMI 1.3 电缆时,请确保再次搜索设备或重新开启电视机。 检查是否已将 Anynet⁺ 功能设置为开或已打开 Anynet⁺ 设备。
我想启动 Anynet ⁺	 检查 Anynet+ 设备是否正确连接到电视机,并检查是否在 Anynet+ 设置菜单中是否将 "Anynet+ (HDMI-CEC)"打开。 按电视机遥控器上的电视按钮,切换到电视模式。 然后按工具按钮显示 Anynet+ 菜单选择所需菜单。
我想退出 Anynet ⁺	 在 Anynet⁺ 菜单中选择查看电视。 在电视机遥控器上的节目按钮,选择一台非 Anynet⁺ 设备。 频道 频道 /へ,频道列表,回看等按钮中的任意一个按钮。切换到电视机模式,(注意只有在尚未连接具有内置调谐器的 Anynet⁺ 设备时,频道按钮才可用。)
屏幕上显示"正在连接到 Anynet ⁺ 设备"的消息	 在配置 Anynet⁺ 或切换到观看模式时无法使用遥控器。 请在 Anynet⁺ 设置或到观看模式的切换已完成时使用遥控器。
Anynet ⁺ 设备不能播放	正在进行自动频道浏览时不能使用播放功能。
无法录制电视节目	 检查设备是否支持 Anynet⁺ 功能。 检查 HDMI 1.3 电缆连接是否正确。 检查是否在 Anynet⁺ 设置菜单中将 Anynet⁺ (HDMI-CEC) 设置为开。 重新搜索 Anynet⁺ 设备。 只能使用 HDMI 1.3 电缆连接 Anynet⁺ 设备。 有些 HDMI 可能不支持 Anynet⁺ 功能。 如果发生非正常的设备中断,如断开HDMI线缆或电源线或者发生断电,请重新对设备进行扫描。
没有显示所连接的设备	● 检查录制设备上的天线插孔连接是否正确。
电视没有音频输出。	● 连接电视和接收设备间的光纤线缆

安装底座

- 1. 连接LCD和底座。
 - ② 两个或者两个以上的人搬电视。
 - ② 安装时注意区分底座的前后面。
 - ② 确保 LCD 恰当的安装在底座上,不要左边右边不对称。
- 2. 在如图位置 ① 安装两颗螺钉,然后在位置 ② 安装三颗螺钉。
 - ② 将电视竖立好安装螺钉,如果将电视平放安装螺钉的话,装好后有可能倾向一边。



拆卸底座



- 1. 将电视背面的五颗螺钉拧下。
- 2. 把底座和电视分离开来。
 - ② 两个或两个以上人搬动电视。
- 3. 用底盖盖住底孔。

| 安装墙壁安装套件

墙壁安装套件(单独出售)可是使你的电视安装在墙壁上。在购买我们的墙壁安装套件时,您将获得一本详细的安装手册以及组装所需的全部部件。当安装墙壁支架时联系一位技术人员或者助手。

如果您选择独自安装墙壁安装套件,出现的任何产品损坏或者人身伤害,三星公司概不承担任何法律责任。

- ② 安装墙托架套件时,拆卸底座,用底盖盖住底孔。
- ② 安装墙托架套件时,使用固定环(附件提供)



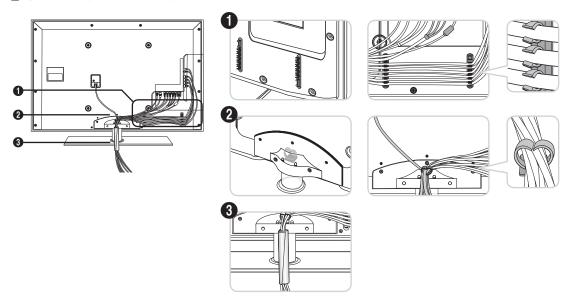
请勿在电视启动状态下安装套件,否则可能会引发触电造成的人身伤害。



装配线缆

□ 摆放模式

② 将信号线放入背后的固定架上这样信号线就不会明显露出。

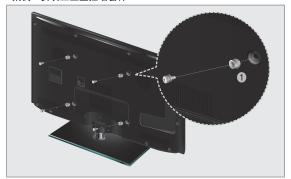


□ 壁挂模式



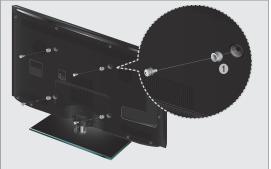
■ 安装挂墙套件前准备

案例A:安裝三星壁挂墙套件



安裝壁挂墙套件時,请使用固定环①。





保留安全的安装空间

在电视和其它物品(如:墙壁)之间保持必需的空间以保证适当的通风。

否则可能会引起火灾或者因为电视内部温度升高导致产品损坏。

安装电视时按照图示留出所需空间。

- ② 当使用支架或墙托架的时候,您只能使用三星电子提供的部件。
 - 如果您使用其它厂商提供的部件,可能会因为落下造成产品损坏或人身伤害。
- 如果您使用其它厂商提供的部件,可能会造成产品损坏或因为通风情况不好导致产品内部温度升高引起的火灾对于由此造成的任何产品损坏或人身伤害,三星电子概不负责。
- ② 外观可能因产品而不同。

■ 当用支架安装电视时



■ 当用墙托架安装电视时



使用 Kensington 防盗锁

Kens i ngton防盗锁是一种公共场合固定电视设备的工具。视生产商不同,锁定装置的外形和锁定方法可能与图中所示不同。

请参阅Kensington防盗锁说明书,以便正确使用。

- ② 锁定装置必须另外购买。
- ② 视电视机型号不同,防盗锁的位置可能也不相同。
- 1. 将锁定装置插入液晶电视的 Kensington 锁孔 ❶ , 然后朝锁定方向旋转 ❷。
- 2. 连接 Kensington 防盗锁的钢缆 3。
- 3. 将 Kensington 防盗锁与一张桌子或重物固定在一起。





注意:推拉或攀爬电视可能造成电视的翻倒,特别注意,不要让儿童攀爬或剧烈摇晃电视,经常摇晃可能导致电视翻倒或坠落,造成严重的伤害。留意说明书中所有安全警告,为了使电视更加稳定,请安装如下安全装置。

■ 电视保护装置:

- 1. 如图所视将螺钉穿入夹子并确保其紧紧的固定在墙上。
 - 根据墙的种类不同你可能需要其他的物品固定。
 - ② 固定所需的螺钉、夹子、绳子不是随机提供的,请单独购买。
- 2. 如图 2 把电视背后的螺钉卸下,将夹子套在螺钉上,再重新把螺钉安装回电视。
 - ❷ 螺钉并非随机附带,请单独购买如下规格螺钉。
 - Ø 螺钉规格

17~29寸LED 电视: M4 X 15 / 32~40寸LED 电视: M6 X 15

- 3. 用根结实的缆线将电视上夹子和墙上的夹子连接起来。
 - 图 把电视安装在靠近墙的位置。
 - ② 固定在墙上的夹子平行或者略低于固定在电视上的夹子的位置,这样更加安全。
 - ② 如果移动电视的话先去掉缆线。
- 4. 确保所有的位置已连接好,定时检查一下连接是否还完好,如果你不确定自己可以连接的 很好,请联系专业人员寻求帮助。







故障诊断: 与维修人员联系之前

故障	解决方法
无伴音或图像。	检查电视机的电源线是否与墙壁电源插座连接。 检查是否按了电视机前面板上的开关键。 检查图像的对比度和亮度设置。 检查音量。
图像正常但无伴音。	检查音量。 检查是否按了遥控器上的静音 哗 按钮。 检查选择了"外部扬声器"还是"电视扬声器"。
出现黑屏,电源指示灯不断闪 烁。	在电脑上检查电源,信号线。 电视正在使用其电源管理系统。 将电脑鼠标移动一下或者在键盘上按任意键。
无图像或者黑白图像。	调整色度设置。 检查所选的广播系统是否正确。
伴音和图像干扰。	看看有什么电器对电视造成了干扰,将该电器挪开。 换一个电源插座来查电视机的电源线。
图像模糊或出现雪花点,伴音 失真。	检查天线的方向,位置和连接。 这种现象经常是由于使用室内天线引起的。
遥控器发生故障。	给遥控器更换电池。 擦拭遥控器的上端(发送窗口)。 检查电池的接线端。
出现"检测信号线"菜单信息。	检查信号电缆与PC或视频信号源的连接是否稳固。 检查PC或视频信号源是否已经打开
在PC模式中屏幕会显示"设置无效"信息。	检查视频适配器的最大分辨率和频率。 将这些数值与显示模式中的数据进行对比。
受损的画面出现在屏幕的一角。	如果在某些外部设备中选择"全扫描",则受损的画面可能会出现在屏幕的一角。此故障为外部设备而非 电视。
出现"所有设置初始化"提示。	当你按遥控器上的退出键按住一会时会出现这样的提示,电视的设置会被还原回出厂设置。
如果你很近的盯着电视的边缘处 看,会发现细小的微粒。	这是产品本身的设计并非产品损坏。

② TFT 液晶显示面板所使用的面板由6 220 800个子像素组成,需要先进的技术才能生产出来,但屏幕上可能会有一些过于明亮或黑暗的像素。这些像素不会影响产品的性能。

■ 详细规格

型号名称	UA32B6000	UA40B6000	UA46B6000	UA55B6000		
最大可视图像 尺寸	81厘米/32英寸对角线	101厘米/40英寸对角线	116厘米/46英寸对角线	139厘米/55英寸对角线		
PC分辨率(最优)	1920 x 1080 @ 60 Hz		1920 x 1080 @ 60 Hz	1920 x 1080 @ 60 Hz		
伴音最大输出	10W × 2	10W x 2	10W x 2	15W × 2		
尺寸(宽*深*高) 机身 带支座	799 X 29.9 X 520.9mm 799 X X 255.0 X 579.9mm	996 X 29.9 X 630 mm 996 X 255 X 692 mm	1129 X 29.9 X 705 mm 1129 X 275 X 767 mm	1321 X 29.9 X 815 mm 1321 X 305 X 877 mm		
质量 带支座	12. 15kg	18. 5kg	25. 5g	27. 4kg		
环境条件 运行温度 运行温度 贮存温度 贮存温度	10°C到40°C(50°F到104°F) 10%到80%,非凝结 -25°C到45°C(-4°F到113°F) 5%到95%,非凝结					
亮度	≥350c	d/m2	≥350cd/m2			
对比度	≥150	0:1	≥150:1			
可视角	水平:≥85° 重	垂直:≥65°	水平:≥85° 垂直:≥65°			
清晰度	水平: ≥720	垂直:≥720	水平:≥720 垂直:≥720			
色域覆盖率	≥32	2%	≥32%			
固有分辨力	1920 x	1080	1920 x 1080			
运动图像拖尾 时间	≤18	lms	≤18ms			
执行标准		Q/12JD5715 液晶遥控彩色	电视广播接收机技术条件			

- ② 设计及规格如有变,恕不另行通知。 ② 本设备为B类数字仪器。
- ② 有关电源信息和整机消耗功率,请参阅产品上所附的标签

▶ LCD TV

环境保护期限适用条件 环境温度: 0 ~ 40 度 环境湿度: 10% ~ 80%

	有毒有害物质或元素					
部件名称	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路组件	Х	0	0	0	0	0
电缆组件	Х	0	0	0	0	0
塑料和聚合物部件	0	0	0	0	0	0
金属部件	Χ	0	0	0	0	0
液晶屏	Х	Х	0	0	0	0

环境保护期限适用条件 环境温度: 0 ~ 40 度 环境湿度: 10% ~ 80%

► LED TV

部件名称	有毒有害物质或元素					
部件名称	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路组件	Х	0	0	0	0	0
电缆组件	Х	0	0	0	0	0
塑料和聚合物部件	0	0	0	0	0	0
金属部件	Χ	0	0	0	0	0
液晶屏	Х	0	0	0	0	0

环境保护期限适用条件 环境温度: 0 ~ 40 度 环境湿度: 10% ~ 80%

► PDP TV / PDP Monitor

는	有毒有害物质或元素					
部件名称	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路组件	Х	0	0	0	0	0
电缆组件	Х	0	0	0	0	0
塑料和聚合物部件	0	0	0	0	0	0
金属部件	Х	0	0	0	0	0
等离子屏	Х	0	0	0	0	0

- O:表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。
- X:表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。

本表表示本机器内含有的有害物质情报,部品别有害物质情报是由供应商 提供的情报和内部检查结果为基础制作的。部分部品含有的有害物质在目前技术水准条件下是不可能替代,三星电子为了做到可以替代正不懈地努力着。

我们承诺: - 5年内提供可更换部件。

- 接收消费者寄回或送回的报废产品。 具体地址请拨打: 400-810-5858 进行咨询。

注: 消费者承担邮寄,快递等相关费用。

本产品已经取得中国环境标志认证。

- 环境标志表示本产品与同类产品相比,具有低毒少害,节 约资源等环境优势,对保护人体健康及生态环境更有益。
- 您可以登陆 www. sepa. gov. cn 查询中国环境标志相关信息。(CCTV 除外)

- This product uses parts of the software from the Independent JPEG Group.
- This product uses parts of the software owned by the Freetype Project (www.freetype.org).
- This product uses some software programs which are distributed under the GPL/LGPL license. Accordingly, the following
 GPL and LGPL software source codes that have been used in this product can be provided after asking to vdswmanager@
 samsung.com.

GPL software: Linux Kernel, Busybox, Binutils

LGPL software: Glibc, ffmpeg, smpeg, libgphoto, libusb, SDL

GNU GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. http://fsf.org/

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS

0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source

form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law. You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provided you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".

- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This
 License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its
 parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it
 does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has
 interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied
 by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This
 alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer,
 in accord with subsection 6b.
- d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.
- e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and
 Corresponding Source of the work are being offered to the general public at no charge under subsection 6d. A separable
 portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not
 be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be
 marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version. In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such

14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program. Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.> Copyright (C) <year> <name of author>

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see http://www.gnu.org/licenses/>.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

The hypothetical commands 'show w' and 'show c' should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary.

For more information on this, and how to apply and follow the GNU GPL, see http://www.gnu.org/licenses/.

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read http://www.gnu.org/philosophy/why-not-lgpl.html.

GNU Lesser General Public License (LGPL)

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. http://fsf.org/

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS

0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source

form of a work

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law. You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This
 License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its
 parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it
 does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has
 interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This
 alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer,
 in accord with subsection 6b.
- d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.
- e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and
 Corresponding Source of the work are being offered to the general public at no charge under subsection 6d. A separable
 portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not
 be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or nonconsumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be
 marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

8. Termination

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

11. Patents

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version. In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such

14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program. Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

15. Disclaimer of Warrantv.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.> Copyright (C) <year> <name of author>

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details

You should have received a copy of the GNU General Public License along with this program. If not, see http://www.gnu.org/licenses/>

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

The hypothetical commands 'show w' and 'show c' should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary.

For more information on this, and how to apply and follow the GNU GPL, see http://www.gnu.org/licenses/.

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read http://www.gnu.org/philosophy/why-not-lgpl.html.

LICENSE ISSUES

The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit. See below for the actual license texts. Actually both licenses are BSD-style Open Source licenses. In case of any license issues related to OpenSSL please contact openssl-core@openssl.org.

OpenSSL License

Copyright (c) 1998-2007 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- 3. All advertising materials mentioning features or use of this software must display the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)"
- 4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
- 5. Products derived from this software may not be called "OpenSSL nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.
- 6. Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Original SSLeay License

Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com) All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com). The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- 3. All advertising materials mentioning features or use of this software must display the following acknowledgement: "This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)" The word 'cryptographic' can be left out if the rouines from the library being used are not cryptographic related :-).
- 4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

此页有意留空