

Illustrated Parts & Service Map

HP LT4700 47-Inch LCD High-Definition Television

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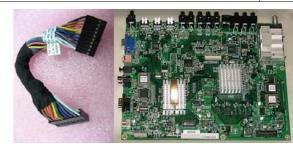
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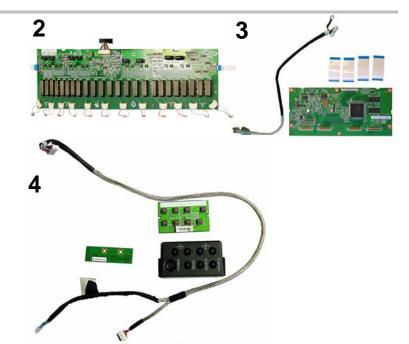


Key Specifications

| Resolution | 1920 (H) x 1080 (V) |
|--------------------|--|
| Brightness | 500 cd/m2 |
| Contrast ratio | 1200:1 |
| Viewing angle | 176 degrees |
| Response time | 6.5 ms |
| Expected lifetime | 60,000 hours |
| Scalar | Trident LX66 |
| Supported input | 480i, 480p, 720p, 1080i, 1080p (HDMI only) |
| Connectivity | AV in (2), Component In (YPbPr) (2), HDMI, (3), S-Video In (2), Antenna In (1), PC VGA In (1), Analog Audio In (L/R) (5), Pc Audio In (1), RS-232c (1), USB Port (1), Audio Out (1), SPDIF Out (1) |
| Speakers | 2 x 10W, 1 way |
| Tuning | ATSC/NTSC/Clear - QAM |
| Power supply | 120 V AC 60 Hz |
| Power consumption | 330 W |
| Panel manufacturer | СМО |

| Bo | ards | |
|----|---|------------|
| 1 | Main board assy, including: - Main board - Cable: Main board to power supply | 455595-001 |
| 2 | Inverter board assy, including: - Inverter boards: Master and slave (master shown) - Cables: Master and slave (not shown) | 455599-001 |
| 3 | Control board assy, including: - Control board - LVDS cable - Ribbon cables (4) | 455603-001 |
| 4 | Keypad/Infrared assy, including: - Keypad buttons - Keypad PCA board - Infrared board - Cable: Main board to keypad | 455604-001 |





Covers/mounting/stand

| 1 | Stand neck assy, including: - Stand neck - Repair screw kit | 455590-001 |
|---|---|------------|
| * | Stand base | 452087-001 |
| 2 | Back cover/bucket | 452095-001 |
| 3 | Mesh bracket board cover | 452098-001 |
| 4 | Internal support wall mount | 452097-001 |
| 5 | I/O bracket with AC inlet | 452126-001 |

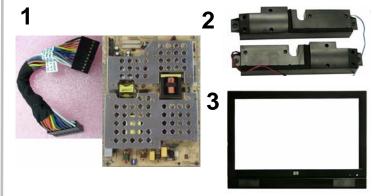
^{*}Not shown

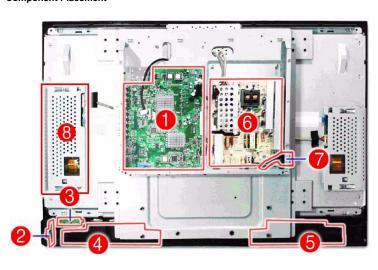


Misc parts

| 1 | Power supply assy, including: - Power supply - Cable: Power supply to main board | | 455592-001 |
|---|--|-----------------------|---------------|
| 2 | Speakers (L and R and wire connectors) | | 452108-001 |
| 3 | Front bezel including speaker cover | | 452117-001 |
| * | Remote control | | 452113-001 |
| * | Cable clamp | | 452127-001 |
| * | VGA cord | | 453143-001 |
| * | Whole unit - head only | | 451707-001 |
| * | Power cord | | 8121-0740 |
| * | Repair screw kit, includes: | | 452128-001 |
| | Screw hex I#4-40/O#4-40 L7 NI (2) | Screw pan W/FLT SPG | M3*8L NI (4) |
| | Screw T M4 P0.7 8L NI SAE1018 (4) | W37A-Screw-speaker-N | 13X10 (2) |
| | Screw M3X0.5 6L black ZN (4) | Screw M3 6L P T black | ZN (4) |
| | Screw M4 6L M black ZN W32A (10) | Screw M4 10L P T blac | k ZN W32A (4) |
| | Screw M5 15L M black ZN W32A (8) | Screw tap flat M4*10L | NI (4) |
| | 1 | | |

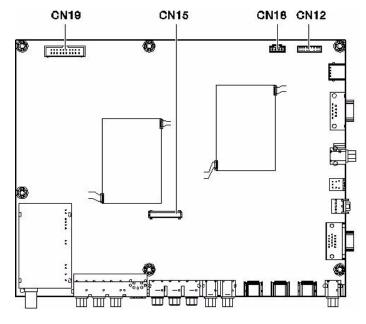
*Not shown





| No | Description | No | Description |
|----|--------------|----|-------------------------|
| 1 | Main board | 5 | Speaker right |
| 2 | Keypad board | 6 | Power supply unit board |
| 3 | IR board | 7 | AC socket |
| 4 | Speaker left | 8 | Inverter |

Main Board Layout



| Connector | Specification | Description |
|-----------|---------------|--|
| CN19 | 13 pins/ROHS | Power supply from power converter board CN114 |
| CN15 | 28 pins/ROHS | LVDS output signal (Between main board and panel) |
| CN18 | 4 pins/ROHS | Audio power |
| CN12 | 11 pins/ROHS | Keypad and IR control (connect to keypad board and IR board) |

LED Indicators (all on main board)

| Indicator | Blink Frequency | Failure Part |
|-----------------------------|-----------------|--------------------------------------|
| Amber and aqua LED blinking | 1 sec interval | MCU Host link error |
| Amber LED blinking | 1 sec interval | TAFE does not respond |
| Aqua LED blinking | 1 sec interval | Tuner does not respond |
| Amber LED blinking | 2 sec interval | Digital Demodulator does not respond |
| Aqua LED blinking | 2 sec interval | Audio process does not respond |
| Amber and aqua LED blinking | 2 sec interval | More than two I2C devices error |

I/O Connectors

| Name | Description |
|---------------------------------|--|
| HDMI | Digital High Definition Input Video Input Connector with HDCP - Type A HDMI 1 (with HDMI audio in L and R) HDMI 2 HDMI 3 Audio L and R must be set to PCM at the source across HDMI. |
| VGA | VGA monitor input with audio L/R (line in) |
| Audio-Input | Digital (Optical) in Dolby Digital or PCM format) (S/PDIF) Audio Output L and R stereo analog (RCA) |
| ANT/Cable in (RF input) | 75-ohm unbalanced, F-type for VHF/UHF/CATV in |
| Component High Definition Input | 1: Y, Pb, and Pr, and audio L and R 2: Y, Pb, and Pr, and audio L and R |
| Serial RS-232 | Serial input (Commercial use only) |
| Standard Definition Input | AV Input 1: S-Vid, Video, and Audio L and R AV Input 2: S-Vid, Video, and Audio L and R |
| Service Port | USB (For firmware upgrade use) |

TV Indicators and Controls

| POWER | Power button turns on the TV or places it in standby mode. |
|----------------------------------|--|
| MENU | Menu displays the on-screen display (OSD) or closes the OSD menu. |
| SELECT | SELECT starts the Auto Sync function for a connected PC signal. In an OSD menu, selects the highlighted item in the OSD. |
| SOURCE | Source (SRC) selects the input Menu. In an OSD menu, this functions as a back button or moves you up one item or menu level. |
| +CH -CH | Channel (CH) selects the next or previous channel. In an OSD menu, press these buttons to move up or down in the menu. |
| +VOL -VOL | Volume (VOL) raises or lowers the sound level. In an OSD menu, press these buttons to move right or left in the menu or to adjust an item. |
| LED Indicator (left) | Amber: TV is powering on (light turns off after about 30 seconds). HP Aqua Blue: TV is off but plugged into the power source. No light: TV is on or AC power cord is disconnected. |
| Remote Control Sensor (Right) | Receives the signal from the remote control. |

SimpleMenu

| Main | Sub1 | Sub2/Options |
|---------|------------------|--|
| Picture | Mode | Vibrant Standard Studio User |
| | | Brightness |
| | | Contrast |
| | | Saturation |
| | | Hue |
| | | Sharpness |
| | Color Temp | Cool Standard Warm |
| | Aspect Ratio | Auto 16:9 Mode 4:3 Mode Zoom1 Zoom2 Panorama |
| | PC | Auto Sync |
| Audio | Mode | Voice Standard Music Other |
| | Auto Volume | On Off |
| | Virtual Surround | Off Theater Music Hall |
| | Speaker | On |
| Setup | Caption | On Off On Mute |
| | Default Settings | Reset |

Wiring Diagram

