



10937 Understanding LED Television is a friendly training platform to learn the operation of LED Television receiver. It is demonstrator cum training system specifically designed for the comprehensive practical study on LED TV engineering for the beginners with a basic knowledge of the various electronic building blocks and fundamentals of communication system.

This didactic product develops the sense of investigation within the student and familiarises him with repair/design techniques. One of the main features of this training system is fault simulation to educate on actual fault finding, by simulating faults on this platform. The complete block diagram of LED TV system is printed on the mimic. Finally this equipment allows us to do experiments and to observe waveforms/signals/voltages of different sections, which are guided thoroughly by theory and product tutorials to gain in-depth knowledge of the system.

### Features

- Superior quality 24-inch full HD LED Color Television/ PC Monitor
- Manual and Remote control operation
- PAL/ NTSC video formats
- Composite video input/ VGA input
- Complete block diagram of a LED TV system on board
- The different circuit sections of LED TV are exposed on a PCB
- Easy identification of different parts and components of the system at a glance
- Easy measurement of voltages and observation of waveforms on test points
- Soldering free fault creation and troubleshooting
- Online Product Tutorial
- 1 Year Warranty

### Technical Specifications

|                    |   |
|--------------------|---|
| Display            |   |
| Display Type       | : LED, HD                                   |
| Screen Size        | : 24 Inch (60cm)                            |
| Display Resolution | : 1366 X 768 pixels                         |
| Contrast Ratio     | : Mega Contrast Ratio                       |
| Display Color      | : 16.7 Million Display Colors               |
| Viewing Angle      | : 170 (H) X 170 (V)                         |
| Refresh Rate       | : 50 Hz                                     |
| Video Interface    | : Video Input/ VGA input                    |
| Audio Interface    | : RCA L & R                                 |
| Audio Output Power | : 20W                                       |
| Application        | : Color Television/ PC Monitor Connectivity |
| USB                | : 1 X USB 2.0 (MPEG, JPEG, MP3)             |

|                      |   |
|----------------------|---|
| HDMI                 | : Yes (1 X HDMI)                                      |
| Other Connectivity   | : RF In, AV In, Ypbpr In, VGA In, VGAAudio In, AV out |
| Composite A/V        | : Yes   |
| Component Video      | : Yes   |
| Analog Audio         | : Yes   |
| Test Points          | : 60 nos  |
| Remote Battery       | : UM-4, "AAA" 1.5V (2 nos)                            |
| Mains Supply         | : 110-260V AC $\pm$ 10%, 50/60Hz                      |
| Power Consumption    | : 35W   |
| Weight               | : 9 Kg (approximately)                                |
| Dimension            | : W400 X D300 X H115                                  |
| Included Accessories | : Remote, Mains cord, 25 Pin FRC cable,               |
| <b>Optional</b>      | : 15 Pin D type cable each 1 no.                      |

### Experiments

01. Study the specifications of full HD LED Television
02. Study the block diagram and operating principle of LED TV
03. Study the functions of front panel controls/ keys of LED TV
04. Study the functions of controls on Remote
05. Study of circuit description and functions of different sections
06. Study and observation of waveforms/signals of different sections
07. Study and measurement of voltages of different sections
08. Study of switch faults and troubleshooting in different sections

Note: Specifications are subject to change.

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