



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 indepth 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**

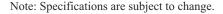
Display		
Display Type	:	LED, HD
Screen Size	:	24 Inch (60cm)
Display Resolution	:	1366 X 768 pixels
Contrast Ratio	:	Mega Contrast Ratio
Display Color	:	16.7 Million Display Colors
Viewing Angle	:	170 (H) X 170 (V)
Refresh Rate	:	50 Hz
Video Interface	:	Video Input/ VGA input
Audio Interface	:	RCA L & 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,
Optional	:	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



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