



**Sciencetech 2651A 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
- 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

## Scope of Learning

### Study the :

- Specifications of full HD LED Television
- Block diagram and operating principle of LED TV
- Functions of front panel controls/ keys of LED TV
- Functions of controls on Remote
- Circuit description and functions of different sections
- Observation of waveforms/signals of different sections
- Measurement of voltages of different sections
- Switch faults and troubleshooting in different sections

## Technical Specifications

### Display

Display Type	: LED, HD
Screen Size	: 24 Inch (50cm)
Display Resolution	: 1600 X 900 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** : 8W X 2

**Receiving System** : PAL BG/I/DK and NTSC

**Channel Coverage** : VHF-2-12; UHF21-69; CATV (X~Z+2, S11S41)

**Application** : Color Television/ PC Monitor

### Connectivity

USB	: 1 X USB 2.0 (MPEG, JPEG, MP3)
HDMI	: Yes (1 X HDMI)
Other Connectivity	: AV In 1, VGA In, VGA Audio In, AV out

**Composite A/V** : Yes

**Component Video** : Yes

**Analog Audio** : Yes

**Test Points** : 55 nos

**Switched Faults** : 50 nos

**Remote Battery** : UM-4, "AAA" 1.5V (2 nos)

**Mains Supply** : 110-260V AC  $\pm$  10%, 50/60Hz

**Power Consumption** : 35W

**Weight** : 11 Kg (approximately)

**Dimension** : W430 X D252 X H82

**Product Tutorial** : Online (on [www.SciencetechLearning.com](http://www.SciencetechLearning.com))

**Included Accessories** : Remote, Mains cord, 25 Pin D type cable, 15 Pin D type cable each 1 no.