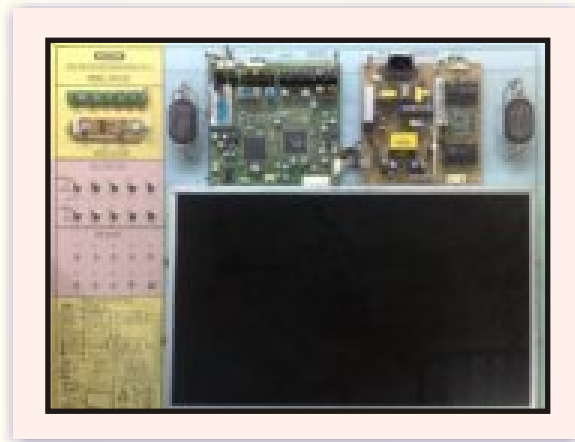




# ULTRA HIGH DEFINITION TV (UHDTV) TRAINER

MODEL - UHDTV100

This trainer has been designed with a view to provide theoretical and practical knowledge of a general High Definition TV (HDTV) on SINGLE P.C.B.



## FEATURES

1. The main circuit board is soldered on single PCB.
2. The students can visually observe the electronic circuits and mechanical parts easily.
3. The block diagram is printed on single PCB.
4. Fault creation facilities are provided by switches.
5. About more than 5 faults can be demonstrated on this trainer.
6. Section wise different colored screen printed circuit on the PCB for easy understanding of functions of different sections.
7. Typical ICs are provided on sockets.
8. Explanation, Observation, Alignment and adjustment of internal and External controls is possible at a glance due to single PCB.
9. Easy identification of different parts of HDTV at a glance.
10. Easy measurement of Voltages and observation of waveforms at any point. Also typical voltages and waveforms are provided.
11. A manual having 10 practical is provided with this trainer.
12. The whole circuit of HDTV is explained section wise in detail in the manual.

In keeping view of SIGMA policy of continuous development and improvement, the Specifications may be changed without prior notice or obligation.

**Sigma Trainers and Kits**  
E-113, Jai Ambe Nagar,  
Near Udgam School,  
Thaltej,  
**AHMEDABAD - 380054.**  
**INDIA.**

**Phone(O): +91-79-26852427/ 26850829**  
**Phone(F): +91-79-26767512/ 26767648**  
**Fax : +91-79-26840290/ 26840290**  
**Mobile : +91-9824001168**  
**Email : sales@sigmatrainers.com**  
**: sigmatrainers@sify.com**  
**Web : www.sigmatrainers.com**

**Dealer:-**

## SPECIFICATIONS

1. Display : 15" Diagonal Size , Flat panel display / TFT active matrix
- Max Resolution : 1280 x 1024
- Aspect ratio : 16:9
- HDTV Resolution Lines : VGA interface, 480i/480p/576p/720p
2. Image
- Image Brightness : 300 cd/m<sup>2</sup>
- Image Contrast Ratio : 400:1
- Image Max H-View Angle : 140
- Image Max V-View Angle : 140
3. Interface
- HDTV (Digital Video) Input : HDMI
- Analog Video Input : RGB, VGA (HD-15)
- Analog Video Input : S-Video
- Composite Video Input : RCA Yellow,
- Audio Input : RCA- Left (White), Right (Red)
- Component Input : Y (Green), Pr (Red), Pb (Blue)
- Audio output : Headphone Audio output
- Antenna RF Input : RF - HDTV/ PAL - SDTV
4. Application : Used as Monitor (PC), DVI Player, HDTV, SDTV, AV Player  
S- Video Player, Component Player
5. Computer Monitor Driver : Windows XP, Windows 2000
6. Tuner Channels : 2 to 69
7. On Screen display : Volume, Brightness, Contrast, Color, Channel, Tuning.
8. Remote Control functions : On screen display of Volume, Brightness, Contrast, Channel
9. Audio Amplifier : 6W PMPO
10. Faults : 5 No.
11. PCB Size : 24"x20" with Block diagram in multicolor section wise.
12. Power supply : 230V + 15% AC, 50 Hz, 60 watts.
13. Standard Accessories : 1. Trainer PCB with LCD display.  
2. Different input Cables  
3. A Manual having 10 practical.

## EXPERIMENTS

1. To Study Specifications of HDTV.
2. To Study the Block Diagram and working principle
3. To Study Input/output signals of different sections
4. To Study Complete circuit with different sections
5. To Study Remote Section
6. To understand/observe the function of external and Internal controls
7. To measure Test Point Voltages for different sections
8. To observe Test Point Waveforms for different sections
9. To measure Video and Audio gain (sensitivity) with Pattern Generator
10. To demonstrate and understand different types of faults
11. To study faults diagnosis method
12. To study ICs used in HDTV
13. To study glossary of the Technical Words
14. To study complete schematic circuit Diagram