

## DTH TV AND SET TOP BOX TRAINER WITH 7 INCH DISPLAY TV

MODEL - DTH100N

This trainer has been designed with a view to provide theoretical and practical knowledge of a general Direct to Home (DTH) receiver 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 LCD screen is Mounted on single PCB.
- 4. Fault creation facilities are provided by switches.
- 5. Section wise screen printed circuit on the PCB for easy understanding of functions of different sections.
- 6. Typical IC s are provided on sockets.
- 7. Explanation, Observation, Alignment and adjustment of internal and External controls is possible at a glance due to single PCB.
- 8. Easy identification of different parts of DTH at a glance.
- 9. Easy measurement of Voltages and observation of waveforms at any point. Also typical voltages and waveforms are provided.
- 10. A manual having practical is provided with this trainer.
- 11. The whole circuit of DTH is explained section wise in detail in the manual.

## **SPECIFICATIONS**

Power supply
 Dish Antenna
 200V to 240v AC, 50Hz.
 1.5' Aluminum steerable.

3. LNB (Low Noise Block down converter)

Input frequency : KU band.

Output frequency : 950 to 1450 MHz.

Conversion gain : 65 dB.

Noise Temp : 35 degree K max.

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Dealer:-

4. SETTOP BOX Receiver in Trainer Form

IF frequency : 70 MHz.

Video Bandwidth : 50 Hz to 5 MHz.

Video output level : 1 Vpp. (at 75 ohm load)

Video polarity : Normal/Inverted Switch selectable

Audio sub carrier frequency : Tunable from 5.0 to 8.0 MHz.

R.F Output channel : No.2
5. Uplink satellite : INSAT 4A
6. Screen : 7" SVGA LCD

7. Controls : Channel selecting, Volume,

8. Faults : 20 No.

9. Standard accessories : 1. Dish Antenna-1.5 feet

2. LNB

3. Trainer PCB

5. Dish connecting wire4. R.F out put cable5. Teaching manual6. Acrylic cover.

7. Hardware Material for assembly of dish antenna.

10. DTH Subscription Connection : DoorDarshan Free Channels.

11. Books for Audio video Engineering

: 20 Nos in pdf Format

12. Mp4 Video Class for Audio video Engineering : 40 Classes in Mp4 on Pen Drive

13. Accessories required : Any Colour TV with Audio/Video Input.

## **EXPERIMENTS**

- 1. To Study Specifications of DTH.
- 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 demonstrate and understand different types of faults
- 10. To study faults diagnosis method
- 11. To study ICs used in DTH
- 12. To study glossary of the Technical Words