## DIRECT TO HOME (DTH) RECEIVER TRAINER MODEL - DTH100

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 block diagram is printed 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

- 1. Power supply : 200V to 240v AC, 50Hz.
- 2. Dish Antenna : 1.5' Aluminum steerable.
- 3. LNB (Low Noise Block down converter)

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Input frequency	:	KU band.
Output frequency	:	950 to 1450 MHz.
Conversion gain	:	65 dB.
Noise Temp	:	35 degree K max.

4. SETTOP BOX Receiver in Trainer Form

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	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.	Controls	:	Channel selecting, Volume,
7.	Faults	:	5 No.
8.	PCB Size	:	15"x12" with Block diagram in multicolor section wise
9.	Standard accessories	:	1. Dish Antenna-1.5 feet
			2. LNB
			3. Trainer PCB
			5. Dish connecting wire
			4. Audio-Video cable
			5. Teaching manual
			6. 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 v	ideo	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