

## Basic Universal Antenna Trainer

The Antenna Trainer **EA-817B** is a comprehensive education system designed for teaching, demonstration and experimentation about the theory and practice of telecommunications infrastructure installations:

- **MATV** (Master Antenna Television) Digital
- **SMATV** (Satellite Master Antenna Television) Digital

and the development of skills to install and assembly.

This trainer allows students to install, configure, adjust, modify and analyse any real **MATV** and **SMATV** installation.



Including satellite dish and UHF



Includes test signal generator **RP-050**



Coaxial cable, a tool for coaxial cable, connectors and fasteners are included in order to implement other types of installations or to modify the existing one. It is also provided the Theory and Practice Manuals and a technical manual about the elements that make up the trainer.



Super selective headend model **AGIL** included

The flexibility of this trainer allows students check and test the effectiveness of different solutions proposed by the teacher. The trainer can also simulate failures, errors and the most common problems that a student will find in a real installation.

Together with the trainer a high definition (HD) terrestrial television receiver and satellite television receiver is provided, which also allow going further with subjects related to high definition and video compression (MPEG-2 and MPEG-4). A signal generator for the analysis of the IF band at installations and some accessories to point antennas are also included.

The trainer, if desired, can be expanded in the future with other modules to explore in more detail the new technologies and ultrafast access infrastructures (DVB-S2, transmodulation, TDT Premium, IPTV, Fiber Optics, FTTx ...). It can also be completed with an advanced transmission unit that has very interesting practices about TDT real signal transmission, such as DTT signals propagation, Gap-Fillers, transport stream (TS) creation, familiarity with PID, PMT NID, configuration and testing of modulation parameters and so on.

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### ANTENNAS

- UHF Antenna
- Off-set Antenna composed by:
  - Reflector
  - 4 outputs LNB (H/L, V/L, H/H, V/H) with polariser
  - Accessories: LNB and fasteners

### HEADEND EQUIPMENT

- MATV (integrated into a single module):
  - Set of 10 UHF programmable filters
  - VHF and FM amplifier
  - Power supply unit

### MECHANICAL ACCESSORIES

- 150 cm mast for terrestrial antenna
- Fixed support for off-set antenna

### COLLECTIVE and INDIVIDUAL MATV DISTRIBUTION

- Splitter
- Taps
- User Access Point
- Terminal box
- Terminal box cover
- Socket divider

### COLLECTIVE and INDIVIDUAL SMATV DISTRIBUTION VIA IF

- Switchable splitter, with internal amplifier
- IF sockets

### USER EQUIPMENT

- High Definition Terrestrial and satellite digital television receiver (COFDM, QPSK) with MPEG-2 and MPEG-4 combo

### ACCESSORIES FOR ANTENNA POINTING

- Inclinometer
- Compass

### ACCESSORIES, CABLES AND TOOLS

- Reel of coaxial cable (25 m.)
- F male connectors (100 pcs.)
- TV male connectors (25 pcs.)
- TV female connectors (25 pcs.)
- Tool for coaxial cables

### INSTRUMENTATION

- Simulator for Intermediate Frequency (**RP-050**)

### DOCUMENTATION (on CD-ROM):

- Theory and Practice Manual for Intermediate Cycle
- Trainer's User's Manual
- Technical Documentation

### RECOMMENDED INSTRUMENTATION:

- Signal generators (GV-998, GV-898+, GV-798, GV-698+)
- Field Meters (TV EXPLORER, TV EXPLORER **////+**, TV EXPLORER **HD** and **HD+**)
- Test signal Generator (RP-110)
- COFDM Modulators (MO-170)
- DTTV Headend (Digital to TV)

### Recommended instrumentation



**Signal generators**  
GV-998, GV-898+, GV-798,  
GV-698+



**Field Meters**  
TV Explorer, TV Explorer **////+**,  
TV Explorer HD y HD+



**COFDM Modulators**  
MO-170, y cabecera DTTV



**Test signal Generator RP-110**