TESTING MODULES FOR TV ANTENNA SYSTEMS

Mod. TS/EV

INTRODUCTION

This system is one of the models of the set of electric installations and also of Transmission Systems (Cat. 21). It consists of modules conceived for theoretical-experimental courses concerning the design and assembly of the devices used in modern terrestrial TV reception systems, as well as the measurements carried out on them. Each module of this system includes various functional devices enabling to carry out different exercises in flexible way and according to the instructions available in the theoreticalexperimental handbook supplied with the equipment, so that the peculiar characteristics of the included electronic circuits and the global characteristics of the system using them can be examined efficaciously.

Trainer mod. TS/EV is designed to examine the characteristic and application aspects of design and assembly of a TV antenna reception system, and to analyze the amplification and distribution of television signals in detail. It also includes a handy and functional vertical frame for modules.

This trainer consists of panels of insulating material where the block diagram has been silk-screen-printed for an easier use during exercises. Each module includes "professional" devices enabling to assemble a lot of central antenna systems starting from the basic single-user system.

TRAINING PROGRAM:

- Characteristics and operation of components for TV antenna systems: mixers; broad-band, multi-input and channel amplifiers; filters; converters; power supply units; cables; sockets; shunts; dividers and antennas
- Distribution network: in cascade on 1 and 2 columns, and by nodes
- · Single broad-band system; multiple system with band amplifiers, channel converter and with channel and power amplifiers
- · Using equalizing filter
- Using antennas

TECHNICAL SPECIFICATIONS:

The set of modules for implementing TV antenna systems mod. TS/EV includes:

- 1 Module TS01 consisting of:
 - 1 power supply unit
 - 1 UHF band pre-amplifier
 - 1 channel amplifier band I channel B (*)
 - 1 channel amplifier band III channel D (*)
 - 1 channel amplifier UHF band channel 25 (*)
 - 1 channel amplifier UHF band channel 40 (*)
 - 1 channel amplifier UHF band channel 61 (*)
 - 1 VHF band output amplifier
 - 1 UHF band output amplifier
- 1 Panel TS02 consisting of:
 - 1 two-input (VHF and UHF) mixer
 - 1 broad-band (VHF and UHF) amplifier
- · 1 Panel TS03 consisting of:
 - 1 broad-band four-input (bands I-III-IV-V) branch exchange



- 1 UHF/band I converter from channel 61 to B (*)
- 1 equalizing filter
- 1 Panel TS04 consisting of:
 - 1 two-output divider; 1 four-output divider
 - 4 directional TV sockets
- · 1 Panel TS05 consisting of:
 - 1 one-output directional junction box
 - 1 two-output directional junction box
 - 3 simple sockets (terminals)
- 1 Panel TS06 consisting of:
 - 1 four-output directional junction box
 - 4 simple sockets (terminals); 2 directional sockets

Dimensions: 1100 x 800 x 800 mm

Net weight: 20 kg

RECOMMENDED ACCESSORIES FOR COMPLETION:

- · Colour bar generator
- · Field meter

SUPPLIED ACCESSORIES:

- 1 vertical rack for modules
- 1 log-periodic antenna band III
- 1 log-periodic antenna band IV/V
- 1 antenna mast with support
- 1 set of 20 terminalized cables with antenna plugs of various
- 8 terminations of 75 Ω , 2 direct current separators,
- · 2 female-female adapters

(*): different channels can be supplied on demand

POWER SUPPLY:

230 V / PE 50-60 Hz