

Essential Principles for Installers

Suitability

An ideal 'starting' point for those entering the industry. Professional installers of media reception systems. Any person involved in the installation, design, maintenance and specification of TV, Satellite, Sate and Audio Video systems in both the domestic and commercial sectors. Architects, Designers, Engineers, Consultants and those involved in the industry with a desire to learn or refresh basic principles. The course is designed to form part of an individual's Continual Professional Development portfolio. A reasonable understanding of basic mathematics would be desirable but not necessary.

Content

'(P) indicates inclusive practical elements'

- Units of Measurement
- Principles of Electricity (AC/DC) including Ohms and Watts Laws
- Basic Electronic Principles and Components – *introducing Semiconductors and Integrated Circuits*
- Basic electrical/electronic parameters and symbols.
- Basic mathematics, scientific notation, Trigonometry, transposition calculations of formulae.
- Binary, hexadecimal systems basics. RS232 Serial Interfaces
- Decibels for signal ratios and measurement
- Electromagnetic Spectrum, Frequency to Wavelength and vice versa conversion
- Transmission and Reception line basic principles
- Earthing overview types and requirements
- Power Supply Units (PSU) explained – *SMPS also*
- Electrical equipment classes explained and tested (PAT).
- Introduction to Mechanical loading and torque.
- Speaker Systems, Passive/Active & 100V Line level.
- Video display and interface formats
- (P) Use of Multimeter & Clamp Meter
- (P) Fitting 230v Connectors – *13A & IEC Types*
- (P) PAT (Portable Appliance Testing)
- (P) Construction of basic electronic circuits
- (P) Measurement of Voltages, Currents and Resistance
- (P) PSU investigation and fault finding

Learning Outcomes

On completion, participants will have a greater understanding of the fundamentals taught and be able to apply them in their working environment. They will have a broad-based underpinning knowledge in preparation for other industry training.

Aims

To teach the fundamentals principles that are essential to the professional installation of media reception systems.

Objectives

On completion of the 2-day course, candidates will have a broad-based underpinning knowledge and competence in the subject.

Learning Style

This 2-day programme will give participants to a broad-based underpinning knowledge and competence on the subject.

Assessment Method

Continual information and formal assessments will monitor progress throughout. Practical assessment exercises and multiple choice open book assessment paper with a pass mark of 65%.

Duration

This programme is run over 2-day.

Programme Cost

Member Rate £365

Non Member Rate £500