

An Introduction to IRS

Suitability

This programme is designed for participants who have prior experience in the design, installation and maintenance of TV and satellite reception and relay systems and who would like to update their knowledge of Integrated Reception Systems (IRS).

Aims

This programme delivers an overview of all aspects of TV and radio signal delivery via an IRS.

Objectives

This programme practically defines the basic principles of IRS and enables the participants to engage in team project planning.

Content

- The electromagnetic wave.
- The principles of digital signals and modulation techniques.
- Measurement parameters and frequency bands.
- Aerial design.
- The principles of Digital Terrestrial Television (DTT) reception
- UHF multiplexes.
- Practical signal measurements.
- Digital bandwidths
- Splitters and diplexers.
- Coaxial cable losses.
- The principles of satellite TV reception.
- Satellite location and footprints.
- Frequency down conversion and source switching.
- Methods of signal distribution in the home
- IRS concepts for new and existing buildings.
- Network design and signal level calculations for IRS.
- System hardware.
- Equipotential bonding and lightning protection.
- IRS system troubleshooting.
- TV flat-panel displays.
- An overview of fibre optics

Learning Outcomes

At the conclusion of this programme all participants will be able to conceive, plan, install and service a typical IRS for up to 100 locations to current best practice.

Learning Style

This programme is classroom based by PowerPoint and contains a mix of practical demonstrations with hands-on learning exercises.

Assessment Method

The assessment method for this programme is by means of practical assessment exercises and a multiple choice open book assessment paper with a pass mark of 65%.

Programme Duration

This programme is run over 2 days.

Costs

Members £270

Non-Members £395