

## IRS Networks Stage 1

**Suitability** - This programme is designed for participants who have prior experience in the installation of simple TV reception equipment (TV Aerial & Satellite) and who wish to update their knowledge of simple 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 locations 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

### Programme Cost -

Member Rate £330  
Non Member Rate £465



ACCREDITED  
PROGRAMME