

# Connectix Training Programmes

## UFO/PON Installation Training

Correct installation procedures are a fundamental part of today's structured cabling industry. We are committed to ensuring that our cabling systems are installed quickly, professionally and in compliance with the rapidly changing standards proposed by the ISO/IEC, ANSI/TIA and CENELEC. Modern building designs often include consideration for cabling infrastructures to support voice and data distribution. It is increasingly the case that tender documents, project specifications and detailed plans make reference to relevant standards and terminology that anyone working in this field should be aware of. Passive Optical Networks are a way of cabling sites/premises/users without the need, in the majority of cases for traditional Copper cabling or distributed active equipment.

### Course Description

PN02 is a part theory, part practical training course held at our Braintree HQ specifically tailored to engineers who are tasked with deploying and installing the products. The majority of the time is spent 'hands on' working to install and test our unseen fibre optic range (UFO) and also associated passive optical networking components such as enclosures and splitters. We also have a live OLT and ONT set up connected.

### Features and Benefits

- Enables engineers to understand how PON systems work differ from other cabling systems.
- Explains the different ways PON systems can be designed and deployed
- Using a 'mock up' of apartments, cabling is undertaken using our bespoke products
- Terminating and testing techniques are discussed and undertaken
- Engineers have the chance to ask questions relating to the deployment of PON and POL systems

### Detail

#### Introduction to Connectix

- Background, History and activities
- How we work with ISP's, Altnets and Installers

#### Course Introduction

- Housekeeping, Course materials and Objectives

#### Pre- Requisites

- It is recommended that delegates would have a prior knowledge of basic fibre optic technology, jargon, components, cables and some experience of fusion splicing.
- It would be beneficial but not essential to have undertaken the online PON/POL theory course.

#### PON Theory

- Addressing the components compared to structured cabling
- Key active components of a POL
- 10G ready FTTH
- Designing splitter deployments
- APC connectors for reflections and return loss
- Loss budgets
- Insertion Loss
- dB vs dBm
- UFO installation guide
- Specific pebble guidelines

#### PON Practical

- Mounting midspan boxes (PoE) and marking slit points
- Using tool to slit sheath of midspan cable
- Fixing and gluing midspan cables
- Installing pebble cables and gluing
- Connect into an enclosure with a splitter
- Test passively for dB readings
- Check connected OLT for dBm readings at various points
- ONT connections
- Dynamic range testing
- Check out different enclosures
- Look at the difference between hold and cold glue systems

#### Timescales

It is intended that delegates will arrive for 8:45am with a view to start at 9am. The late start will enable more delegates to travel rather than have to stop overnight (distance dependent).

It is anticipated that the course will finish around 5pm.

#### Important

Please note, certain activities involve splicing single mode cables.

Class sizes are kept small to facilitate individual learning and assessment.