



Level Crossing Design – MCB and AHBC

Aim

This course is intended for signalling designers who wish to progress to the design of circuits for level crossings of the Manned Barrier (MCB) and Automatic Half Barrier (AHBC) style.

Key Features

- Technical terms and relay names explained in “plain English”
- Full operation sequence for each crossing type

Function, appearance and diagrammatic representation of common level crossing components

- Barriers, pedestals, controlling and proving circuits
- Road Lights, flasher units and lamp proving
- Audible Warning units and controllers
- Treadles – Normal and Reverse contacts
- Local Control Unit

Manually Controlled Barrier Crossing

- Operational requirements and control tables

- Understanding of Circuitry
- Function of all relays and circuits
- Operation sequence
- Auto Raise function

Automatic Half Barrier Crossing

- Operational requirements and control tables
 - Understanding of Circuitry
 - Function of all relays and circuits
 - Operation sequence
 - Single track and double track bidirectional
 - Signals within strike-in zone
 - Stopping/ Non stopping controls
 - Indications and alarms
- Control table and typical circuits for these level crossings

Course Outcomes

On successful completion of this course, the delegate will be able to:

- Create site specific circuit diagrams for MCB and AHBC level crossings based upon the typical circuits

Assessment and Certification

Achievement of the Course Outcomes will be assessed by an assessment of underpinning knowledge and circuit design.

The delegate’s achievement of the Course Outcomes will be confirmed by a certificate which will be forwarded to the nominated client contact following the course.

Pre-Requisites

A well prepared delegate is expected to be able to interpret signalling layout diagrams and control tables

Practical Information

Duration: 10 days

Location: at our Derby training centre, or on your premises (subject to equipment availability)

Maximum number of delegates: 10

This course is produced and run by Signet Solutions.

For further information contact us:

enquiries@signet-solutions.com

www.signet-solutions.com

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Course Progressions

We offer many signalling technical courses, and it can be difficult to work out what's best for your needs. The following table will assist you.

*Development Courses in green text

These courses typically form the backbone of a career development path, and are usually taken in the order shown.
Available on an "open" basis, in which you can take individual places from our regular timetable.

*Supplementary Courses in blue text

These courses provide supplementary knowledge about a specific technology or process. They can generally be taken on an "as needed" basis, without any particular order.
Available on a "private" basis, in which you sponsor the delivery of a full course. This works better for four or more delegates.

This is just a quick guide – please consult our individual course specifications for more detailed information. Please ask us if you have any queries.

Signal Maintenance & Signal Installation	Signal Design	Signal Works Testing
Introduction to Signalling/ Basic Signalling 1 & 2	Basic Signalling Technology Intermediate Signalling Technology Layouts Intermediate Signalling Technology Control Tables Advanced Signaling Technology	Introduction to Signalling/ Basic 1 & 2 Mod 5 - Test Assistant Mod 3c - Verification Tester Mod 3BL - Functional Tester Mod 4 - Functional Tester Mod 2 - Principles Tester Mod 1 - Tester in Charge
SMTH - Signalling Maintenance Testing Handbook Appreciation Route Relay Interlocking - Maintenance Interlocking Design Clamp Lock Installation Clamp Lock Maintenance Cable Jointing Supplementary Back Drives + Stretcher Bars EISS Electrical Installation Skills Electrical Principles Style 63 Points Installation Style 63 Points Maintenance Westpac MK111A Maintenance + Faulting HW100 Points Maintenance EBI Track 200/T121 Track Circuits Fault Finding Techniques Mechanical Signalling	Route Relay Interlocking Route Relay Interlocking - Maintenance + Faulting Western Region E10k Circuitry Correlation Westpac MK11A - Design Location Design Project Level Crossing Design SSI Appreciation SSI Control Tables SSI Data Appreciation SSI Data Preparation Route Relay Interlocking - Mod 3BI Westpac MK11A - Testing	