

Glossary of Technical Terms and Abbreviations

Absolute block system

A signalling system which allows only one train to be between two signalboxes on the same line at the same time.

Acceptance of a train

A term used in Absolute Block signalling when a signalman allows a train to proceed towards his signalbox.

Accommodation Level Crossing

A private level crossing connecting land separated by the railway.

Advance

Further along in the direction of travel.

Annunciator

A buzzer which sounds when a train occupies a berth track circuit with the home signal at danger.

Approach control

A colour light junction signal which is held at red although the line ahead may be clear, in order to ensure that the driver slows down for a speed-restricted turnout.

Approach release

The point at which an approach-controlled signal is released.

Approach locking

A system of locking facing points so that they cannot be moved across in front of an approaching train.

Aspect

The colour displayed by a colour light signal.

Automatic Barrier Crossing (ABCL)

A level crossing whose operation is monitored by the train driver.

Automatic Half-Barrier Level Crossing (AHB)

An automatically-operated level crossing.

Automatic Open Crossing (AOCL)

A level crossing without barriers whose road traffic signals are monitored by the driver.

Automatic Route Setting (ARS)

A computerised system for setting routes according to a pre-programmed formula.

Automatic Section

An automatically-signalled section on an Absolute Block line.

Automatic signal

A signal which is operated by the passage of trains.

Automatic Train Control (ATC)

A former safety device for warning a driver of the need to slow down or stop.

Automatic Train Protection (ATP)

A system for ensuring that the driver slows down or stops when necessary.

Automatic Warning System (AWS)

A safety device for warning a driver of the need to slow down or stop.

Axle Counters

Track-mounted equipment which counts the number of axles on a train.

Back board

Driver's name for a distant signal.

Banner Repeating Signal

A signal which gives a driver advance information about a signal which has a limited sighting distance.

Berth Track Circuit

Track circuit in rear of home signal.

Block bell and code

The bell used for sending bell codes between adjacent manual signalboxes.

Block indicator

An instrument indicating the state of the line between adjacent manual signalboxes.

Blocking Back

Term used in Absolute Block when an unsignalled train or shunting movement is to be allowed to stand within the clearing point or outside the home signal.

Block telephone

A telephone link between two adjacent manual signalbox, using the block telegraph wires.

Block section

A section of line between two signalboxes.

Block signalling

A system of signalling based on block sections.

Block switch

Enables a signalbox to be closed by putting the signalboxes on each side into through communication with each other.

Braking distance

The distance a train needs in which to stop.

Bridge bashing

Overheight road vehicles colliding with railway bridges over the road.

Calling-on signal

To allow a train into an occupied section.

Cat's eyes

A railwayman's term for the 'proceed' aspect of a position light signal.

- Clearing a signal**
The action of the signalman in changing a signal from 'danger' to 'clear'.
- Clear signal**
A colour light signal displaying a green aspect, or a semaphore stop signal in the 'Off' position.
- Clearing point**
The point to which the line must be clear before a train can be accepted from the signalbox in rear under the Absolute Block system of signalling.
- Closed Circuit Television (CCTV)**
Equipment used for remote monitoring or supervisory purposes.
- Cut Out sign**
Metal cut out numerals erected at the line-side to denote the permitted speed.
- Coaching stock**
Vehicles designed to be capable of running in passenger trains.
- Colour light area**
An area in which all signals are of the colour light type and usually worked under the Track Circuit Block system.
- Colour light signal**
A signal which conveys its message by means of coloured lights.
- Controlled signal**
A colour light signal which is cleared from red by the signalman.
- Delayed yellow**
Allows a train to enter a colour light section without the full overlap being available.
- Detection**
A means of ensuring that facing points are correctly closed before the signal can be cleared.
- Detonators**
Small disc-shaped warning devices, placed on the rail head, which explode when a train passes over them.
- Distant arm proving**
A means of ensuring that the distant signal arm is in the 'On' position before the block indicator can be placed to 'line clear'.
- Distant signal**
A signal which tells the driver whether he needs to be prepared to stop at the next signal.
- Double yellow aspect**
A preliminary caution signal in four-aspect colour light signalling.
- Down**
All running lines and trains are assigned a direction, either Up or Down. The Up direction is usually towards London or a main centre. Trains using lines which are signalled for both directions are either Up or Down, according to their individual direction.
- Electric token block**
A system of signalling used on single lines.
- Electronic token**
Used in Radio Electronic Token Block.
- Emergency Indicator**
A sign used to inform a driver of a speed restriction imposed without prior notice.
- Emergency replacement switch (ERS)**
A switch that enables a signalman to replace an automatic signal to danger in an emergency.
- Entrance-exit system (NX)**
A system of route-setting used in modern power signalboxes.
- Examination of line**
A method of establishing whether it is safe to run trains through a section.
- Facing point**
A point which can change the direction of a train approaching it.
- Facing point lock**
Equipment for ensuring that facing points cannot move irregularly.
- Fail-safe**
Signalling equipment is designed so that any failures will result in signals being set at danger, hence 'fail-safe'.
- Fast line**
Where there are four separate tracks, one pair of Up and Down lines may be called the Fast lines and the other pair the Slow lines.
- Fixed signal**
A signal in a fixed location. The word 'fixed' refers to the location and not to the aspect or indication of the signal.
- Flank protection**
Additional signal and point interlocking at junctions, for extra safety.
- Flashing yellow aspects**
Warn the driver that he is routed over a speed-restricted turnout at a junction ahead.
- Fouling bar**
Equipment used to establish that a vehicle is safely clear of the fouling point.
- Fouling point**
The precise spot where a vehicle standing at a converging point between two lines will come into contact with a vehicle on the other line.
- Four aspect territory**
An area where all signals can display four aspects (Red, one yellow, two yellows, or green).

Four foot

Railway term for the space between the two running rails of a line.

Goods line

A line which is not signalled and equipped to the standard needed for passenger trains.

Green aspect

Means that the line ahead is clear and that the next signal will not be at red (or at single yellow in four-aspect territory).

Ground Frame

A stage or cabin containing switches or levers for controlling points and signals, but which can only be used when released by the controlling signalbox.

Half-cock

Term used by drivers to describe a semaphore signal that is halfway between On and Off.

Handshake

Simultaneous successful operation of separate electronic devices in the same system.

Handsignalman

Person stationed at the lineside to give signals to the driver by flag or lamp.

Headway

The minimum distance between two trains travelling in the same direction that will enable green signals to be given to the driver of the second train and enable him to travel at unrestricted speed.

Home normal contact (HNC)

A means of ensuring that the home signal lever is replaced in the frame before 'line clear' can be given.

Home signal

The first (or rearmost) stop signal in the Absolute Block system. May also be called Outer home or Home No 1.

Hot axlebox detector (HABD)

Apparatus for detecting an overheated axlebox on a rail vehicle.

Hudd system of ATC

A former system of warning the driver of the need to slow down or stop.

Illuminated diagram

A panel in a signalbox containing a diagrammatic representation of the track under the signalman's control, and with certain functions, such as the location of trains, being shown by lights.

Integrated Electronic Control Centre (IECC)

The most modern type of signalbox, with visual display units instead of control panels, and with routes being set by tracker-ball or keyboard, instead of push button. They have solid state interlocking controls, and automatic route setting.

Intermediate Block Section (IBS)

An additional unstaffed block section between two Absolute Block signalboxes, generally worked from the rear signalbox.

Isolate

Take equipment out of use.

Junction indicator

Displayed at a junction signal to inform the driver which way a junction is set.

King lever

A lever, whose operation unlocks other levers.

Lamp proving

A system of ensuring that a lamp in a colour light signal is lit before the next signal in rear can show a proceed aspect.

Lever collar

Piece of equipment placed over a lever to physically prevent it from being moved.

Light-emitting diode (LED)

Provides a tiny bright light when illuminated.

Line

A loose term which may mean just one pair of rails, eg the Up line, or may mean all the tracks on a route.

Line clear

The position of the block indicator when a signalman has accepted a train.

Line speed

The maximum permitted speed of a line.

Main aspect

The red, yellow or green aspect of a colour light signal.

Manually-controlled barriers (MCB)

A manned level crossing with barriers.

Manual signalbox

A signalbox in which the levers operating the signals and points are pulled over and replaced by physical effort.

Miniature Warning Lights (MWL)

Small red and green lights at certain types of level crossings.

Multiple aspect signal

A colour light signal capable of displaying three or four aspects.

Nearside

The left-hand side in the direction of travel.

Normal

Denotes the usual position in which points lie.

No-signalman token system (NST)

A method of working trains over a single line with a signalman at only one end of the section.

NX system

See 'Entrance-Exit' system.

Occupation Level Crossing

A private level crossing, usually giving access between premises and a public road.

Occupied

Denotes the presence of a train.

Off

A proceed aspect in a colour light signal, or a semaphore stop signal arm inclined at 45°.

Off side

The right-hand side in the direction of travel.

One Train Working (OTW)

A method of working a single line by confining it to one train at a time.

On

A red aspect in a colour light signal, or a semaphore stop signal arm in the horizontal position, meaning 'stop'.

One control switch system (OCS)

A route-setting signalling system in which a point and the junction signal are set by turning the appropriate switch.

Open Level Crossing

An unmanned crossing without road traffic signals.

Out of correspondence

Denotes that facing points are not correctly set.

Overlap

A section of line beyond a signal which, for safety reasons, must be clear before the next signal in rear can show a proceed aspect.

Passenger line

Signalled and equipped for use by passenger trains.

Permanent speed restriction (PSR)

A restriction imposed owing to sharp curves or other permanent cause.

Permissive Block system

A signalling system which allows more than one train to be in a section on the same line at the same time.

Pilotman

A person appointed to conduct trains over a single line, or a line being used for trains in both directions, during failure of equipment or repairs, or owing to an obstruction.

Platform starting signal

A stop signal at the departure end of a passenger station platform.

Position light ground signal (PLGS)

A signal on the ground, controlling shunting movements.

Position light signal (PLS)

A signal located on the same post as a colour light running signal, and fixed below

it. It controls train movements other than normal running movements.

Power signalbox (PSB)

A signalbox in which points and signals are operated by electric or other power and controlled by switch or push button. Interlocking between points and signals is performed by electric relays. PSBs usually cover large areas, and have large control and indications panels.

Proceed aspect

A green, yellow or double yellow light shown at a colour light signal, which means that the driver may proceed past it.

Protection of the line

Warning action taken to stop trains running into an obstruction or a failed train, or any other source of danger.

Radio Electronic Token Block (RETB)

A signalling system used on single lines.

Rear

Behind, in the direction of travel, ie a section of line which a train has already travelled over.

Red aspect

Danger, stop. Displayed by a colour light signal.

Reminder appliance

Used in manual signalling to remind a signalman of the presence of a train or other circumstance.

Repeater

A dial or indicator in a manual signalbox, showing the position of a signal arm and whether the signal lamp is lit.

Reverse

Denotes that points are lying in a position opposite to normal.

Rotary block

A special type of block instrument, used in some former Midland Railway signalboxes.

Route-relay interlocking

A system of interlocking between points and signals, performed by electric relays.

Ruling gradient

The main or most important gradient on a section of line with more than one gradient.

Running line

Any line other than a siding. Train movements on running lines are controlled by fixed signals.

Running movement

A normal train movement on a running line, under the control of a running signal.

Running signal

A main aspect in a colour light signal, or a distant or stop semaphore signal.

Section signal

In Absolute Block, the most advanced stop signal (ie the signal which admits a train to the section ahead).

Semaphore signal

A fixed signal, whose meaning is given to drivers by the position of an oblong arm during daylight, and by coloured lights at night.

Semi-automatic signal

A colour light signal which is worked automatically by the passage of trains, but which can also be controlled from a signalbox or ground frame.

Sequential locking

Interlocking between signal levers, to ensure that they are pulled over in the correct sequence.

Service brake application

The normal brake application which is made by a driver in routine service (as opposed to an emergency application).

Setting back

Denotes a short-distance shunting movement, usually in the wrong direction.

Shunt-ahead signal

Allows a driver to pass a stop signal by a short distance for shunting purposes.

Shunt frame

Similar to a ground frame, but often a former signalbox.

Shunt movement

A short distance movement, often setting back through points, and controlled by shunting signals.

Sighting distance

The maximum distance at which a driver can see a signal ahead of him.

Signalling panel

A panel in a signalbox giving a diagrammatic representation of the layout under the signalman's control, together with control switches or push buttons and track circuit etc indications.

Signal post replacement switch

A switch at the foot of an automatic colour light signal, which enables the signal to be switched to, and maintained at, red by the use of a key.

Signal post telephone (SPT)

A telephone provided at a signal for the driver to speak to the signalman.

Six foot

A term for the space between the Up and Down lines.

Slack

A term for a temporary speed restriction.

Slotting

A mechanism for controlling semaphore signal arms where two signalboxes are involved.

Slow line

A name often used for one of a pair of lines, eg the Up Slow line, where there are four lines of way (see Fast line).

Solid-state interlocking

A computerised software system for controlling the interlocking between points and signals.

Spate indicator

Used in connection with temporary speed restrictions.

Speed indicator

A sign erected at the running-on end of a temporary speed restriction.

Splitting distants

Two distant signals erected side by side, to tell a driver in advance which way he is routed at the junction ahead.

Staff (or train staff)

A form of token used in the working of a single line.

Staff and ticket working

An obsolete form of controlling the working of trains over a single line.

Starting signal

See 'Section signal'.

Station limits

The section of line between the outermost home signal and the most advanced stop signal worked from the same signalbox.

Station working

Special regulations governing shunting movements within station limits.

Stop signal

A signal capable of showing a stop aspect or indication.

Subsidiary signal

In semaphore signalling, a calling-on or shunt-ahead signal.

Sunflower

Driver's name for the AWS visual indicator.

Sykes lock and block signalling

A former method of signalling.

Temporary speed restriction (TSR)

A speed restriction imposed for a short period.

Termination indicator

A sign at the running-off end of a temporary speed restriction.