# **National Code 3-Position Speed Signalling**

#### STANDARD MAINLINE SIGNALS

ARTC 3 position speed signalling mainline signal displays consist of two indications one above the other. Each of the indications potentially display one of three colours—red, yellow, or green.

Three styles of indication exist – a single searchlight lamp with selectable coloured lenses, individual incandescent lamps for each colour (now confined to Victoria), and more recently, LED lamp displays with individual "lamps" for each colour. When multiple lamps are used they are mounted Green over Yellow over Red.

The upper lamp provides Normal Speed indications, whilst the lower indication provides Medium Speed indications. Should the particular track configuration not require either the Green or Yellow indications then that lamp or lens is not fitted.

The new standard for signal numbers is a black number on a reflective white plate, although many signals still display earlier standards – typically white on black. In Victoria absolute signal numbers display station identification in number or letter code.

# **DEFINITION AS ABSOLUTE OR PERMISSIVE ("Automatic" in Victoria)**

The function as an absolute signal is identified by the lower lamp head being mounted directly below the upper head, whilst the function as a Permissive/Automatic signal is identified by the lower lamp head being mounted offset to the right below the upper head. Where the lower display is only required to show Red, it is provided by a small red marker lamp or a red reflective disc. Marker lamps are being progressively replaced throughout the system. In some Victorian installations the lower Red-only head is full size.

## **LOW SPEED INDICATIONS on Mainline Absolute Signals:**

A single small yellow lamp is mounted on an Absolute signal below the other two lamp heads. It is normally off, and is lit in combination with two red lights above to indicate "Proceed at low speed".

#### **INDIVIDUAL LOW SPEED SIGNALS- Dwarf or Pole Mounted:**

Individual Low Speed signals may be mounted at ground level or on a pole and have two or three sperate incandescent lamps to indicate Red or Yellow / Red or Yellow or Green. They are used to control shunt movements in station yards.

## **LOOP DEPARTURE SIGNALS:**

Signals permitting departure from crossing loops and access to a main line (by definition through a turnout), only need to give Medium Speed displays and hence only need the lower lamp head to display multiple colours.

**Mainline Signals:** Searchlight signals appear the same but do not have selectable colours in the upper lamp head. LED style only have a single red lamp at the top.

**Dwarf:** Loop departures may be signalled by dwarf signals. Searchlight type have only one lamp and can display multiple colours. LED style, mimic the mainline signal with three distinct areas to show A over B over LS.

#### **ENTRY TO BLACK AREAS:**

A Yellow indication on an Absolute is also used for entry into a single track area where there are no further signals ("Black Area"). This may be either the Normal or Medium Speed lamp head depending on the departure track configuration.

### POSSIBLE DISPLAYS

Indication (A over B)	Definition	Significance
Red / Red	STOP	
Yellow / Red	Caution Normal speed	Block ahead is clear but next signal is at STOP.
Green / Red	Clear Normal speed	Block ahead is clear and next signal is at Clear or Caution
Red / Yellow	Caution medium speed	Turnout to a Block ahead that is clear but next signal is at STOP.
Red / Green	Clear medium speed	Turnout to a Block ahead that is clear and next signal is at Clear or Caution
Yellow / Green	Reduce to medium speed	Block Ahead is clear but expect to turnout at next signal.
Red / Red / Yellow	Proceed at low speed	Block may be obstructed
Yellow – LS signal	Proceed at low speed	Block may be obstructed
Green – LS signal	Proceed at low speed	Block is clear











Examples of LED style:

Absolute Absolute Abs Loop dep. Permissive LED Dwarf
A over marker A over B + LS Red over B Jcn Aproach Loop dep.