

## Norwegian Railway Signalling

The Signalling System used on standard gauge railways in Norway is regulated by the Regulations of December 4, 2001 no. 1336 laying out the Signalling for signals and signs on the state's railway network and connected private tracks.

The first signalling system on the Norwegian railway system was a mechanically operated [semaphore](#) system introduced at [Drammen](#) station in 1893. The first electrically operated light signal system was delivered by [AEG](#) in 1924. Today, only electrically operated light signals are used

### The fundamental meaning of the signal colours

#### Red

Red always indicates Stop.

#### Violet

Violet indicates that the associated level crossing signal shows Stop Short of the level crossing".

#### Yellow

Yellow indicates Caution

#### Green

Green indicates Permission to run

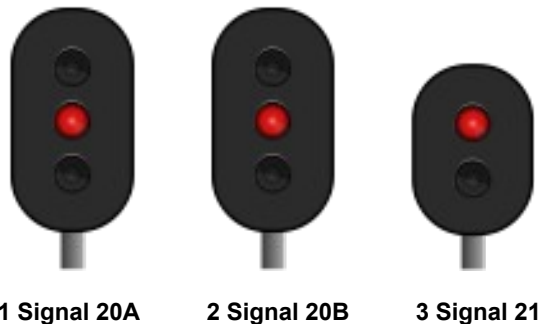
#### White

White indicates Clear Line.

### Light signals

The standard light signals show one of these signals:

#### Main signals



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#### Main Signals

##### 1 Signal 20A -Stop flashes

The train must stop short of the Signal.  
Used in Home and Block Signals

##### 2 Signal 20B- Stop

The train must stop short of the Signal.  
Used for Home and Departure Signals

##### 3 Signal 21- Stop



##### 4 Signal 21- Proceed to diverging rout

The Train can proceed usually via one or more diverging switches.  
Used in Home, Departure, Inner, and Block Signals

##### 5 Signal 22- Proceed

The train can proceed not via a diverging switch  
Used in Home, Departure, Inner and Block Signals

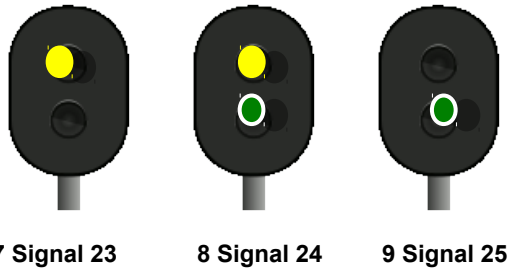
##### 6 Signal 21- Proceed

#### Fail safe

If one of the green lights in signal 22 fails, the indication becomes the lower speed signal 21 – this is [fail-safe](#).  
Other Scandinavian countries reverse the role of the single green aspect and double green aspect.

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## Distant signals



### 7 Signal 23- Except Stop

Top light flashes yellow  
Associated Main Signal shows signal 20A or 20B

### 8 Signal 24 – Except to proceed to diverging route.

Top light flashes yellow and bottom light flashes green  
Associated Main Signal shows signal 21

### 9 Signal 25- Except to proceed –

Bottom light flashes green  
Associated Main Signal shows signal 22

### Wrong-side failure

If the yellow light in signal 24 fails, the signal displays a higher speed indication, which would be a [wrong-side failure](#). To prevent this, the yellow light would be proved to be operating before the green light is displayed (that is, the yellow is shown before the green, if the yellow fails, the green isn't shown and the signal stays totally dark).

### Warning systems

Norway uses the [Ericsson ATP](#) warning system, also used on Australia's [Perth](#)'s suburban railway network.

### Signalling remedies

The following signalling remedies are used in the case of failures:

Signal flags	Fixed sound signals
Hand-held signal lamps	Signal signs
Signal whistle	Orientation poles
The signal giver's arms	Locomotive whistle
Fixed light signals	Locomotive and train signal lamps