

Traffic control by portable traffic signals

The use of portable traffic signals is a positive method of traffic control that can be appropriate in many environments, 24 hours a day, where works are no more than 300 metres long.

All signal heads should be placed in a position where they are clearly visible to approaching traffic. Additional guidance on the use of portable traffic signals can be found in *An Introduction to the Use of Portable Vehicular Signals*, commonly known as the 'Pink Book', and in Traffic Advisory Leaflet 2/11: *Portable traffic signals for the control of vehicular traffic*. Guidance on portable pedestrian facilities can be found in Traffic Advisory Leaflet 3/11: *Signal-controlled pedestrian facilities at portable traffic signals*.

Warning: Under no circumstances should portable traffic signals be used at works that straddle a railway level crossing, nor to control road traffic within 50 metres of a level crossing equipped with wig-wag traffic signals. Your [supervisor, manager or other competent person](#) must contact the railway owner or tramway operator when works requiring portable signals are to take place at or near a level crossing, or where traffic queues could affect a level crossing.

Two-way portable traffic signals may only be used under the following circumstances:

- the distance between the 'WAIT HERE' signs does not exceed 300 metres;
- they are vehicle-actuated (unless otherwise instructed by the highway authority);
- the equipment is type approved for use on the highway;
- Stop/Go boards are available on site in case of signal failure; and
- the highway authority has given written permission for their use (for emergency works, it is permitted to use the portable traffic signals and seek permission retrospectively as soon as possible).

When using two-way portable signals to control traffic, you **must** consider the following:

- the speed of the traffic. If these signals are to be used on roads where the 85th percentile speed is 35 mph or more, speed reducing measures should be considered on the approach;
- the position of bus stops and parking bays;
- the position of pedestrian crossings, either signal-controlled or Zebra;
- the location of existing traffic controls, junctions and roundabouts that could affect or be affected by traffic flow beyond the works;
- the needs of cyclists and other vulnerable road users;
- any junctions that are so close to the shuttle section that multi-phase control may be required;
- the potential for the shuttle section to become blocked by stationary traffic; and
- the potential for the waiting traffic to block any level crossing (see page 79).



The minimum requirement is for one signal head on each approach. For safe operation, drivers must be able to see a signal on approach and while waiting at the 'Wait here' sign. This might require the use of more than one signal head on each approach.



The use of two-way signals should be avoided when the shuttle section includes a road junction. If it is necessary to include a side road junction in the shuttle section, the highway authority's approval must be given. The joining street must have appropriate signing, including a 'Traffic under signal control' sign, and 'Joining traffic not signal controlled' on approaches to the junction. Those waiting at the road junction must be able to see the front vehicle in both queues of traffic for the shuttle lane.

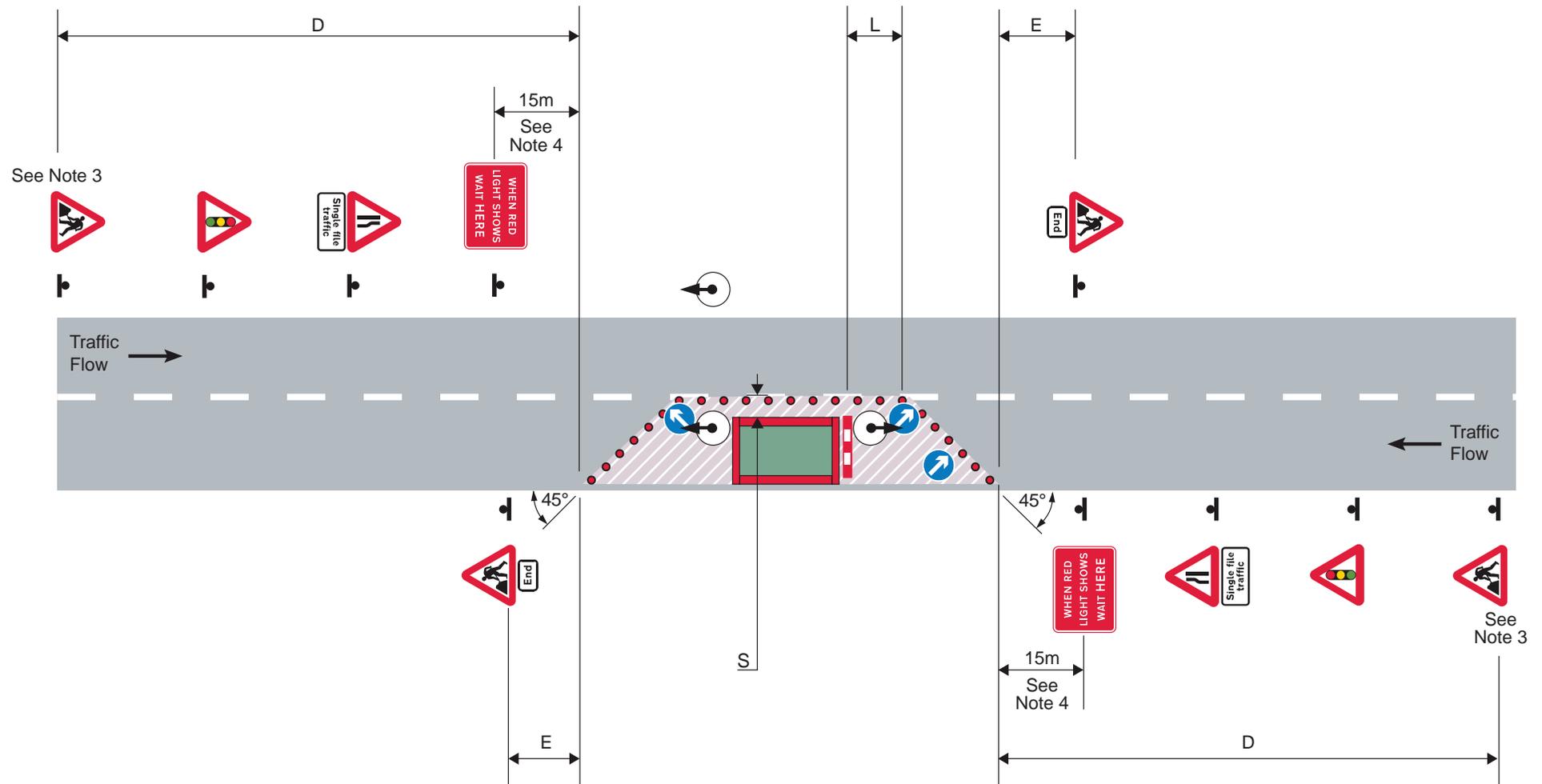
Three-way and four-way traffic control (multi-phase)

Three-way or four-way control may be appropriate where a side road junction is within the shuttle length, depending on the level of traffic flow. All multi-phase signal systems must have the written permission of the highway authority, including express approval for placing the signals at a particular site. The site approval must be retained for the whole time the system is in operation, and the approved plan must be followed.

Three and four-way portable traffic signals may only be used under the following circumstances:

- the distance between the 'WAIT HERE' signs does not exceed 300 metres;
- they are vehicle-actuated (unless otherwise instructed by the highway authority); and
- the equipment is type-approved for use on the highway.

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Notes

- 1 For numbers and minimum size of cones, and dimensions D, L, S and E, see table inside back cover.
- 2 An information board (omitted here for clarity) must be displayed.
- 3 A supplementary distance plate is required for roads with a permanent speed limit of 50 mph or more.
- 4 This distance may have to be increased in some cases to allow larger vehicles to pass the works.

When using three-way and four-way portable signals to control traffic, you **must** consider:

- the speed of the traffic. If these signals are to be used on roads where the 85th percentile speed is 35 mph or more, speed-reducing measures should be considered on the approach;
- the potential for the exit from the shuttle section to become blocked by stationary traffic;
- the position of bus stops and parking bays;
- the position of pedestrian crossings, either signal-controlled or Zebra;
- the location of existing traffic control, junctions and roundabouts that could affect traffic flow beyond the works;
- the needs of cyclists and other vulnerable road users; and
- the potential for waiting traffic to block any level crossing (see page 79).

The minimum requirement is for one signal head on each approach. For safe operation, drivers must be able to see a signal on approach and while waiting at the 'Wait here' sign. This might require the use of more than one signal head on each approach.

Installation and commissioning

For advice on setting up and adjusting the timings of portable traffic lights, see *An Introduction to the Use of Portable Vehicular Signals* (the 'Pink Book').

To ensure traffic disruption is kept to a minimum, advance warning signs and equipment should be placed ready for use, and portable traffic signals tested in accordance with the manufacturer's instructions.

In most cases, portable signals should be vehicle-actuated. Manual control of the signals should only be used to stop traffic if the shuttle lane has to be occupied for short periods (e.g. for unloading), or in other permitted circumstances.

Many portable signals are radio-controlled, but some are connected by cable. Where power cables cross the carriageway, a cable crossing protector must be used where vehicles have to pass over the cable.

'Ramp' and 'Ramp ahead' signs must be used where the cable protector exceeds 15 mm in height, and the 'Ramp' signs should be placed adjacent to the cable crossing.

Warning: Multi-phase traffic signals should only be installed and adjusted by suitably competent operatives.

You must have Stop/Go boards available on site in case the portable traffic signals break down. An emergency contact telephone number for the traffic signal provider should be displayed on site.

The signing you will need is shown on page 65.