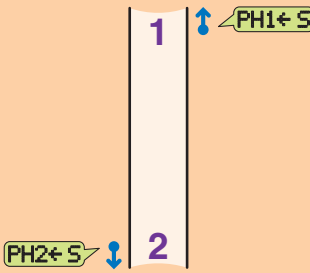


Please see the Operator's Guide for full details of setup and operation

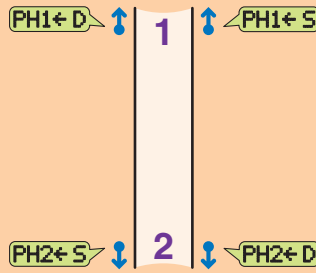
**1 Set up all signal heads, cones and signs according to Highways Agency regulations.**

**2 approaches, 2 phases**



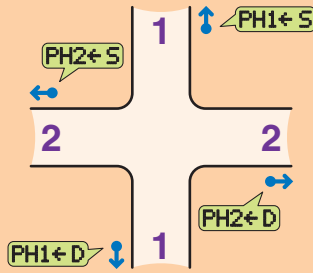
One head per approach

**2 approaches, 2 phases**



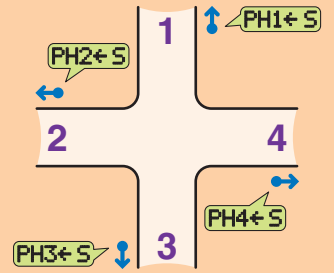
Two heads per approach

**4 approaches, 2 phases**



Two opposed heads

**4 approaches, 4 phases**



One head per approach

**2 For each approach, measure the distance to the WAIT HERE sign furthest away.**

**3 On each remote XL signal head:**



Switch on the signal head at the control panel.

**NOTES**

The XL Multiphase Controller should be OFF at this stage.

If a signal head is directly connected to the XL Multiphase Controller, it will automatically become the primary head on phase 1 (PH1+S).

PLEASE SELECT ONE OF THE FOLLOWING  
XL TWO PHASE +  
MULTIPHASE

Press to choose (+) MULTIPHASE

Press to proceed.

Use row S for a single or primary signal head.  
Use row D for a second signal head in a phase (if used).

USE UP & DOWN KEYS  
PH1 PH2+PH3 PH4 S  
PH1 PH2 PH3 PH4 D  
PRESS +/- KEY

Press to choose (+) the correct phase number (PH1 - 4) for this head, in either row S or row D. Press to proceed.

MULTIPHASE OPERATION  
THIS SIGNAL HEAD  
PHASE TWO SINGLE  
IF OK PRESS +/- KEY

The screen will confirm your settings. If correct, press to proceed.

If not, use to change.

MULTIPHASE OPERATION  
PHASE TWO SINGLE  
WAITING FOR MASTER  
PLEASE WAIT

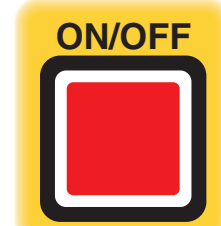
The head is now ready and waiting for control information from the XL Multiphase Controller. No signal lamps will be lit at this stage.

**Repeat for all other remote heads.**

**4** Switch the XL Multiphase Controller to **HOLD ALL RED**.



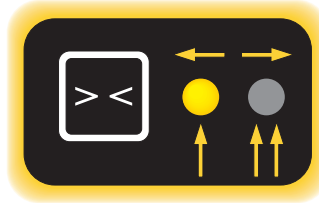
**5** Press the **ON/OFF** button to power on the XL Multiphase Controller.



**6** For each phase:

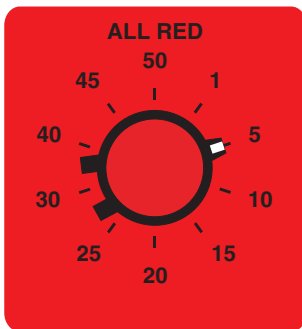


Press the **PHASE ON/OFF** button to enable each phase to be used...

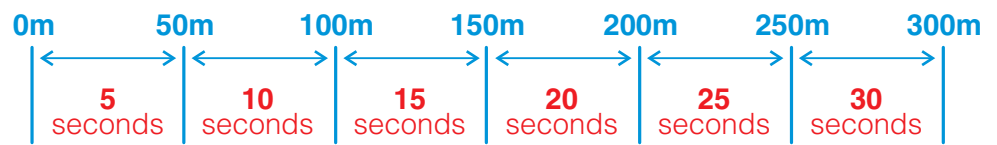


...then, press this button to choose the appropriate phase mode:

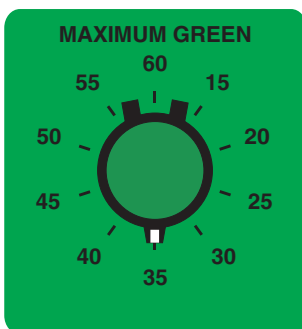
- One head per approach
- Two heads per approach
- Two opposed heads



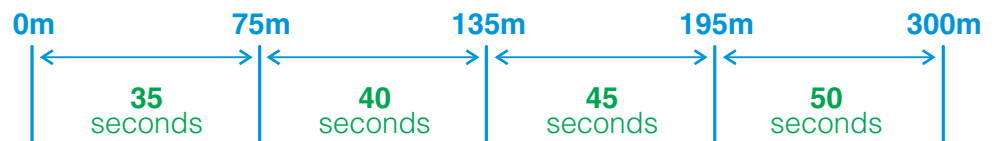
Using the measurement taken earlier (from this phase's WAIT HERE sign to the WAIT HERE sign furthest away), set the appropriate **ALL RED** time:



**NOTE:** On steep gradients, increase the **ALL RED** time by 5 seconds for the uphill phase(s).



Using the measurement taken earlier (from this phase's WAIT HERE sign to the WAIT HERE sign furthest away), set the appropriate **MAXIMUM GREEN** time:



**Repeat for all other active phases.**

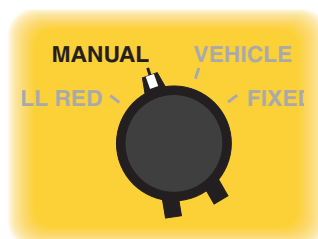
**7** Press the **RUN** button.



In turn, each approach will display amber then red.

**8** If traffic is tailing back significantly on one approach:

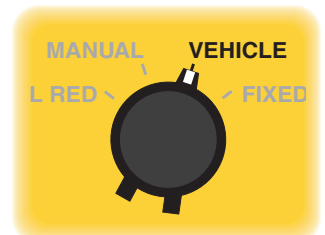
Switch to **MANUAL**...



...press the **DEMAND** button for that approach...



...then, as traffic flows, switch to **VEHICLE**.



**If traffic is evenly spread, switch straight to VEHICLE.**