

ST700 Neutral Indicator and Odd-fire Addendum

NEUTRAL INDICATOR

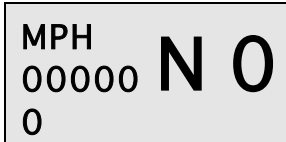
Installation

Connect the ST918051 Neutral Indicator Extender to the connector marked 'N' on the 6-way harness. Connect the free end of that wire to the existing neutral indicator switch on the gearbox (not supplied by Stack). The neutral switch must connect to ground when the gearbox is in the neutral gear position.

Once connected the ST700 will automatically configure itself to use this input, ie, no calibration is required.

Display

When the gearbox is in the neutral position, a large 'N' will be displayed between the odometer (if enabled) and the speed value on the Speed Layer. If not already showing, the display will switch to the Speed Layer



Troubleshooting

No Neutral Indicator Display

Cause: Open circuit in harness or Faulty switch.

Remove the connection from the neutral switch and short to the chassis. Check for 'N' on the display. If no 'N' is displayed, disconnect the extender and short the female car crimp to the chassis. If 'N' is displayed then there is a problem with the extender wire.

Continuous Neutral Indicator Display

Cause: Short circuit in harness or Faulty switch.

Remove the connection from the neutral switch. Check for no 'N' on the display. If the 'N' is still displayed, disconnect the 6-way connector. If the 'N' display persists then there is a problem with the ST700 display.

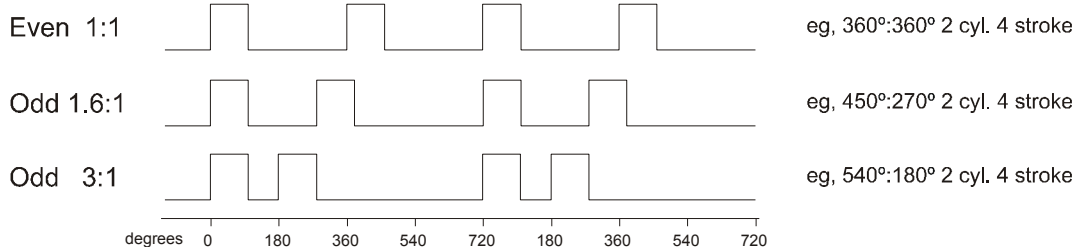
ODD-FIRE CONFIGURATION

Most engines have an even firing interval where the sparks occur at equal firing angles; this is typical of in-line engines. However, there are some engines which have odd firing intervals where the sparks reach each spark plug at unequal intervals of the engine's cycle; this is typical of some 'V' engines. The ST700 has been specifically designed for use with odd-fire engines but retaining the excellent noise immunity which is part of Stack's product range.

A menu, found under "Channel Settings->ESPD Input", allows the selection of the engine's ignition cycle:

On Even Fire engines the "Ign cycle" setting should be set to 1:1

On Odd Fire engines select the next highest "Ign cycle" setting based on the firing angle of your engine. For example, if the firing angle ratio is 1.28:1, select the 1.6:1 setting (see the diagram below).



Always select the minimum Ignition Cycle ratio required for your engine because larger settings will make the tachometer more susceptible to noise from faulty or badly installed ignition systems.

Troubleshooting

Tachometer sometimes shows normal revs and sometimes half revs

Select the next setting from the "Ign cycle" menu.

Tachometer needle is erratic

Select the previous setting from the "Ign cycle" menu.

If the Tachometer still shows incorrect revs, please contact Stack for advice.