

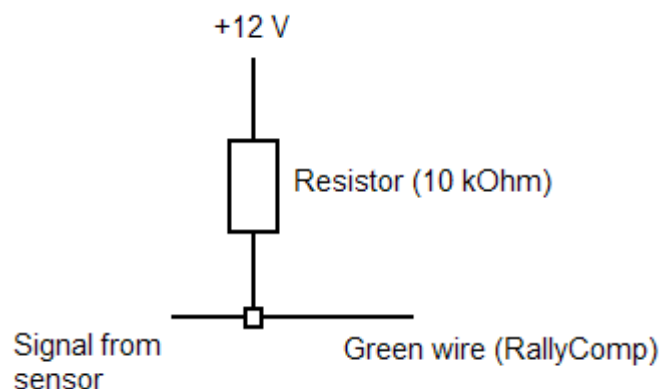
HIDJA

Pull-Up Connection

Pull-up/down is a method to produce, in an economical way, from a weak speedsignal a usefull speedpulse-signal. It can only be used on output-signals, generated in instrumentpanels, sensors or ABS-units.

Pull-up resistors may be used at logic outputs where the logic device cannot source current, such as open-collector TTL logic devices.

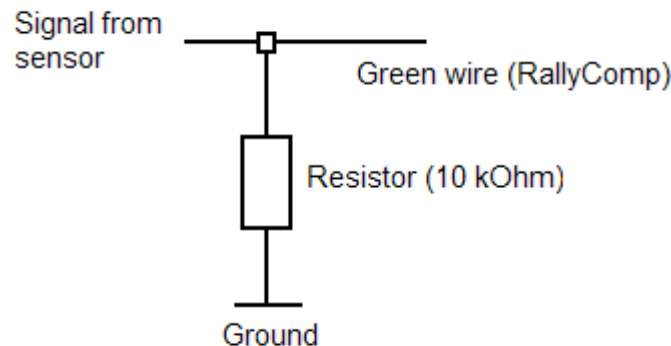
If you want to pull-up a signal, you need a resistor that is welded between a feed wire and the speedsignal. Take a **10 kilo-Ohm** resistor (1/4 Watt) and weld a good fused feed wire to one end of the resistor. Weld the other end of the resistor to the speedsignal output of the instrument panel and, of course, to the speedsignal input of the system you're installing.



Pull-Down Connection

Pull-down resistors are used in the design of electronic logic circuits to hold the input to a logic gate at a zero (low) value when no other component is driving the input. They are used less often than pull-up resistors.

If you want to pull-down a signal, you need a resistor that is welded between a ground wire/plane and the speedsignal. Take a **10 kilo-Ohm** resistor (1/4 Watt) and weld a wire to one end of the resistor. Weld the other end of the resistor to the speedsignal output of the instrument panel and, of course, to the speedsignal input of the system you're installing.



By using the method above, Hidja AB disclaims from any responsibilities of any damage that can be caused by any installation.

Any form of installation in the car should be done by a car electronic specialist!

If there are any doubts of the above, please contact us so we can guide you in the right direction!

HIDJA AB

Älvåkersgatan 1
653 49 Karlstad
Sweden

www.hidja.se

Tel : 46 (0)70 – 520 4973

Tel : +46 (0)54 – 850 930

E-Mail : hidja@hidja.se