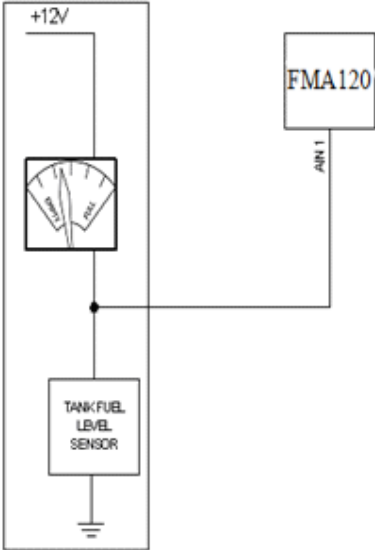
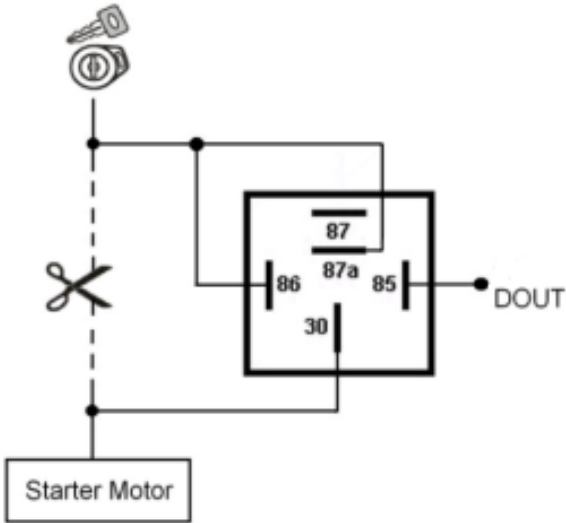


# Template:FMA1 Accessories

⛔ Please order accessories separately as they are not included into device package.

Accessory and its description	Accessory connection schematic
<b>Fuel tank sensors</b> A fuel tank level sensor which indicates the approximate fuel level on the driver's indicator panel exists in most cars. If the sensor returns analogue signal proportional to fuel level it can be connected to FMB1YX Analog input. After connection to the tank fuel level sensor a calibration is needed because most fuel tank sensors are not linear. Calibration is performed by measuring voltage values resulting from the volume of fuel in tank.	<b>Fuel sensor connection to FMB1YX</b> 
<b>Alarm buttons, door sensors etc.</b> Alarm buttons, door sensors, ignition, etc. have two output states: high or low. FMB1YX Digital inputs are used to detect these states.	<b>Panic button connection to FMB1YX</b> ⛔
<b>Relays</b> In cases when sensor output signal is negative, an additional relay has to be installed to convert negative signal to positive.	<b>Inverting relay connection to FMB1YX</b> ⛔
<b>Immobilizer relay</b> When connected as shown on the right hand side, FMB1YX disables engine starter when output is ON.	<b>Immobilizer relay connection to FMB1YX output</b> 

### Automotive relay

An ordinary automotive relay is used to invert input signal or to immobilize engine starter. Note that relays can be 12 V or 24 V capable.



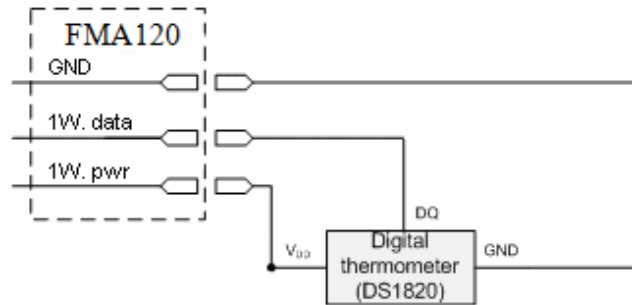
### 1-Wire devices

One of the implemented features on FMB1YX is 1-Wire® data protocol, which enables connection to devices such as thermometer (DS1820, DS18S20 and DS18B20) and I-Button types: DS1990, DS1991, DS1994, DS1993, DS1992, DS1982, DS1995, DS1985, DS1996, DS1986, DS1971, DS1963L, DS1921, DS1973, DS1904, DS1972, DS1977, DS2413, DS1922/1923, DS1990A, DS1982U, DS1985U, DS1986U.

### Automotive relay pinout



### Digital thermometer DS1820 and TTJ100 connection to FMB1YX



### TTJ sensor pinout



### I-Button DS1990A connection to FMB1YX

