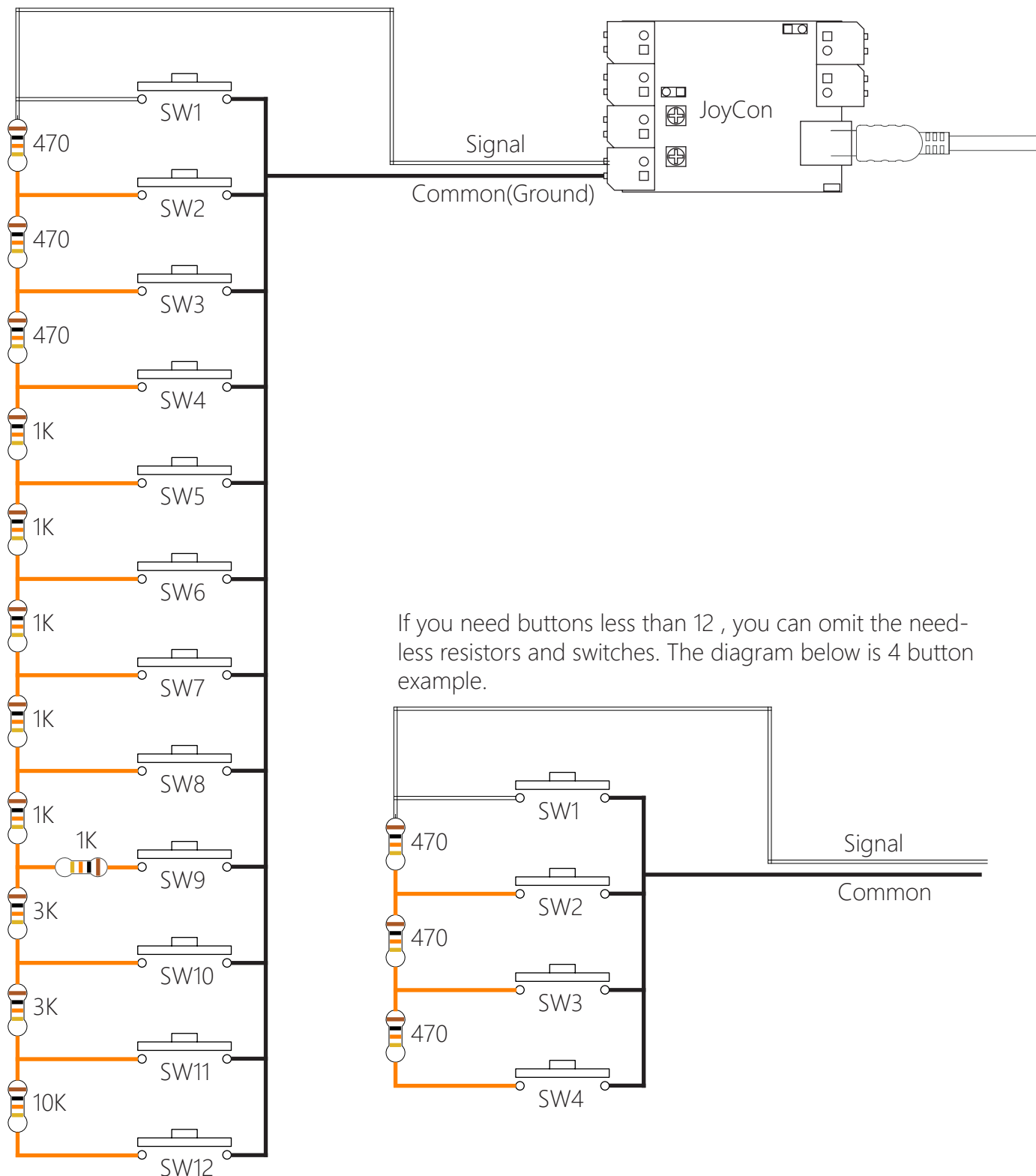# Application Note AN1058
How to make multiple resistive buttons for single channel

CarPC JoyCon Exr/Exd/Exc

The channel A,B,C,D of JoyCon Exr/Exd/Exc supports max 12 buttons for single channel.
Each button at a channel need to have a unique resistor value not duplicated.
This is the simple resistor ladder for 12 buttons, using 4 kind of resistors.
Total 12 resistors are required.

If you need buttons less than 12 , you can omit the need-less resistors and switches. The diagram below is 4 button example.

*Unit of the resistor is ohm.

The button bars appear like this screen shot after "Auto Detect".