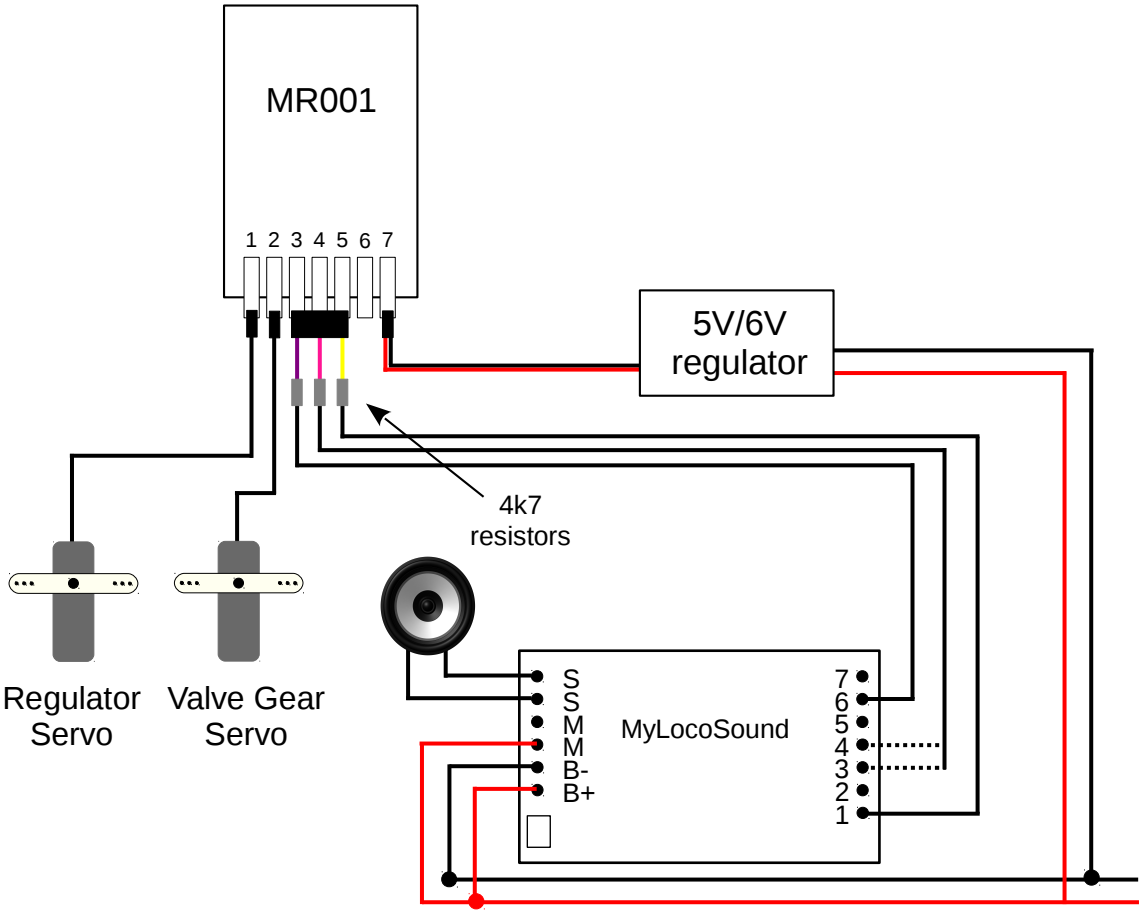
MR001 & Tx20v2 or Tx20Sv2 with MyLocoSound

MyLocosound is often used with live-steam locos to provide a whistle, steam injector and coal shovelling sound effects. This info sheet shows how MR001 outputs are configured to provide regulator and reverser servo outputs plus up to 3 sound triggers using the F1, F2, and F3 buttons on Tx20Sv2.

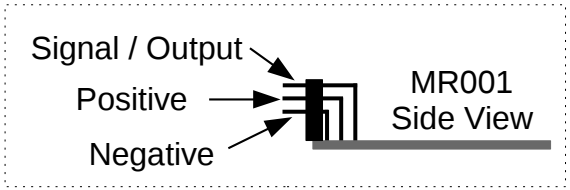
MR001 outputs for sound triggers are configured as on/off with the idle state at 3.3V and 0V when the transmitter button is pressed. As the MR001 uses 3.3V and the MyLocosound inputs are at 5V when off, a 4k7 ohm series resistor is required to avoid overloading the MR001 microprocessor. The reverser servo is moved from its usual position on P3 to P2 so that all sound triggers are together on P3 to P5.

MyLocosound requires at least 9V (e.g 8 x NiMH cells) whereas most servos have a 5V-6V voltage range. A solution is to power MR001 from a 5V regulator with sufficient current rating for the servo peak demand. Micron can supply a suitable requlator.



MR001 outputs:

P1	regulator servo on R/C ch1
P2	reverser servo on R/C ch3
P3	sound trigger on R/C ch2 (F1)
P4	sound trigger on R/C ch4 (F2)
P5	sound trigger on R/C ch5 (F3/bind)



The 4k7 ohm resistors in series with each sound trigger lead are essential to adapt the MyLocoSound 5V trigger input to the MR001 3.3V output. Without these resistors, the MR001 microprocessor would be taken outside its safe operating area.

To on/off switch, resettable fuse and battery

micron radio control

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