

# Abrams Sound Module Interface & Operation

The Abrams Sound Module is powered by 12Vdc and is controlled via four 5V TTL (digital) input signals.

The control signals are:

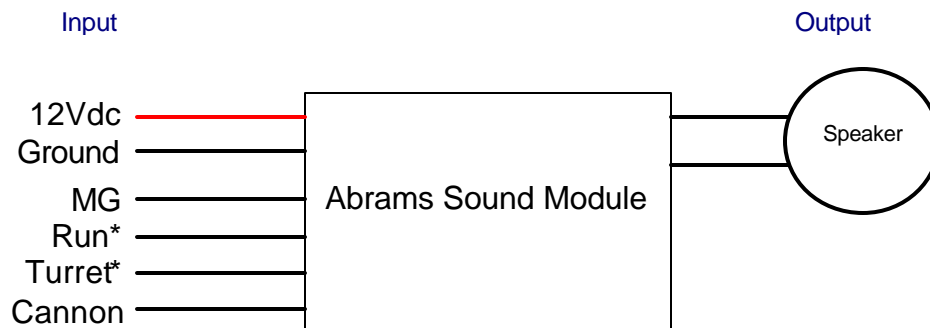
- machine gun (MG)
- run
- turret
- cannon

Operating Sequence:

- After the module is powered up (with the tank), it waits for a pulse on the MG line
- The module runs through the start-up routine
- The module switches to turbine idle sound. Idle is then always active unless a 'run' signal is received
- A run signal switches background to turbine/track sound.
- After the startup routine, when a MG, turret, or cannon signal is recd the sounds are created over the background idle or run sounds.

If not readily available, control signals can be generated using standard TTL digital logic devices interfaced with the host vehicle's control system. A microcontroller interface can also be used to decode required signals from the host vehicle's receiver.

## Block Diagram



\* Four control lines are made available to initiate the **Run** sound (corresponding to LF, RF, LR, RR input signals). Two control lines are available to initiate the **Turret** sound (turret left & turret right inputs). These input lines are logically ORed.