⌿ᴍᴀ⫪ Lost Model Alarm
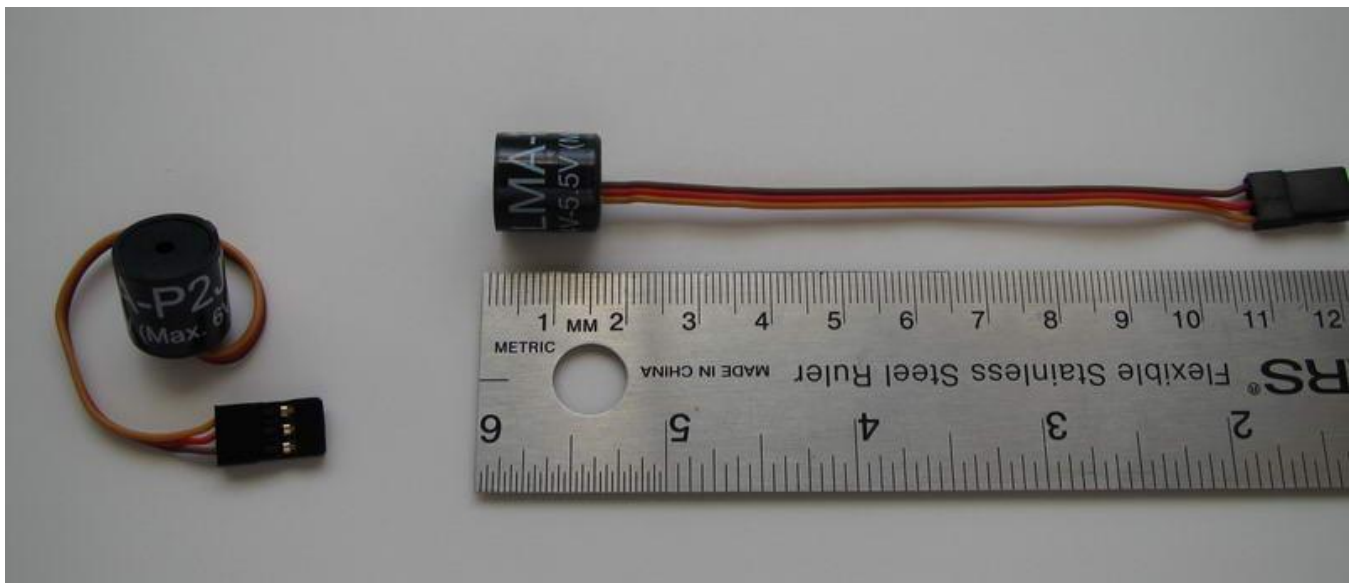

LMA-P2J

Description and Principle of Operation

The LMA-P2J lost model alarm is passively triggered, meaning the lost model alarm is activated after one minute of inactivity on behalf of the pilot. The LMA-P2J model alarm is linked either directly or indirectly to an actively used channel like elevator, rudder, ailerons, and monitors the changes of commands on this channel. If there is an inactivity longer than one minute the alarm sounds. To deactivate the alarm move the radio control associated with the LMA-P2J lost model alarm channel; this will turn off the alarm and reset the inactivity one minute counter. The alarm will not be triggered as long as you are changing often (within a minute) the radio commands on the monitored channel.

The LMA-P2J lost model alarm is well suited for the radio controlled systems which employ the "hold position" fail-safe. In this setup even if the transmitter signal is lost and the fail-safe engaged, after one minute is passed the passive lost model alarm will be triggered due to no change of servo signal on its channel.

Receivers without any fail-safe features will also trigger the alarm if no transmitter signal is present and no servo signal is passed onto the lost model alarm unit.

Set-up and Installation

If your radio transmitter functionality offers cloning or mixing of signals from one receiver channel to another, the preferred installation is to connect the LMA-P2J lost model alarm to a unused channel of your receiver - one that you can set in such a way that its signal is a function of a primary actively used channel, e.g. elevator, rudder, ailerons. Alternatively use a Y-splitter servo cable to physically attach the LMA-P2J lost model alarm to share the output of an actively used channel, e.g. elevator, rudder, ailerons. Employing a Y-splitter servo cable as alternative installation is also feasible if a suitable free receiver channel may not be immediately available.

The preferred and more efficient installation of the LMA-P2J lost model alarm in your model suggests opening a small hole (~2mm) in the model walls and attaching the LMA-P2J lost model alarm so its sound emitting opening is aligned with this hole. Alternatively, secure the LMA-P2J lost model alarm in a suitable spot inside the model, check the sound. (please refer to the installation diagrams.) Depending on your model's structure the whole LMA-P2J lost model alarm can be completely exposed outside of the model too...

Suggested installation

Alternative installation

Dedicated Rx channel installation

Shared Rx channel installation
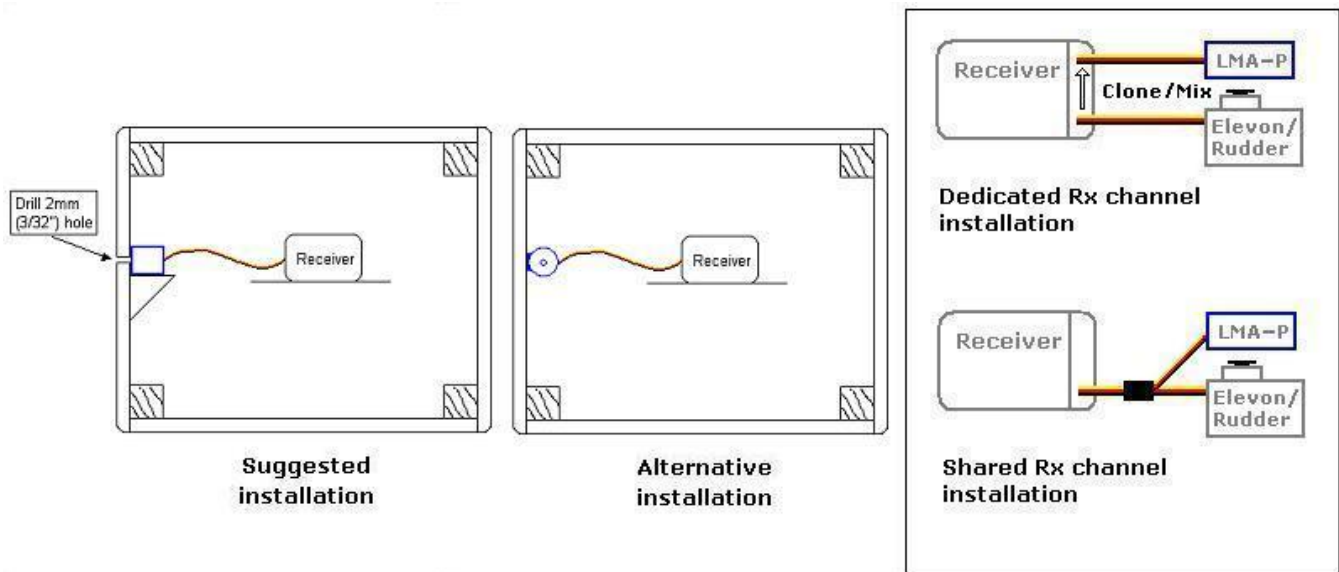
Powering the LMA-P2J

The LMA-P2J lost model alarm can be powered with power sources providing up to 5.5V (please see the recommended voltage values bellow in the technical characteristics). Please be careful and use battery packs with appropriate cell count or consider using power regulators in line with your power source.

Example: 5-cells NiCd or NiMH battery packs when fully charged will exceed the absolute voltage maximum and are thus inappropriate as a power source to be used directly to power the LMA-P2J lost model alarms. 4-cells NiCd or NiMH battery packs on the other hand, even when fully charged, will not exceed the power supply voltage limit and are thus suitable as a direct power source for the LMA-P2J lost model alarm.

Technical Characteristics

- Operating Voltage: 1.8V-5.5V (6V absolute maximum)

- Recommended Voltage: 4V-5.5V

- Power Consumption: Less than 1mA silent
                                 Less than 20mA emitting sound (13mA typical at 5V)

- Alarm Sound Loudness: Minimum 85dB (90dB typical at 5V) at 10cm; 2300Hz

- Weight: 3.5g (including the servo wire and connector)

- Dimensions: Ø14mm x 14mm

- Servo Connector Wire Length: 100mm

- Servo Connector: Universal

- Inactivity threshold: 1 min