

Instructions for the Alice Snooper board (user installation)

The Alice Snooper modification is a small PCB that is fitted inside or adjacent to the recording machine it is to control. Its purpose is to switch the machine in and out of record or play mode under the command of a control signal received from the mixing desk.

This signal enters the board via a 3.5mm mono jack socket and should be a positive voltage signal (9-15V, active high, 10mA approx, fully electrically isolated from the cassette machine). This is compatible with the Alice Air 2000 mixing desk (closing pair signalling is available to special order).

The sleeve of the jack carries the voltage signal, and the tip is the ground/0V return.

Connections to recording machine

<u>Wire</u>	<u>Function</u>
Red	Positive power supply voltage. Acceptable range 7-12V @ 25mA approx. Can be derived from recording machine if available.
Black	Power supply ground/0V
White	Collector of REC optotransistor
Green	Emitter of REC optotransistor
Yellow	Collector of PLAY optotransistor
Brown	Emitter of PLAY optotransistor
Orange	Collector of PAUSE optotransistor
Blue	Emitter of PAUSE optotransistor

The PLAY and PAUSE optotransistors should be wired across the PLAY and PAUSE button of the recording machine, with the collector to the most positive terminal (if applicable - to be determined by user).

The PLAY optotransistor will pulse on at the rising edge of the external control signal, starting the recording machine. The PAUSE optotransistor will pulse on at the falling edge of the signal, pausing the recording until the signal goes high again.

The REC optotransistor stays on for approximately 2 seconds when power is first applied to the board, and can - if the recording machine is suitable - be used to automatically enter RECORD mode on power up. Whether this is feasible must be determined by the user.

User Instructions for the Alice Snooper Modification fitted to a Denon DRM550

The Alice Snooper modification is a small PCB that is fitted inside the Denon cassette machine. Its purpose is to switch the machine in and out of record mode under the command of a “mic live” signal received from the mixing desk.

This signal enters the machine on a flying lead and should be a positive voltage signal (9-15V, active high, 10mA approx, fully electrically isolated from the cassette machine). This is compatible with the Alice Air 2000 mixing desk (closing pair signalling is available to special order).

The connections are as follows:

Signal - red wire or tip of jack
Ground/0V - black wire or sleeve of jack

Operating Instructions

Insert a blank cassette in the machine. Switch the front panel power switch to on. Now, and only now, apply mains to the machine. If powered up in this way, the machine will automatically enter “record-pause” mode, with both record and pause symbols shown on the display. With the connection to the mixer in place, it should be possible to toggle the machine between record and pause modes under the control of the “mic live” signal.

At any point the machine can be used as a normal cassette deck by pressing “stop” to leave the “record-pause” mode, then continuing as usual. It is recommended that the “mic live” signal connection be disconnected under these circumstances, as an active “mic live” signal may cause the deck to enter “play” mode unexpectedly! To restart automatic Snoop operation, press the “record” button to re-enter “record-pause” mode.

In the event of a power cut or other interruption, the Snooper modification will ensure that the deck is forced into Snoop mode on power-up, with no manual intervention required.

NOTE: The Denon cassette machines are unusual in that even when the front panel power switch is set to off, most of the internal circuitry is still powered for as long as there is mains applied. For this reason, using the front panel switch to power up with mains already applied will NOT result in the machine automatically entering “record-pause” mode. If this is unavoidable, simply enter the mode manually by pressing the “record” button after powering up.