

CPU Interfaces

The Onyx and Challenge machines have a set of Interrupt Inputs and Outputs that can be used to synchronize two or more machines.

3 Conductor Audio Jack and Plug

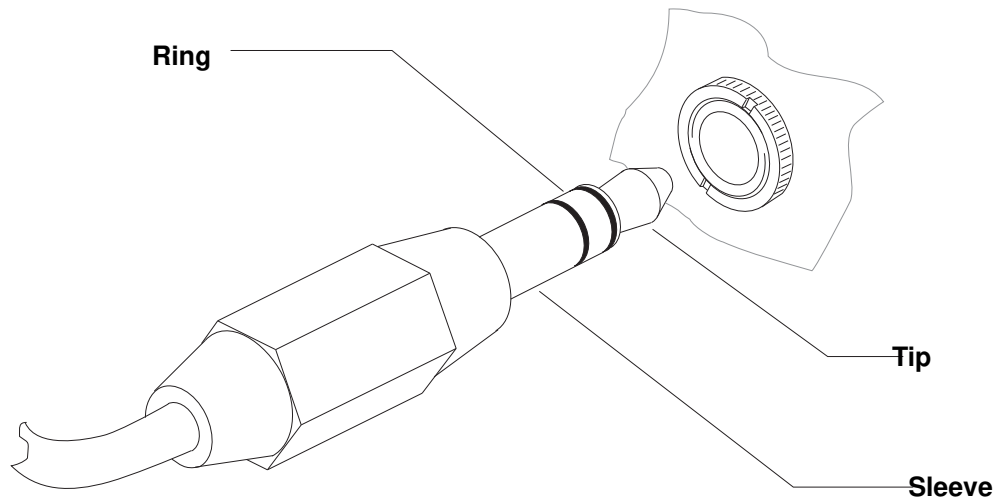


Figure 41 Interrupt Jack and Plug

Pinout

Pin	Signal
Tip	Interrupt Input/Output (active low)
Ring	+5 Volts
Sleeve	Chassis Ground/ Cable Shield

Table 53 Interrupt Input/Output Pinout

Interrupt Inputs

These two inputs allow an interrupt signal generated by another machine to directly control the system. For example, a particular action in software could be programmed to wait for the receipt of an interrupt signal from another machine.

These inputs are opto-isolated and operate as an open collector current loop. The source resistance is 420 ohms pulled up to +5 Volts. The connections are via a 3 conductor 1/8" audio jack. The connector pinouts are shown in Table 53.

The system does not distinguish between a signal received at either of the two input connections. Therefore it is unimportant which connector is used for an input interrupt. For more information on this signal consult the 'ei' (external interrupt) manpage.

Interrupt Outputs

There are four interrupt outputs. These are used to send an interrupt signal to another machine for synchronization purposes. Unlike the Interrupt Inputs, the outputs can be individually driven.

Like the inputs, the outputs are opto-isolated and operate as an open collector current loop. The source resistance is 420 ohms pulled up to +5 Volts. The connections are via a 3 conductor 1/8" audio jack. The connector pinouts are shown in Table 53.

For more information on this signal consult the 'ei' (external interrupt) manpage.