

# FearCond

A Whisker client

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*by Rudolf Cardinal*

*[www.whiskercontrol.com](http://www.whiskercontrol.com)*

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# FearCond

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# Foreword

## WARNING

**Whisker is a system designed for research purposes only, and should never be used to control medical apparatus or other devices that could endanger human life.**

## DISCLAIMER

**The authors, copyright holders, and distributors disclaim all responsibility for any adverse effects that may occur as a result of a user disregarding the above warning.**

# 1 FearCond

## 1.1 About FearCond

### Purpose

Fear conditioning (shock US).

### Software requirements

Requires Whisker v2.0 or greater.

### Data storage

Text-based output to disk.

### Author

Rudolf Cardinal ([rudolf@pobox.com](mailto:rudolf@pobox.com)).

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## 1.2 Required devices

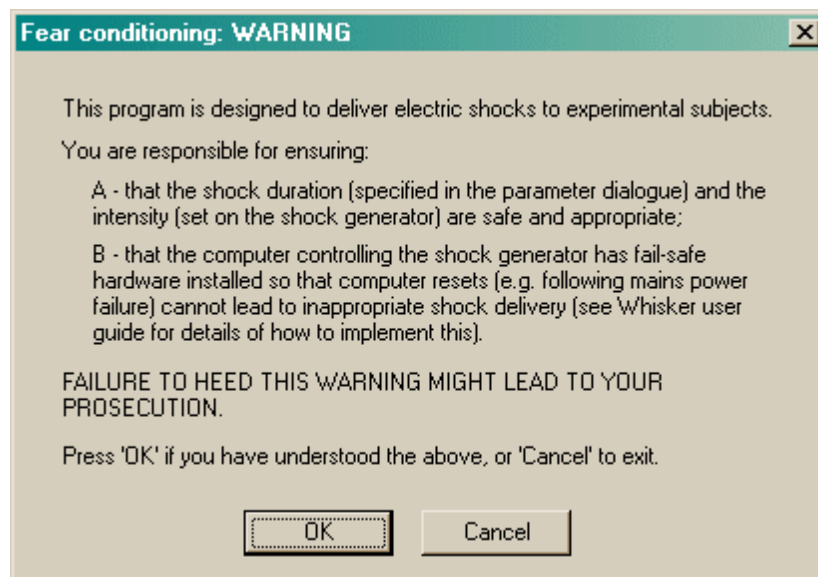
The program requires to claim devices in groups named **box0**, **box1**, **box2...** with device names as follows:

```
CSLIGHT           // output
HOUSELIGHT        // output
CLICKER           // output
TONE              // output
SHOCK             // dangerous output
```

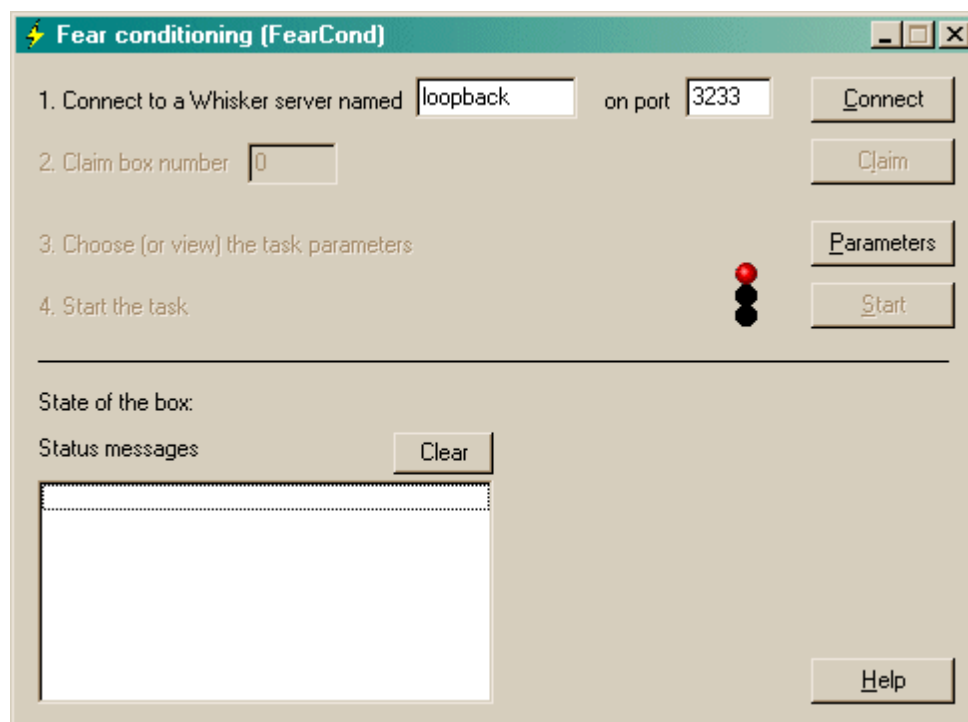
Please ensure that these devices are available and listed in the device definition file in use by the server.

## 1.3 Using the task

When you run the task, you will see the following warning. Read and acknowledge it:



The main screen looks as follows:



You must connect to a Whisker server, claim an operant chamber (box), and set up the [parameters](#) for your task. Once that's done, the traffic lights will turn amber. When you are ready, press *Start* to begin the task.

## 1.4 Parameters

The parameters dialogue box looks like this:

**Set parameters for fear conditioning**

**Subject details**

Rat ID:  Session number:   
 Comment:

**Data recording**

**Stimuli and lighting**

CS duration (s):   Housetlight on during task

CS comprises:  Tone  Light  Clicker Clicker frequency (Hz):

US (shock) duration (s):  --- CAUTION: ensure shock duration/intensity acceptable

**Task**

Lead-in time before other aspects of task begin (min):

**PAIRED TRAINING (CS -> US; CS terminates in US)**  
 Number of presentations:   
 Time before/between presentations (min): from  to

**UNPAIRED TRAINING (CS // US; pseudorandom; distributed through total task time)**  
 Number of presentations:   
 US can occur at any time except during CS, or following it within: (s)

**CONTEXT-ONLY TRAINING (US)**  
 Number of shocks:   
 Time before/between presentations (min): from  to

**CS TEST (CS, usually a prolonged version)**  
 Time before/between presentations (min): from  to   
 CS duration (min):  Number of presentations:

**CONTEXT TEST (no stimuli)**

Total task time (min) (specify 0 to finish as soon as presentations are complete):

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