

FearCond

A Whisker client

by Rudolf Cardinal

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

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1.2 Required devices

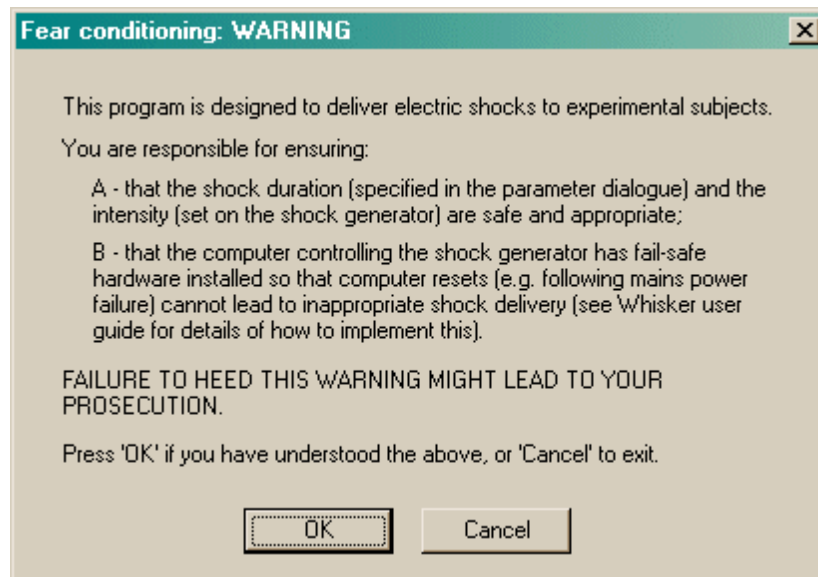
The program requires to claim devices in groups named **box0**, **box1**, **box2...** with device names as follows:

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

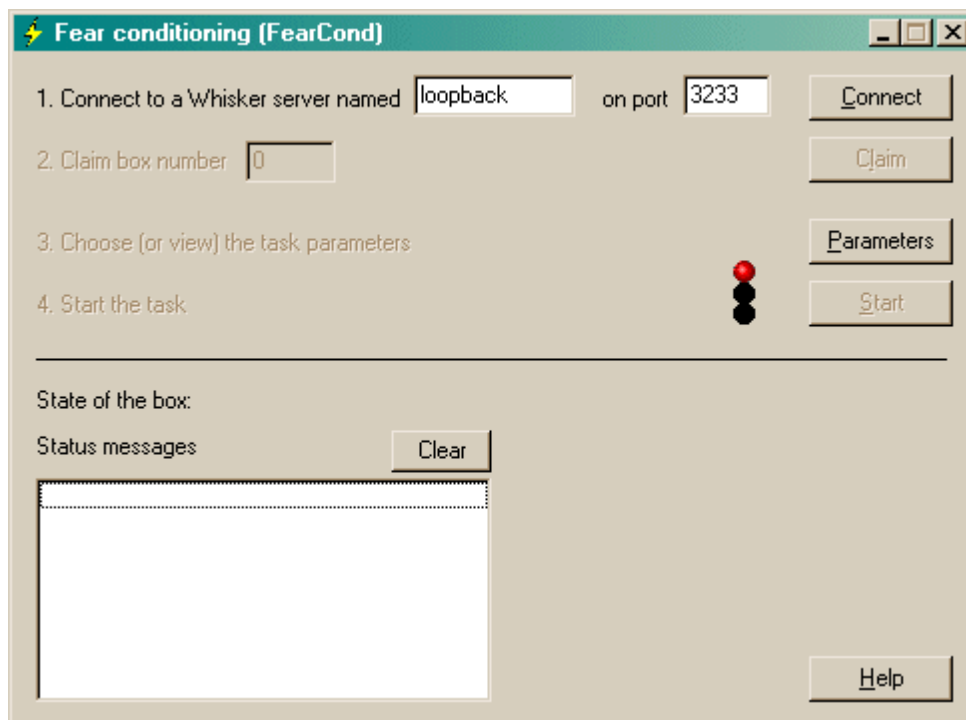
Please ensure that these devices are available and listed in the device definition file in use by the server.

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): Houselight 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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