

# DialysisStimuli

A Whisker client

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*by Rudolf Cardinal*

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# DialysisStimuli

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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.**

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# 1 DialysisStimuli

## 1.1 About DialysisStimuli

### Purpose

Noncontingent presentation of stimuli for a dialysis experiment.  
Console-mode client.  
Written for Rutsuko Ito, 1999.

### Software requirements

Requires Whisker v2.0 or greater.

### Data storage

None.

### Author

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

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## 1.2 Task details

As the code stands, DialysisStimuli runs through the following sequence:

1. Houselight/CS light/clicker off.
2. Waits 2 min.
3. Presents 5 on/off cycles of either clicker (10-Hz clicking, on for 10s, off for 40s) or light (15s on, 35s off) stimulus, separated by 6-min periods of darkness and nothing-ness.
4. Waits 6 min.
5. Repeat steps 2-4 twice more for a total of 3 presentations of the same stimulus.
6. Repeat steps 2-5 for the other stimulus.

You can choose whether to use the clicker or light first, and which light to use.  
No data is recorded.

While the task is running it looks like this:

```

W:\CODE\Clients\DialysisStimuli\DialysisStimuli_code\Release\DialysisStimuli.exe
DIALYSIS STIMULI
by Rudolf Cardinal for Rutsuko Ito, 8-9 June 2000.
This program records no output. It takes line numbers from a definition file.
- This is a release build compiled on May 17 2002 at 14:24:48.

-----

Enter server name [loopback]: willow
Enter box number to use <0 to 32767> [32331]:
- Trying to connect to server willow on port 3233
Connection to server pending
- Partial connection made to server.
Immediate port number is 1334
Connecting immediate socket
Successfully linked immediate socket
- Connected completed to server; using two sockets.

Boxes are numbered from 0.
Enter box number to use <0 to 20>:
Enter box number to use <0 to 20>: 0
Rat name: testrat
Left or right CS light? <LR>: L
Click or flash first? <CF>: C
- Box in dialysis state.

Box is in the 'dialysis' state. Press Enter to start everything going...

^/^^/^^/^^/^^/ Running... ^/^^/^^/^^/^^/

* Box 0 <testrat>: Beginning presentation 0 of phase 0 <clicker>
- Box in 2-minute wait state.

```

### 1.3 Required devices

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

```

// Names of lines the program expects to be able to claim
HOUSELIGHT // output
LEFTLIGHT  // output
RIGHTLIGHT // output
CLICKER    // output

// Aliases used while the program is in full flight, which it therefore expects
not to be present on the server:
CSLIGHT

```

Please ensure that devices named 'HOUSELIGHT', 'LEFTLIGHT', etc. are available and listed in the device definition file in use by the server. An excerpt from an appropriate device definition file is given below:

```

# Box 0 definition

line      0           box0    NOSEPOKE
line      1           box0    LEFTLEVER
line      2           box0    RIGHTLEVER
line      3           box0    LOCOBEAM_FRONT

```

```
line      4          box0  LOCOBEAM_MIDDLE
line      5          box0  LOCOBEAM_REAR

line     24          box0  HOUSELIGHT
line     25          box0  LEFTLIGHT
line     26          box0  RIGHTLIGHT
line     27          box0  TRAYLIGHT
line     28          box0  PUMP
line     29          box0  CLICKER
line     30          box0  LEFTLEVERCONTROL
line     31          box0  RIGHTLEVERCONTROL
```

```
# Box 1 definition
```

```
line      6          box1  NOSEPOKE
line      7          box1  LEFTLEVER
line      8          box1  RIGHTLEVER
line      9          box1  LOCOBEAM_FRONT
line     10          box1  LOCOBEAM_MIDDLE
line     11          box1  LOCOBEAM_REAR

line     32          box1  HOUSELIGHT
line     33          box1  LEFTLIGHT
line     34          box1  RIGHTLIGHT
line     35          box1  TRAYLIGHT
line     36          box1  PUMP
line     37          box1  CLICKER
line     38          box1  LEFTLEVERCONTROL
line     39          box1  RIGHTLEVERCONTROL
```

```
# ... etc.
```

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