

FiTRO Agility Check

Manual

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System serves for testing of reactions to stimuli generated in four corners of the screen. Subject tested is supposed to touch on of the mattress located in 4 corners corresponding with the position of stimulus on the screen.

The user can specify the shape and color of stimuli, color of background, stimuli generation (randomly, after a fixed time interval or according to a preprogrammed schedule), its localization (randomly or according to a program) as well as the way of performing the test (from the fixed position in the middle or from the place of localization of the last stimulus). The equipment can serve for diagnostics as well as development of disjunctive reaction velocity of different types of sports, especially in sport games.

I. EQUIPMENT INSTALATION

Use cables to link mattresses to particular sockets of interface according to the symbols on its front side.

Position of plates	Socket
Left front	1
Right front	4
Left back	3
Left front	2

Mutual distance between the plates depends on user. They are usually placed inside a symbolic square with a 1.2m long outer side. It is appropriate to specify exact location of plates (COMMENT item in SUBJECT INFORMATION). The input will be loaded together with data and will be a part of header while processing the data in report routine.

Plug another outlet from interface to USB port of your PC.

WARNING: DUE TO SAFETY REASONS IT IS STRONGLY RECOMMENDED TO FIX THE PLATE TO THE PAD USING ADHESIVE TAPE BEFORE THE MEASUREMENT ROUTINE!

II. PROGRAM INSTALLATION

- A.) Run the file "instal" from the installation CD. Follow the instructions. The system will create a specific directory (AGILITY), subdirectory for data (DATA), copies all necessary files into directory and create an icon on the desktop.
- B.) Instead of running install program, you can install the program manually. Create a specific directory (AGILITY), subdirectory for data (DATA), copy exe files into directory and create an icon on the desktop.

The program can be started by clicking on the icon on the desktop or directly on the exe file in directory.

III. RUNNING THE PROGRAM

After launching the program the main menu with modules File, Subject, Test, Report and Setup appears on the screen.

In addition to mouse click one can enter the modules by:

1. Simultaneous pressing ALT and first letter of an appropriate option.
2. Activating of menu using F10, highlighting particular option using left and right cursor arrows and its confirmation by ENTER.

3. Pressing particular hot key according to the offer at the bottom part of the screen. To return from the modules to main menu press ESC.

SUBJECT INFORMATION

Input the information (optional), which will be stored with the data.

FILE

The program module offers the possibilities of saving and opening data files from diagnostic measurement routines as well as configuration files (containing parameter assignment, ranges, step, etc. for measurement and report routines).

ABOUT

Provides basic information about the name, copyright and version of the used program.

EXIT ALT-X

Closes the application.

TEST

After entering the option (possible also by using hot key F7) one may specify the way in which stimuli should be generated. There are two alternatives: "*Custom configuration*" or "*Protocol*".

Option "*Custom configuration*" facilitates modification of number of stimuli just before the measurement routine. If the option "*Protocol*" is chosen, the number is given by a chosen program.

After pressing ENTER message: "Press ENTER to start the test" appears on the screen. Repeated pressing of ENTER starts generation of defined stimuli at the corners of the screen.

The ways of reactions of a tested subject should be in compliance with the setting in the *Setup* routine (see below).

If the option "*Fixed test base*" is set, the tested subject, after touching an appropriate mattress (corresponding with the localization of stimulus on the screen), should get back to the original place in the middle among the mattresses and there waits for generation of the next stimulus. Results of this test show reactions in four directions: slantingly right-front, left-front, right-back, left-back.

If the option "*Test base at the location of last stimulus*" is chosen, the subject remains on the plate and there waits for generation of the next stimuli in one of the three other corners. Results of the test show velocity of reaction in eight directions: front, back, left, right, left-front, left-back, right-front, right-back.

Summary after accomplishing the test includes name, date, time of the test, information about the conditions of the test (Protocol or Custom configuration, type and color of stimuli and color of background) and finally mean, minimum and maximum values of reaction.

It is possible to save measured data using procedure SAVE (program module FILE). To avoid possible loss of data, this procedure appears automatically before the next measurement routine. It is possible to skip it (and thus delete the data from the memory) by repetitive pressing ENTER.

REPORT

After confirmation of the choice by simultaneous pressing ALT-R, or highlighting option REPORT (using cursor arrows after pressing F10) and its confirmation by ENTER, particular options in the form of pull-down menu appear.

Data in computer's memory (either from the previous measurement or loaded from a disc) are prerequisite for working with the program. Their absence is signalled by a note "No data in memory. Please press ENTER."

The module provides the possibility for representing results from each reaction separately (*RESPONSE BY RESPONSE*) or in form of summary, and for representing the measured data digitally. To enter particular modules highlight the option and press ENTER.

RESPONSE BY RESPONSE

The header includes name, date and time of a test, information about the conditions of the test (protocol or custom configuration, type and color of stimulus as well as color of background), chosen test settings ("*Fixed base*" or "*Base at the location of the last stimulus*") and note.

To move data lines use up and down cursor arrows.

SUMMARY

The header includes name, date, time of a test, information about test conditions (protocol or custom configuration, type and color of stimulus as well as color of background) and finally mean, minimum and maximum values of reaction in 4 or 8 directions (according to the setting "*Fixed base*" or "*Based at the location of the last stimulus*"). Parameters of particular reaction, i.e. ordinal number, direction of the movement at the reaction, time of stimulus generation and reaction time are showed bellow it.

SETUP

CUSTOM CONFIGURATION

Option enables to specify the test with randomly generated stimuli.

Put the number of stimuli into the first window and in the second one choose the way of its generation (after fixed or random time period).

Value of fixed period, or top and bottom bounds of range of interval for random time generation are to be filled into the following windows.

Base for a tested subject also has to be specified. Option "*Central*" is used if the tested subject is supposed to stay or come back to the original position in the middle among the 4 plates after each reaction.

If the tested subject is supposed to wait for generation of the next stimulus on the plate corresponding with the localization of the last stimulus, it is necessary to set the option "*On the basis of the last stimulus*".

Finally, the form of stimulus has to be set (square, circle, triangle or cross) as well as its color (red, yellow, blue, green) and color of background.

After pressing ENTER the set configuration becomes effective and might be used for test. It is possible to save it using procedure SAVE cfg (see bellow). In this way it is possible to build own "bookcase" of test configurations.

The configuration remains effective until the user changes it or loads a new one from a bookcase.

CREATE PROTOCOL

Module provides the opportunity to create own program to ensure standard conditions for tests. It is possible to specify the way stimuli will be generated including time interval and position in the a particular programs. They can be saved for future application (see bellow).

Opening this module and pressing TAB brings cursor into a dialogue box where a name of protocol is required to be put in. Also a base for tested subject has to be specified. Option “*Central*” is used if the tested subject is supposed to stay or come back to the original position in the middle among the 4 plates after each reaction.

If the tested subject is supposed to wait for generation of the next stimulus on the plate corresponding with the localization of the last stimulus, it is necessary to set the option “*On the basis of the last stimulus*”.

Finally, the form of stimulus has to be set (square, circle, triangle or cross) as well as its color (red, yellow, blue, green) and color of background.

After pressing ENTER cursor is brought to a dialogue box in which time for stimulus generation and its localization (ordinal number in the second line of the box) has to be filled.

Type and color of stimulus and color of background is written in the top line of the dialogue box (e.g. red square on black).

After filling in the time and pressing ENTER it is necessary to place a star next to the chosen localization using cursor arrows.

When *NEW* is highlighted (using TAB or simultaneously pressing ALT-N) the ordinal number of the next stimulus appears in the second line of the dialogue box. Specification of its generation time and localization is the same as of the previous stimulus.

Highlighting PREVIOUS or NEXT (using TAB or simultaneously pressing ALT-P, or ALT-X) facilitates moving to the previous or next stimulus and possibly modifying its generation time or localization.

Highlighting ERASE (using TAB or simultaneously pressing ALT-E) deletes, after confirmation by ENTER, currently showed stimulus (ordinal number in the second line of the dialogue box).

Highlighting CLOSE (using TAB or simultaneously pressing ALT-C) closes the programming procedure and it is possible to save the program. Complete specification of parameters even for the last stimulus is a prerequisite for closing it.

SAVE.CFT

Saves setting of “Custom configuration” under a given name. The file always has suffix cft.

OPEN.CFG

Loads chosen setting (Custom configuration).

SAVE.PRT

Saves arranged test protocol under a given name. The file always has suffix prt.

OPEN.PRT

Loads chosen protocol.