

Release 1R

# DyRecs – Dynamic Resistor Calculation Program

User Manual

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# 1 Program start

## 1.1 Program start under Windows Vista

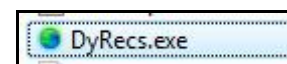
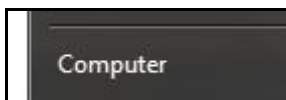
Basically there are 3 alternatives to access DyRecs. The fastest way leads to the shortcut that has been created on your desktop during the installation process. Please double-click on it to execute the program. Simply have a look for the following Symbol:



Another way leads to the start menu. Click the Windows button in your taskbar and type in "DyRecs". A program shortcut is going to show up almost immediately. You can start the program by clicking on it.



The last alternative is using direct file access by Windows Explorer. Open the start menu by clicking the Windows button in your taskbar. Select "Computer" and open up the local hard disk. Now switch to the directory "Program Files\zaschke.eu\DyRecs". You can start the application by double-clicking the file „DyRecs.exe“.

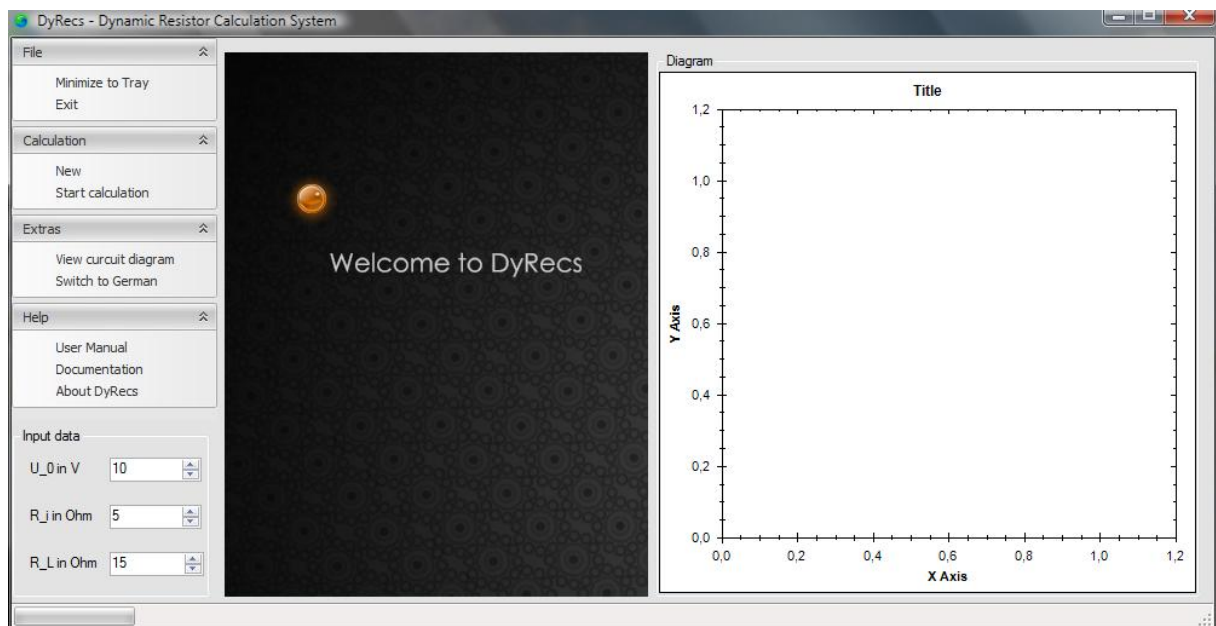


## 1.2 Program start under Windows XP/Server 2003

Program execution under Windows XP/Server 2003 works similar to Windows Vista by double-clicking the desktop shortcut or using direct file access with the Windows Explorer.

In case you want to use the start menu simply open it, hover over "All programs" and select the program shortcut in the folder "DyRecs".

## 2 Main window



The main window is divided into 5 areas.

The main menu of DyRecs is located in the top left corner. It controls all important functionalities. For more and detailed information about this menu please refer to section 3 “Main menu”.

You will see a field for Input data directly under the main menu. This is where you enter your basic data for a calculation. In the beginning this field is always filled with the same standard values. Input fields will be deactivated after the start of a calculation. You can reactivate them by pressing the “New” button.

The value table is almost centered in the main window and shows all calculated data. These values can be copied into an external application by using a simply Copy & Paste functionality that includes pressing [CNTR] + [C] und [CNTR] + [V] on your keyboard. This area is covered by a welcome screen after starting DyRecs.

The diagram window is finally located at the left-hand side of the main window. After completing the calculation of values the appropriate graph is going to show up in this area. You always see graphs for voltage- and current drop as well as the graph for the loss of power and a legend.

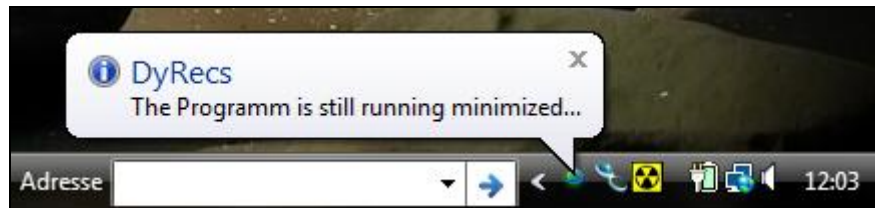
At the bottom of the window you will find a status bar that displays the current progress of a calculation.

### 3 Main menu

The main menu is divided into 4 submenus which can be collapsed for a better clarity. The following text describes the functionalities in that menu.

#### **Minimize to Tray**

This minimizes the application into the system tray on the right-hand side of the taskbar without closing it.



You can maximize the program at any time by double- or right-clicking the tray icon.

#### **Exit**

This exits the application and closes all windows.

#### **New**

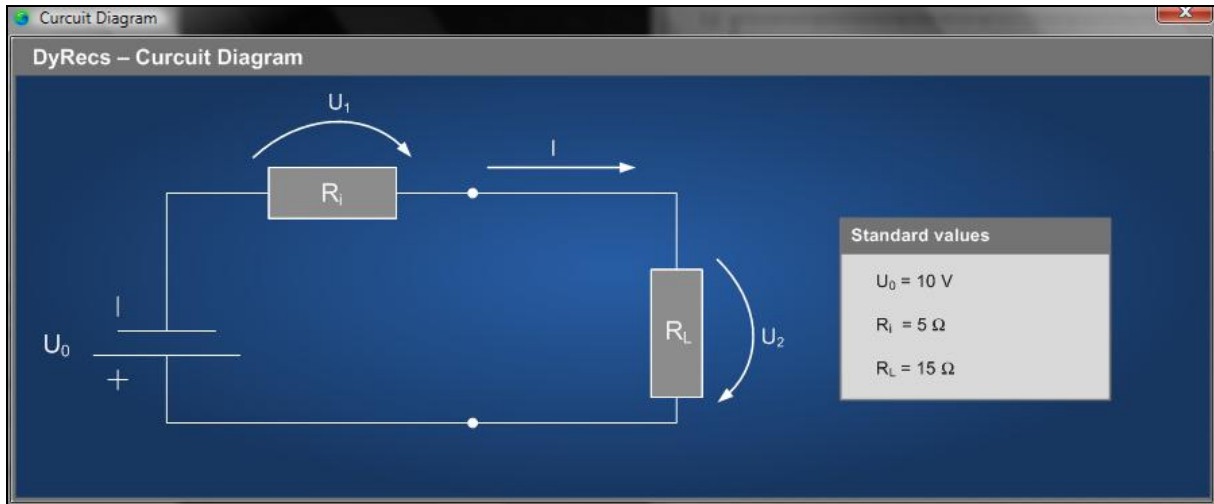
This functionality resets the input data field as well as the diagram and reactivates the area for input data.

#### **Start calculation**

Starts a calculation with the entered values and creates value table as well as the diagram.

### View circuit diagram

This opens a new window that shows the circuit diagram this application is based on.



### Switch to German

This changes the application language to German.

### User Manual

This opens this document.

### Documentation

This opens the technical documentation of Dyrecs, which contains further application information.

### About DyRecs

This opens a new window containing author and copyright information as well as a support address.

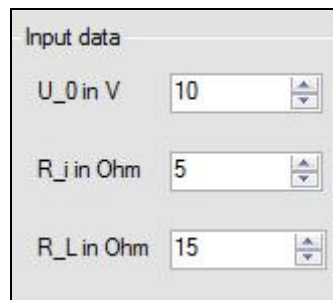
## 4 Input data

You can enter all Input data in this field that is necessary for the calculation.

U\_0 equals source voltage

R\_j equals internal resistor

R\_L equals dynamic external resistor



The screenshot shows a dialog box titled "Input data" with three input fields, each with a spin button on the right:

Parameter	Value
U_0 in V	10
R_j in Ohm	5
R_L in Ohm	15

After entering all data you can start a new calculation by pressing “Start calculation” and the process begins.