

Meet the TI-Rover

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TI-Nspire CX Family

TI-Basic

Texas Instruments

@ticalculators

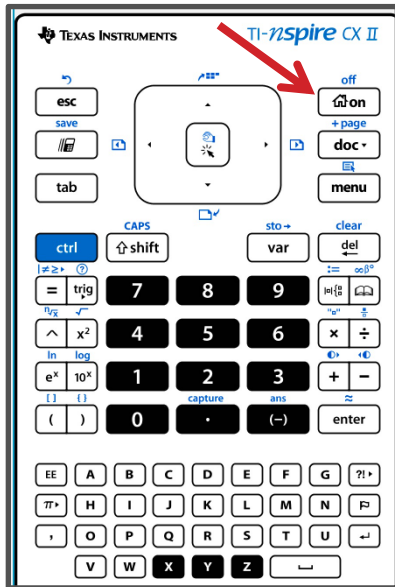


Meet the TI-Innovator™ Rover



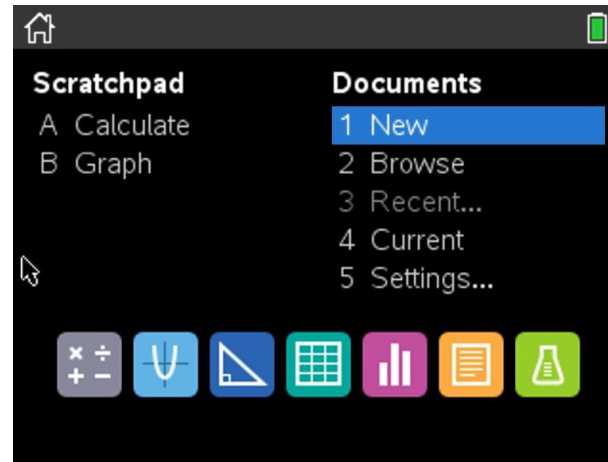
Creating a new TI-Nspire document

1



Press the **[home/on]** key to display the home screen.

2



Use **arrow keys** and **[enter]** or Press **[1]** to select 1 New document.

3

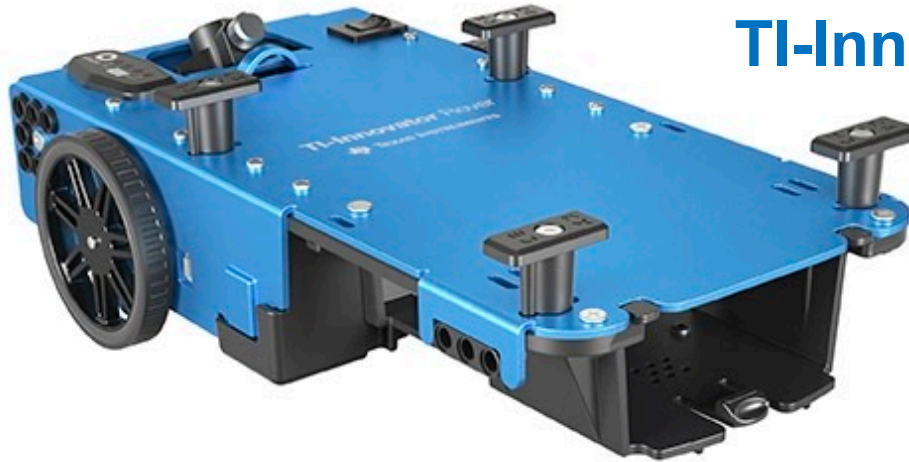


See next slide for steps to add a program.

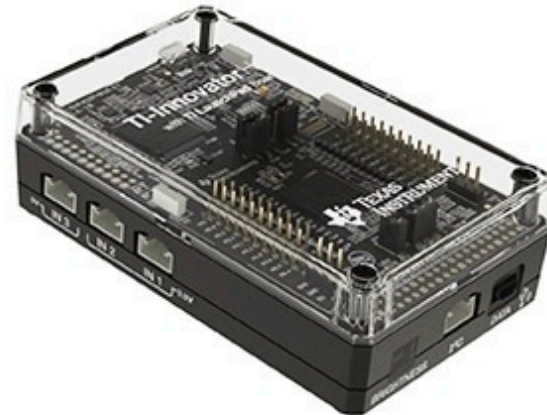
TI Graphing Calculator



TI-Innovator™ Rover

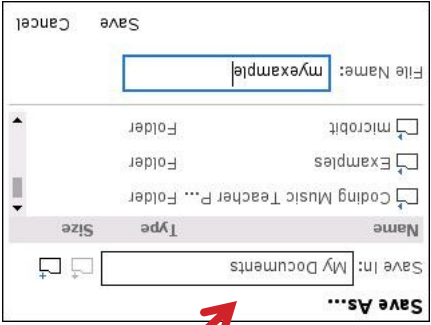


TI-Innovator™ Hub

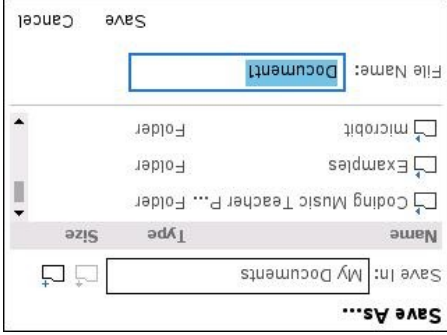


Saving a TI-Nspire document file

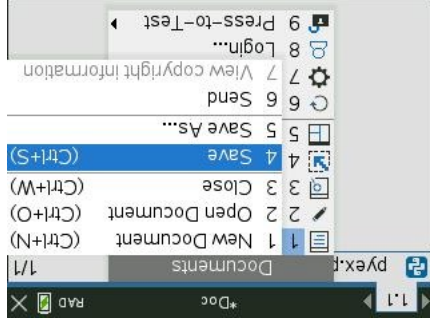
Folder where file will be saved.



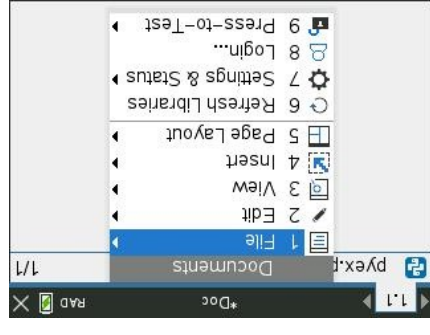
4



3



2



1

Press **[doc]** then select **1 File** from the menu by pressing **[enter]** or **[1]**.

Select **4 Save** or **5 Save As...** from the menu.

Type in your file name using alpha and numeric characters.

Note: The name must begin with an alpha character.

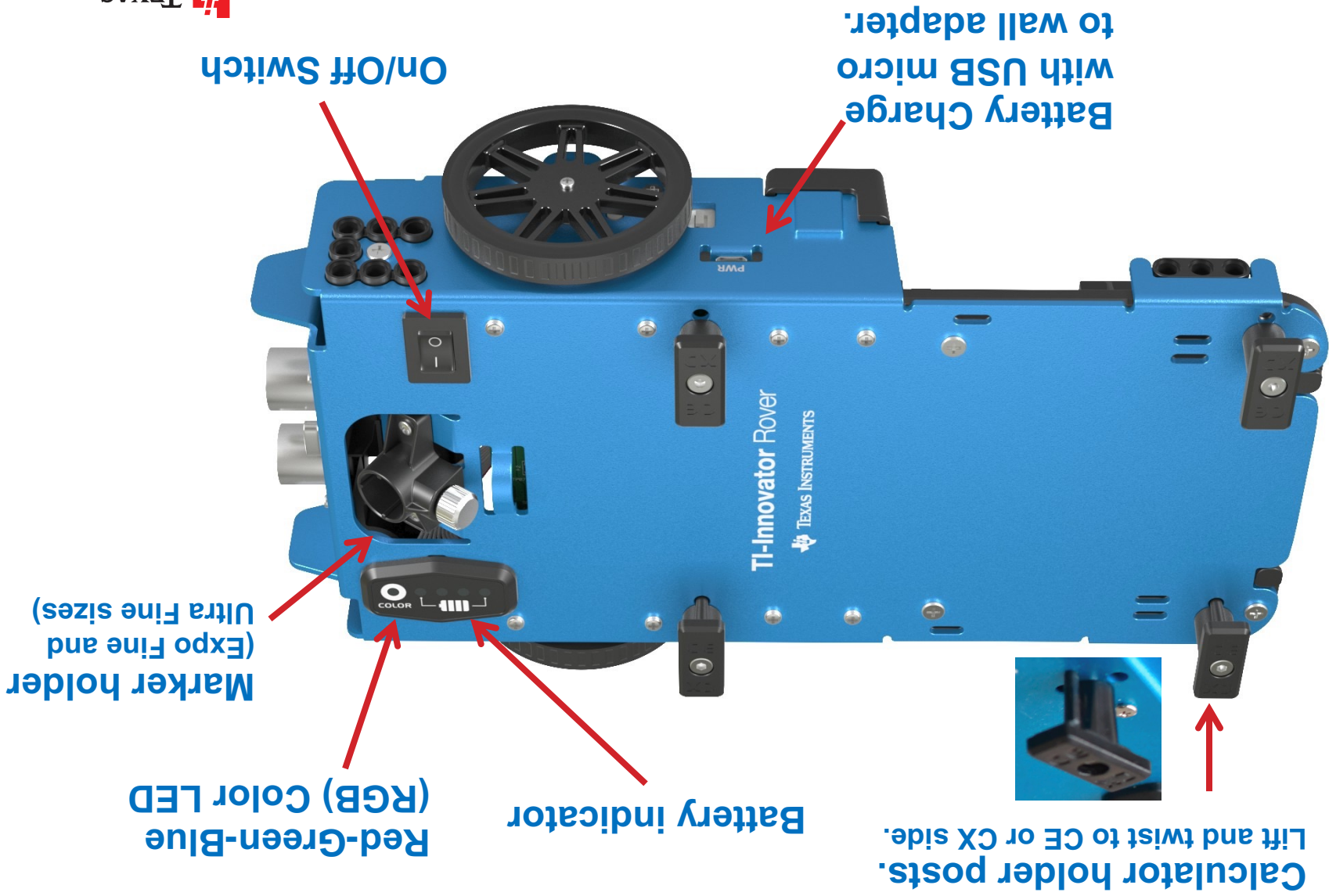
To change the folder press the **[up]** arrow key and then use **arrows** and **[enter]** to select a folder before pressing **[enter]** to save the file.

Press **[esc]** to cancel the save dialogue.

You can use **[ctrl] [s]** as a shortcut to save the TI-Nspire document file.

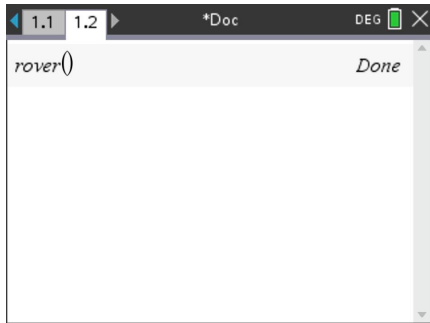
Press **[enter]** to save the file to the folder indicated above.

Rover from the top



Editing a Rover Program

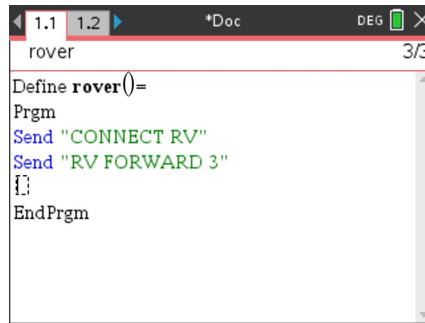
1



```
rover() Done
```

Press **[ctrl]** **left** to go back to your editor page.

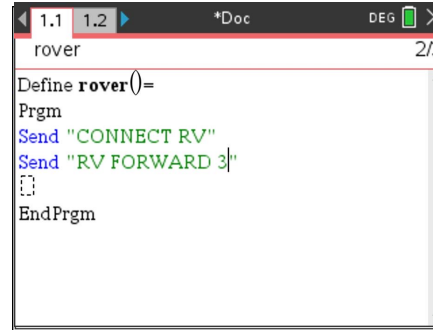
2



```
rover 3/3
Define rover()=
Prgm
Send "CONNECT RV"
Send "RV FORWARD 3"
EndPrgm
```

Use the arrow keys to position the cursor to change the value of the forward distance.

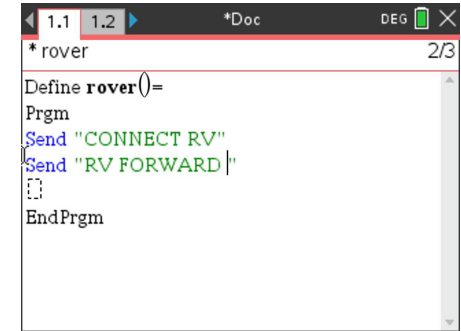
3



```
rover 2/3
Define rover()=
Prgm
Send "CONNECT RV"
Send "RV FORWARD 3"
EndPrgm
```

Press **[del]** to backspace over the 3.

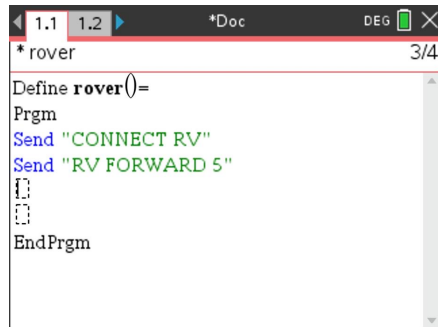
4



```
*rover 2/3
Define rover()=
Prgm
Send "CONNECT RV"
Send "RV FORWARD |"
EndPrgm
```

Type in a new value for distance, **right arrow** to the end of the line, then **[enter]** to move to the next line.

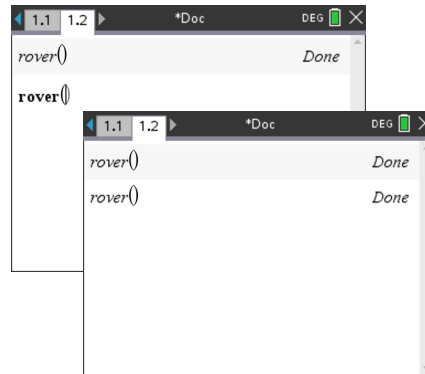
5



```
*rover 3/4
Define rover()=
Prgm
Send "CONNECT RV"
Send "RV FORWARD 5"
EndPrgm
```

Press **[ctrl]** **[R]** to paste the program name ready to run in a Calculator app on the next page.

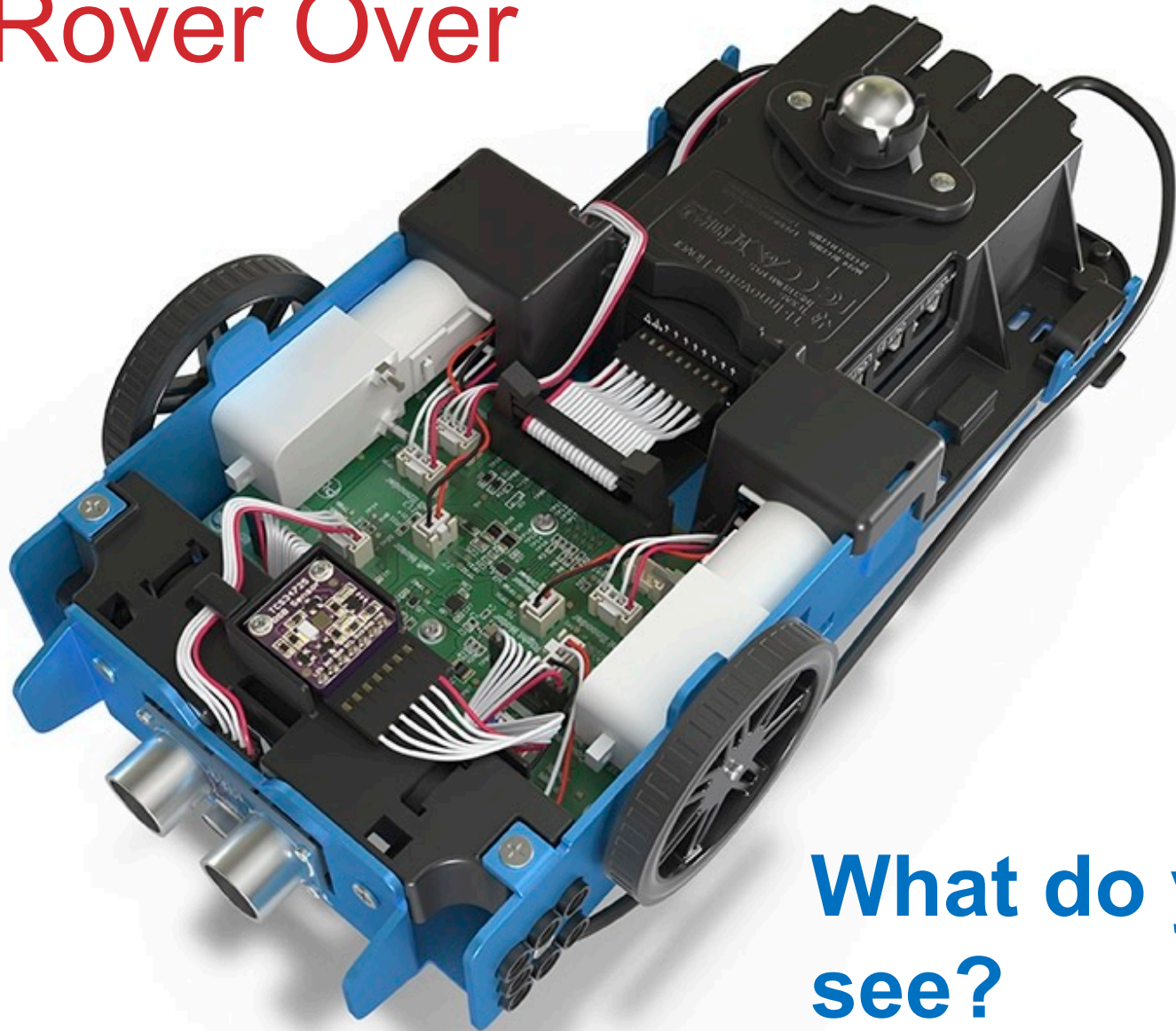
6



```
rover() Done
rover()
rover() Done
rover() Done
```

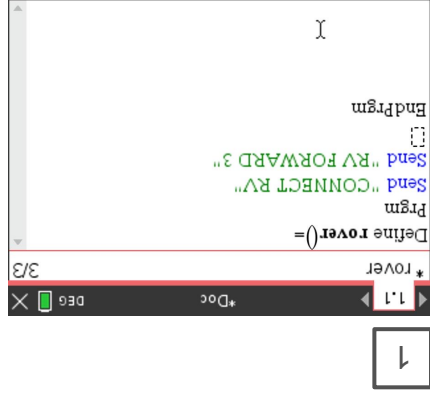
Press **[enter]** to run your program in the Calculator app.

Turn Rover Over



**What do you
see?**

Running a Rover Program



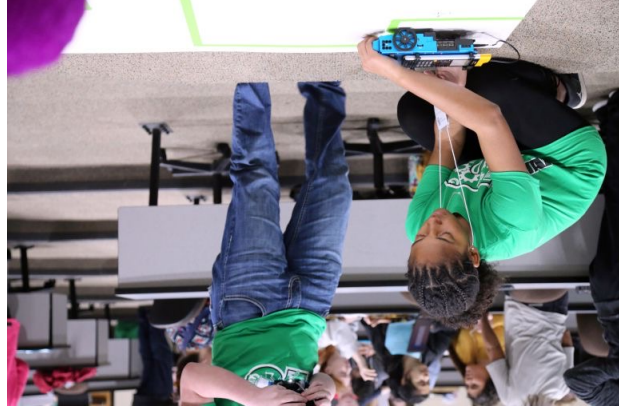
Press **[ctrl] [R]** to paste the program name ready to run in a Calculator app

on the next page.

Note: **[ctrl] [R]** also checks syntax and stores program changes. **[ctrl] [B]** is another option for checking syntax and storing. * before the program name indicates that changes have not been stored.

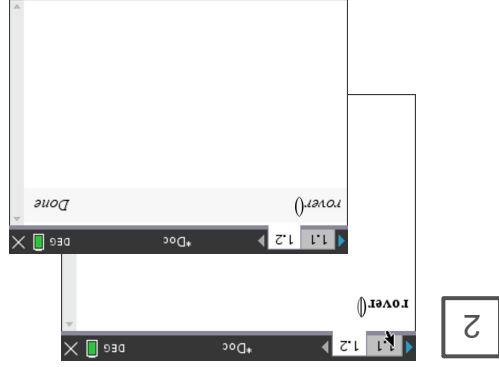
Before running the program make sure that

- Rover is connected to the calculator
- Rover is switched on
- Rover is on a flat surface ready to roll

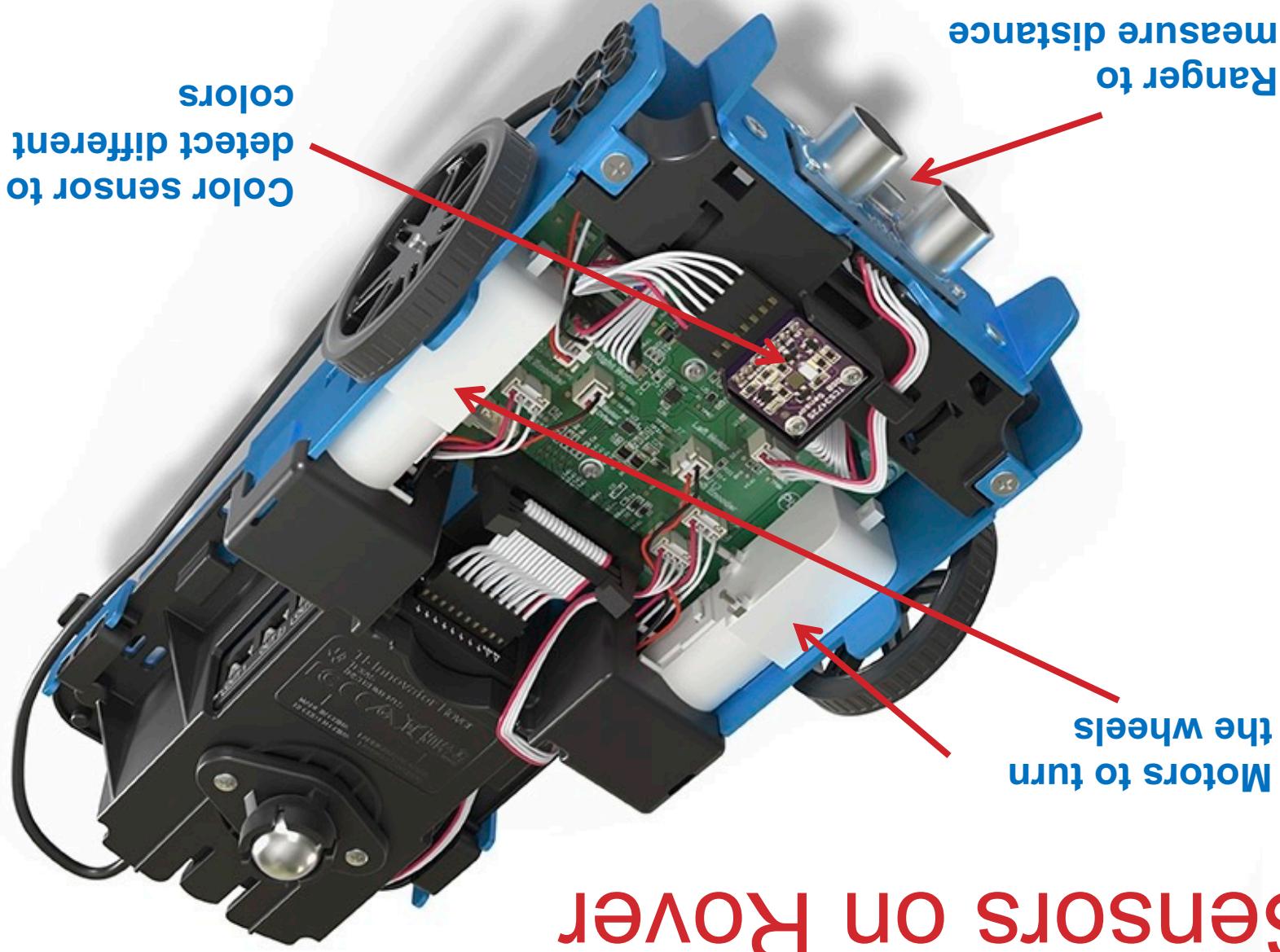


Press **[enter]** to run your program in the Calculator app.

You can re-run the program in the Calculator app by pressing **[enter]**.



Sensors on Rover



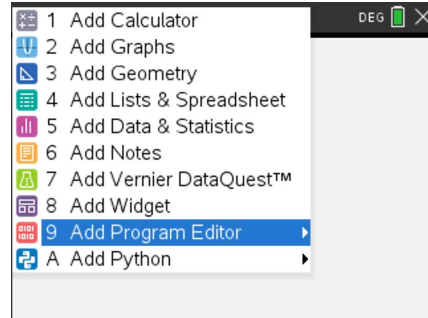
Creating a Rover Program

1



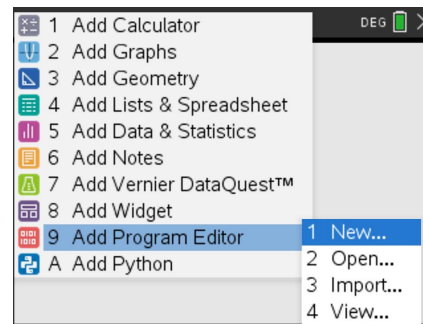
Press **[menu]** to bring up a menu of applications to add to the page.

2



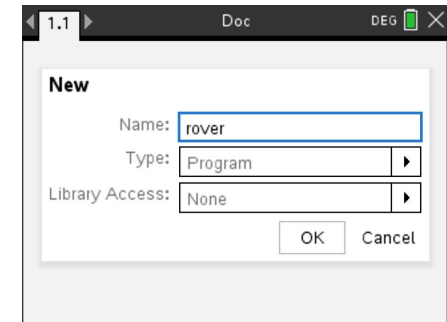
Press **down arrow** repeatedly then press **[enter]** or press **[9]** to select Add Program Editor.

3



Select 1: New by pressing **[enter]** or **[1]**

4



Enter your program name and press **[enter]**.

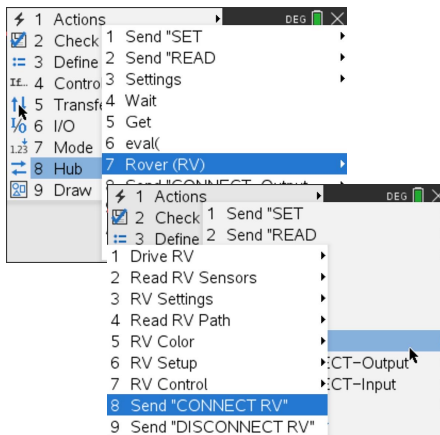
Note: You can also add a new page to the document by pressing **[ctrl] [doc] +page**.

5



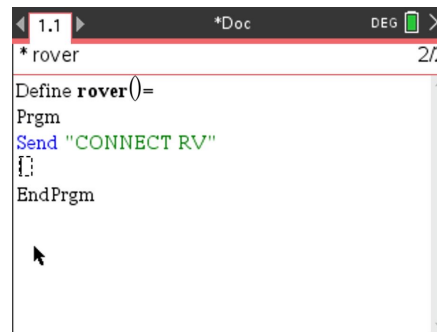
You begin on a blank program line.

6



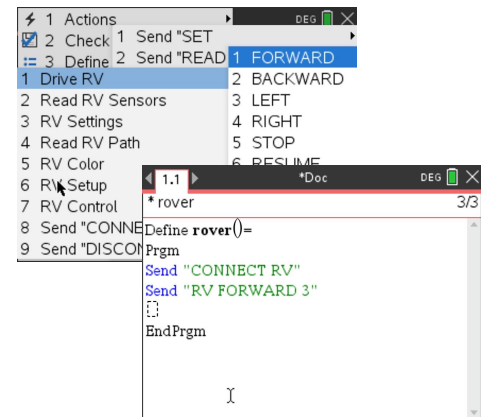
Press **[menu]** then **[8] Hub [7] Rover (RV) [8] Send "Connect RV"**

7



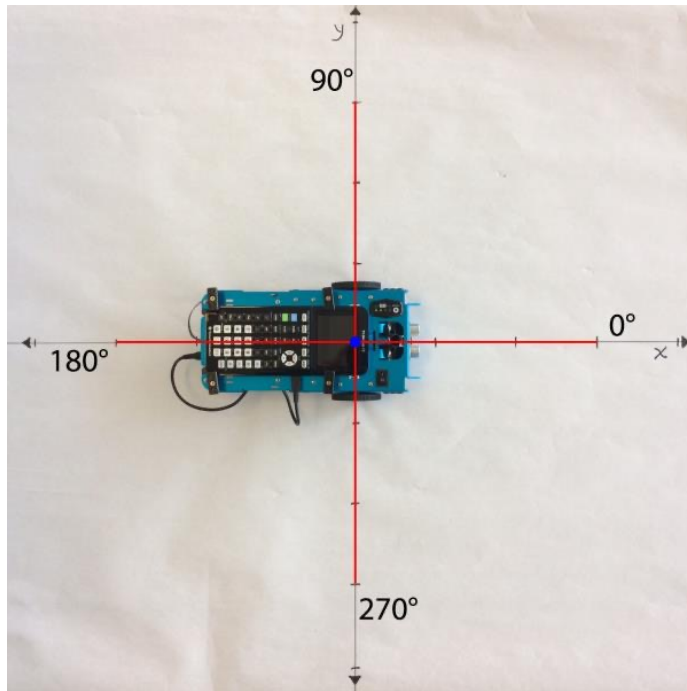
The Connect RV command is required at the beginning of every Rover program. **Note:** **Right arrow** to the end of the line and press **[enter]** to complete the statement.

8



Press **[menu]** then **[8] Hub [7] Rover (RV) [1] Drive RV [1] FORWARD** to paste to the edit line. Type a value for units to drive. **Right arrow** to the end of the line and press **[enter]** to complete the statement. Press **[ctrl] [R]** to run the program in a calculator app on the next page.

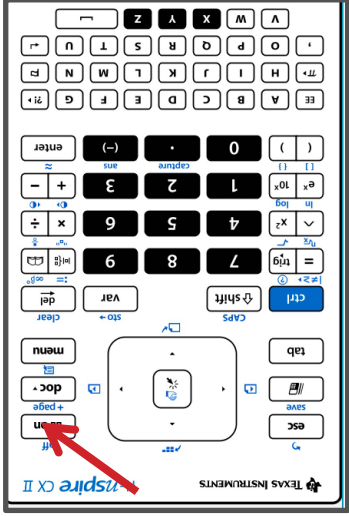
TI-Rover orientation and virtual grid



Rover programs set the initial position as the origin and the heading as 0 degrees measured from the x-axis.

Note: The Rover tracks its position on a virtual coordinate grid with a unit value of 10 cm. The coordinate grid position applies to the RV TO XY, RV TO POLAR, and RV TO ANGLE on the Drive RV Drive menu. The virtual grid also applies to the RV Path menu functions.

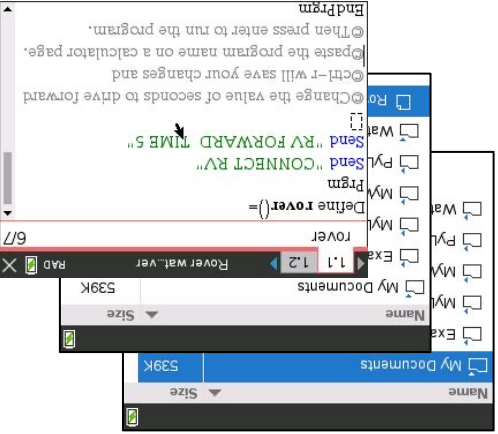
Opening an existing TI-Nspire document file



Press the [home/on] key to display the home screen.



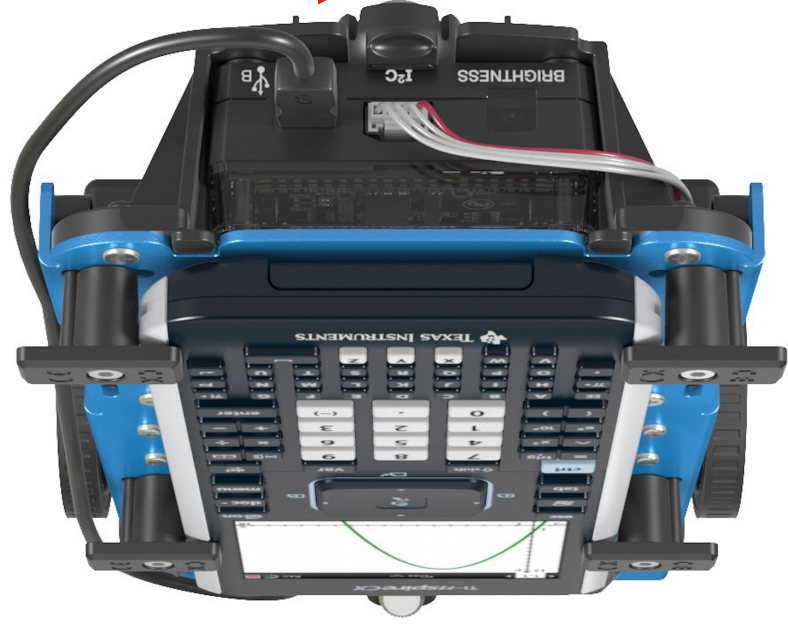
Use arrow keys and [enter] or Press [2] to select 2 Browse files.



Use arrow keys and [enter] to select a folder and a file.
Note: Pressing the [home/on] key repeatedly toggles between the home screen and the current document.

Connecting Rover to your calculator

3 Make sure that your Rover is switched on and on floor ready to roll before running the program.



1

Plug B side into the Rover Hub.



2

Plug A side into the Rover Hub.

Unit-to-unit cable