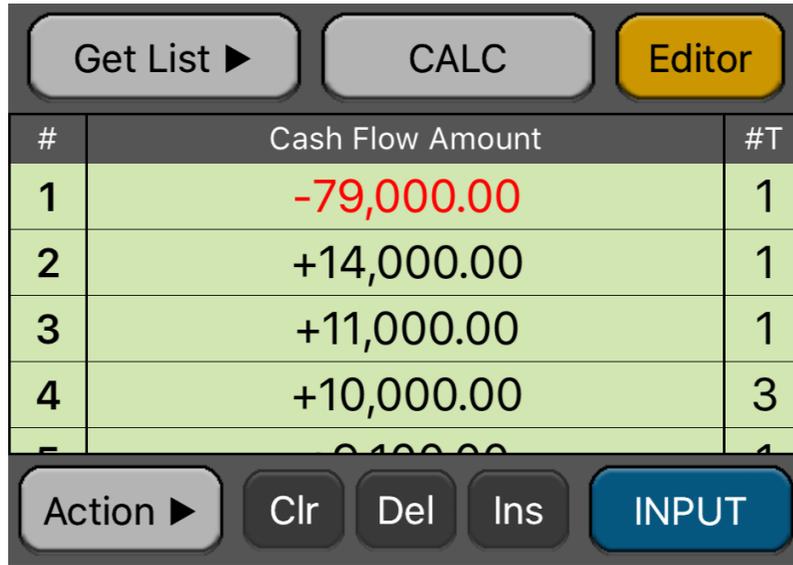


# Cash Flows Menu

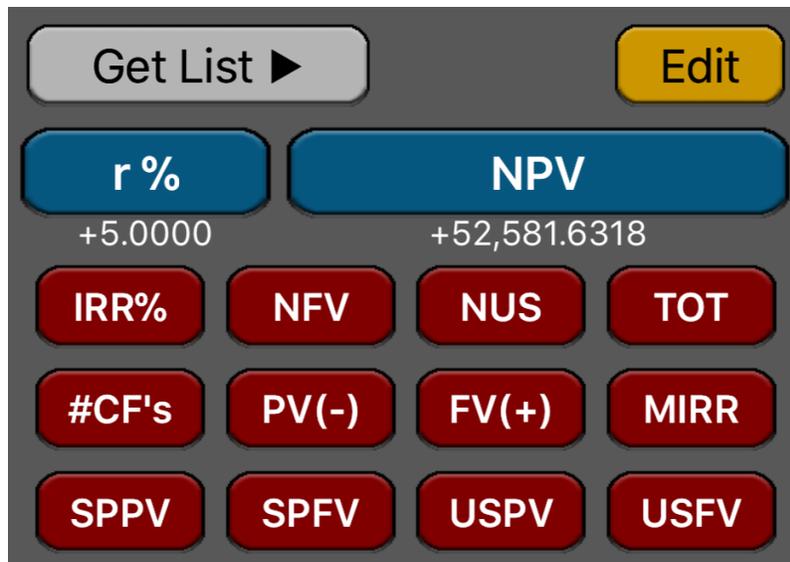
This menu allows to input Cash Flows data to perform common financial calculations over it . To show it, touch the “**OPT**” and in the section “4) **Finance:**”, touch the “**Cash Flows**” button.



<b>[Get List ►]</b>	If enabled, shows all previously saved data list available. Select the one to use in the calculations.
<b>[CALC]</b>	Shows the CALC Menu for the current list (see below).
<b>[Editor]</b>	Shows the “ <b>CFLO Editor</b> ” view to create a new “data list” or to edit the current one (see below).
<b>[Action ►]</b> <span style="color: blue;">New List</span> <span style="color: blue;">CLEAR Data</span> <span style="color: blue;">NAME List</span> <span style="color: blue;">DELETE List</span>	Shows the Cash Flow data actions: Creates a New empty list. Clears all the date in the current list Allows you to enter a name for the current list. Delete the current list.

<b>[Clr]</b>	Clears the selected Cash Flow in the list.
<b>[Ins]</b>	Insert a new cash flow entry above the current selected one in the list.
<b>[Del]</b>	Deletes the current selected cash flow entry.
<b>[INPUT]</b>	Enters the stack-X value in to the list.

Once a Cash Flow list is ready for calculation, Touch the “**CALC**” button to show the “**Calculation Menu**”



<b>[ r% ]</b>	Stores the Interest Rate to calculate <b>NPV</b> or, calculates the <b>r%</b> for the current <b>NPV</b> value.
<b>[NPV]</b>	Stores the Net Present Value to calculate <b>r%</b> or, calculates the <b>NPV</b> for the current <b>r%</b> value.
<b>[IRR%]</b>	Calculates the Internal Rate of Return.
<b>[NFV]</b>	Calculates the Net Future Value of the cash flows in the current list using the <b>r%</b> interest rate.

<b>[NUS]</b>	Calculates the Net Uniform Series of payments that produces the same <b>NPV</b> at the <b>r%</b> interest rate.
<b>[TOT]</b>	Calculates the total sum of the current Cash Flows list.
<b>[#CF's]</b>	Calculates the Number of cash flows. This is the sum of repetitions including the initial cash flow.
<b>[PV(-)]</b>	Calculates the Present Value of <b>Negative</b> cash flows only. Used in the <b>MIRR</b> calculation(see the example).
<b>[FV(+)]</b>	Calculates the Future Value of <b>Positive</b> cash flows only. Used in the <b>MIRR</b> calculation (see the example).
<b>[MIRR]</b>	Calculates the Modified Internal Rate of Return using a previously calculated <b>PV(-)</b> and <b>FV(+)</b> .
<b>[SPPV]</b>	Calculates the Single Payment Present Value: <b>SPPV = ( 1 + r% / 100 )<sup>-n</sup></b>
<b>[SPFV]</b>	Calculates the Single Payment Future Value: <b>SPFV = ( 1 + r% / 100 )<sup>n</sup></b>
<b>[USPV]</b>	Calculates the Uniform Series Present Value: <b>USPV = [ 1 - SPPV ] / ( r% / 100 )</b>
<b>[USFV]</b>	Calculates the Uniform Series Future Value: <b>USFV = [ SPFV - 1 ] / ( r% / 100 )</b>

**Example:** Create the following cash flow list and save it with the name “Help-Example”:

Year	Cash Flow	Year	Cash Flow
0	-\$79,000	6	\$9,100
1	\$14,000	7	\$9,000
2	\$11,000	8	\$9,000
3	\$10,000	9	\$4,500
4	\$10,000	10	\$100,000
5	\$10,000		

**Solution:** Touch “**OPT**” key and the “**Cash Flows**” menu button.

Keys	Comment
[Action▶] [CLEAR List]	Initialize the list for data entry.
79000 [CHS] [INPUT] [INPUT]	Enters the initial cash flow (CF <sub>0</sub> ) and maintain #T = 1.
14000 [INPUT] [INPUT]	Enters the CF#1 and maintain #T = 1.
11000 [INPUT] [INPUT]	Enters the CF#2 and maintain #T = 1.
10000 [INPUT] 3 [INPUT]	Enters the CF#3 and #T = 3.
9100 [INPUT] [INPUT]	Enters the CF#4 and maintain #T = 1.
9000 [INPUT] 2 [INPUT]	Enters the CF#5 and #T = 2.
4500 [INPUT] [INPUT]	Enters the CF#6 and maintain #T = 1.
100000 [INPUT]	Enters the CF <sub>j</sub> #7 and maintain #T = 1.
[Action ▶] [NAME List]	Save the list to a file. Name the file “Help-Example” and touch “Save”.

Now, for the created Cash Flow data, calculate:

- 1.- Net Present value at 5% of interest.
- 2.- The rate necessary to obtain a Net Present value of 1000.
- 3.- The Internal rate of return (IRR%).
- 4.- Calculate the Net Uniform Series (NUS) at 9% of interest.
- 5.- Calculate the Net Future Value at 5% of interest.
- 6.- Calculate the Cash Flows average.
- 7.- Calculate the Modified Rate of Return (MIRR) using a safe rate of 8% per period and a reinvestment (risk) rate of 13%.
- 8.- Calculate SPPV, SPFV, USPV and USFV at 9.0%

### Solution:

Keys	Comment
<b>[CALC]</b>	Show the CFLO calculation Menu.
“5” [ r% ] [NPV]	1) Net Present Value at 5% = <b>52,581.63</b>
“1000” [NPV] [ r% ]	2) i% for NPV = 1000 => i% = <b>13.48%</b>
<b>[IRR]</b>	3) The Internal Rate of Return = <b>13.72%</b>
“9” [ r% ] [NUS]	4) Net Uniform Series at 9% = <b>3,675.34</b>
“5” [ r% ] [NFV]	5) Net Future Value at 5% = <b>85,649.94</b>
<b>[TOT] [#CF's] [÷]</b>	6) Cash Flows Mean = <b>9,781.82</b>
8 [PV(-)] 13 [FV(+)] <b>[MIRR]</b>	7) Modified Rate of return = <b>13.43%</b>
“9” [ r% ] <b>[ SPPV ]</b> <b>[ SPFV ]</b> <b>[ USPV ]</b> <b>[ USFV ]</b>	8) Enter the interest rate SPPV = <b>0.4224</b> SPFV = <b>2.3674</b> USPV = <b>6.4177</b> USFV = <b>15.1929</b>

# Data List Editor View

This view adds a convenient way to create, visualize and edit a list of values with repetitions. To show it, touch the “**OPT**” key and in the section “**6) Utilities:**” touch the “**CFLO Editor**” button.

The screenshot shows the 'Cash Flow Editor' interface. At the top right, there is a toggle switch labeled 'Nj?:OFF'. Below it is a table with three columns: 'j', 'CFj value', and 'Nj'. The table contains 9 rows of data. Below the table is a control panel with several buttons: 'Add', 'Delete', 'Insert', 'Clear', and 'INPUT'. To the right of the control panel is a numeric keypad with buttons for digits 0-9, '+/-' (decimal), and 'E' (scientific notation). At the bottom of the interface, there are two summary statistics: 'Mean +9,781.8182' and 'Total +107,600.0000'. At the very bottom, there are two buttons: 'Action' and 'Done'.

j	CFj value	Nj
0	-79,000.0000	1
1	+14,000.0000	1
2	+11,000.0000	1
3	+10,000.0000	3
4	+9,100.0000	1
5	+9,000.0000	2
6	+4,500.0000	1
7	+100,000.0000	1
8	?	1

Callouts and their descriptions:

- #TIMES entry toggle**: Points to the 'Nj?:OFF' toggle switch.
- Entry Value**: Points to the 'CFj value' column in the table.
- Entry Index**: Points to the 'j' column in the table.
- Entry consecutive repetitions (Nj)**: Points to the 'Nj' column in the table.
- Adds a new entry row**: Points to the 'Add' button.
- Remove the current row**: Points to the 'Delete' button.
- Inserts a new entry row**: Points to the 'Insert' button.
- Clears to "0" the current entry**: Points to the 'Clear' button.
- Number keypad and editing**: Points to the numeric keypad area.
- Select to Load, Save, or Clear the list**: Points to the 'Action' button.
- Close the view**: Points to the 'Done' button.

The editor has three areas: the data listing, the keypad to enter numbers and the actions buttons.

### Data Listing:

- Shows the current content of the list.
- Touch a “Value” or “#T” item in the list to select it for editing. The row
- Use the Keypad to to enter numbers in the selected cell.

### Keypad:

- The keyboard contains the common 15 keys for number entry including the change sign, exponent and backspace.
- A number in edition is actually entered in the list when the **[INPUT]** key is pressed

### Action Buttons:

<b>[Add]</b>	Creates a new data row at the end of the list.
<b>[Insert]</b>	Inserts a new empty CFj, Nj data above the current line.
<b>[Delete]</b>	Deletes the current CFj, Nj data and shift up the list.
<b>[Clear]</b>	Clears the current CFj, Nj data to “0.0” & “1” respectively.
<b>[Done]</b>	Ask for saving in a file or ask if you want to use and copy the current Cash Flows values to the calculator’s registers. Finally, closes the editor.
<b>[Action ►]</b>	Shows a list of actions that affects the whole list: “ <b>Load List</b> ”: Load a previous saved list into the editor. “ <b>Save List</b> ”: Save the list in a file for further use. “ <b>Clear List</b> ”: Clears the list.