





# HP 10bII+ Financial Calculator - Calendar and Date Formats

## Keys and Functionality


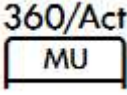

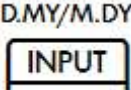

The calendar options on the 10bII+ are Actual (**Act**) and 360-day (**360**). The default setting, Actual, is based on a 365-day calendar. The alternate setting, 360, is based on a 360-day calendar. Since financial analysis often involves calculations over given periods of time, it is important to note calculations involving dates return different values for each calendar setting. Verify the calendar mode is appropriately set for your problem before you begin. The valid range of dates for the calendar functions of the HP 10bII+ is October 15, 1582 through December 31, 9999.


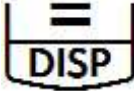
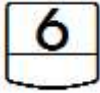
For the date, the number of days between two dates, and bond calculations, dates may be entered and displayed either in month-day-year (**M.DY**) or day-month-year (**D.MY**) formats. In addition to a different display mode for the date and date calculations, these functions also return different values based on the 365-day and 360-day calendars. The table below lists the keys used in storing dates and date calculations and their functionality.



Keys	Description of Functionality
 D.MY/M.DY INPUT	Enters dates in DD.MMYYYY (D.MY) or MM.DDYyyy (M.DY) formats. The <b>D.MY</b> annunciator indicates D.MY format is active.
 360/Act MU	Toggles between 360- and 365-day (Actual) calendars. The <b>360</b> annunciator indicates the 360-day calendar is active.


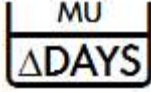
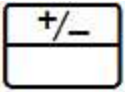
Keys	Description of Functionality
	Calculates the date and day, past or future, that is a given number of days from a given date. The returned result is always calculated on the 365-day calendar (Actual), regardless of the calendar setting.
	Calculates the number of days between two dates. Based on your current calendar setting, the returned result is calculated on either the 365-day (Actual) or the 360-day calendar.


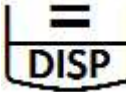

The general process for storing dates, date formats, setting the calendar, and displaying dates is as follows:

1. Set the calendar format. Press   to toggle between the 360-day and 365-day (Actual) calendars. The **360** annunciator indicates the 360-day calendar is active. No annunciator is displayed when the actual calendar is active.
2. Set the date format. Press   to toggle between day-month-year (**D.MY**) and month-day-year (**M.DY**) formats. The **D.MY** annunciator indicates D.MY format is active. No annunciator displays when M.DY format is active.
3. Key in dates using the numbered keypad and  as a separator. For D.MY format, key in one or two digits for the day followed by the decimal point, two digits for the month, and four digits for the year (DD.MMYYY). For M.DY format, key in one or two digits for the month, followed by the decimal point, two digits for the day, and four digits for the year (MM.DDYYYY).

4. Set the display precision. Press   followed by a numeric key (0-9) to specify the number of displayed decimal places. To view the entire date, press .
5. Numbers at the far right of a calculated date indicate days of the week. 1 is for Monday; 7 is for Sunday.


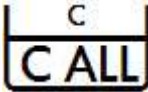

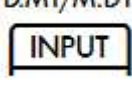
6. Calculate the date and the day. Press  .

7. Calculate the number of days between two dates. Press  .
8. Press  followed by a value to represent days in the past.

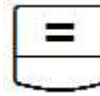
The examples that follow illustrate this process. Before beginning, press    so your display matches the display in the examples.

## Example 1

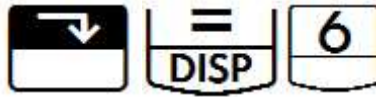
Key in July 12, 2014 in M.DY (month-day-year) format. View the date in the current display format. Key in September 1, 2014 in D.MY (day-month-year) format.

1. Clear all memory. Press  . The message 12 P\_Yr flashes to indicate all the data except the value for payment-per-year (P/YR) has been cleared. 0.00 should be displayed.
2. Verify the date format is M.DY. When M.DY format is active, no annunciator is displayed. If the D.MY annunciator is displayed, press  .

- Key in **7.122014** using the numbered keypad. Key in one digit for the month followed by two digits for the day separated by the decimal point. Key in four digits for the year. **7.122014** should be displayed.



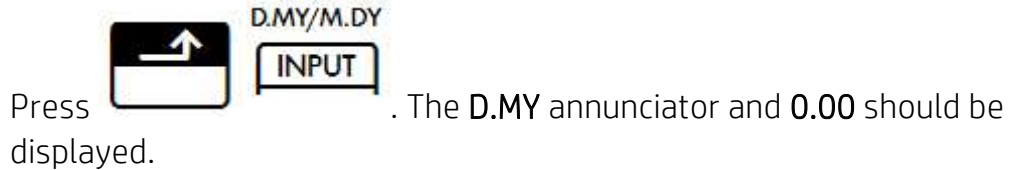
- View the date in the current display format. Press . **7.12** should be displayed.



- View the entire date. Press .
- Return the display format to two digits to the right of the decimal point.



- Clear the display and set the date format to D.MY. Press .

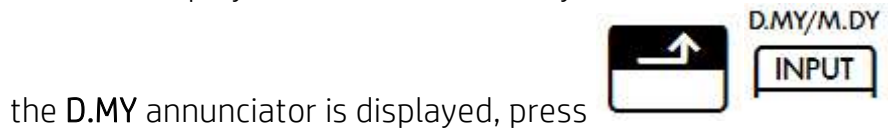


- Key in the second date. In this example, key in one digit for the day followed by two digits for the month separated by the decimal point. Key in four digits for the year. **1.092014** should be displayed.

## Example 2

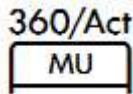
What day of the week is October 15, 2015? Key in the date in M.DY format. Use the actual-day calendar.

- Clear the display. Press . Verify the date format is set for M.DY. If



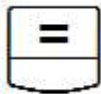
- Verify the actual calendar is active. When actual format is active, no

annunciator is displayed. If the **360/Act** annunciator is displayed, press



- Key in the date. **10.152015** should be displayed.

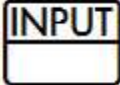
- Return results for the day of the week. Press



**10 - 15 - 2015 4** should be displayed. The **PEND** annunciator indicates the calculator is waiting for another operation. Note: if 0 is entered as the number of days for the calculation, the day and the date is returned. October 15, 2015 is a Thursday.

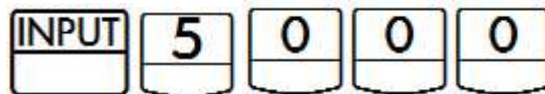
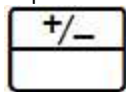
## Example 3

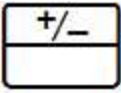
If today is April 10, 2015, what was the date 5000 days ago? Use the actual-day


calendar. Calculate this example using the in-line feature with . Use M.DY format.

- Clear the display. **0.00** should be displayed.
- Verify the actual calendar is active.
- Verify the date format is M.DY.
- Key in the date. **4.102015** should be displayed.

- Input the number of days. Press




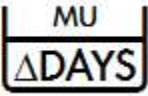
Note the **INPUT** annunciator is displayed.  changes the sign to indicate days in the past. **-5,000** should be displayed.

- Calculate the date. Press . **8 - 1 - 2011 3** should be displayed.

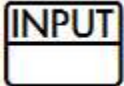

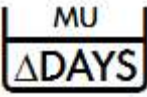
## Example 4

What is the number of days between September 10, 2014 and December 14, 2015?  
Use the actual calendar and M.DY format. Calculate the number of days using both the  
in-line functionality and the Input key.

1. Clear the display.
2. Key in the first date. **9.102014** should be displayed.

3. Press   . **9.10** should be displayed.

4. key in the future date. Press  . **460.00** should be displayed. To return  
the same results using the Input key, key in the first date followed

by  . Key in the second date and press   .