Bond Price & Yield Menu

It allows you to calculate annual or semi-annual coupons bonds with actual calendar or 360 day years.

To show it, touch the "**Finance**" menu button in the main menu, and select the "**BOND**" option.

Bond Calendar type. (Actual or 30/360)	Stores the purchase or settlement date	Stores the call price.	Stores the coupon rate.	Stores or calculates the Bond Price.

TVM	BOND	DEPRC	BSCH

Type

A/A	Settlement 05/19/2003 Mon	Maturity 06/30/2017 Fri	PRICE +25.22

SEMI	CALL +100.00%	CPN% +0.00%	ACCR%	YIELD% +10.00%

Bond Coupon type. (Annual or SemiAnn.)	Stores the call or maturity date.	Calculates the accrued Interest to Sett.Date.	Stores or calculates the yield as an annual percentage to Mat.Date.

The **[PRICE]** or **[YIELD]** buttons calculates the value if the immediate previous key pressed was one of the keys in this tool. See the examples below to have a better understanding about.

To enter dates (Settlement and Maturity) use the current date format indicated in the status bar (M.DY, D.MY or Y.MD). The following examples assumes "M.DY" date format.

Example 1: Price & Yield of a Bond

What price should you pay on August 10, 2003 for a 6¾% U.S. Treasury bond that matures on May 1, 2018 if you wish a yield of 8⅜%? The calendar basis is actual and the coupon payments are semi-annually.

Solution:

Keystrokes	Description
[A/A] **[SEMI]**	Sets the calendar to **Actual**. Sets the bond coupon period to **Semi-Annual**.
"8.102003" **[Settlement]**	Type the settlement date and press **settlement**.
"5.012018" **[Maturity]**	Type the maturity date and press **maturity**.
"6.75" **[CPN%]**	Type the annual coupon rate and touch **CPN%**.
"8.375" **[YIELD%]**	Type the desired yield and press **Yield(%)**.
[PRICE]	Calculates the bond price. **Result = 86.38**
[+] [ACCR]	Calculates the interest accrued since last coupon to the settlement date. **Result = 1.85**.
[=]	Adds the bond price and the accrued interest to calculate the net price. **Result = 88.23**

Suppose that the market quote for the bond is 88¼. What yield does it represent?

Keystrokes	Description
"88.25" **[PRICE]**	Type the market quote and enter it in **PRICE**.
[YIELD%]	Calculates the bond yield to maturity. **Result = 8.13**

Example 2: A Bond with a Call feature

What is the price of a 6% corporate bond maturing on March 3, 2022 and purchased on May 2, 2003 to yield 5.7%? It is callable on March 3, 2006 (a coupon date), at a value of 102.75. What is the yield to the call date? Use a 30/360 calendar with semi-annual coupon payments.

Solution:

Keystrokes	Description
Set Calendar to [30/360]	Sets the bond calendar to **30/360** calendar.
Set Calendar to [SEMI]	Sets the bond type to **semi-annual** coupons.
"5.022003" [Settlement]	Type the settlement date and press **settlement** to enter it.
"3.032022" [Maturity]	Type the maturity date and press **maturity** to enter it.
"6" [CPN%]	Type the annual coupon rate and touch **CPN%** to enter it.
"5.7" [YIELD%]	Type the desired yield and press **Yield(%)** to enter it.
[PRICE]	Calculates the bond price. **Result = 103.43**
"3.032006" [Maturity]	Change maturity date to **call date** and press **maturity** to enter it.
"102.75" [CALL]	Type the **call value** and press **CALL%**.
[YIELD%]	Calculates yield to call date. **Result = 5.58**

Example 3: A Zero-Coupon Bond

Calculate the price of a zero-coupon, semi-annual bond using a 30/360 calendar basis. The bond was purchased on May 19, 2003 and will mature on June 30, 2017, and has a yield to maturity of 10%.

Solution:

Keystrokes	Description
Set Calendar to **[30/360]**	Sets the bond calendar to **30/360** calendar.
Set Calendar to **[SEMI]**	Sets the bond type to **semi-annual** coupons.
"5.192003" **[Settlement]**	Type the settlement date and press **settlement**.
"6.302017" **[Maturity]**	Type the maturity date and press **maturity**.
"100" **[CALL]**	-reset the CALL value to 100%
"0" **[CPN%]**	Type zero coupon rate and touch **CPN%**.
"10" **[YIELD%]**	Type the desired yield and press **Yield(%)**.
[PRICE]	Calculates the **bond price Result = 25.22**