

Convert Text to Time in Excel (With Examples)

Authored by
Mohammed looti

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Introduction to Converting Text to Time in Excel

The ability to accurately represent time data is essential for effective data analysis in [Excel](#). However, time data often originates from external sources or manual inputs that treat the values as simple strings of text (e.g., 0455 instead of 4:55 AM). When [Excel](#) interprets a number sequence as text, it cannot be used in time-based calculations, such as duration tracking or scheduling. Fortunately, [Excel](#) provides powerful functions and coercion techniques that allow users to seamlessly transform these text strings into recognized time formats.

This guide details the specific formulas required for converting numerical text strings into valid time values, focusing on scenarios involving hours and minutes, as well as those that include seconds. Understanding these methods is key to unlocking the full potential of your temporal datasets within the spreadsheet environment. We will explore two primary, highly efficient formulas that leverage the robust [TEXT function](#) combined with a crucial mathematical operation designed to force data type conversion.

Before diving into the practical examples, it is necessary to grasp the core concepts of how [Excel](#) handles time. All time values are stored internally as fractional portions of a day. For instance, 6:00 AM is stored as 0.25 (one-quarter of a day), and 12:00 PM is 0.5. When we successfully convert a text string to a time value, the result initially appears as a decimal, which must then be formatted correctly for display.

Understanding the Core Conversion Formulas

To convert text strings that resemble time into actual time values, we utilize a combination of the [TEXT function](#) and the [double negative \(--\)](#) operator. The [TEXT function](#) takes the text input and applies a specified format, transforming the string (e.g., "0455") into a new, formatted text string that looks like time (e.g., "04:55").

However, the output of the [TEXT function](#) is still a text string, even though it is formatted correctly. [Excel](#) needs to recognize this output as a numerical value (the decimal fraction of a day) to treat it as a time value. This is where the [double negative \(--\)](#) comes into play. Applying the double negative is a common technique known as type coercion, which forces the text string to be evaluated as a mathematical quantity, resulting in the correct serial number that [Excel](#) uses for time calculations.

We will focus on two specific formulas, tailored to the precision required for your time data:

Formula 1: Convert Hours & Minutes Text to Time

=--TEXT(A2,"00:00")

This powerful formula is designed to convert a four-digit text string (where the first two digits represent hours and the last two represent minutes) located in cell **A2** into a standard [time format](#). For instance, if cell **A2** contains the text **0455**, the formula first formats it as "04:55" (text) and then coerces it into the serial time value, returning **4:55 AM** upon proper formatting.

Formula 2: Convert Hours, Minutes & Seconds Text to Time

=--TEXT(A2,"00:00:00")

If your source data includes six digits representing hours, minutes, and seconds, this formula is the correct choice. It applies the format code "00:00:00" to the text string in **A2**. If cell **A2** holds the string **045522**, this formula converts it to the serial number representing the time, which displays as **4:55:22 AM** after applying the appropriate [time format](#).

Example 1: Converting Hours and Minutes (HHMM) Text

Consider a scenario where you have imported a list of shift start times, and they are currently stored as four-digit text strings in Column A. This example demonstrates the step-by-step process of converting these strings into calculable [time formats](#) using Formula 1.

Suppose we have the following column of text values that need to be transformed into valid time entries in [Excel](#). Notice that these values are left-aligned, a common indicator that [Excel](#) is treating them as text rather than numerical data.

	A	B	C	D	E	F
1	Text					
2	0455					
3	1023					
4	1216					
5	1433					
6	1604					
7	2003					
8	2145					
9	2214					
10	0758					
11						
12						
13						
14						
15						
16						
17						

Our goal is to apply the conversion formula to generate the corresponding time values in Column B. To initiate the conversion, we navigate to cell **B2** and input the designated formula for hours and minutes. This formula instructs [Excel](#) to interpret the four digits in **A2** as HHMM, create a time text string, and then convert that string into a numerical time value.

=--TEXT(A2,"00:00")

Once the formula is entered in **B2**, we can efficiently apply it to the entire dataset by clicking and dragging the fill handle down to the remaining cells in Column B. At this stage, the results in Column B will appear as decimal numbers. This is expected, as these decimals are the raw serial numbers that [Excel](#) uses internally to represent time.

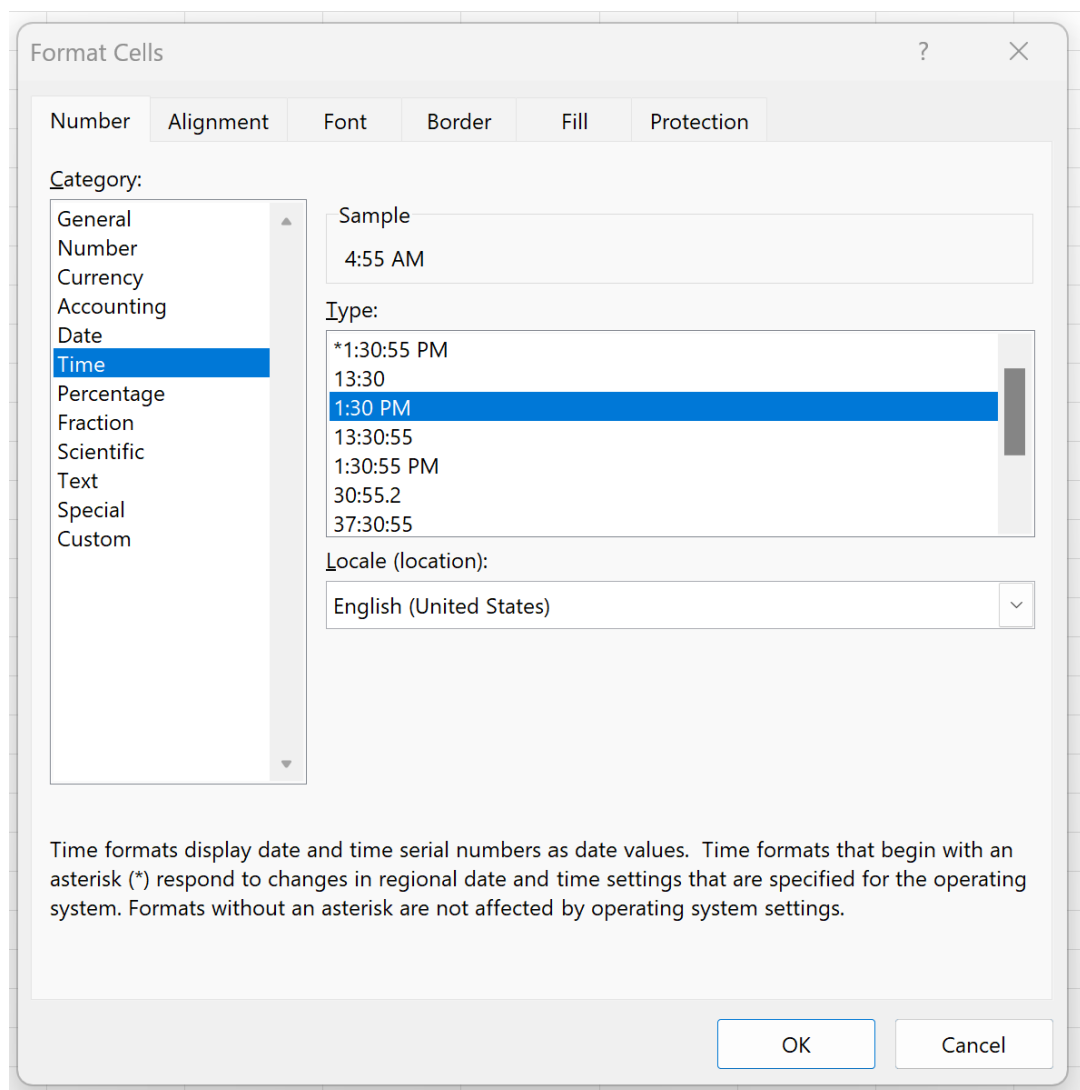
B2 ✕ ✓ <i>fx</i> =--TEXT(A2,"00\ :00")						
	A	B	C	D	E	F
1	Text	Time				
2	0455	0.204861				
3	1023	0.432639				
4	1216	0.511111				
5	1433	0.60625				
6	1604	0.669444				
7	2003	0.835417				
8	2145	0.90625				
9	2214	0.926389				
10	0758	0.331944				
11						
12						
13						
14						
15						
16						

Formatting the Decimals into Readable Time Values

Although we have successfully converted the data type from text to numerical time values, the decimal display (e.g., 0.3854) is not user-friendly. The final crucial step is applying the appropriate [time format](#) so that the serial numbers are displayed as recognizable hours and minutes.

To format these decimals, first, highlight the entire range of converted values, specifically the cell range **B2:B10**. Next, press the keyboard shortcut **Ctrl + 1** (or Cmd + 1 on a Mac) to open the essential [Format Cells dialog box](#). This dialog box is the central hub for controlling the visual appearance of data without altering its underlying value.

Within the [Format Cells dialog box](#), navigate to the **Number** tab and select **Time** from the **Category** list on the left. You will then be presented with various predefined time formats. For this example, choose the format that displays hours, minutes, and the AM/PM indicator, typically shown as **1:30 PM** or a similar standard time representation.



Once you confirm your selection by clicking **OK**, [Excel](#) instantly updates the visual display of the cells. Each of the underlying decimals is now presented as a clear time value, complete with hours, minutes, and the appropriate meridian indicator (AM or PM). This transformation completes the conversion process, ensuring your data is ready for temporal calculations.

B2		✕ ✓ <i>fx</i>		=--TEXT(A2,"00\ :00")		
	A	B	C	D	E	F
1	Text	Time				
2	0455	4:55 AM				
3	1023	10:23 AM				
4	1216	12:16 PM				
5	1433	2:33 PM				
6	1604	4:04 PM				
7	2003	8:03 PM				
8	2145	9:45 PM				
9	2214	10:14 PM				
10	0758	7:58 AM				
11						
12						
13						
14						
15						
16						

Example 2: Converting Hours, Minutes, and Seconds (HHMMSS) Text

In scenarios requiring greater precision, such as analyzing stopwatch data or system logs, the input text string may include seconds, resulting in a six-digit code. The process for conversion remains fundamentally the same as Example 1, but we must adjust the format code used within the [TEXT function](#) to accommodate the additional two digits for seconds.

Suppose we start with the following dataset in Column A, where the text strings now represent time down to the second:

	A	B	C	D	E
1	Text				
2	045522				
3	102359				
4	121601				
5	143305				
6	160416				
7	200344				
8	214551				
9	221420				
10	075825				
11					
12					
13					
14					
15					
16					

To perform this conversion, we will input the second formula into cell **B2**. Notice the critical difference in the format argument: we append ":00" to account for the seconds component of the six-digit string.

=--TEXT(A2,"00:00:00")

After entering the formula in **B2**, drag the fill handle down to convert all remaining text entries in Column A. As before, the results in Column B will initially display as numerical decimals, representing the time serial number.

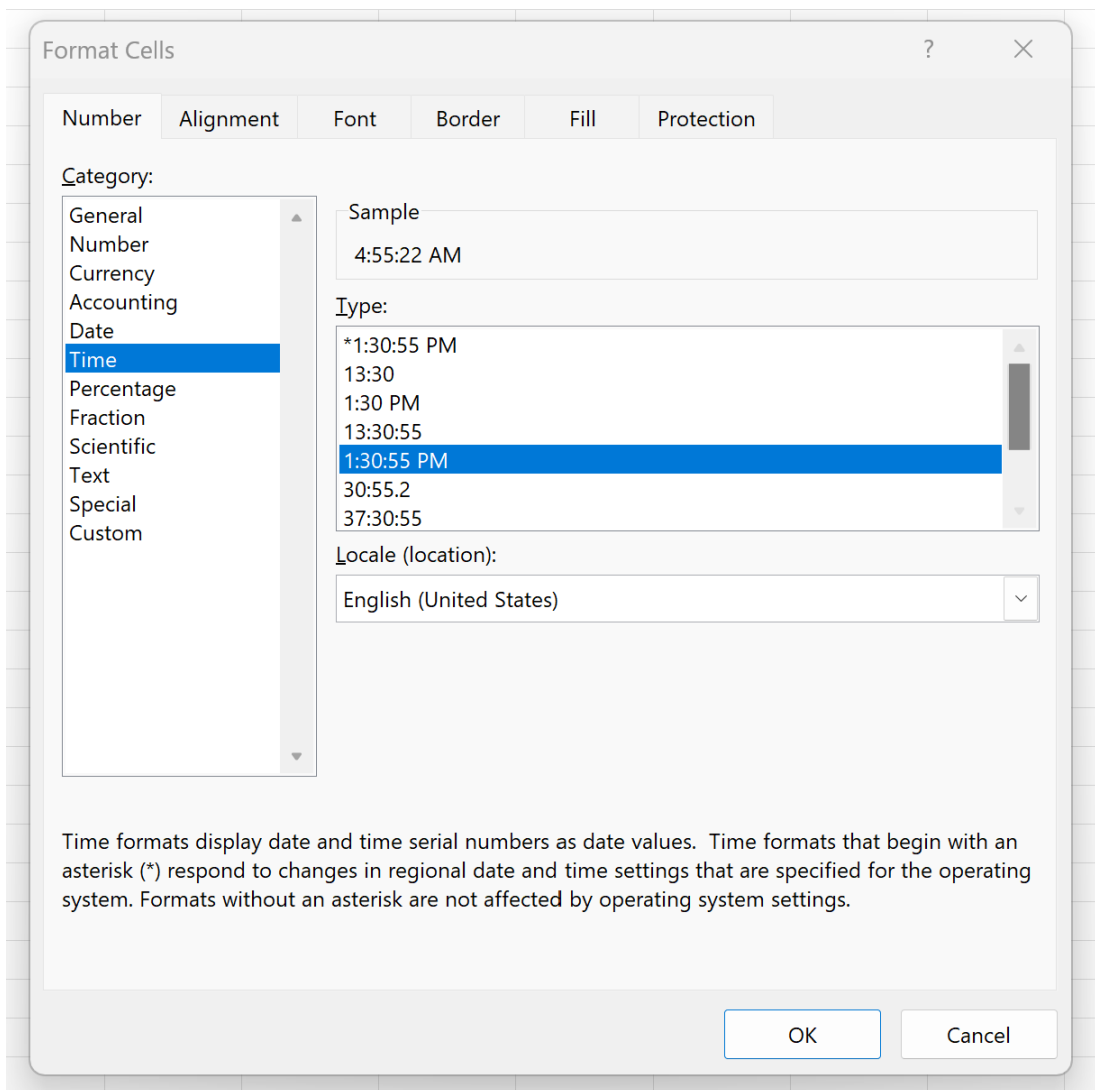
B2 ✕ ✓ <i>fx</i> =---TEXT(A2,"00\:00\:00")						
	A	B	C	D	E	F
1	Text	Time				
2	045522	0.205116				
3	102359	0.433322				
4	121601	0.511123				
5	143305	0.606308				
6	160416	0.66963				
7	200344	0.835926				
8	214551	0.90684				
9	221420	0.92662				
10	075825	0.332234				
11						
12						
13						
14						
15						

Applying the Seconds Time Format

With the numerical conversion complete, the last step is to format these decimals into a readable time display that includes seconds. This step is crucial for maintaining the precision of the original data.

Highlight the converted range (e.g., **B2:B10**) and activate the [Format Cells dialog box](#) by pressing **Ctrl + 1**. Navigate to the **Time** category under the **Number** tab.

For this high-precision data, select a [time format](#) that explicitly includes seconds, such as the format shown as **1:30:55 PM**. This ensures that all components of the original six-digit text string are accurately reflected in the final time display.



Upon clicking **OK**, the decimal serial numbers are transformed into precise time stamps, including hours, minutes, and seconds, confirming the successful conversion of the text data into a functional time dataset.

	A	B	C	D	E	
1	Text	Time				
2	045522	4:55:22 AM				
3	102359	10:23:59 AM				
4	121601	12:16:01 PM				
5	143305	2:33:05 PM				
6	160416	4:04:16 PM				
7	200344	8:03:44 PM				
8	214551	9:45:51 PM				
9	221420	10:14:20 PM				
10	075825	7:58:25 AM				
11						
12						
13						
14						
15						
16						

Additional Resources for Excel Data Manipulation

Mastering data type conversion is a foundational skill in [Excel](#). The techniques demonstrated here, particularly the use of the [TEXT function](#) and type coercion, are applicable to a wide range of data cleaning tasks beyond just time conversion. We encourage further exploration of related tutorials to enhance your data preparation workflow.

The following tutorials explain how to perform other common tasks in [Excel](#):

How to Calculate Time Differences in Excel

How to Convert Seconds to Minutes in Excel

Introduction to Custom Number Formatting