

# PrecisionID ITF Barcode Fonts User Manual



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# PrecisionID ITF (Interleaved 2 of 5) Barcode Font User Manual

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**Limitations of the demo version:** The demo version of this product may be used for evaluation purposes only. In the demo version, a few of the barcodes generated may contain the demo watermark. All other characters and symbols are exactly the same as the purchased version. If you are using the demo version and you would like to order, please visit: <https://www.precisionid.com/>

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## Product Overview

[ITF Barcode Fonts](#) require numbers to be interleaved into single characters before printing. PrecisionID supplies several Font Encoders, that will format data to the font, calculate any check digits that are required, and provide easy application integration. Refer to the Examples folder of the product zip file and the [Font Encoders](#) section of the website for a complete selection. This package also provides working examples for Word, Access, Excel and Crystal Reports as examples.

## System Locale, Language and Codepage Support

To represent all of the ITF characters in the specification, some characters must be placed at locations that are different in other languages. Therefore, to ensure correct formatting, the system regional setting should be set to English USA or one of the following codepages: 1252 Latin-1, 1250 European, 1251 Cyrillic, 1253 Greek, 1254 Turkish or 1256 Arabic. To view the System Locale settings in Windows: Click Start, then Control Panel, Click Clock, Language and Region, Click Region, The Region and Language options dialog appears. Click the Administrative or Advanced tab, (if there is no Advanced tab, then you are not logged in with administrative privileges). In the Language for non-Unicode programs section, click “Change system locale” and select the desired language. Click “OK” and Restart the computer to apply the change.

## Installation

### Microsoft Windows

PrecisionID recommends using the supplied **exe** file to install the fonts automatically in Windows. If you wish to manually install the fonts in Windows, open the Control Panel and choose Fonts; then choose Install New Font and browse to the folder that contains the ITF bar code fonts with the TTF extension extracted from the zip file.

### Mac

Our fonts are compatible with all versions of Macintosh OS Version 10.1 and greater (OS-X). Decompress the fonts in the supplied ZIP file with a decompression utility such as Stuffit Expander. Drag the files with the TTF extension to the Library/Fonts folder of your hard drive. To activate the fonts, restart the application; some applications may require a restart of the computer.

### Other Operating Systems

We supply Windows TrueType (TTF) fonts as well as Binary (PFB) and ASCII (PFA) versions of PostScript fonts. Consult the documentation for your operating system about instructions and which font to install.

### Font Encoders and Application Tutorials

PrecisionID supplies several different Font Encoders, that will format data to the font, calculate any check digits that are required, and provide easy application integration. Refer to the [Font Encoders](#) section of the website for a complete selection that is available for download.

## Tutorials for Specific Applications

The results for the following tutorials are saved in the [examples](#) folder of the product zip file. We encourage you to refer to the examples provided in this folder.

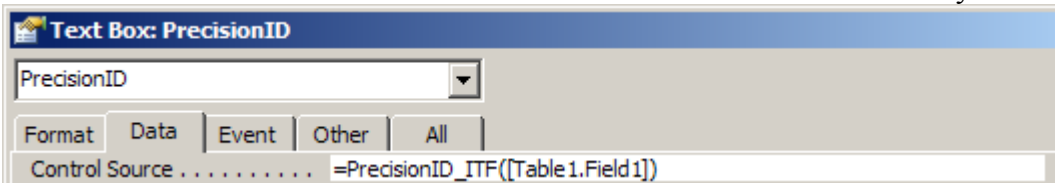
### Microsoft Access

To create a barcode in a Microsoft Access report:

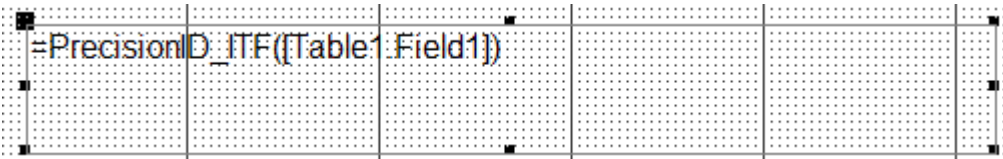
1. Run the Setup program to install the fonts and Access Example file.
2. Before we can create barcodes in Access, we must import the required module. Choose Modules – Import and select the Access Example.mdb file, which will be located in the [Program Files\Precision ID ITF Font Package](#) folder.



3. Choose the module to import from the other database; this module should be named [PrecisionID\\_ITF\\_Module](#). After it is properly imported, it will appear as one of the modules in the database.
4. Open a report in design view and add a text box to your report. The text box will be modified to contain a barcode.
5. Right click on the text box and choose properties.
6. Place the formula `=PrecisionID_ITF([Table1.Field1])` in the control source property of the text box where *Table1* is the table and *Field1* is the field that contains the data you want to barcode.



7. Run the report. You should see that the formula changed the data from the database and appended additional characters at the beginning and ending of the text. You may notice that the numbers from the data are compressed into other characters, this is normal when you are using ITF.  
È!-CYo{-Ì
8. Size the text box so it is large enough to contain the entire barcode. You will need to adjust both the height and width. Be sure to leave some extra space to the right and left of the barcode on the report. Generally, you need about 3 times the space to the left and right of the barcode as the thickest bar in the ITF barcode.



9. Open a report in design view, select the text box and choose one of the PrecisionID fonts such as [PrecisionID ITF T08](#) and choose 12 for the point size of the font. You must select the appropriate font for the formula you are using. For example, if you have a formula for the ITF barcode, you must select the ITF Font.
10. Save and run your report. You should see the barcode appear in the text box.

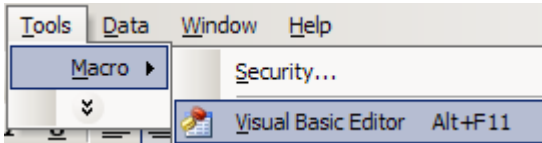


## Microsoft Excel

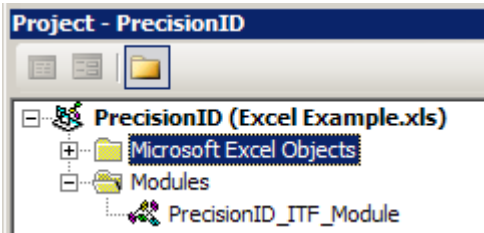
- NOTE: the [PrecisionID ITF T04](#) font is formatted specifically for use in Microsoft Excel. Other fonts may work but may not format properly in the cells.
- In this example we will create a barcode in cell B10 using the data from cell A10 for the barcode.

	Text Data	Barcode
9	0123456789012	
10	0123456789012	
11	0123456789013	

- Extract the [PrecisionID\\_ITF\\_Module.bas](#) file from the package and place it in the “My Documents” folder.
- Before we can create barcodes in Excel, we must import the required module and change the security setting so it will run. In Excel, choose Tools – Macro – Security and set the security level to Medium. Choose Tools – Macro – Visual Basic Editor.



- Choose File – Import File and select the [PrecisionID\\_ITF\\_Module.bas](#) file from the list of files. After this module is imported, it will be visible in the list of modules. Choose File – Close and return to Excel.



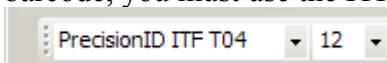
- In cell B8, enter the formula of `=PrecisionID_ITF(A10)` which is required to format the data to the font.

	A	B
9	Text Data	Barcode
10	0123456789012	=PrecisionID_ITF(A10)


- You should notice that the formula changed the data from the spreadsheet and appended additional characters at the beginning and ending of the text. You may notice that numbers from the data are compressed into other characters, this is normal when you are using ITF.

	A	B
9	Text Data	Barcode
10	0123456789012	È!-CYo{i

- With cell B10 selected, choose the [PrecisionID ITF T04](#) font, which is specifically formatted for use in Microsoft Excel, and choose 12 for the point size. We also recommend centering the text in this cell so the barcode will contain white space before and after the barcode. You must select the appropriate font for the formula you are using. For example, if you have a formula for the ITF barcode, you must use the ITF Font.



- After selecting the bar code font, you should see the barcode appear. Size the width of the column so that there is some white space before and after the bars of the barcode.

	A	B
9	Text Data	Barcode
10	123456789012	

- To create an entire column of barcodes, choose Edit – Copy with cell B10 selected.
- Highlight cells you wish to add barcodes to and choose Edit - Paste. The formula will automatically adjust for the other cells.

## Microsoft Word Mail-Merge

- Open the mail merge document.
- To create a barcode in a Word mail-merge, we must insert a merge field from a data source that already formatted the text to the barcode font. In this example, we use Excel as the data source. The Excel spreadsheet data source must already be setup with barcodes just like the Excel Tutorial in this document.
- In Word, Choose Tools – Letters and Mailings – Mail Merge and select the Excel spreadsheet for your data source. Be sure to select the columns and range for the cells that contain the data formatted to the barcode font. You may have to go through the Word mail-merge tutorial for assistance if you are unsure of how to connect to a data source or perform a mail-merge.
- When connected to the data source, we insert the merge field of <FormattedText> into the document. When we choose the “View Merged Data” option, we see the text formatted to the barcode font from the data source appear.

Text formatted to barcode font:

È-ÈÇÌ

- Select the text in the merged data and choose the **PrecisionID ITF 08** font. Make the font 12 points in size.

Barcode Font



## Crystal Reports

This example was created in Crystal Reports version 9. Implementation in other versions of Crystal Reports are very similar if not identical.

### 1. Copy the formula object to the clipboard.

Extract and open the “Crystal Reports Font Formulas.rpt” file that is in the \examples\ folder of the product zip file. Right-click on the font formula that is needed and choose Copy.



### 2. Paste the object into your report.

Open your Crystal Report and switch to design mode. Choose Edit – Paste or CTRL-V where the object is needed and size it appropriately to contain the entire symbol.



### 3. Change the data source in the formula of the object.

Right-click on the object and choose Edit – Formula. Modify DataToEncode= to connect to the data source; for example: DataToEncode = ({Table.Field})

If an error such as "A string is required" appears, the data will need to be converted to a string with a VB crystal function such as ToText or cStr. For example: DataToEncode = ToText( {Table.Field})

### 4. The barcode should now be visible when you run the report.



## Information for Specific Implementations

### Creating Check Digits in other Applications

The easiest method of creating source code for a check digit in a custom application is to use our [PrecisionID\\_ITF\\_Module.bas](#) module as a guide. The module was written to be compatible with Visual Basic 6 and Microsoft Office VBA and may be viewed with a text editor. This module is located in the [Examples\VB Module](#) folder of the package. PrecisionID also supplies several different Font Encoders, that will format data to the font, calculate any check digits that are required, and provide easy application integration. Refer to the [Font Encoders](#) section of the website for a complete selection that is available for download.

### Printing Text Below the Barcode

Human-readable or text fonts are provided in this package. These fonts contain the letter T to designate them as text fonts.

# Specifications

## Font Point Sizes and X Dimension (narrow bar width)

Our fonts are designed to print with precision on high resolution printers as well as low resolution printers such as 203 dpi thermal barcode printers. When printing at 203 dpi, the point size chosen should be a *multiple of 6*. When printing at 300 dpi, the point size chosen should be a *multiple of 4*.

Font point size	X Dimension (narrow bar width) measured in mils (1/1000 of an inch)
6	5
8	7
12 (recommended)	10
16	13
20	16
24	20
36	30

## Font Names and Bar Code Height

The numbers at the end of the font name are to identify the height of the font in millimeters (mm) when printed at 12 points. Fonts that contain the letter “T” just before the 2 digit size are “human readable” fonts that contain the text interpretation.

Font Name	Approximate Font Height at 12 points
PrecisionID ITF 04	.18” or 04mm (use in Excel)
PrecisionID ITF 08	.30” or 08mm
PrecisionID ITF 12	.45” or 12mm
PrecisionID ITF 16	.62” or 16mm
PrecisionID ITF 20	.84” or 20mm
PrecisionID ITF 30	1.2” or 30mm

## The ITF Character Chart

The fonts were created according to the chart below. If you have an advanced knowledge of the ITF specifications, you can use this chart to manually create your barcodes and calculate the check digit. The Text column below is based on the ISO Latin 1 Character set\*.

Value	ASCII	Text	Value	ASCII	Text
00	0033	!	53	0086	v
01	0034	"	54	0087	w
02	0035	#	55	0088	x
03	0036	\$	56	0089	y
04	0037	%	57	0090	z
05	0038	&	58	0091	[
06	0039	'	59	0092	\
07	0040	(	60	0093	]
08	0041	)	61	0094	^
09	0042	*	62	0095	_
10	0043	+	63	0096	`
11	0044	,	64	0097	a



12	0045	-	65	0098	b
13	0046	.	66	0099	c
14	0047	/	67	0100	d
15	0048	0	68	0101	e
16	0049	1	69	0102	f
17	0050	2	70	0103	g
18	0051	3	71	0104	h
19	0052	4	72	0105	i
20	0053	5	73	0106	j
21	0054	6	74	0107	k
22	0055	7	75	0108	l
23	0056	8	76	0109	m
24	0057	9	77	0110	n
25	0058	:	78	0111	o
26	0059	;	79	0112	p
27	0060	<	80	0113	q
28	0061	=	81	0114	r
29	0062	>	82	0115	s
30	0063	?	83	0116	t
31	0064	@	84	0117	u
32	0065	A	85	0118	v
33	0066	B	86	0119	w
34	0067	C	87	0120	x
35	0068	D	88	0121	y
36	0069	E	89	0122	z
37	0070	F	90	0123	{
38	0071	G	91	0124	
39	0072	H	92	0125	}
40	0073	I	93	0126	~
41	0074	J	94	0197	À
42	0075	K	95	0198	Æ
43	0076	L	96	0199	Ç
44	0077	M	97	0200	È
45	0078	N	98	0201	É
46	0079	O	99	0202	Ê
47	0080	P	START	0203	Ë
48	0081	Q	STOP	0204	Ì
49	0082	R			-
50	0083	S			-
51	0084	T			-
52	0085	U			-

\* If problems occur printing extended characters above ASCII 126, configure your operating system to use one of the following character sets: 1252 Latin 1, 1250 Europe, 1251 Cyrillic, 1253 Greek or 1254 Turkish.

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