Turbo Pascal (With DOSBox) User Manual

Copyright © 2017-2020 by Lưu Nguyễn Thiện Hậu. All Rights Reserved. Last Update: 7/25/2020 11:57 AM

Table of contents

Introduction	. 3
Basic Infomations	3
System Requirements	. 4
Getting help	. 4
License	. 4
View Version and Documents	. 5
Shortcut	6
Interface	. 6
Main Interface	6
Menu bar	. 7
Programming Center	. 9
Quick Start Guide	10
Open Turbo Pascal (With DOSBox)	10
Make and run my Program	11
Use Turbo Pascal	12
Notes When Using Software	12
New File	13
Open file	13
Save file	15
Change Dir	15
Tools for programming	16
Run and Complie	18
Error in Pascal	19
Clear and Refresh DOS Scrren	21
Window manage	22
Use other functions	23
Exit Turbo Pascal	25
Sample in Pascal	25
Note When using a unikey with Turbo Pascal (With DOSBox)	26
Keyboard shortcut	27
Advanced Lise	29
Modify and Repair	29
Edit DOSBox Conf file	27
More Help	22 22
Other Infomantion	3 <u>7</u>
	57

Introduction

Turbo Pascal (With DOSBox) (TPWDB) is a free and open source compiler and Integrated Development Environment (IDE) for Pascal language on Windows 64 Bit and 32 Bit. Using basic Pascal programming, many functions, no need to install multiple steps and integrate some other tools.

Features of Turbo Pascal (With DOSBox)

Runs on Windows 32/64 Bit Thanks to DOSBox

No need to install multiple steps. Easy to use

Add tool clear/refresh screen DOS (Shift + F3)

Run and access it all in one place with the Programming Center

Write Vietnamese easily in Turbo Pascal with TCVN library and Vietnamese writing mode.

Thank you for using our Turbo Pascal (With DOSBox)

This user's manual is designed to be a reference tool for operation of your system. Here you can find detailed operation information about Turbo Pascal (With DOSBox).

 View <u>License here</u> (Including Third-Party License Agreement and License Agreement here)

Also can be viewed by going to Programming Center of Turbo Pascal (With DOSBox) and into tab About, clicking on License or read the License.txt file that can be accessed from the directory path C:\TPWDB\Main\

- Information about the release history, short information of the software can be viewed at the Readme.txt file in the path C:\TPWDB\Main\ (Can be accessed from Tab About in <u>Programming Center</u>)
- Download the latest software releases at https://turbopascal-wdb.sourceforge.io
- Copyright © 2017-2020. Lưu Nguyễn Thiện Hậu.

Turbo Pascal (With DOSBox) is free and open-source under MIT License. Project is hosted at <u>Sourceforge</u>.

Website: https://turbopascal-wdb.sourceforge.io

Basic Infomations

This section includes an overview of basic information about Turbo Pascal (With DOSBox), including the following items:

- System Requirements
- Getting help
- License
- View Version and Documents
- Shortcut

System Requirements

These are the basic requirements for installing Turbo Pascal (With DOSBox).

Items	Requirements
Windows	Windows XP SP3/7/8/8.1/10 (All In 32 and 64 bit Version)
Version	Windows Server (2003 or higher)
RAM	128 MB or Higher
Capacity	20 MB in Hard drive

Getting help

- You can download other user manual at Turbo Pascal's homepage (With DOSBox) at: <u>https://turbopascal-wdb.sourceforge.io/doku.php/support</u>
- However, if you have the software installed from version 7.3.4 onwards, there will be a User's Guide available when installing the software by accessing the User Manual Section in the Start Menu.
- The manual of the software can also be accessed here through the User Manual button in the Options and About interface.
- For more help, see section <u>More Help</u> for details

License

Turbo Pascal (With DOSBox) License Agreement Copyright (C) 2017-2020. Lưu Nguyễn Thiện Hậu

Turbo Pascal (With DOSBox) is free and open-source. You can freely use Turbo Pascal (With DOSBox) under the terms of MIT License.

About the MIT License

Copyright 2017-2020 Lưu Nguyễn Thiện Hậu

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software

without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Third-Party License Agreement

This software uses other 3rd party software based on the specified licenses (including open source licenses) that the author offers.

Turbo Pascal 7.0 license:

Turbo Pascal 7.0 Copyrights (C) 1983,92 Borland international

VietRes (Vietnamese Resident for DOS) License Agreement:

VietRes (Vietnamese Resident for DOS) 2.5A Copyright © 1992-95. Seatic, VietRes. All Rights Reserved

TCVN library for Turbo Pascal License Agreement:

TCVN library for Turbo Pascal Copyright © Nguyễn Công Hoàng

DOSBox 0.74-3 License Agreement:

DOSBox version 0.74-3 Copyright © 2002-2019 DOSBox Team, published under GNU GPL

View Version and Documents

You can view the version by visiting Readme file in the Start Menu Access

The text in the software can be viewed by going to Tab About in Programming Center of Turbo Pascal (With DOSBox)

See <u>Introduction</u> and <u>Shortcuts</u> for details.

Shortcut

Information about the shortcuts in the software is in the table below.

Name	Location	Describe
Turbo Pascal (With DOSBox)	Desktop & Program Menu	Start Turbo Pascal (With DOSBox)
Website	Program Menu	Visit Website
Turbo Pascal (With DOSBox) Help	Program Menu	View Help and User Manual
Readme	Program Menu	Short info about software and software version.
Vietnamese Help - TPWDB	Program Menu	View Help and User Manual (Vietnamese)
Uninstall	Program Menu	Uninstall Turbo Pascal (With DOSBox)
Programming Center -	Desktop &	Programming Center of Turbo Pascal
Turbo Pascal (With	Program Menu	(With DOSBox)
DOSBox)		

Interface

This section includes introduction of the general interface in Turbo Pascal, including the following sections:

- Main Interface
- Menu bar
- Programming Center

Main Interface



- 1. <u>Menu bar</u> : Where to store tasks to work on Turbo Pascal, see section for detailed description.
- 2. Window Command line Programming: Where to edit and work Pascal programming commands in pas or inc files.
- See more items for details: Make and run my Program and Sample in Pascal
- Name file : Where to show pas file name. The format may be <file name> .pas or NONAMExx.pas for an unsaved or newly created file (xx is the number of the newly created file).
- See more items for details: <u>New File Open file</u> and <u>Save file</u>
- Staus and most command bar: Where quick command buttons are at work, the red text to the left of each command button name is the shortcut of the command button. See section <u>Menu bar</u> for details.

Menu bar

The menu bar gives you access to all the features of Advanced Installer. It contains the following sub menus: "File", "Edit", "Search", "Run", "Compile", "Debug", "Tools, "Options", "Window" and "Help".



The File bar

File management includes commands:

- <u>Create a new file</u>
- <u>Save</u> and <u>open</u> the file
- change the default save path
- go to the DOS interface
- Exit Turbo Pascal

The Edit Bar

Execute commands related to text and code such as Copy, cut, paste, delete text, paragraphs, code and view clipboard

• See more items for details: Tools for programming

The Search Bar

Execute commands related to finding and replacing paragraphs and code snippets, in addition to finding and missing Pascal programming errors.

• See more items for details: <u>Tools for programming</u>

The Run Bar

Perform pascal file commands and related commands.

• See more items for details:

Run and Complie

Error in Pascal

The Compile Bar

Execute commands related to pascal file execution.

• See more items for details:

Run and Complie

Error in Pascal

The Debug Bar

Execute commands related to Debug pascal, in addition to view the DOS interface when compiling and running pascal files, see the current state of the DOS interface.

The Tools bar

Open the notification window and run the built-in tools, including the <u>Clear and Refresh</u> <u>DOS Scrren tool</u>.

The Options Bar

Set up and customize Turbo Pascal

The Window Bar

Perform custom related commands, manage windows, arrange windows in Turbo

Pascal

• See more items for details:

Window manage

The Help Bar

Implement help using Turbo Pascal

• See more items for details:

More Help

Programming Center

Since version 7.3.4. All startup, custom and access modes for Turbo Pascal and DOSBox related documents will be included in the "Programming Center". To get started, visit the "Programming Center" in the list of all applications in the Start Menu (You can search for this application with the keyword "Programming Center"). A dialog box appears as shown below. See also Edit DOSBox Conf file for more DOSBox configuration functions.

😬 💦 Turbo Pascal (With DC	SBox) - Programming Center	– 🗆 🗙	
Exit About			
Main Configuration Help A	About	Version 7.3.4	
Welcome to programming center of access Turbo Pascal running mode access related documents.	Welcome to programming center of Turbo Pascal (With DOSBox). This is where you can access Turbo Pascal running modes, Pascal files stored in memory, see examples of Pascal, access related documents.		
Running mode Turbo Pascal (With DOSBox) has 2 running modes: Normal mode and Vietnamese writing mode. The Vietnamese writing mode is only a little different from the normal mode which is more integrated with Vietnamese Input Support Kit to be able to write Vietnamese in Turbo Pascal. If you use Vietnamese library to write Vietnamese language, you do not need to use Vietnamese writing mode.			
Click one of the 2 buttons below Normal Mode	Vietnamese Writing N	ode. Node	
Manage and access files Here you can manage and access .pas files in Turbo Pascal easily, you can also access Turbo Pascal examples and libraries (units) here.			
Access the Bin folder	Access to the directory containing mos the pascal files you have saved. You ca copy the pascal file into it to program i Turbo Pascal. Note that you need to re Turbo Pascal to open the copied file	t of n also n start	
Access to the Units folder	Customize Turbo Pascal libraries (be ca when accessing and modifying files in directory)	reful this	
Access the Examples folder	Access examples of Turbo Pascal		

Quick Start Guide

This section includes a very basic user guide for Turbo Pascal beginners, including:

- Open Turbo Pascal (With DOSBox)
- Make and run my Program

For other uses, see More Help for details

Open Turbo Pascal (With DOSBox)

To launch the software, open the Turbo Pascal icon (With DOSBox) on the desktop, or go to Start> All Apps> Turbo Pascal (With DOSBox) > Turbo Pascal (With DOSBox) or Open File Explorer to open the software



See more items for details:

<u>Shortcut</u>

View Version and Documents

Make and run my Program

First to create and run the software, create a new file by going to File> New ...

Programming in Pascal code, if you don't know Pascal programming, see this example to know in the section <u>Sample in Pascal</u>

When programming the Pascal file, compile the file into Compile> Compile (or press

ALT + F9). If successful, the following dialog box will appear.



When programming the Pascal file, to run the file, go to Run> Run (or press F9). If successful, the program will run.

NOTE: in the process of compiling or running the program, if there is an error (the compiler has an error that will not show the above dialog box), an error will be reported, see section Error in Pascal for details.

Use Turbo Pascal

This section includes Turbo Pascal's basic usage instructions, including the following sections:

- Notes When Using Software
- New File
- Open file
- Save file
- Change Dir
- Tools for programming
- Run and Complie
- Error in Pascal
- Clear and Refresh DOS Scrren
- Window manage
- Use other functions
- Exit Turbo Pascal
- Sample in Pascal
- Note When using a unikey with Turbo Pascal (With DOSBox)
- Keyboard shortcut

For other uses, see <u>More Help</u> for details.

Notes When Using Software

Here are some things to keep in mind when using software:

• To Compile file Pascal, Please Save File Before Use Command

(Note: Will not Compile or run File Pascal if In Programmer File Has Programming Error, See Error In Pascal to see what the error is.)

• To Run file Pascal, Please Save File Before Use Command

(Note: Will not Compile or run File Pascal if In Programmer File Has Programming Error, See Error In Pascal to see what the error is.)

• Do not close the window By clicking the X on the left corner of the window you have to

go to File> Exit, if not, you can lose the file you are working on if you have not already.

• Do not click away from the software window if you are running the program,

including using the key combination to switch the Alt + Tab window, otherwise you will not be able to click on the menu bars and other components in Turbo Pascal.

• If you get a typo in Turbo Pascal (With DOSBox), turn off the typing support in your computer.

New File

To create a new File in Turbo Pascal (With DOSBox), boot into Turbo Pascal (With DOSBox). By default a file named Welcome.txt is available on the screen for notify note when using the software. To start creating a new file for programming, go to File> New to create a new file.

Open file

If you want to open a file you have made and save it to your computer. Go to File>

Open (or press F3) to enter the open dialog box:

۲ (•)	Open a File
Name	
*.PAS	↓ Open
Files	
ABOUT.PAS	Replace
	Cancel
	Help
ABOUT.PAS 77	48 May 4, 2019 10:16mm
	the second second

In the dialog box open, we select the file to open by selecting the file ending in .pas in the Files file table, then click Open to open.

When we select the file .pas we can see the date and time of file modification, file size (Byte unit) at the bottom of the file picker (yellow square frame in the picture). If you want to open the file in other folders, click ...\ to view the parent folder. Click [Folder Name]\ to open the folder

• Tips:

By default Turbo Pascal only displays the .pas file, if you want to display files other than .pas, in the Name field, enter *.<File format to display> if you want to show the file with the specified extension or type *.* if you want to display all file formats.

Also in this field you can enter the path if you want to enter the directory directory quickly

To quickly open the file, double-click the file to open.

You can use the history list to re-enter text that you've already entered, click the arrow icon to the right

If you open the file by pressing Replace, you will open the selected file and close the file you are opening, notice if the unsaved file will have a message asking to save the file before opening the selected file.

Note: There will be some files of the form <file name (incomplete)>~1.pas. These are file names that exceed 7 characters. Turbo Pascal cannot display the file name correctly but still open the file normally.

Save file

Save file on Turbo Pascal

If you want to save the created file, go to File> Save (you can press F2) to save the file

Save file as	Save File As —	
Sample	1	ОК
Files ABOUT.PAS		
HELLO.PAS		
		Cance 1
		Help
C:NTPWDBNBINN*.I	PAS	
ABOUT.PAS 77	May 4, 2	019 10:16pm

The file save dialog box appears, enter the file name in the Name field and click OK to save.

Tip: If you want to reuse the file name, click the file name already in the file list table and edit the file name and save.

To save in another folder, use the directory operation as in the file open dialog box. If you want to overwrite the file, click the existing file name and save it, there will be a message that you want to overwrite the existing file, select overwrite to save.

You can use the history list to re-enter text that you've already entered, click the arrow icon to the right

Note: The file name must be no more than 7 characters (including spaces).

The section below selects the file name that will contain the date and time information to create the file as shown in the file open dialog box.

If the file has been saved before, when you click the save button, it will save the file changes, and if you want to save with another name, go to File> Save As ... and save the same way as above.

Change Dir

If you want to change the default save path, go to File> Change Dir ...

[] Change Directory	
Directory name	
	014
Drives	
	Chdir
└──BIN	
	Revert
	Help_

Here we change the default save path by selecting the directory in the Directory tree (Directory Tree).

You can also enter the path in the Directory Name field

You can use the history list to re-enter text that you've already entered, click the arrow

icon to the right

Click the Chdir button to refresh the directory tree

Press the Revert button to bring back the path you changed last.

After changing click OK to save.

Note: To save as the default setting in subsequent runs, go to Options> Save

Tools for programming

Turbo Pascal (With DOSBox) provides some tool functions in programming, how to use these tools is guided below.

Cut, Copy and Paste

Turbo Pascal has a way to copy, cut and paste them in Word, but other usage mechanisms.

- To copy a piece of text, select the original paragraph and click Edit> Copy (or press Ctrl + Ins).
- To cut a piece of text, select the text to cut and click Edit> Cut (or press Shift + Del).
- To create a paragraph, select the text you want to cut and click Edit> Paste (or press Shift + Ins).

Note: If you paste blank, just do the above, if you want to replace the existing text override, select the text to overwrite and go to Edit> Delete (Or press Ctrl + Del) then click Copy or Paste at that location.

In addition, Delete button in Edit also deletes existing text, to delete existing text, go to Edit> Delete (Or press Ctrl + Del)

Find and Replace

• To Search for a piece of text or code, go to Search> Find ...

The search dialog box appears, I enter the code, the phrase to search in the Text to Find input field. In addition, you can change the results, filter the search results by adjusting options in Options, Direction. Scope and Origin (Red frame in the image). After finishing click OK to find.

You can use the history list to re-enter text that you've already entered, click the arrow icon to the right



• To replace a piece of text or code, go to Search> Find ...

The dialog box appears, I enter the code, the phrase to search in the Text to Find input field and enter the replacement word in the New Text input field. Alternatively, you can change the results, filter the search results and replace the search by adjusting the options in Options, Direction. Scope and Origin (Red frame in the image). After finishing, click OK to find and replace. If you click Change All will search all the search terms and replace them all.

You can use <u>the history list</u> to re-enter text that you've already entered, click the <u>arrow</u> <u>icon to the right</u>

[]]	ace
Text to find <mark>tgds</mark>	↓
New text tgds	1
Options	Direction
[] Case sensitive	(•) Forward
[] Whole words only	() Backward
[] Regular expression	
[X] Prompt on replace	
Scope	Origin
(•) Global	(•) From cursor
() Selected text	() Entire scope
OK Change all	Cancel Help

Go to line number

To find a line, go to Search> Go to line number ... and enter the line number in the Enter New Line Number box and click OK.

You can use <u>the history list</u> to re-enter text that you've already entered, click the <u>arrow</u> <u>icon to the right</u>

Find Error and go to last error

- To find the error, go to Search> Error Search and enter the error address in the Error address box and click OK to Search. (You can use <u>the history list</u> to re-enter text that you've already entered, click the <u>arrow icon to the right</u>).
- Go to last error is command displays the last compile-time error message at the top of the screen and positions the cursor near where the error occured. No error message is displayed if the last compilation was successful.

Run and Complie

When programming the Pascal file, compile the file into Compile> Compile (or press ALT + F9). If successful, the following dialog box will appear.



When programming the Pascal file, to run the file, go to Run> Run (or press F9). If successful, the program will run.

If you run the hidden program, you can view the output of the program by opening the <u>Output window</u>.

See the DOS screen status by going to <u>User Scrren</u>.

If the screen is too messy, you can use the <u>Clean / Refresh DOS Scrren tool</u> to clear the screen before running, so it will be better

NOTE: in the process of compiling or running the program, if there is an error (the compiler has an error that will not show the above dialog box), an error will be reported, see section Error in Pascal for details.

Error in Pascal

When programming Pascal When there is a Programming Error or when the program fails, Turbo Pascal will Report Error As shown below, the error codes and error information are located below..



To Know About Pascal Programming Errors Or Error When Starting File, You can see the following ways: Go to Help> Error Messages and edit the file to delete the above programming error so that the file can be compiled.



Clear and Refresh DOS Scrren

Turbo Pascal (With DOSBox) provides an important tool in programming.

It's a Clean / Refresh DOS Screen tool, which clears the text on the Dos screen, making the screen blank if the screen gets too messy when running Pascal software multiple times.

Before Use Clean / Refresh DOS Screen tool



After Use Clean / Refresh DOS Screen tool



To run this tool go to Tools> Clean / Refresh DOS Screen (Shift + F3).

me	skip 0. Program: TURBO	- 🗆 🗙
bug	Tools Options Window	Help
TE	Messages	
	Go to next	Alt+F8
	Go to previous	Alt+F7
	Grep	Shift+F2
	Clear Refresh DOS Scree	en Shift+F3
	About	

Window manage

The Window menu contains commands for manipulating and opening windows. Most of the windows you open from this menu have all the standard window elements, like scroll bars, a close box, and zoom icons.



- Choose Window> Tile to tile all your open Edit windows.
- Choose Window> Cascade to stack all open Edit windows.
- The Refresh Display command restores the IDE screen. This is handy if your program has accidentally overwritten the screen.

• Choose Zoom to resize the active window to the maximum size.

If the window is already zoomed, you canchoose this command to restore it to itsprevious size.

You can also double-click anywhere on thewindow's title bar (except where an iconappears), or on the Zoom box in the window'supper right corner (2), to zoom or unzoom the window.

- Choose Next to make the next window active, which makes it the topmost open window.
- Choose Previous to make the most-recently active window be active again.
- Choose Close to close the active window. You can also close by pressing the key in the left corner of the window (1).
- The List command opens the Window List dialog box, which lists all the windows currently open.
- If you press Shift while you use the arrow keys, you can change the size of the window. When it's at the size you want, press Enter.

If a window has a Resize corner, you can drag that corner to resize the window (3).

• When you choose Window> Size/Move, the active window moves in response to the arrow keys. Once you've moved the window to where you want it, press Enter. You can also move a window by dragging its title bar.

Use other functions

• The history list attached to an input box lists whatever text you typed the last few times you used the dialog box.

You can get to the history list whenever you see a down-arrow icon to the right of an input box.

You can use the history list to re-enter text that you've already entered. You can also edit an entry in the history list directly.

Press Esc to exit from the history list without making a selection.



• The commands on the Debug menu control all thefeatures of the integrated

debugger. You can change default settings for these commands in the Options> Debugger dialog box.

The Debug Bar

These are the available menu commands:

Breakpoints, Call stack, Register, Watch, Output, User screen, Evaluate/Modify, Add

Watch, Add Breakpoint

The following is the function of **Output** and **User Scrren (Alt+F5)**

Output-View DOS screen when compiling files in a window. Display the current status that is happening on the DOS screen.

BOSBox 0.74-2, Cpu speed: 3000 cycles, Frameskip 0, Program: TURBO File Edit Search Run Compile Debug Tools Options Window Help HELLO.PAS { This is a simple example to create the word Hello world on the screen, Created by Luu Nguyen Thien Hau } { day la vi du don gian de tao dong cu hello world tren man hinh , tao boi luu nguyen thien hau } **Program Hello_World:** { Name the program / khai bao ten chuong trinh } {Note: The name does not use spaces, or if so use the "_" } { Chu Y : Ten CHuong trinh khong duoc co dau cach, hoac neu co thi phai co dai "_" ngan cach } { Main program body/ Phan Chong trinh chinh } BEGIN Writeln('Hello World !'); { Print out simple Hello World text } =2=[1]= =[🛯]= — Output = Hello World ! Hello World ! F1 Help ↑↓→← Scroll F10 Menu

User Scrren (Alt+F5)-View the current status on the DOS screen.



The Options Bar

• The Options menu contains commands that let you view and change various default settings in Turbo Pascal. Most of the commands in this menu lead to a dialog box.

Compiler..., Memory sizes..., Linker..., Debugger..., Directories..., Tools, Environment, Open, Save, Save as

Exit Turbo Pascal

To exit Turbo Pascal, go to File> Exit to exit

Note, if there are any unsaved files, it will notify you if it is saved before exiting It is recommended to use this method to exit Turbo Pascal, do not use the key combination to exit or click the X corner of the window because it will cause the file to be saved or changed.

• See more items for details:

Keyboard shortcut

Notes When Using Software

Sample in Pascal

This is an example of pascal programming

Program HelloWorld.Pas	
Program HelloWorld;	
uses crt;	
Begin	
Clrscr;	
Writeln('Hello World');	
Readln;	
end	
Clrscr; Writeln('Hello World'); Readln; end	

Inside

program Helloworld; : Program Declaration, Helloworld is the name of the Program
Uses Crt; : Library Declaration, Crt Library Name Required
Begin: Begin the command
Clrscr; Clear Screen Commands
Writeln ('Hello World'); : On Screen Display, On Screen Display ('_')
ReadIn; : stop the screen until the user press enter
End. End the Program
Other Commands
TextBackground (White); screen color change, color name in (_)
TextColor (White); Change screen color, color name in (_)

NOTE: All Commands Must Have; before ending the Or statement before concluding the program declaration Or library. (Except the Begin command and other commands)

Note When using a unikey with Turbo Pascal (With DOSBox)

ONOTE: These are articles related to Error typing Vietnamese software.

To avoid having the wrong character set when programming Pascal on Turbo Pascal (With DOSBox) software, turn off Unicode or switch to English mode before programming.

To switch to English mode, scroll to the right of the taskbar, find the [V] icon and press to switch to [E]



To turn off Unikey on the Unikey interface and press the end to turn off Unikey

	UniKey 4.3 RC4	×
Điều khiến Bảng mã:	Unicode 🗸	🖌 Đóng
Kiểu gõ:	Telex V	🚺 Kết thúc
Phim chuyen:	CTRL + SHIFT O ALT + Z	🕂 Mở rộng
🧇 Hướng dẫn	n Thông tin Mặc định	http://unikey.org

Keyboard shortcut

• Keyboard shortcuts In DOSBox

Shortcuts	Description
CTRL-E	Kill (close) DOSBox. (Warning : Please Save File Before Before closing with this Off key, it is not recommended to use this shortcut key)
ALT-ENTER	Switch to full-screen (and back). (Windows XP/Vista/7 Only)
ALT-PAUSE	Pause emulation.

• Keyboard Shortcut In Turbo Pascal

	-
Кеу	Action
F3	Open The File Pascal
F2	Save The File Pascal
Alt+X	Exit Turbo Pascal
ALT-Backspace (<-)	Undo Action
SHIFT-DEL	Cut
CTRL-INS	Сору
SHIFT-INS	Paste
CTRL-DEL	Delete
CTRL-F9	Run Programs
F8	Step Over
F7	Trace Into
F4	Go to cursor
ALT+F9	Compile Program
F9	Make
Shift+F2	Grep
Shift+F3	Clear/Refresh Scrren DOs

CTRL-F5	Size/Move Window	
F5	Zoom Window	
F6	Next Window	
SHIFT+F6	Previous Window	
ALT+F3	Close Window	
ALT+0	List Window	
• Shortcuts Other : Ctrl-F3, Alt-F5, Ctrl-F4, Ctrl-F7,		

• Other DOSBox Shortcuts

Кеу
Action
ALT-ENTER
Switch to full-screen (and back).
ALT-PAUSE
Pause emulation.
CTRL-F1
Show the keymapper configuration screen,
CTRL-F4
Update cached information about mounted drives. Useful if you changed something
on a mounted drive outside of DOSBox
. Also cycles through disk images mounted using IMGMOUNT
CTRL-F5
Save a screenshot (goes to capture folder).
CTRL-ALT-F5
Start/Stop recording of AVI video. NOTE: You may well have some problems with
this, please see Recording Video for more information.
CTRL-F6
Start/Stop recording sound output to a wave file (goes to capture folder).
CTRL-ALT-F7
Start/Stop recording of OPL commands.(not recommended to use this shortcut key)
CTRL-ALT-F8
Start/Stop the recording of raw MIDI commands.(not recommended to use this shortcut key)
CTRL-F7
Decreases frameskip.
CTRL-F8
Increases frameskip.

CTRL-F10

Capture/Release the mouse (if you need to use the mouse within DOSBox).

CTRL-F11

Decrease DOSBox cycles (slows down the emulation).

CTRL-F12

Increase DOSBox cycles (speeds up the emulation)

Advanced Use

This section includes Turbo Pascal's high-performance instructions, including the following sections:

- Modify and Repair
- Directory Structure in Turbo Pascal (With DOSBox)
- Edit DOSBox Conf file

For other uses, see <u>More Help</u> for details.

Modify and Repair

This article explains how to modify already installed Turbo Pascal (With DOSBox) using Turbo Pascal (With DOSBox) Installer. We can repair Turbo Pascal (With DOSBox) using Turbo Pascal (With DOSBox) Installer. If we missed installing in Turbo Pascal (With DOSBox) we need not uninstall and again install. We can add directly without uninstalling only which we have missed by Turbo Pascal (With DOSBox) Installer.

Open Turbo Pascal (With DOSBox) Installer

Choose Add or Remove Programs in Control Panel, select the program in the Add or Remove Programs dialog box and click the Change button.

Turbo Pascal (With DOSBox) 7.2.4 Setup		
Modify, Repair or Remove installation Select the operation you wish to perform.		
i.	<u>M</u> odify Allows users to change the way features are installed.	
1	Repair Repairs errors in the most recent installation state - fixes missing or corrupt files, shortcuts and registry entries.	
8	<u>R</u>emove Removes Turbo Pascal (With DOSBox) 7.2.4 from your computer.	
Advanced Installer	< Back Next > Cancel	

The Turbo Pascal (With DOSBox) Installer will open and then click "Yes" button, There are three important options we can see in the installer.

<u>Click the sections below to see the effects and how to use the above</u> <u>functions:</u>

- <u>Modify</u>
- <u>Repair</u>
- Uninstall

Modify

Modify is used to add extra features in Turbo Pascal (With DOSBox). If we have already installed Turbo Pascal (With DOSBox) but forgot to install any features, we can use modify option we add new features. We do not uninstall and again re-install full Turbo Pascal (With DOSBox).

First, click **Modify** we can see already installed features are selected. Now, select what are the new features need to add or remove in Turbo Pascal (With DOSBox). We can see the

installation size for selected one in right side in Turbo Pascal (With DOSBox) Installer.

Turbo Pascal (With DOSBox) Setup					
Custom Setup Select the way you want features to be installed.					
	Click on the icons in the tree below to change the way features will be installed.				
	Main Feature Vietnamese Writting Mode User Manual & Help This feature requires 0KB on your hard drive.				
Advanced Installer Reset Disk Usage < Back Next > Cancel					

Click Next button. Then click Install to start installing the selected components. We can see the Installation Progress.

After successful, press Finish to end the process. You can already use the newly added components.

Repair

Any problem or corrupted any files in Turbo Pascal (With DOSBox) use repair to resolve problems.

First, open Turbo Pascal (With DOSBox) Installer and click repair options which look like below screenshot.

谩 Tui	rbo Pascal (With DOSBox) 7.2.4 Setup	
Repair Turbo Pascal (With DOSBox) 7.2.4 The Setup Wizard is ready to begin the repair of Turbo Pascal (With DOSBo		
Click "Repair" to repair the installation of Turbo Pascal (With DOSBox) 7.2.4. If you want to review or change any of your installation settings, click "Back". Click "Cancel" to exit the wizard.		
Advanced Installer	< Back Repair Cancel	

Then click Repair to start the repair process. The repair will take some minutes to complete. If need to cancel repair, click Cancel to stop the repair.

After successful, press Finish to end the process.

Uninstall

We can uninstall Turbo Pascal (With DOSBox) using Turbo Pascal (With DOSBox) Installer. If no need forTurbo Pascal (With DOSBox) we can uninstall without going to "Programs and Features" in Control Panel. Open Turbo Pascal (With DOSBox) Installer and click Remove option.

After click Remove then click Remove to continue to uninstall.

Uninstall will continue after clicking Remove button. Now progress bar will be open and can see the uninstall percentage.

After successful, press Finish to end the process. You have uninstalled Turbo Pascal (With DOSBox) successfully, you can reinstall at any time by running the software's installation file.

Edit DOSBox Conf file

You can edit the DOSBox's .conf file using tab "Configuration" in Programming Center.

In the tab "Configuration" section, click "Edit Normal Mode file" of "Edit Vietnamese Writing Mode file" to start editing the DOSBox .conf file, depends on the mode you want to edit. Note that this may change the way DOSBox works. For more information on how to set up DOSBox, click "DOSBox Configuration Help" or "DOSBox Manual" in tab Help to learn more.

Turbo Pascal (With DOSBox) - Programming Center	– 🗆 🗙			
Exit About				
Main Configuration Help About	Version 7.3.4			
DOSBox Click the following buttons to access and configure DOSBox's .conf file in run mode. Note that accessing and modifying these files requires a knowledge of DOSBox settings and may change the way DOSBox works. To learn more about how DOSBox works, click the "DOSBox Configuration Help" button below to get help. Each mode has its own DOSBox configuration file, click the button below to access the DOSBox configuration file of the mode to be repaired.				
Edit Normal Mode file Edit Vietnamese Writing Mo	ode file			
DOSBox Configuration Help				

More Help

You can find other software tutorials in the Help Menu in the Turbo Pascal Menu



Other Infomantion

- If you have any suggestions for any bug fixes please report web site error at sourceforge.net here: web site error
- You can discuss the software here on page SF.net
- Website: https://turbopascal-wdb.sourceforge.io