

# WTC Mini – a miniature Waveterm C

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## Introduction

WTCMini is a miniature variant of Waveterm C.

Here's a typical view of wtcmini, directly after initialization:

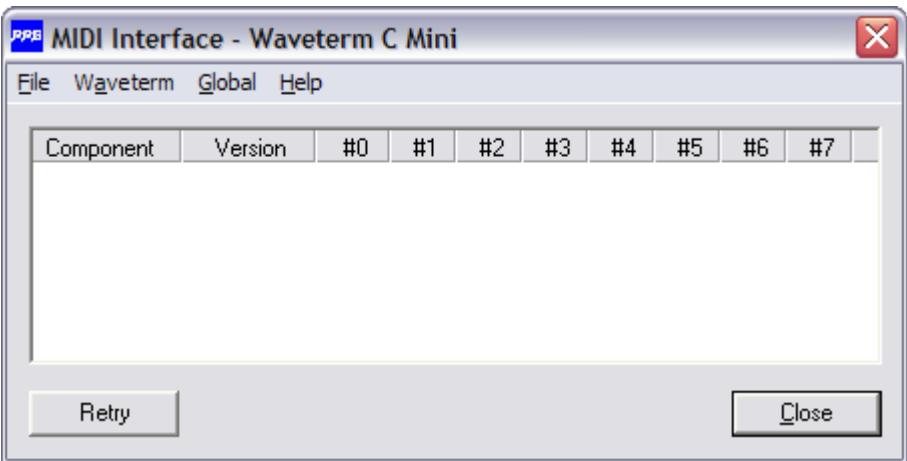


Image 1: Typical initial wtcmini view

... not much going on here, it seems. Deceiving... before you can see this window, wtcmini has already executed some important initialization steps:

1. enumerate and instantiate the available hardware interfaces. If more than one interface is found, wtcmini presents a dialog like this:

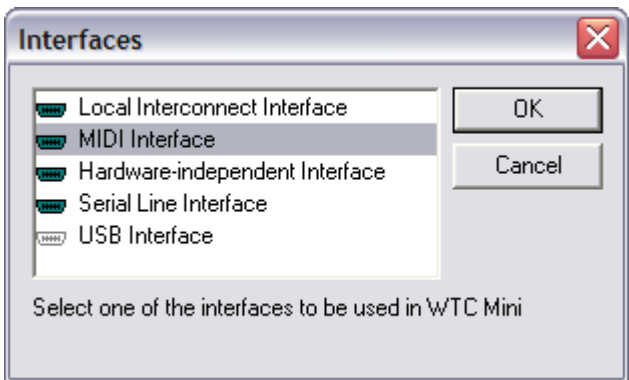


Image 2: Interface selection dialog

Here, you can select one of the available interfaces; in contrast to Waveterm C, wtcmini can only use one interface. Select the one you're going to use and either press Enter, double-click

on it, or click OK. Pressing Escape or clicking on Cancel causes wtcmini to come up without a loaded hardware interface... which is a relatively senseless state.

2. open the interface
3. enumerate all Waves, EVUs and other devices attached to the interface.  
Most likely, this will fail the first time, since most interfaces need additional configuration before they can work.  
Here's an example how it looks like if wtcmini finds a fully populated PPG Bus equivalent:



Image 3: Wtcmini with fully populated "PPG Bus"

OK, back to the initial image. Wtcmini is up and running, but doesn't show anything. What's next?

## Configuration

There are some global initialization steps that have to be done before wtcmini can really be used. All of them can be reached from wtcmini's menu bar.

### Global / Interfaces

Here, you can configure the interfaces that wtcmini uses. You don't necessarily have to do this; it's only interesting if (a) there's more than one interface DLL and (b) you always want to use the same subset of the available interfaces. In this case, you can select them here.

### Global / MIDI Devices...

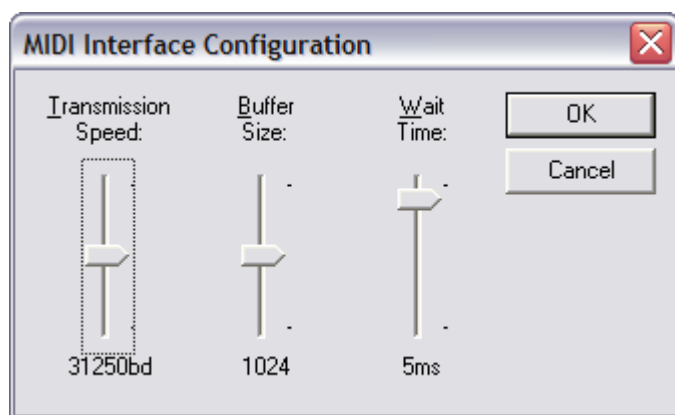
Wtcmini can use a MIDI In and Out device. In the big Waveterm C package, this can be used to "translate" incoming MIDI messages into PPG Bus commands. In wtcmini, it is only used for the

MIDI interface... which is the currently the only one in the package, so it *is* important to configure the used MIDI devices. Set them to the MIDI port where the V8.3 Wave or EVU you want to talk to is attached. It is advisable to leave the “MIDI Thru” box ***unchecked***, since PPG devices have the unfortunate little peculiarity that they reflect incoming MIDI messages to the output port. If wtcmini also does it, you create a MIDI feedback loop.

Once this has been done, wtcmini should be able to talk to the attached Waves and EVUs... if the currently used interface is correctly configured.

### ***Waveterm / Interface / Configure...***

Some interfaces, like the Local Interconnect Interface, have no configuration parameters. Others do... and especially the MIDI interface needs careful configuration.



*Image 4: MIDI Interface configuration dialog*

Normally, I'd say “just leave this alone”... unfortunately, Microsoft goofed big time with their MIDI drivers. If you send and receive big SysEx messages, the program can split them and send or receive them in parts – but not with the default Windows MIDI drivers. They destroy the messages if the buffers are smaller than the SysEx messages. Therefore, it is advisable to set the buffer size to the allowed maximum (32767), unless you know that your MIDI card came with better drivers.

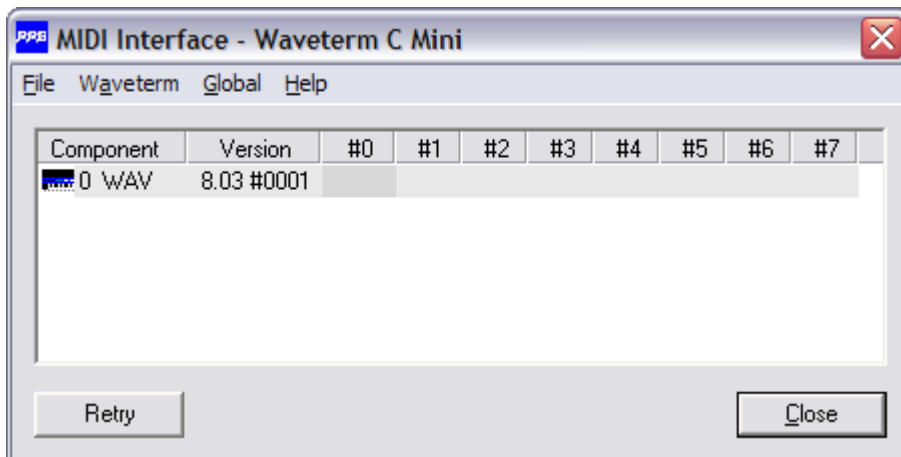
OK, we're nearly through, only one more thing is missing...

### ***Waveterm / Disk / Set Path...***

Wtcmini searches for files in a defined directory (unless you're specifically selecting one with the File / Open... menu entry). If you don't set the path to this directory, wtcmini won't be able to send anything to the attached PPG devices.

## Operation

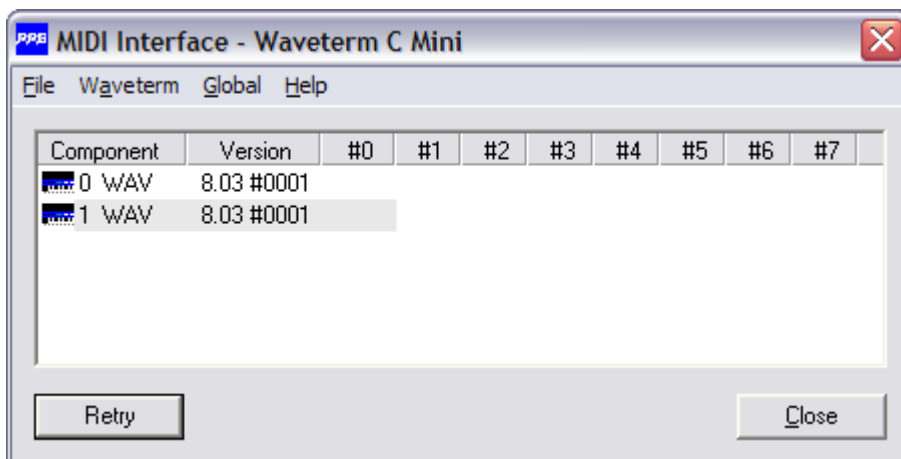
After the necessary configuration steps have been set, you should be able to see at least one attached PPG device, like this:



*Image 5: Wtcmmini found one attached Wave 2.3 with V8.3*

There's one line per attached component. The currently selected component is shown with a light gray background. This also shows whether the attached device is an 8-bit device with one bank (i.e., a Wave 2.2) or a 12-bit device with 8 banks (i.e., a Wave 2.3 / EVU): only the selectable banks are shown in gray. The currently selected bank of the currently selected device, if there's more than one bank selectable, is shown in a darker gray.

Here's an example how an attached 2.2 would be displayed:



*Image 6: Wave 2.3 and 2.2 attached, Wave 2.2 selected*

As you can see, banks #1-#7 are not shown in gray here.

If you've properly configured the directory where the data files are expected (see "Waveterm / Disk / Set Path..." on page 3 for details), you can load a file into a specific bank by right-clicking on it and selecting "Load..." from the resulting pop-up menu.

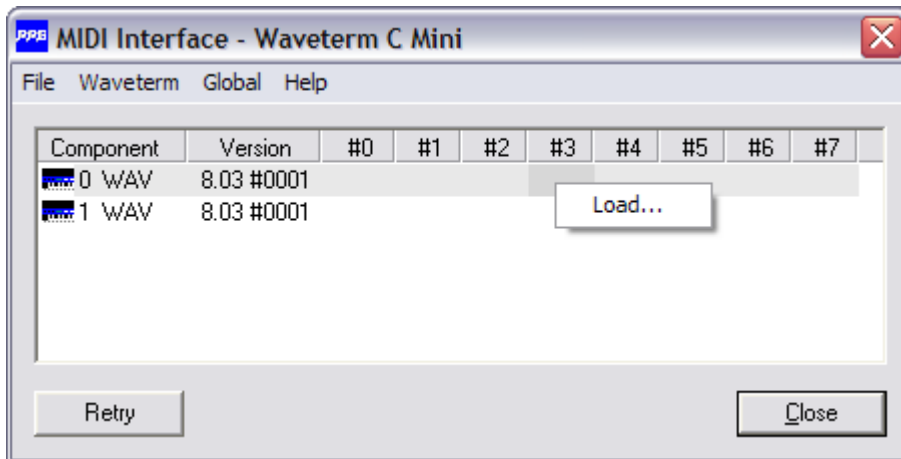


Image 7: Bank 3 of the Wave 2.3 Component 0 right-clicked to load a file

Selecting “Load...” opens the following dialog:

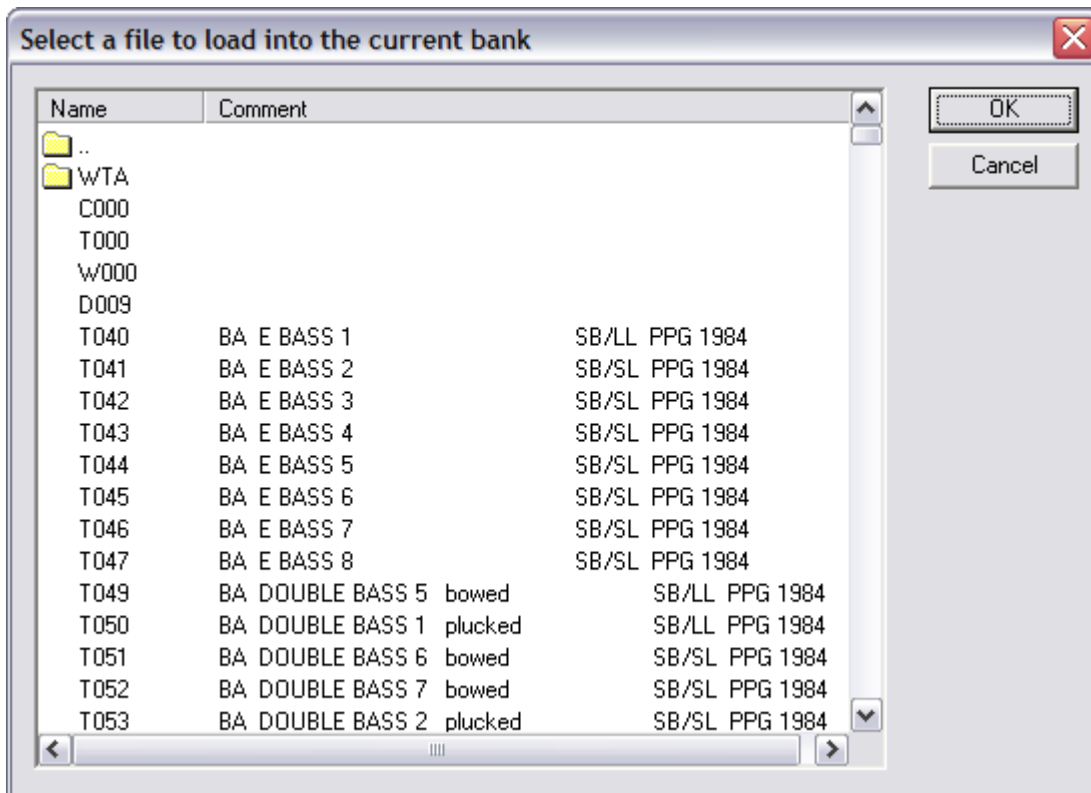


Image 8: File selection dialog

Wtcmmini examines all files in the configured directory; all usable files are displayed. If the files contain comment information, as most of the PPG System Library files do, it is displayed here, too.

Double-clicking a file, or selecting it and pressing OK, sends the file's contents to the selected component. Depending on the file and connection types, this can take a very short (Waveterm C USB device) or rather long time (MIDI or serial connection).

After the file has been loaded into the bank, wtcmmini displays the currently loaded bank in the list, like this:

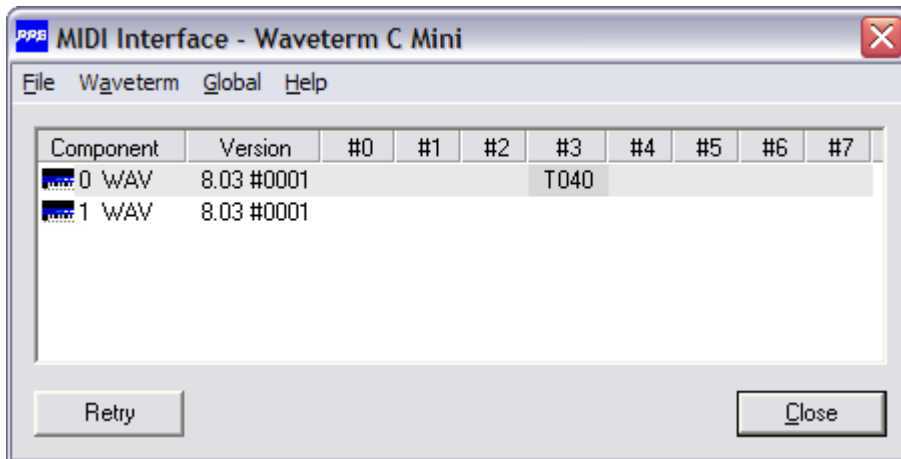


Image 9: T040 loaded into bank #3 on Wave 2.3

That's about all there is to it.

Nearly.

There's one more menu entry that needs to be discussed:

### ***File / Open...***

While the normal load dialog only shows a subset of the files in the configured directory – the files that wtcmini knows how to interpret, using the original PPG filename and contents – this menu entry can be used to load files from other directories. *And* it can be used to load .WAV files into the attached component (8 or 16 bit, mono or stereo; stereo is silently converted to mono).

That's it – have fun!

Hermann Seib

Vienna, May 3<sup>rd</sup>, 2010