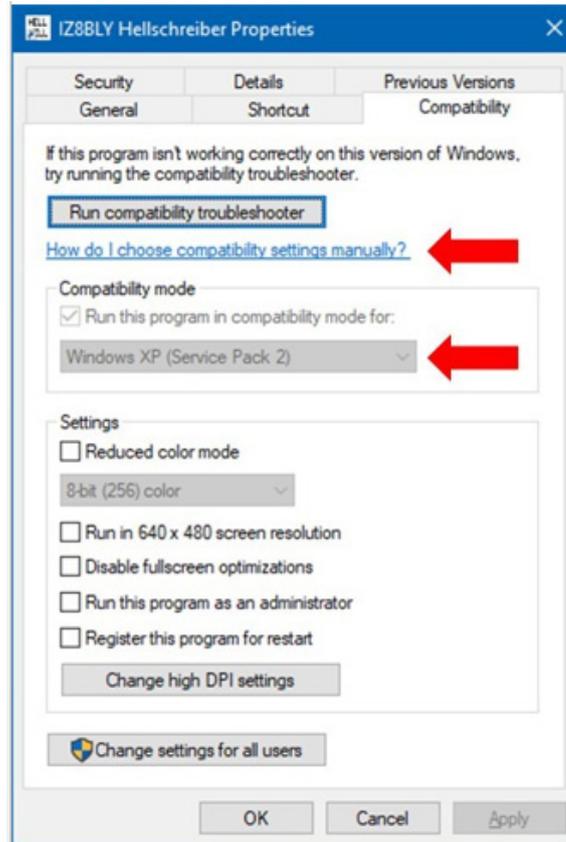


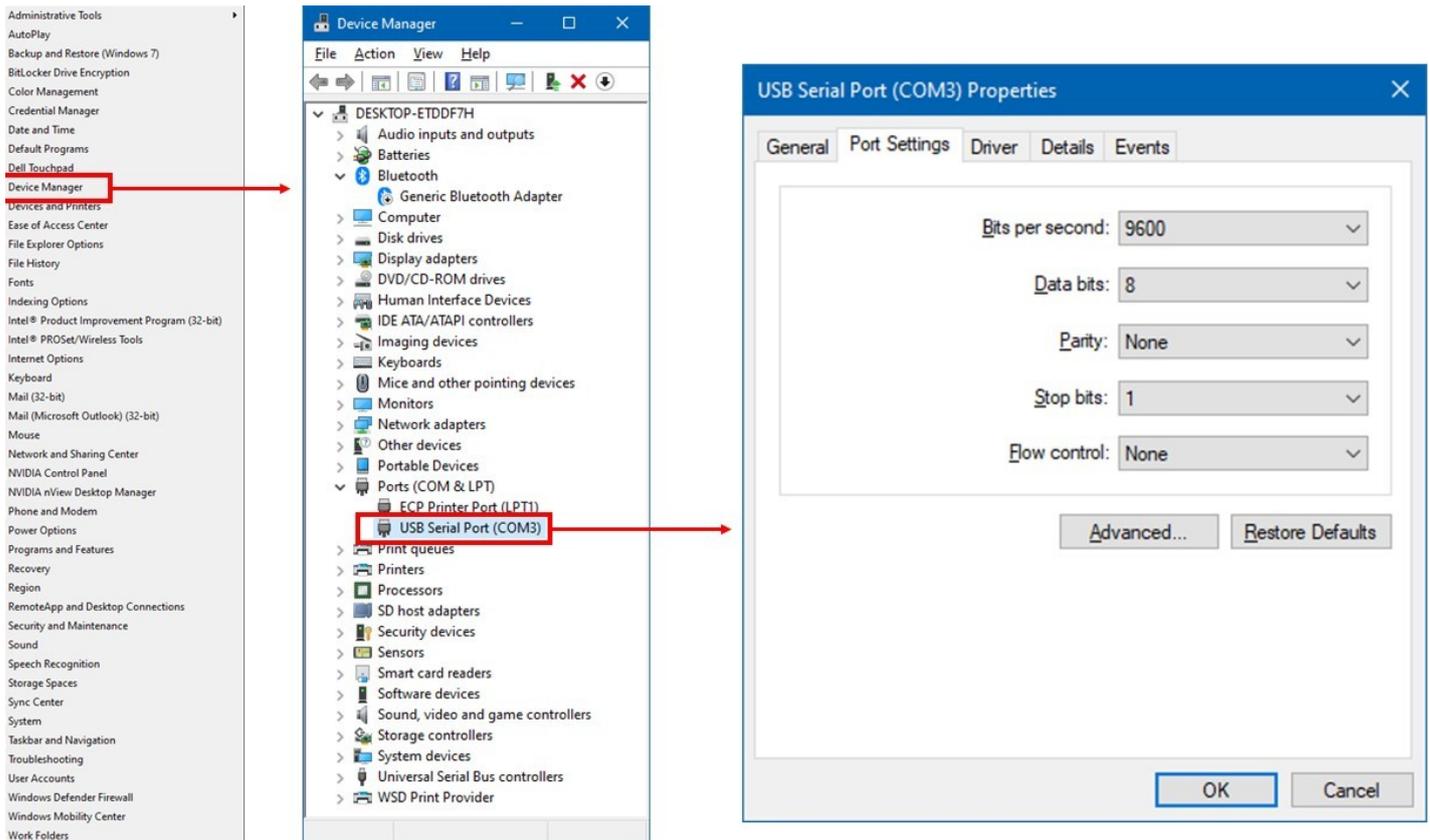
RUNNING IZ8BLY HELLSCHREIBER SOFTWARE UNDER WINDOWS

The wonderful IZ8BLY Hellschreiber program was developed by Nino Porcino (IZ8BLY) in the early 1990s for Windows XP. To make it run under Windows 7/8/10/11 there are a couple of issues that you must be aware of.

- **If you want to store settings and Hell-screen snapshots** (manually via the “camera button”, or by activating “auto save bitmap snapshots” via “files”), you may have to run *IZ8BLY_hellschreiber.exe* as “administrator”. There are at least a dozen ways to do this under Windows. The most common ones are:
 - a) Open the Windows “Start Menu” (bottom left of the screen). Then, in the “All Programs” list, find the shortcut of Hellschreiber program, and right-click (or press-and-hold) on it to open a contextual menu. Then: click on (tap, or hover over) the “More” option, and then click (or tap) on “Run as administrator.”
 - b) Open File Explorer and navigate to the standard directory for this program (i.e., *C:\Program Files (x86)\Hellschreiber*). Right-click (or press-and-hold) on the *IZ8BLY_hellschreiber.exe* file name to open the contextual menu. Then click (or tap) on “Run as administrator.”
 - c) Find the desktop shortcut for the program. Then, right-click (or press-and-hold on it) to open a contextual menu. Click or tap on the “Run as administrator” option.
 - If there is no such shortcut on the desktop, first create one: open File Explorer and navigate to the standard directory for this program (i.e., *C:\Program Files (x86)\Hellschreiber*). Right-click (or press-and-hold) on the *IZ8BLY_hellschreiber.exe* file name to open the contextual menu. Then click (or tap) on “Create shortcut”. Then click-and-drag the shortcut file to the desktop.
- **Make sure that you have activated the “XP Service Pack 2” compatibility:** under Windows „Start“ (or in the “C:\Program Files (x86)\Hellschreiber“ directory: right-click on “IZ8BLY Hellschreiber.exe”, then select/left-click “properties”, then click on “compatibility” and activate the compatibility “XP Service Pack 2” mode.



- **Set up** is relatively straight forward: audio interface and PTT/COM interface (if your transmitter does not have a VOX function, or you do not want to use it): via “file” (top left-hand corner of the IZ8BLY window) → “preferences” → “PTT”.
 - “PTT control” – **COM Port number**: the IZ8BLY program only allows selecting COM ports 1, 2, 3, and 4. If the actual COM port that you want to use on your PC has a number > 4, you will have to rename/reassign the actual COM port to 1/2/3/4. This is easy to do via Windows “control panel” → “device manager” - as long as the target COM-number is not in use. It will ask you if you’re sure, etc. See [this microsoft link](#) for instruction on how to do that.
 - “PTT control” – **COM Port number**: make sure that the settings of your COM port are the defaults that the IZ8BLY software uses:



- **“Soundcard”**: “receive” and “transmit” are selectable separately. I toggle the “receive” between my audio dongle (connected to the RX of my TRX) and the PC-internal audio.
 - Microsoft, in its usual infinite arrogance, has removed the handy Stereomix audio control panel function since Windows 7/8, so you cannot access *PC-internal* audio from, e.g., a Web-SDR directly. Also, the audio “In” and “TX” buttons at the top left of the IZ8BLY window do not work:



- I use the excellent [VOICEMeeter](#) freeware to create virtual audio cables (there are alternatives).
- Sometimes I activate 3-4 Web-SDRs (remote online receivers) simultaneously in my Web browser, and stagger their frequency by a couple of 100 Hz (and therefore similarly in the Hellschreiber waterfall display). This way, I can select the one with the best signal for a given station at any given time.

- The **color scheme** for the “paper tape” and “ink” is selectable via “file” → “load palette”. Over the years, I have settled for “yl2kf.pal”: it has yellow “paper” and blue-scale ink. This gives (me) the best / most visually pleasing contrast.
- Via “file” → “preferences” → “general”:
 - you can select which “**idle character**” is sent when you are typing too slowly. I have set it to “46” (blank/space), because I hate the noise it makes when someone has it set to “underscore” (default?). In the same menu, I tick the “**Force upper case letter**” box – even though I only use the official Hell font, and no Windows fonts (all have bad readability and increase bandwidth).
 - I set “**Center freq**” to 900 or 1000 Hz and “**waterfall display**” to logarithmic.
- Via “file” → “load font”, check that the (default?) **font** is “FeldReal”. Do **NOT** use any other font! The original 1930s font designed by Rudolf Hell is specifically for the best legibility while minimizing occupied bandwidth! If you do not care about legibility or occupied bandwidth, at least be decent enough to use capital (upper case) letters only.
- I hate using **programmed/macro messages** that are the modern no-brains digi modes (which is why I thoroughly dislike those modes), because the nice thing about Feld-Hell is the manageable typing speed. It is perfect for conversation-style QSOs, unlike all modern digi-modes. However, along the bottom of the IZ8BLY screen, I have programmed a couple of standard messages, like “DE N4SPP”, “BKBK”. Just right-click on a bottom and type in the text you want, to define a button.
- **Sending text:**
 - In the text entry window between the buttons and the paper tape section, transmission of typed-in (and auto reversion to RX) starts as soon as you hit the SPACE BAR or the ENTER key, whichever comes first. This is somewhat annoying, as you cannot start pre-typing a message while you are still listening/printing. **IMPORTANT** The way around this, is to type in an asterisk “*” as first character. The SPACE character is then ignored, and transmission of the text buffer does not start until you hit ENTER.
 - With “Ctl + C” you can empty the text buffer.
 - With “Ctl + X” you can interrupt the running transmission of the text buffer.
 - If you are fast, you can edit text while the transmission is running. Just click in the text string, where you want to change something.
- **Receiving:**
 - *Left*-clicking anywhere in the waterfall display will set the receive – and transmit !! – audio frequency.
 - *Right*-clicking anywhere in the waterfall display will set the center frequency to the one you set Via “file” → “preferences” → “general”.
 - Even without filters, most TRX limit audio bandwidth (incl. for TX!). I avoid selecting a frequency < 500 Hz and > 1800 Hz.
- **Using a CW transmitter:**
 - The IZ8BLY Hellschreiber program, like all software for digi-modes, is conceived for using an AM/SSB transceiver. Note that Hellschreiber is the only digi-mode that can also be used with a CW transceiver. However, only the old 1980s *MS-DOS* program by Sigfus Jonsson (LA0BX) could interface directly with a CW transceiver. To use *Windows* Hellschreiber programs, you will need to build an audio/CW interface. See [the “Keying a CW-transmitter with Hell” section of my “Hellschreiber software + rig/PC-interfacing” web page](#).