

epsilon™ EC Quick Start Guide

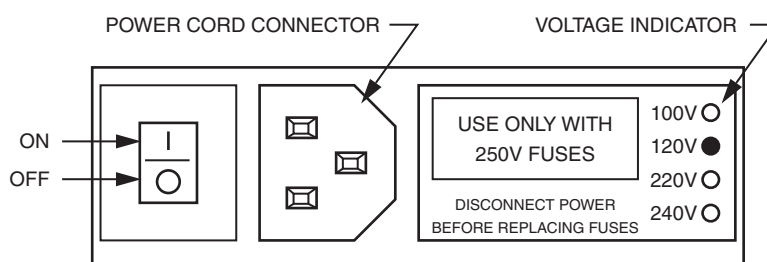
Thank you for purchasing epsilon EC. Your new BASi instrument will provide years of service for your electrochemical requirements. The epsilon EC was fully tested electronically and with a standard solution before shipping. The chemical test procedure (shown in the manual) and results are included in the folder. Please follow the procedure below when setting up your instrument. A full electronic manual (both html and pdf formats) is installed on the computer along with the epsilon software.

The manual is also available at www.BASInc.com/mans.

Power

The epsilon system requires a grounded power supply, providing either 120 or 240 V at 50/60 Hz. Before connecting the power cord, check that the indicator next to the power connection shows the correct voltage (**F1**).

Figure 1. Power connection.



If the indicator does not show the correct voltage, **DO NOT TURN POWER ON**. See the electronic manual for full instructions to change setting.

Software Installation

If you bought the epsilon EC with a computer from BASi, the software is installed on the computer. Simply unpack and set up the computer.

If you are going to use a computer not supplied by BASi, then you will have to install the software on your computer. Place the CD in your CD ROM drive. The installation disk contains different installation programs. For new instruments, select the installation program in the USB folder on the disk. Example is shown below. (Note that names may be slightly different on disk.)

USB-EpsilonEC-V161-setup.exe for Windows 2000/XP/Vista

Follow the instructions as they appear on the monitor.

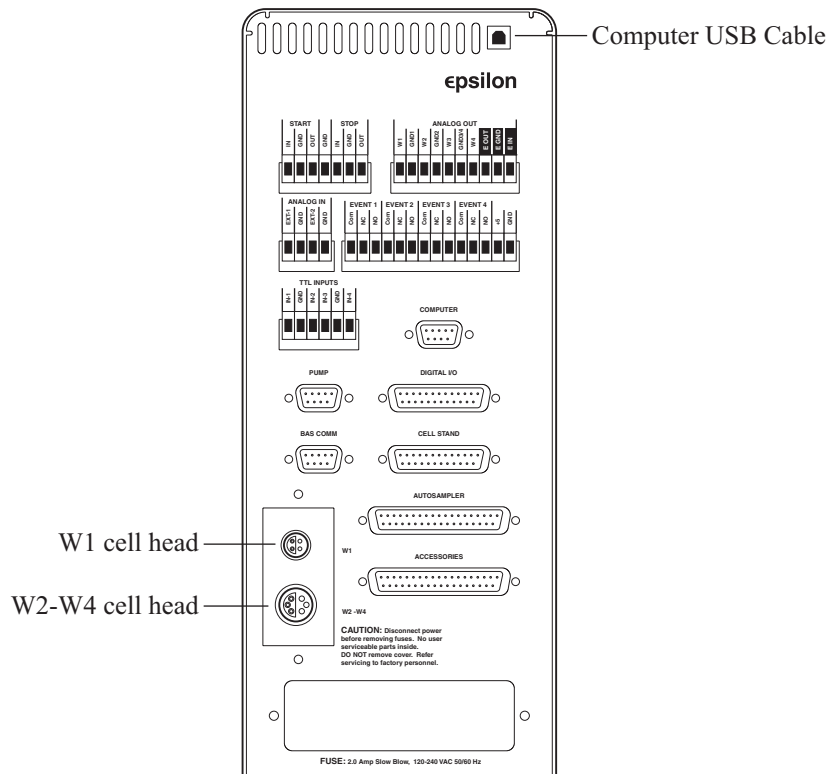
The minimum pc requirements are:

- Windows 2000/XP/Vista
- Pentium III or higher
- 512 MB RAM
- 50 MB hard drive space available
- USB port
- CD-ROM drive

Computer Connection

Connect a standard USB cable (included) between any USB port on the computer and the USB port on the epsilon EC (**F2**).

Figure 2. Cable connections.



Starting the epsilon

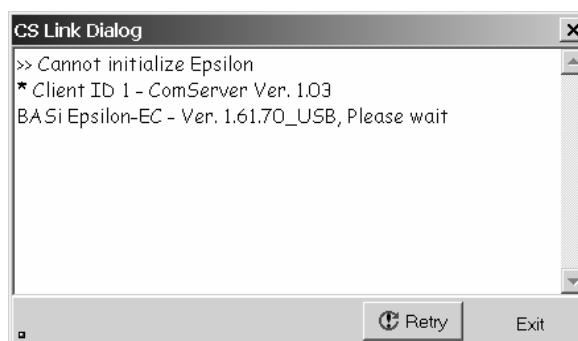
The most important part of starting the epsilon EC is establishing the link between the epsilon EC and the PC. The epsilon EC should be switched on first, and then epsilon PC software should be opened. The link between the PC and the epsilon EC will automatically be established. The status of the link will be displayed in the **CS Link Dialog** box (**F3**), which will disappear once connection has been established.

Figure 3. CS Link Dialog box.



If the link is not established (this is indicated by the message in **F4**), the user can manually try to establish the link using the **Retry** button.

Figure 4. CS Link Dialog box with link failed message.



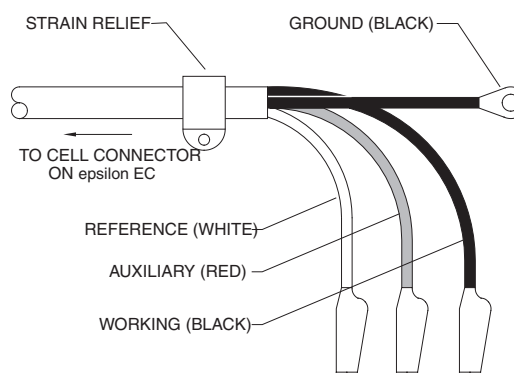
If the link is broken after it has been established, the PC and epsilon EC can be reconnected using **Reconnect epsilon** in the **Experiment** menu.

Cell Connection

The cell lead cable is the group of wires that connects the epsilon EC to the electrodes of the electrochemical cell. If the epsilon EC will be used with a BASi cell stand (e.g., C3, CGME, or RDE), please see the specific cell stand manuals for connection and operation of these accessories. To function correctly, the connected Cell Stand must be selected within the epsilon software (Setup/Manual setting dialog in the Experiment Menu).

A general purpose cell lead cable is supplied with the epsilon EC. The general-purpose cable has a silver LEMO connector that plugs into the W1 port on the rear panel (**F2**) and terminates with alligator clips that attach directly to the electrodes (**F5**).

Figure 5. Cell (electrode) end of cell lead.



There are 3 electrode leads and 1 grounded (shielding) lead. The color code is:

- Black covered wire: Working electrode lead
- Red covered wire: Auxiliary electrode lead
- White covered wire: Reference electrode lead
- Bare or black wire w/lug: Earth ground connector

A plastic mounting lug near the end of the cell cable provides relief by preventing movement of the line or cell. The mounting lug and ground lug are rarely connected under normal operation.

If the epsilon EC is configured with more than one active channel (i.e., a bi- or quad-potentiostat), the additional W2-W4 lead plugs into the **W2-W4** port (note that this port is larger than the **W1** port).

WARNING: NEVER CONNECT OR ADJUST THE CELL LEADS DURING AN EXPERIMENT OR WHEN CELL=ON. DOING SO COULD DAMAGE THE SENSITIVE AMPLIFIERS AND VOID YOUR WARRANTY.