

How to send triggers through a parallel port [E&P v3].

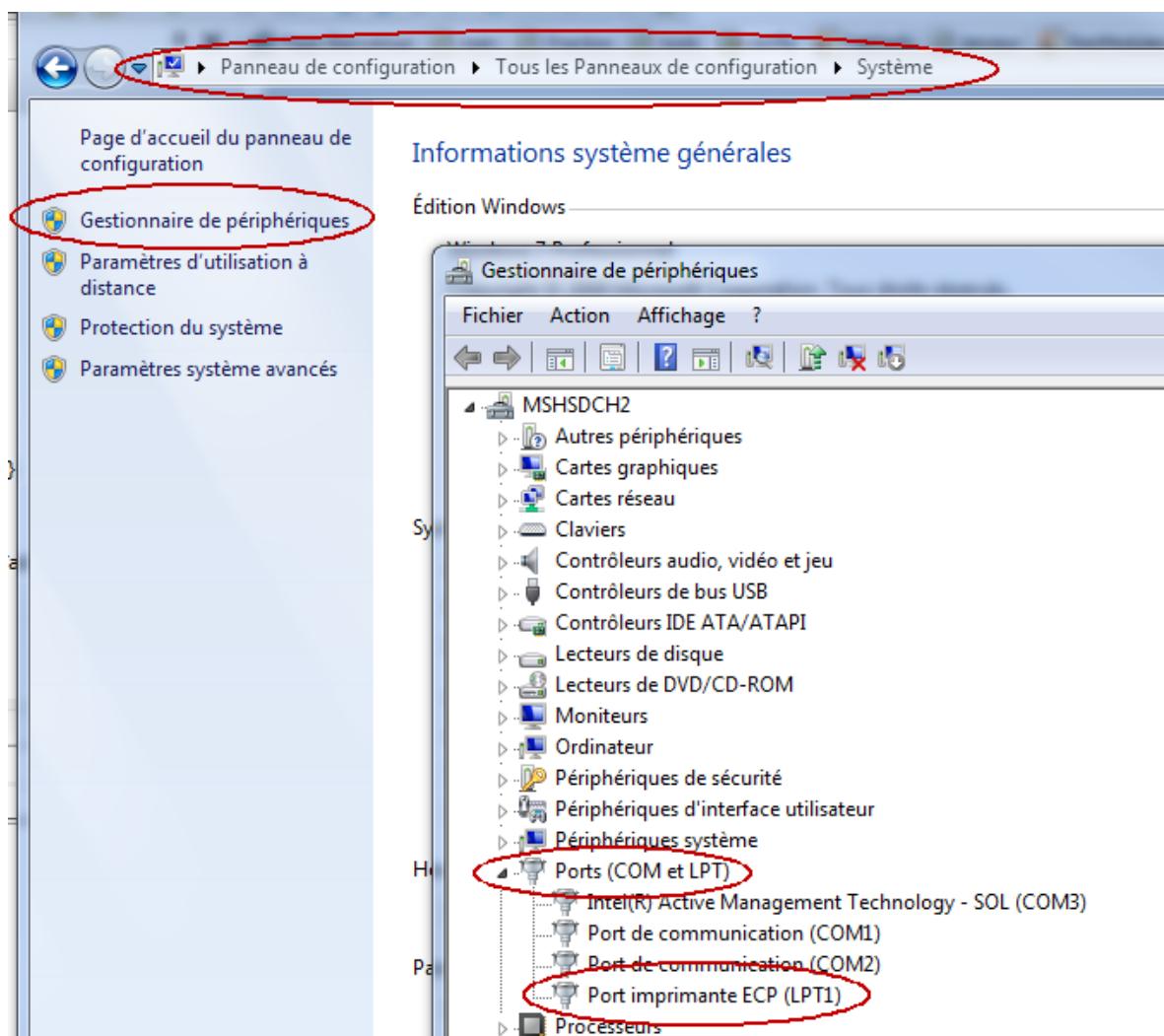
The computer should have a parallel port.

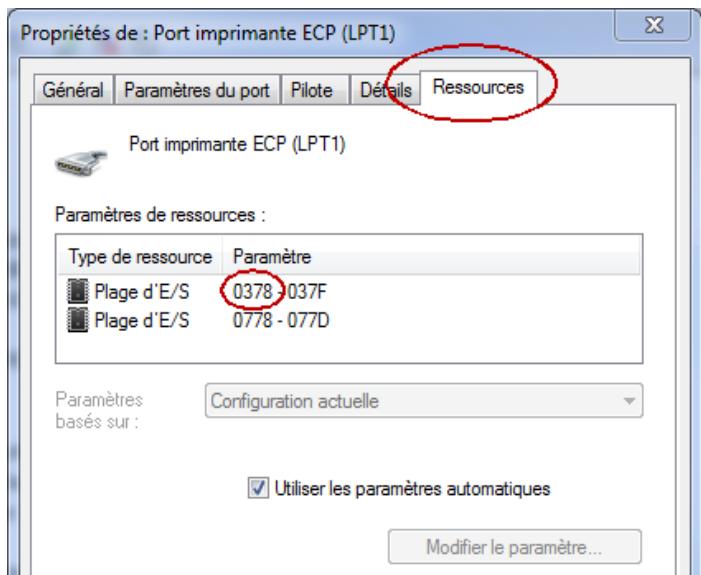
Although this seems obvious, modern computers doesn't all have a parallel port. Some desktop models do, but laptops do not.

One can insert a PCI Express parallel port card into a desktop computer. If using a laptop, a PCMCIA Express Card can be used, for example.

1. Find the parallel port address

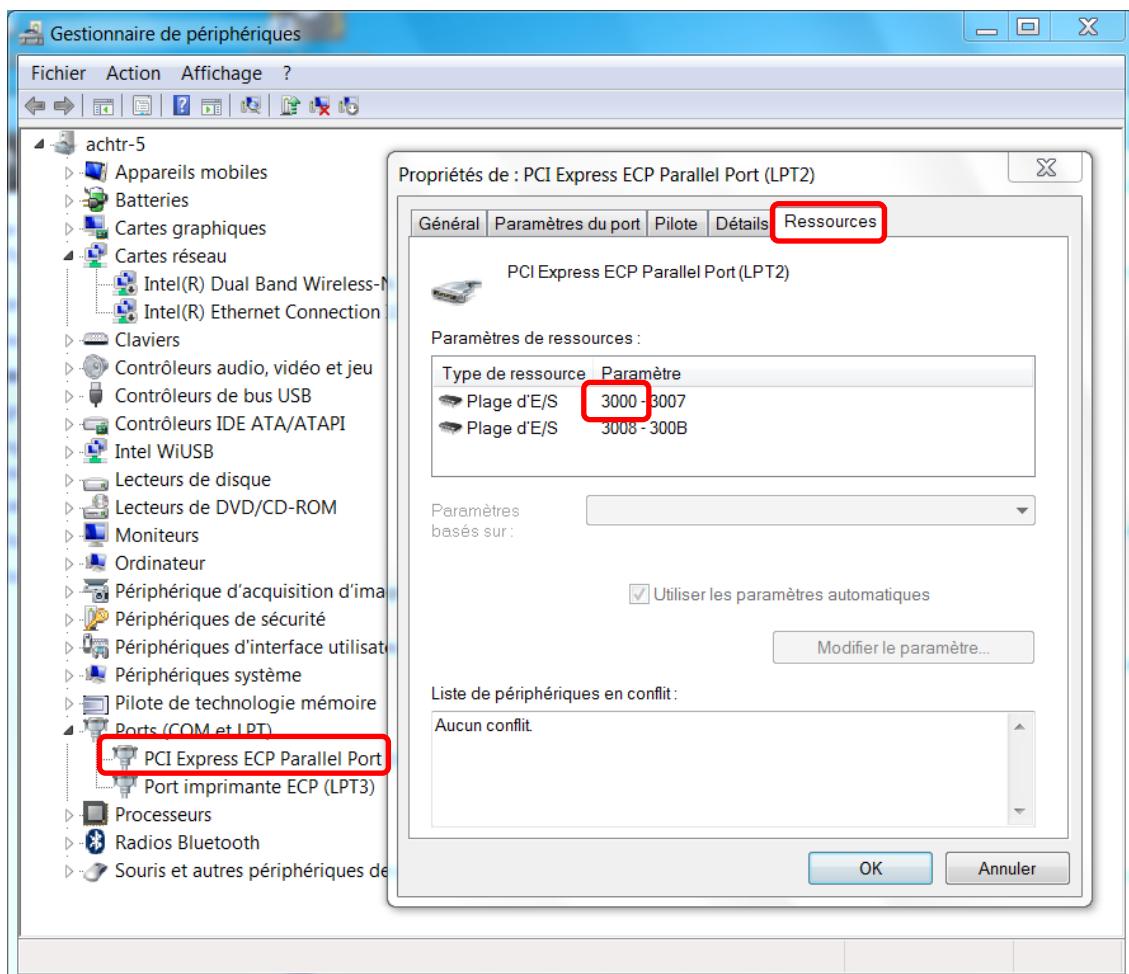
A. If using an integrated parallel port





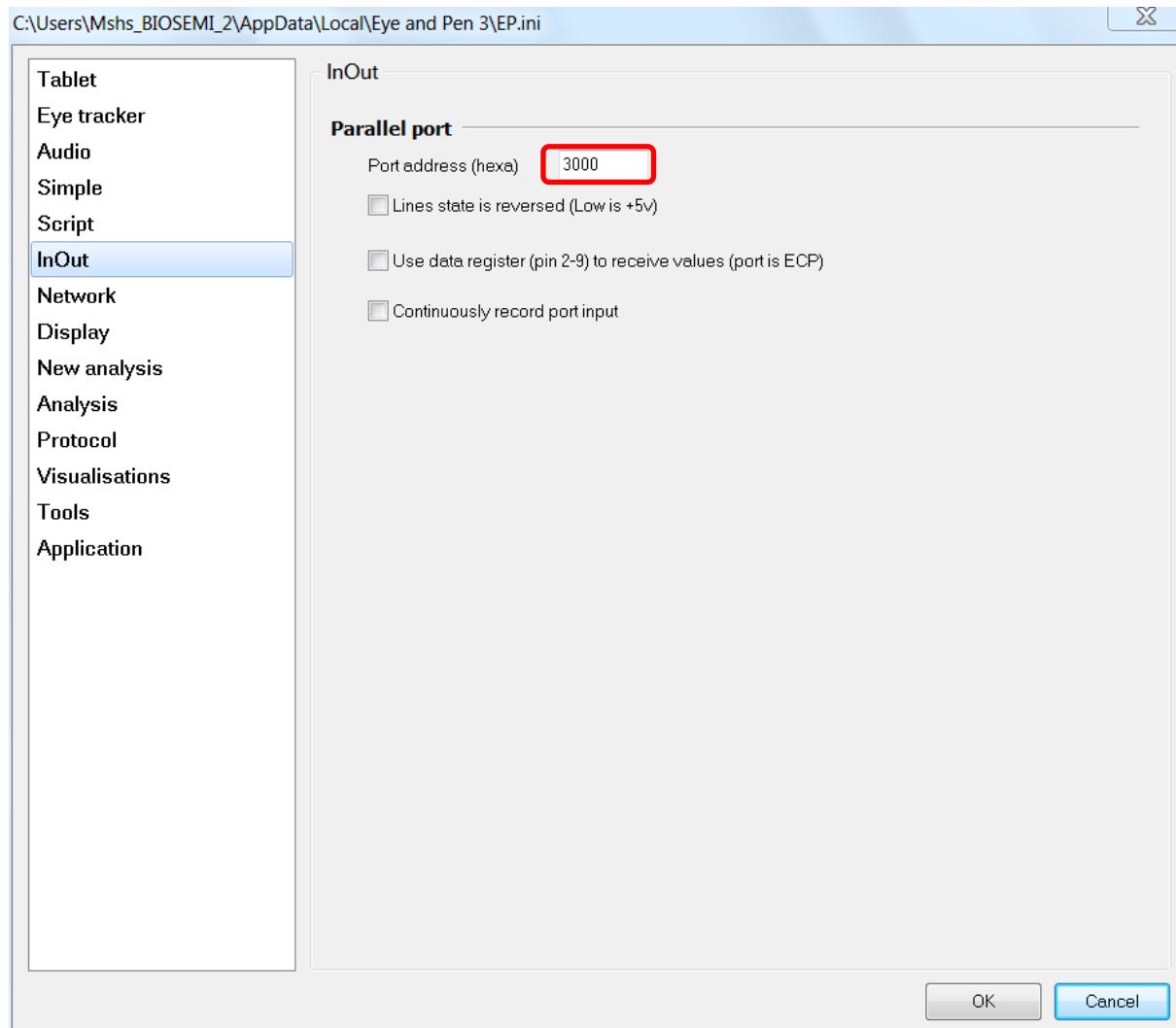
B. If Using an ExpressCard – Parallel port

In general, installing this card creates 2 entries in the device manager: PCI Parallel Port and Printer Port ECP. The target entry is « PCI Parallel Port ». The Printer Port is a virtual port specific to printing and cannot be used to send our data.



2. Copy parallel port address in Eye and Pen

Using the menu Files | Configuration | Edit, select “InOut”.



Type in the address you found for the parallel port.

If you have some device connected to the parallel port, such as a cable plugged in an EEG input, you may test the installation (see chapter **III.5. I/O tests** in the Eye and Pen manual).

3. Send data (trigger) within an acquisition

To use your parallel port to send data, you have to use a few commands within a script.

- `UseParallelPort`: « activates » the parallel port.
- `SendToParallelPort(value)` : sends a digital value (from 0 to 255) through the parallel port. Ex: `SendToParallelPort(8)`.

- SetParallelPortLines (état_lignes) : pour activer/désactiver individuellement les 8 lignes d'envoi du port parallèle, sous forme 0/1 (0 = désactivé, 1= activée).
Ex : SetParallelPortLines(10000000) active la ligne n°1, toutes autres sont désactivées.