

FAQ - NEOCLOCK

Frequently Asked Questions

Hardware

▷ How wide is the reception area for the radio signal of the atomic clock?

DCF77 version

The signal can be picked up at 1,000 to 1,500 km of the transmitter located near Frankfurt in Germany.

FRANCE INTER version

The signal can be picked up at 2,500 to 3,500 km of the transmitter located near Bourges in the centre of France, i.e. in all Central European countries.

▷ Is it possible to use a longer cable between the NeoClock radio receiver and the serial port of the computer?

Yes, you can use a shielded complementary cable up to 100 meters long.

Use a shielded cable adapted for serial links V24/RS232 (cf. pin diagram APPENDIX B).

▷ How can I check that the reception of the radio signal is correct?

Two LEDs allow you to check at any time how the receiver is working.

Software

▷ Which operating systems can I use the NeoClock time synchronization system with?

The NeoClock synchronization system is available with the following software for:

Windows

- * Windows 95
- * Windows 98
- * Windows Me
- * Windows NT 4.00
- * Windows 2000

Novell

- * Netware 4.x
- * Netware 5.x

▷ Under Windows, which PC can be declared as *time server*?

Any PC under Windows 95, 98, Me, Windows NT 4 or 2000 (workstation or client) can be declared as ***time server***. The NeoClock receiver and the corresponding software (or service) must be installed on this PC.

▷ Is it possible to synchronize automatically or manually?

* On the time server:

You can synchronize automatically or manually according to the setting of the **Automatic** parameter in the **Synchronization** section of the **NeoClock Control Panel**.

* On the time client :

When the synchronization program is started on a time client, it asks regularly for synchronization with the time server. The time interval can be set between 5 and 999 minutes.

▷ Does the NeoClock time synchronization system automatically support the switch to daylight saving time?

Yes, if you select the option **Daylight saving time** in section **Time lag** of the **NeoClock Control Panel**, provided that the NeoClock receiver correctly gets the signal from the atomic clock!

▷ Does the NeoClock time synchronization system allow me to synchronize a computer with the GMT time (UT time of the Greenwich meridian) or another time zone?

Yes, by setting an optional time difference (-12 to +12 hours) in section **Time lag** of the **NeoClock Control Panel**.

▷ Does the NeoClock time synchronization system allow me to synchronize other workstations or servers within a local area network (LAN) or a wide area network (WAN)?

Yes, the NeoClock time synchronization system is based on a client/server architecture and any server or workstation can be declared as ***time server***. The other workstations or servers of the network can be synchronized regularly with this server (you need a licence corresponding to the number of synchronized computers).

▷ Which network protocols are supported by the NeoClock time synchronization system?

The programs (or services) of the NeoClock time synchronization system support both routable protocols TCP/IP and IPX/SPX.

▷ Is it possible to synchronize workstations or servers with a time server accessible through a router?

Yes, since the programs and services used here support the routable protocols TCP/IP and IPX/SPX.

▷ How often can a "time client" computer be synchronized with a "time server" computer?

You can set the interval between 5 and 999 minutes for each *time client* in the **NeoClock Control Panel**.

▷ If the radio reception is temporarily disturbed (electromagnetic interference, thunderstorm, etc.), does the NeoClock system still allow a time synchronization of the PC or server?

Yes, if the option **Quartz clock** is selected in section **Synchronization** of the **NeoClock Control Panel**. The synchronization of the computer's system clock will thus occur even if the reception is disturbed, but from the quartz clock of the NeoClock receiver.

When the reception is correct, the synchronization will be done from the atomic clock signal.

▷ How can I check if the time synchronization works?

When the time synchronization program is started, an icon representing a watch appears in the task bar.

When NeoClock works correctly (signal reception and synchronization of the computer's system clock), the background of the watch is green. If you click on the icon, a **NeoClock Atomic Clock** window appears, in which the text is green on black background.

In the case of a malfunction or an error, the background of the watch icon is red, as well as the background of the **NeoClock Atomic Clock** window. Moreover, a status bar displays the error type.

▷ How can I check if the time server program (or service) is started?

When the **time server** program is started, an icon representing the letter "S" within a circle appears in the task bar.

When the program (or service) works correctly, the background of this circle is green.

In the case of an error, the background of the circle is red.

➤ Which programs (or services) must be installed?

The program are installed automatically by an installation program.

Two programs (or services on Windows NT) are installed on the **time server** computer.

The first program communicates with the NeoClock radio receiver and realises the time synchronization of the **time server**.

The second one distributes the date and time to the time clients who request it from the **time server**.

On the client computers of the **time server**, only one program (or service on Windows NT) is installed. This program realises the periodical time synchronization with the **time server**.

➤ How can I know how many time clients are connected to the *time server*?

When the **time server** program is started, an icon representing the letter "S" within a circle appears in the task bar. Click on this icon to see the number of **time clients** connected to the time server.

⇒ Are there any statistics about the time synchronization since installation?

Yes, you can find statistics by clicking on the **Stat** button in the NeoClock **Control panel**. The displayed values are cumulative data going back to the first starting of the NeoClock time synchronization program. You can not reset these values.

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