

PEWETA DCFport24 Pulse Telegram

- self-adjusting slave clocks
- wire-based transmission of time data



DCFport24 pulse telegram function and advantages



Compared with conventional, "classic" slave clocks, PEWETA telegram-receiving slave clocks offer an advantage by not just being *advanced* by pulses but being *controlled* by time and date telegrams.

Time adjustment is fully automatic and independent of the current position of the hands. The time telegram (hour, minute, second, day, month, year) is transmitted by wire from a PEWETA Master Clock to the slave clocks.

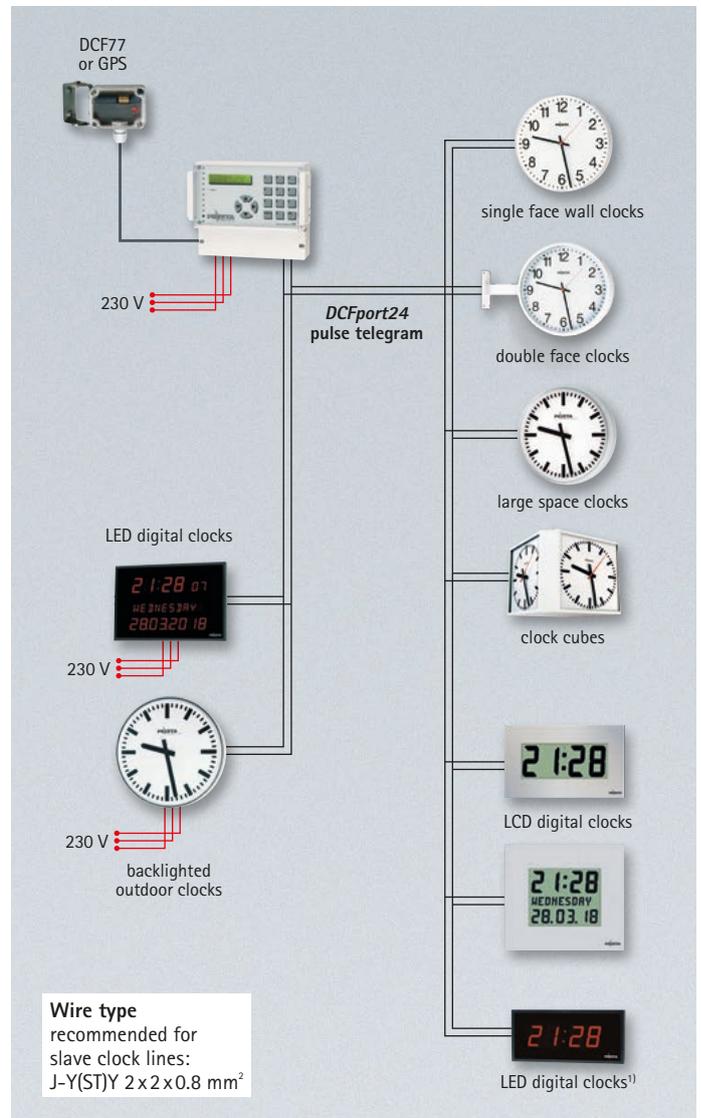
As standard, all analog DCFport24 pulse telegram slave clocks up to 400 mm diameter are already provided with a second hand, so the accurate time will be displayed accurately to the second.

Immediately after receiving the time telegram, digital clocks with a DCFport24 pulse telegram input will display the current time and, according to the model, the current date.

DCFport24 pulse telegram slave clocks will fully automatically reset themselves to the accurate time after accidental disruptions, e.g. wire break, loss of mains power. This is of special benefit when installing and maintaining clock systems with large numbers of slave clocks, clocks with two or four faces, or clocks mounted in areas with difficult access, like in high halls or outdoors. Wire-based PEWETA DCFport24 telegram slave clocks are also powered over the telegram transmitting line¹⁾.

Advantages

- simple, cost-effective "plug-and-play" installation
- rapid self-adjustment, no previous manual set-up necessary
- no need to pay attention to polarity
- existing slave clock wire networks may be re-used
- trouble-free expansion during operation without stopping the slave clock line(s).



Comparison	DCFport24 pulse telegram slave clocks	Conventional minute pulse slave clocks
operating mode	24 V pulse telegram	12/24/48/60 V minute pulse
transmitting wire	2-core wire, shielded	2-core wire, shielded
transmitted signal	complete date and time information	polarity alternating minute pulse
time display on analog clocks	up to 400 mm diameter: hour, minute and second hands over 400 mm diameter: hour and minute hands	hour and minute hands
date display on digital clocks	date and time will be set automatically	must be manually pre-set before initiation
initiation procedure	Slave clocks may be installed with random polarity, random position of hands and in any convenient sequence. Time display adjustment will be fully automatic.	All slave clocks must be connected with uniform polarity and manually pre-set to the planned initiation time. All clocks must be initiated simultaneously.
after initiation	No after-initiation check is required. All clocks have automatically "slaved" to the master clock time display.	Each slave clock must be individually checked for correct polarity of connection. Any discrepancies of hand position must be manually corrected.
additional clocks/lines	Additional clocks may be installed and connected in "plug-and-play" fashion at any time and will automatically adopt the master clock time display.	The line involved must be stopped. All newly installed clocks must be manually set to match existing clocks.
after line disruptions	Each and every slave clock will automatically reset itself when the telegram circuit is restored.	The line involved must be stopped. Clocks lagging behind because of missed pulses must be manually reset.

¹⁾ If the clock system includes LED digital clocks, additional booster amplifiers may be required for power supply, dependent upon the number and the types of these clocks. As an alternative, a 230 V power supply is possible.