

# PEWETA *DCFport24* Telegram

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

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.

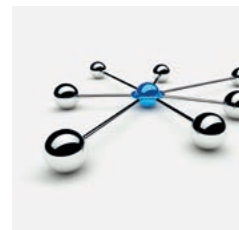
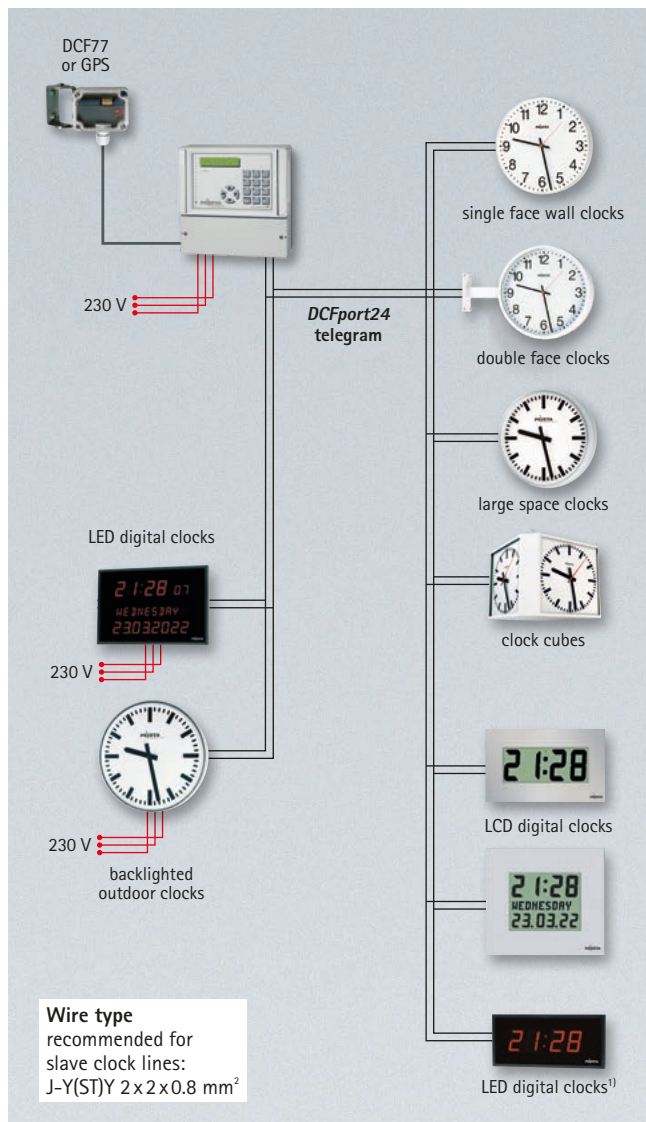
As standard, all analog *DCFport24* telegram slave clocks up to 400 mm diameter are already provided with a second hand, so the accurate time will be displayed accurately to the second.

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

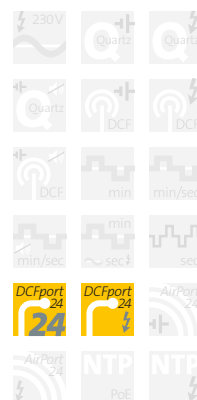
*DCFport24* telegram slave clocks will fully automatically reset themselves to the accurate time after accidental disruptions, e.g. wire break, loss of mains power. This is of special benefit when installing and maintaining clock systems with large numbers of slave clocks, clocks with two or four faces, 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 line<sup>1)</sup>.

## 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).



## *DCFport24* telegram function and advantages



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

<sup>1)</sup> 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.