

Self Winding Clock Voltage Guide (Non-slave clocks)

Note: This guide is a work in process. Last updated 1-15-2010

Manufacturer	Clock Type	Voltage	Recommended Power Source	Comments
Self Winding Clock Co.	Style A, C, F with .008" x .220" x 72" spring; 5.6 Ω coil	3 volts	Model 1900GS or RS Kit if clock has synchronizer coils. Model 1900L if clock has no synchronizer kit.	Most common clock; dials 16 inches and smaller. Requires 180-210mA for an 8-15 sec/hour wind for F style and 400mA for 5-6 sec/hr with A or C style rotary motor.
Self Winding Clock Co.	Style A, C, F with .010" spring, 5.6 Ω coil	3 volts	Same as above.	Clocks with attachments to seconds shaft such as slave switches, or clocks with large dials.
Self Winding Clock Co.	Style A, C, F with .010" x .220" x 72" spring; 200 Ω coil (called Telco clocks)	24 volts	Model 1900-24V Kit or single 1900R2-24V	Often, but not always, there is a tag on the clock that specifies 24 volts. Style F movements identical to 3 volt unit. Requires 46-50mA for 12-15 second wind per hour.
Self Winding Clock Co.	Style E	6 volts	Pair of Model 1900G-3VN or pair of Model 1900R2-3V. Connect two units in series.	Uncommon
Self Winding Clock Co.	Some Style F Later Models, S/N 300000 or above with R prefix using enclosed DC motor	3 volts	Model 1900G-3VN or Model 1900R2-3V. Do not try to use any other battery, as these are the only units that will have the capacity to start the motor and provide good battery life.	Self Winding Clock Co. used an enclosed 3 volt motor in some clocks circa 1950 for broadcast studio version. Requires up to 3 amps to start, 1 amp to run, for about 1-2 sec/hour depending on condition of motor
American Clock Co.	"Getty" movement with pair of weighted arms	3 volts	One Model 1900G-3VN or Model 1900R2-3V	Requires 0.5-1A for about 200ms every 5-7 minutes depending on size of clock.
American Standard Watch Co.	Hipp Toggle Self Winding 80 beat (contact us for 60 beat)	3 volts	One Model 1900G-3VN or Model 1900R2-3V.	Requires 0.5-1A for about 200ms every 2-4 minutes depending on size and condition of movement.
Standard Electric Clock Co.	Units with two electromagnetic coils at base of movement, impulse wound once per minute, helical mainspring	From 4.5 volts to 24 volts. The 24 volt unit is most common.	Model 1900W-UNV available either as a small 2" tall "hockey puck" module or No. 6 battery kit.	Model 1900W-UNV Clock Winder can be connected directly to coil, conserving contacts and greatly improving battery efficiency. The Model 1900W-UNV will determine the required, proper voltage and apply it.
Standard Electric Clock Co.	Motor wound weight driven	24 volts AC, 120 volts or 240 volts AC	No battery solution for these clocks	Requires AC power
Monarch Master Clock	Minute Impulse	4.5 volts	Model 1900GS-4.5V or Model 1900R2-4.5V	These clocks utilize a single 12 ohm coil requiring 4.5 volts to properly activate winding. They can be adjusted to wind on 3 volts but efficiency (battery life) is poor and the movement will run without much power. With 4.5 volts, properly adjusted movement will wind in under 100ms and run well.

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Stromberg	Minute Impulse style Vintage Master Clocks w/ .008" x .250" x 40" spring	10 volts most common, but others produced (up to 24 volts)	Model 1900W-UNV	Like the Standard Electrics, the impulse driven Strombergs can be driven directly to the coil by the Model 1900W-UNV. The Model 1900W-UNV will determine the required, proper voltage and apply it.
Stromberg	Same as Above	110 volts	Model 1900W-110V	High voltage unit provides proper signal to wind clock. Connect directly to coil, bypassing contacts and therefore avoiding effects from burned out contacts (particularly notable with the 110 volt units). Coils are usually marked if unit is 110 volts.
Synchronome	All A frame movements	3-4.5 volts	1900R2 on float charge. Contact us.	Movements virtually the same from 1908 to 1962. Requires 295-320mA for a 5 second per minute impulse. Add 1 volt per slave movement connected in series.
English Clock Systems (ECS)	Smiths Gravity Arm	10-10.5 volts	Contact us	Requires 300-320mA