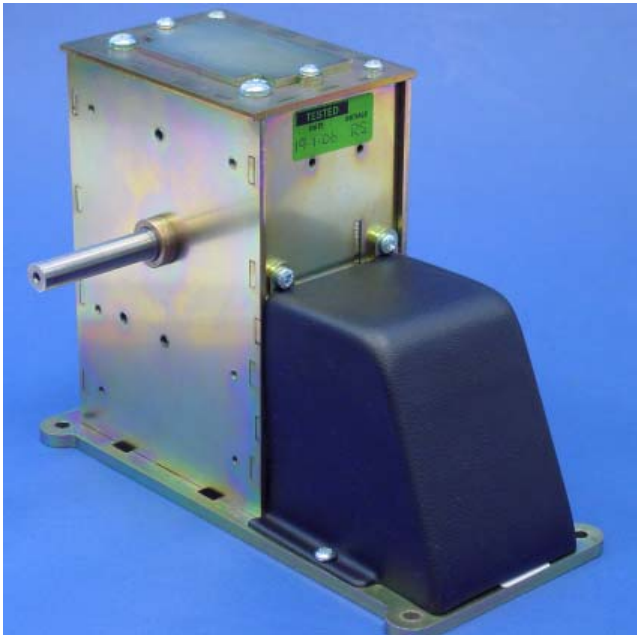
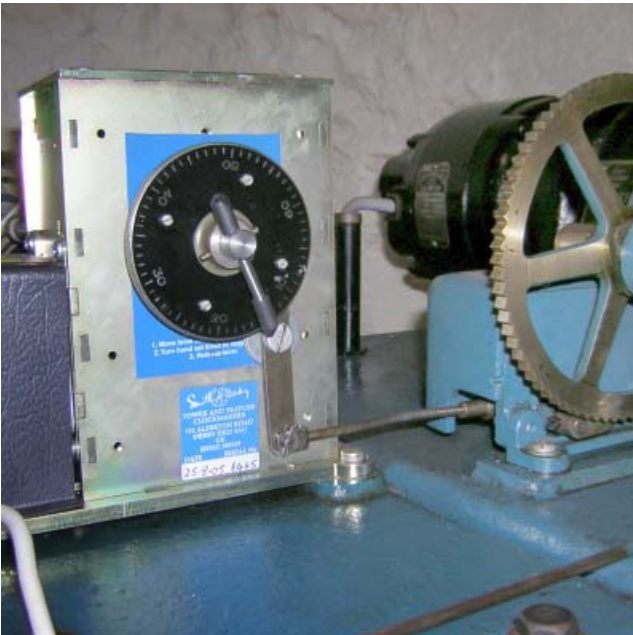
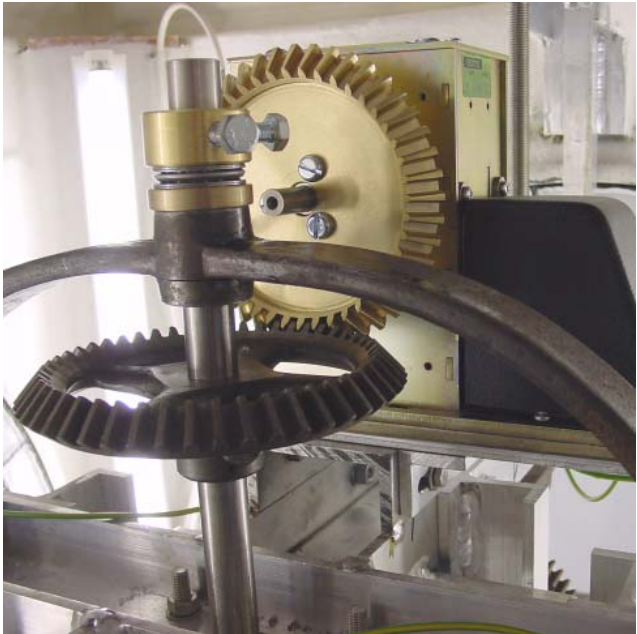
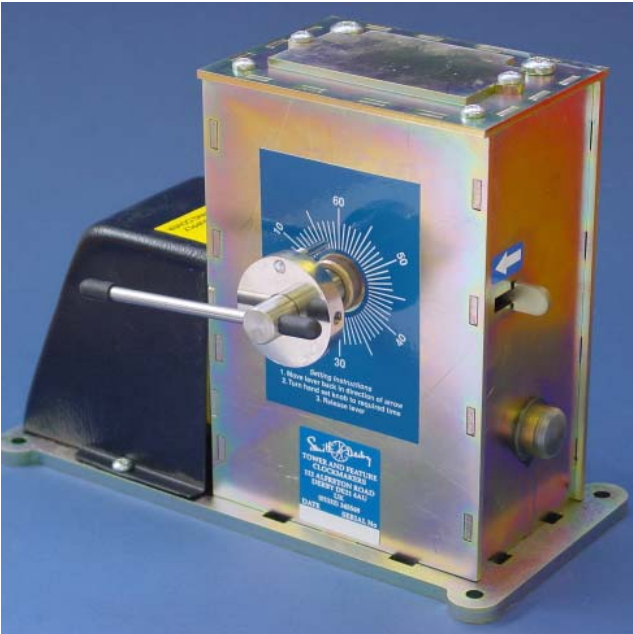


DATA



A powerful, high quality and versatile synchronous electric movement able to bring motive power to existing clock dials whatever the configuration.

T1-R SYNCHRONOUS CLOCK MOVEMENT

T1-R synchronous clock movement

The T1-R is fully interchangeable with its predecessor, the Smith of Derby T1 movement. The T1-R can also be used to replace other types of electric movements. It can also be used to drive the time side of an existing weight driven mechanism, subject to conservation approval.

APPLICATIONS AND BENEFITS

- Heavy duty mechanism for up to four dials of 1,800mm (6 ft) diameter
- Drives hands through new or original shafts and gears
- The ideal replacement for virtually any existing electro-mechanical unit
- Self-starting motor
- Power failure back-up unit option
- Strike and chime let-off options

THE EXPERT SOLUTION

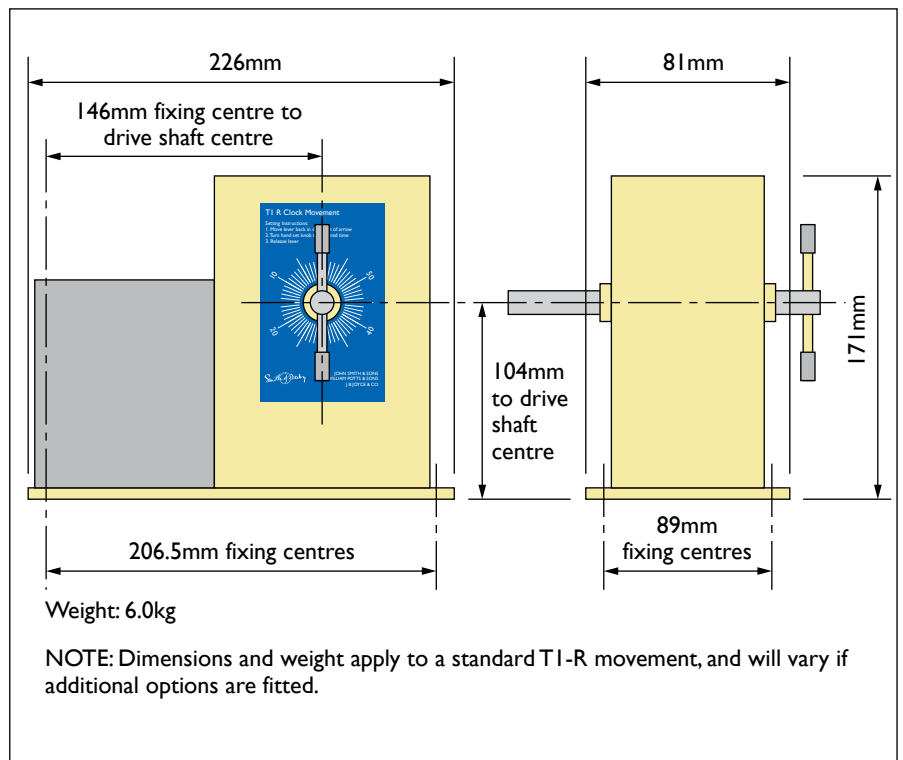
Our T1-R is the latest development of a product that has been manufactured for over 60 years. Early T1 models usually had non self-starting synchronous motors, necessitating a visit to the clock room following any interruption in the power supply. The T1-R is self-starting, and if powered through a Smith of Derby back-up system it is also self-correcting – see Power Failure Back-up Systems on page 4.

INSTALLATION

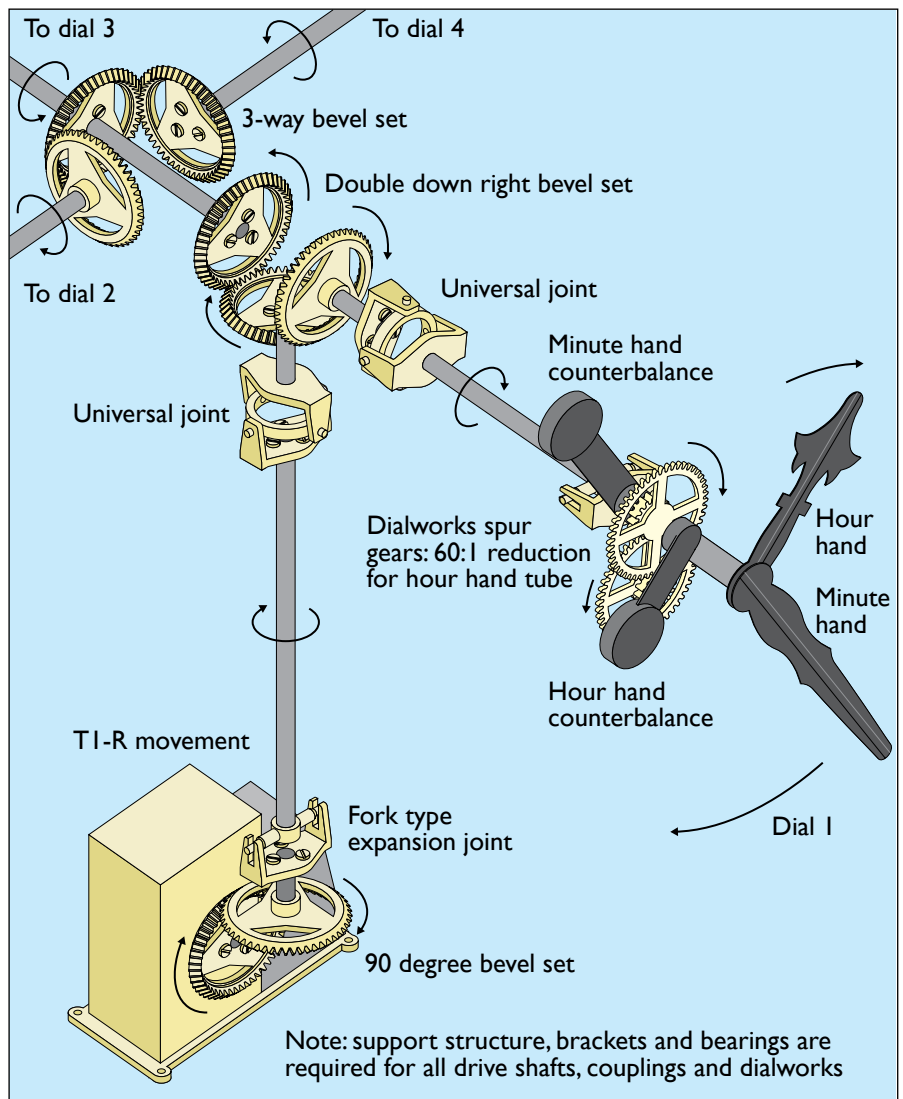
The illustration shows a multi-dial installation using a vertical drive and bevel gears. This is a typical arrangement where the T1-R is located in a similar position to an original weight driven clock movement. Other drive configurations are also available and are illustrated on page 3 opposite.

The T1-R can power up to four individual dials. It provides a direct drive at minute hand speed and requires separate dial motion works. These are usually retained from an original installation if the T1-R is used as a replacement movement. The function of dial motion work is to split the single one revolution per hour transmission rod into an outer tube for the hour hand and an inner shaft for the minute hand.

The T1-R can also be equipped to perform the “let-off” for mechanical or electrically powered bell strike and chimes.



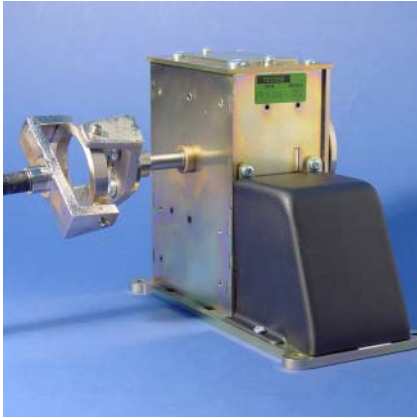
T1-R movement overall dimensions



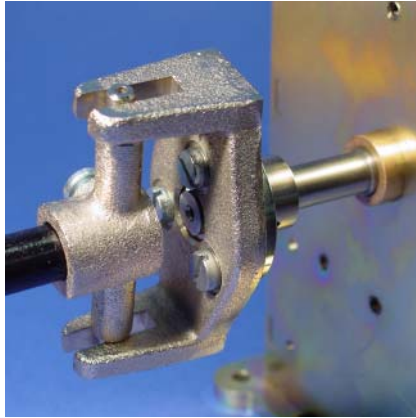
T1-R movement typical installation in a tower with four clock dials

LET-OFF AND DRIVE OPTIONS

A comprehensive range of additional parts are available, making the TI-R a very versatile unit. The images below show examples of some standard arrangements but additional parts can be manufactured to suit virtually any site specific requirement.



Straight-through drive for connecting to a horizontal transmission rod via a universal joint.



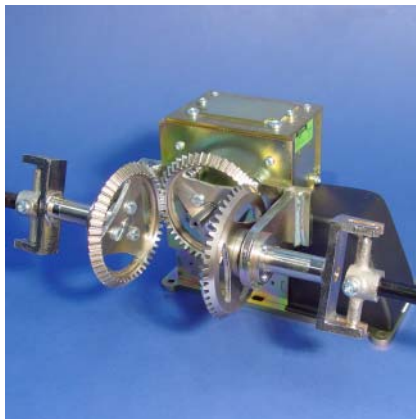
Close up view of fork type expansion joint.



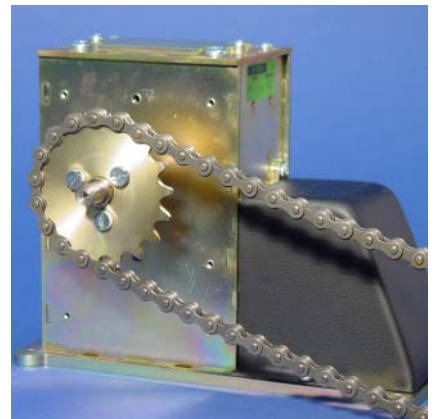
90° bevel set: for connecting to a vertical transmission rod via a fork type expansion joint.



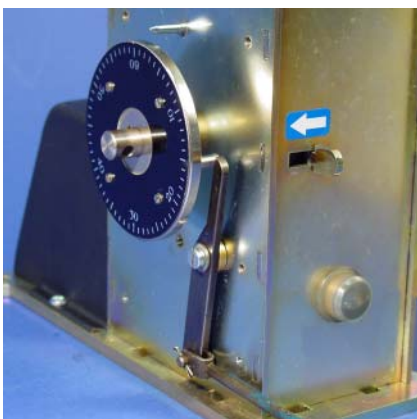
Ball and socket type expansion joint on a vertical transmission rod.



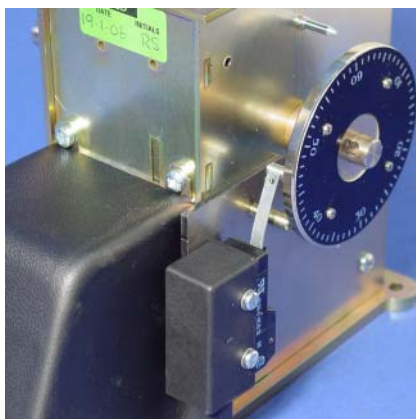
Bevel set for two opposite horizontal connecting rods.



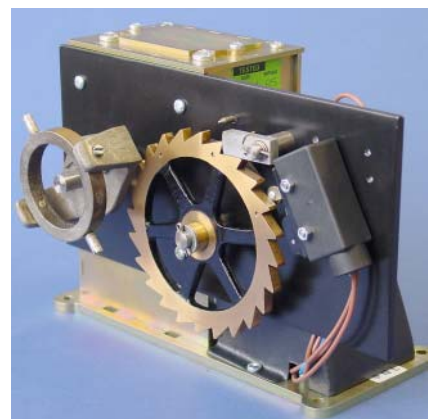
Sprocket drive for connecting to the hour shaft of an existing mechanical clock movement.



Mechanical let-off for strike/chime installation that has its own count wheel mechanism.



Microswitch let-off: sends an electrical signal every hour or quarter hour through to a strike/chime installation.



Night silencer: provides for automatic bell silencing for both mechanical or electrical strike/chime installations.

POWER FAILURE BACK-UP OPTIONS



Auto Restart Unit (ARU) restores power at the precise time shown on the dials after a power failure, eliminating the need to manually adjust the hands. It also provides for automatic summer/winter time changes.



Inverter Charger System (ICS) has back-up battery to power the clock during a power failure lasting up to 24 hours. To protect the battery during a longer power failure it stops the clock and restores power at the precise time shown on the dials. It also provides for automatic summer/winter time changes.

INSTALLATION



We provide a complete installation service throughout the British Isles. Our fully trained clock engineers carry a comprehensive range of parts and tools to ensure that your clock installation is set up accurately and works reliably.

All new equipment is backed by a 12-month warranty against faulty workmanship and materials.

MAINTENANCE

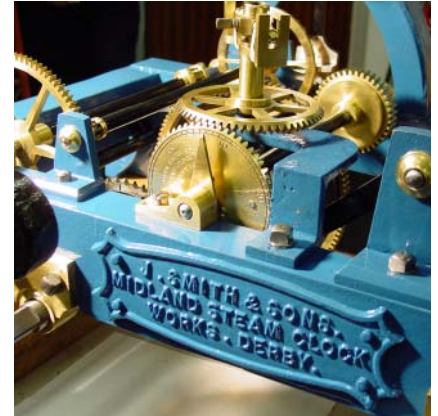
- Annual service visit
- Safety checks
- Free additional visits*
- Conservation advice
- Exchange parts

Even with electrical operation and timekeeping, your clock will still require regular maintenance visits. We operate a comprehensive clock servicing network, giving year-round cover including one scheduled annual maintenance visit. Exchange motors, weight lines (if used elsewhere on your clock), software upgrades, additional call-outs and overhaul/repair advice are also included, (all subject to certain conditions).

Please contact us for full details of our annual maintenance contract.

*Full terms and conditions available on request.

HERITAGE



Many tower clocks are governed by the regulations of heritage and conservation organisations, such as the Council for the Care of Churches. The work we carry out on site and the materials and equipment we use is always in accordance with conservation requirements, ensuring that the historical integrity of your clock system is not compromised.

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