

## 16. Public Clocks

### Turret clocks & Cupolas. Weathervanes. Clock controllers.

#### TURRET CLOCKS

Complete clocks ready for mounting onto cupolas, turrets or walls. Fully weatherproof. Convex glass fibre dials with stainless steel hands. Hands and numerals are gold leafed except on white models, which are black painted. All use 240v. 50Hz. and can be fitted with optional re-synchronizers. The domestic movement uses a 24v transformer. The heavy duty unit is a high quality mechanism with rear setting index etc. Optional Radio control is also available in most areas to ensure accuracy. Easily installed by fixing with brass wood screws & mastic.

| Nominal Size | Outside diameter | Actual face diameter | Numeral height | Movement used |
|--------------|------------------|----------------------|----------------|---------------|
| 1'           | 330mm            | 270mm                | 40mm           | Domestic      |
| 1'6"         | 480mm            | 395mm                | 65mm           | Domestic      |
| 2'           | 595mm            | 510mm                | 85mm           | Standard      |
| 2'6"         | 820mm            | 750mm                | 100mm          | Standard      |
| 3'           | 945mm            | 815mm                | 130mm          | Intermediate  |
| 4'           | 1210mm           | 1075mm               | 165mm          | Heavy Duty    |
| 5'           | 1500mm           | 1340mm               | 205mm          | Heavy Duty    |

#### TURRET CLOCKS - BLACK:

Gilded numerals, with hands and movement.

Price per unit in £ on 04/12/2017

|   |                   |             |    |          |
|---|-------------------|-------------|----|----------|
|  | TURRET CLOCK 1'   | 0905 001202 | 1+ | £319.69  |
|   | TURRET CLOCK 1'6" | 0905 001802 | 1+ | £374.81  |
|   | TURRET CLOCK 2'   | 0905 002402 | 1+ | £749.63  |
|   | TURRET CLOCK 2'6" | 0905 003002 | 1+ | £826.80  |
|   | TURRET CLOCK 3'   | 0905 003602 | 1+ | £1240.20 |
|   | TURRET CLOCK 4'   | 0905 004802 | 1+ | £1427.60 |
|   | TURRET CLOCK 5'   | 0905 006002 | 1+ | £1537.84 |

#### TURRET CLOCKS - WHITE WITH BLACK NUMERALS:

Painted numerals, with hands and movement.

Price per unit in £ on 04/12/2017

|   |                   |             |    |          |
|---|-------------------|-------------|----|----------|
|  | TURRET CLOCK 1'6" | 0905 001823 | 1+ | £374.81  |
|   | TURRET CLOCK 2'   | 0905 002423 | 1+ | £749.63  |
|   | TURRET CLOCK 2'6" | 0905 003023 | 1+ | £826.80  |
|   | TURRET CLOCK 3'   | 0905 003623 | 1+ | £1240.20 |
|   | TURRET CLOCK 4'   | 0905 004823 | 1+ | £1427.60 |
|   | TURRET CLOCK 5'   | 0905 006023 | 1+ | £1537.84 |

#### TURRET CLOCKS - DARK BLUE:

Gilded numerals, with hands and movement.

Price per unit in £ on 04/12/2017

|  |                   |             |    |          |
|--|-------------------|-------------|----|----------|
|  | TURRET CLOCK 2'   | 0905 002421 | 1+ | £749.63  |
|  | TURRET CLOCK 2'6" | 0905 003021 | 1+ | £826.80  |
|  | TURRET CLOCK 3'   | 0905 003621 | 1+ | £1240.20 |
|  | TURRET CLOCK 4'   | 0905 004821 | 1+ | £1427.60 |
|  | TURRET CLOCK 5'   | 0905 006021 | 1+ | £1537.84 |

#### TURRET CLOCKS - GREEN:

Gilded numerals, with hands and movement.

|   |   |   |   |   |   |   |   |   |  |   |   |   |
|---|---|---|---|---|---|---|---|---|--|---|---|---|
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | <b>M &amp; P</b><br>Key Suppliers to<br>Clockmakers |
|---|---|---|---|---|---|---|---|---|--|---|---|---|

Price per unit in £ on 04/12/2017

|   |                   |             |    |          |
|---|-------------------|-------------|----|----------|
| 1 | TURRET CLOCK 1'6" | 0905 001807 | 1+ | £374.81  |
| 2 | TURRET CLOCK 2'   | 0905 002407 | 1+ | £749.63  |
| 3 | TURRET CLOCK 2'6" | 0905 003007 | 1+ | £826.80  |
| 4 | TURRET CLOCK 3'   | 0905 003607 | 1+ | £1240.20 |
| 5 | TURRET CLOCK 4'   | 0905 004807 | 1+ | £1427.60 |
| 6 | TURRET CLOCK 5'   | 0905 006007 | 1+ | £1537.84 |

#### TURRET CLOCKS - LIGHT BLUE:

Gilded numerals, with hands and movement.

Price per unit in £ on 04/12/2017

|   |                   |             |    |          |
|---|-------------------|-------------|----|----------|
|  | TURRET CLOCK 2'   | 0905 002417 | 1+ | £749.63  |
|   | TURRET CLOCK 2'6" | 0905 003017 | 1+ | £826.80  |
|   | TURRET CLOCK 3'   | 0905 003617 | 1+ | £1240.20 |
|   | TURRET CLOCK 4'   | 0905 004817 | 1+ | £1427.60 |
|   | TURRET CLOCK 5'   | 0905 006017 | 1+ | £1537.84 |

## 16. Public Clocks

### MECHANISMS & CONTROLLERS

Synchronous clocks are the most common type of clock mechanism. These derive their timekeeping from the electricity supply company who go to great lengths to provide an accurate mains frequency of 50 cycles per second. Even if it were to drop slightly during a period of extreme demand, they normally make it up later to maintain an overall accuracy. Hence the name synchronous, being synchronised with the supply. A simple 240v 50Hz. supply is needed. Overseas customers should check their local voltage and frequency before ordering. The voltage can be changed by a transformer, but the 50 cycles per second (Hz.) controls the timekeeping. Some countries such as the USA use 60Hz. The current consumption is minimal.

These clocks are dependant upon a continuous mains supply. If it fails they will stop and resume again when the supply is returned. They will then be slow by the duration of the power failure.

Battery back-up devices are available which cut in as soon as a power failure is detected. These keep the clocks running for a number of hours (depending on their capacity and the number and size of the motors) and are re-charged automatically when power is resumed. The result is that short failures have no overall effect on the timekeeping, but eventually the batteries run out and the clock stops.

Re-synchronizers also have re-chargeable batteries, but these do not attempt to drive the clock. The unit records the position of the hands when the failure took place. When power is resumed, the supply to the motor is not allowed through the unit until 12 hours (or multiples of 12) have elapsed since the failure took place. In effect, it waits until time catches up with the stationary hands and off they go. So, no matter how long the power cut (within reason) the clock will be re-synchronised with the mains supply within a maximum of 12 hours after power is restored. These units also make the change from summer time and GMT very easy. At the flick of a switch, the clocks stop for 1 hour or stop for 11 hours. The 11 hours pause effectively advances the clock by one hour.

The two systems can be combined, so that short power cuts have no effect, whilst long ones are corrected automatically.


Pulsed mechanisms work on a 'master and slave' principle. This is particularly advantageous when many faces are used, perhaps throughout a factory complex or hospital. They all show the same time, as they each get the same pulse every half or one minute from a master controller. Pulsed mechanisms depend upon the electricity supply to their master.

Radio master controllers monitor the signals from an atomic clock periodically. This is checked against the position of the hands and should any discrepancy occur, the hands are adjusted automatically. This provides very accurate timekeeping, and the BST/GMT time changes are made automatically. It can control up to four slave clocks.

They have rechargeable batteries. Battery back-up units can be fitted to these, to maintain power during short failures. However, backup devices do not maintain the same time accuracy as the domestic electricity supply companies, so they are not recommended for synchronous movements except in areas of frequent short failures.

### PUBLIC CLOCK RESYNCHRONISER

Price per unit in £ on 04/12/2017

|  |  |                    |    |                |
|--|--|--------------------|----|----------------|
|  | <b>PUBLIC CLOCK RE-SYNCHRONISER</b><br>You can minimize the effect of power interruptions with this mains re-synchroniser. All breaks in the power supply are timed. After a power cut of at least 15 seconds, the mains supply to the clock is switched off for 12 hours less the accumulated time. This allows the clock to start again at the correct time. Additional features include Summer/Winter (BST/GMT) adjustment at the press of a switch and clock power control. It is also fitted with an internal battery that has a minimum life of 5 years and is trickled charged from the mains. Up to four of our mains synchronous movements can be run from this unit. Weight 800g. 180mm high, 230mm wide, 85mm deep. | <b>1189 000115</b> | 1+ | <b>£591.37</b> |
|  |  |                    |    |                |

### WEATHERVANES

Full bodied copper weathervanes with steel pole, copper spacer balls and cast brass directionals. They are not just flat profiles but hollow vanes which will move in the slightest breeze.

Each is treated with an aged finish that looks like verdigris and will continue to mellow in time.

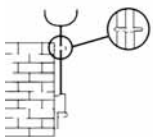


Price per unit in £ on 04/12/2017

|   |   |                    |    |                |
|---|---|--------------------|----|----------------|
| 1 | <b>COPPER ARROW WEATHERVANE</b>             | <b>0906 000115</b> | 1+ | <b>£151.58</b> |
| 2 | <b>COPPER GOLFER WEATHERVANE</b>            | <b>0906 000515</b> | 1+ | <b>£184.65</b> |
| 3 | <b>COPPER HORSE WEATHERVANE</b>             | <b>0906 000615</b> | 1+ | <b>£184.65</b> |
| 4 | <b>COPPER LARGE ROOSTER WEATHERVANE</b>     | <b>0906 000715</b> | 1+ | <b>N/A</b>     |
| 5 | <b>COPPER STANDARD SAILBOAT WEATHERVANE</b> | <b>0906 000815</b> | 1+ | <b>£209.78</b> |
| 6 | <b>COPPER STAG WEATHERVANE</b>              | <b>0906 001015</b> | 1+ | <b>£190.37</b> |
| 7 | <b>COPPER STANDARD ROOSTER WEATHERVANE</b>  | <b>0906 002015</b> | 1+ | <b>£205.04</b> |

### MOUNTING BRACKET FOR WEATHER VANE

Price per unit in £ on 04/12/2017

|  |   |                    |    |               |
|--|---|--------------------|----|---------------|
|  | <b>MOUNTING BRACKET FOR WEATHER VANE</b> A specially designed bracket to simplify mounting our weathervanes. Sturdy construction. | <b>0983 000115</b> | 1+ | <b>£37.55</b> |
|--|---|--------------------|----|---------------|