

JOEL TIME INDUSTRIES



SELECTION MANUAL

Tower clocks

Tower clock is essential for institutions, big organizations, buildings, railway stations etc . It is a service by delivering correct time for the public. It is also a part of advertisement and landmark. Tower clock is a onetime long lasting investment. Before installing a tower you should have a minimum knowledge about its mechanism, Dial and hands. Installation of tower clocks without proper knowledge gives you a headache and unwanted expenses.

The conventional tower clocks had many issues like large area requirements, man power for winding , yearly oiling, periodic servicing, damages due to dust and insects, variation in time etc... In 1992 JTI clocks came with solution for these problems. We have introduced world's fist tower clock movement with stepper motor, microprocessor, temperature controlled quartz crystals and warm gear technology for reducing the number of gears, size of the mechanism and frictions to keep accurate time.

In the year 2005, following a special request from the defence College, Coonur, we have developed GPS synchronized dual stepper motor controlled clock mechanism. In Later years we found GPS clocks are running trouble free and maintains free. Accurate and cost efficient working of these clocks made them popular all over the world. Due to natural reasons (climatic changes, bird sitting etc.) there can be time errors in normal clocks, which have to be corrected manually each time. In a GPS clock these errors are corrected automatically by receiving satellite signals. Indian railways, Indian defence, pharmaceutical industries, churches, educational institutions and many other privet companies are now part of this innovation from JTI. We recommend GPS clocks for more reliability and durability.

MP3 BELL SYSTEM

Chiming and striking increases the participation of a clock in our daily life. Realizing this, we have designed an advanced MP3 bell system which is suitable for all purpose. With our advanced bell system, desired music can be played at desired time as the bell. These bells can also be customized to ring special music at specific dates of a year. It can also be used as an advertising media.

JTI GPS TOWER CLOCK MOVEMENTS are made of full 304 grade steel and gun metal heavy gears (Size of the gear is 1 module to 4 module and thickness is 5mm to 25mm). Chaises is made of full 304 grade stainless steel for long lasting and easy assembly. We are using warm gear technology for reduce the no. of gears and friction, to work for years without maintenance. In JTI clocks coming with imported dual stepper motor. Separate motors for rotating hour hand and minute hand. Dual stepper motor system eliminates the unwanted rotations and sets time quickly. A separate proxy sensors for hour hand and minute hands, will check the errors of the hands every hour, and correct the errors if any. 316 grade stainless steel sealed bearings are used for friction free motion and corrosion free in all weather. . JTI movements have the torque of 25KG to 1000KG depending on the size of the dial. (Torque can be tested by hanging corresponding weight in Centre wheel shaft, movement lift 25KG to 1000KG depends on the size of the dial). So it is able to fix a maximum bold and lengthy hands the maximum appearance of the dial and for a maximum visibility from long distance .

Master controller

Master controller for driving the high torque stepper motor is designed with micro controller based auto intelligent electronic circuits having RTC with high stability quartz crystal and GPS synchronization . High quality pure copper wire used for winding the transformers. All circuits boards are made using glass epoxy double side copper sheets with PTH. Teflon wires are used for interconnections. All Circuits, control cards and transformers etc are housed in a separate 304 grade stainless steel cabinet for the easy Service and replacement of any parts or circuits boards, If any unexpected failures caused by lightning, high voltage etc.

. Note: Before you placing an order for tower clock movement, you should ensure movement meet this quality, durability ,stability and reliability.

Selection of Dials

The index required for the dials can be Roman numerals, Arabic Numbers, Hindi etc according to customer's choice. There are four types of dials,

- A) Fiber Dial
- B) Skelton Dial
- C) Wall Mount Dial
- D) Custom Designed Dials

A) Types of Fiber Dials

These dials last for 10-20 years. Different colors can be given to these types of dials. Illumination for these dials should be provided externally.

There are two types of Fiber Dials,

- 1) Dome Dial
- 2) Plain Dial
- 3) Decorative Dial

1) Dome Dial



Model No: 28FDCCD



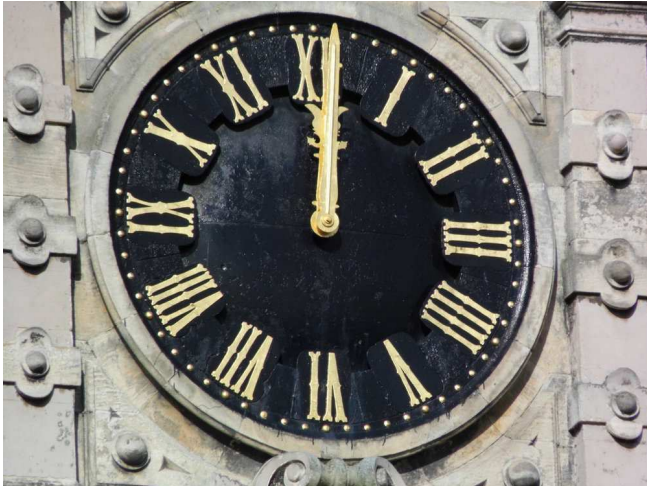
2) Plain Dial



Model No: 424FPCD

3) Decorative Dial

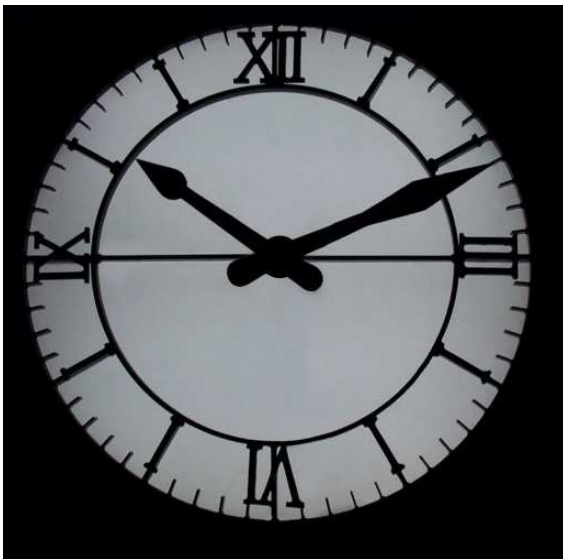
These dials are designed according to customer's design.



Model No: 29FDCD

B) Skelton Dial

These dials will be cut out from, mild steel sheets, stainless sheets, aluminum sheets, plastic sheets, particle sheets and form boards by using the technique of laser cutting. Back side of the dial is cover Polycarbonate sheet or acrylic sheet for back light illuminations. If back light illumination is not required ACP sheet can use for covering the back side. Also various designs can be given to the centre portion of the dial. We use laser cutting technique in order to avoid the rusting of the welded edges. Illumination for these dials can be provided both internally and externally. Internally illumination is provided using tube/CFL lights or LED lights.



Model No: 39MS6LPD Dial with back illumination



Model No: 39MS6LPD WITH OUTER RING

Dial is made from 6mm MS Sheet laser cutted. Dial is backgrounded 4mm Polycarbonate 040 translucent Sheet.



Model No : 38SSL3D

SSLIBG35F Dial made from 3mm 304 Stainless Steel sheet with Laser cutting.



Model No: 35PBL12D

Dial made from 12 mm particle board by laser cutting and MRF Polyurethane painted with Westminster flower.



Model No: MSLOF65F

C) Wall mounted Dial

In these dials, indexes of the dial will be fixed on the wall leaving a hole in the centre for the placement of the machine. All types of indexes like Roman letter, Arabic Numbers, Hindi alphabets can be provided. Illumination should be provided externally.

are comparatively cheap.

These dials



Model No: CIWM5F

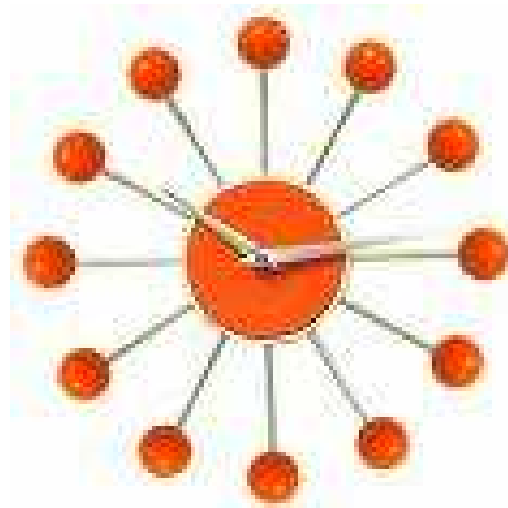




D) Custom Designed Dial

These types of dials are designed by discussion with the customer.

These dials are made according to customer's suggestions like to make dial with materials like wood, marble, vitrified tiles etc.





Clocks with JTI Movements



