

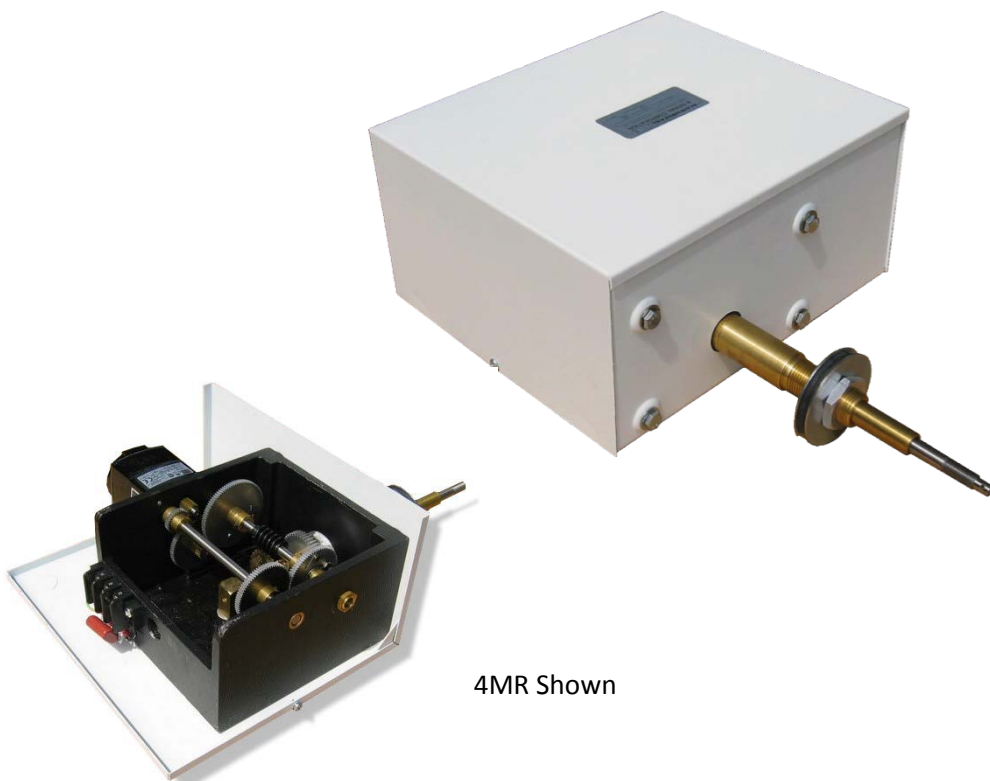
The National Time 4M Series clock mechanisms are the strongest in the industry due to its cast aluminum box construction. This worm gear transmission design outperforms those with parallel plates to withstand extreme forces that may be encountered in service. The 4M mechanism is driven by a permanent magnet, 120V 50Hz or 60Hz synchronous gear. These mechanisms offer mounting options to suit all applications with dial sizes up to 11' diameter. Custom shaft lengths can be provided to meet specific project requirements.

Variations:

4MR- The 4MR employs an innovative transmission and reversible motor that will advance the hands 10 times speed for correction. Time correction can be controlled remotely using a 970 or 980 series manual control. A Master Clock Controller will provide automatic time corrections for daylight saving and power outages.

4MDR- The 4MDR is a double face version of the 4MR. A single mechanism drives back-to-back clock dials with spacing between 15" and 24" with appropriate shaft selection

4MI- The 4MI minute impulse advances incrementally each minute utilizing a single direction motor. An MC3 Master Clock Controller is required for operation and provides automatic correction. The 4MI will not drift when employed in countries that do not regulate power line frequency or installations that may have generator backup power. An MC3 Master Clock with the 4 circuit expansion switches allows user to remotely adjust up to 4 clocks independently during installation or repair.



4MR Shown

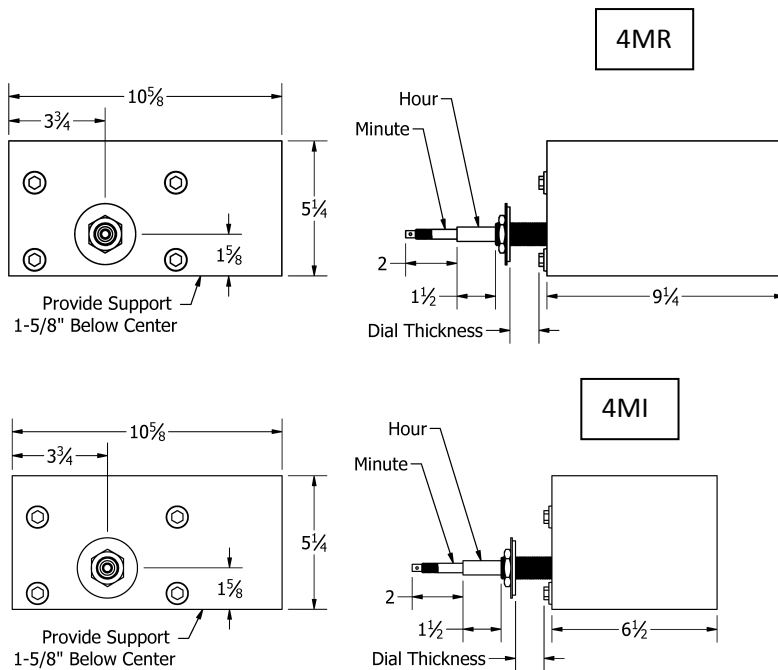
Common Features:

- Dial sizes to 11'
- Rugged box construction
- Cast Aluminum housing
- Shaft extension to eliminate illuminated dial shadows
- Through wall applications to 24" thick
- Front mount applications
- UL Listed
- Manufactured in the U.S.A.

Specifications

Input power: 120 VAC (specify 50Hz or 60 Hz)
Watts: 3
Weight: 17 lbs – 7.7 kg. (Approximate)

Standard Mounting

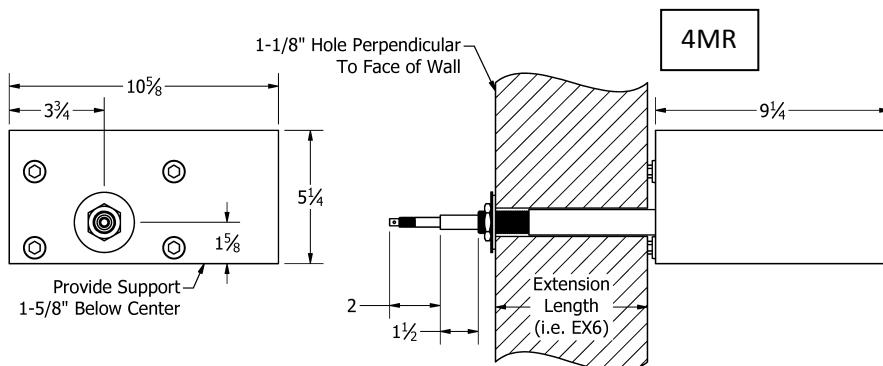


This mounting is for solid clock dial up to 1-1/4" thick. Requires recess behind dial to accommodate clock mechanism.

Clock could be front illuminated. Order (-LB) for dial thicknesses up to 2-1/4".

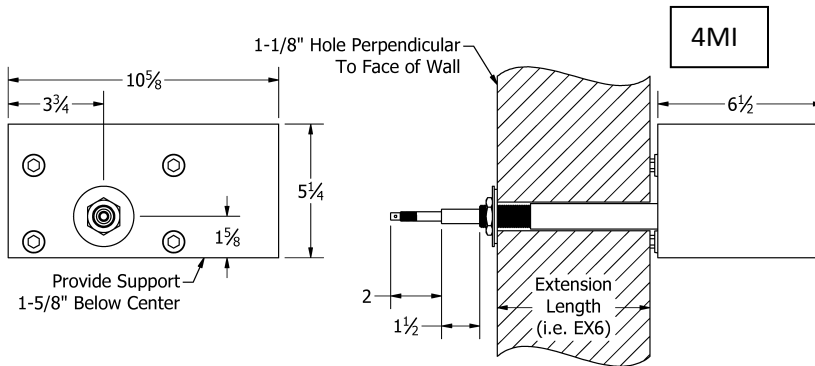
Shelving or other means of support recommended for mechanism.

Through Wall Mounting

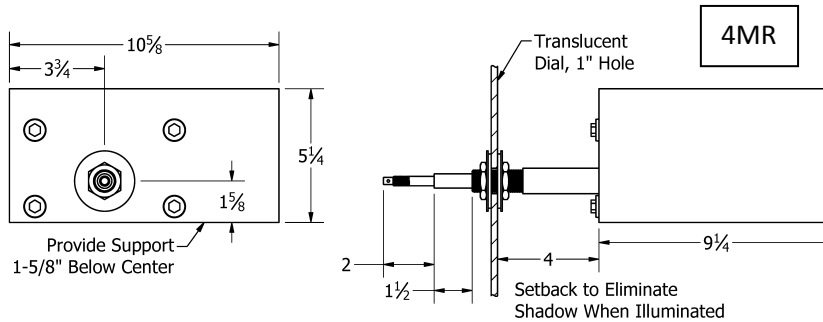


Through wall mounting is possible with an extension shaft. Extension shafts are available in 1" increments, 2 to 24 inches.

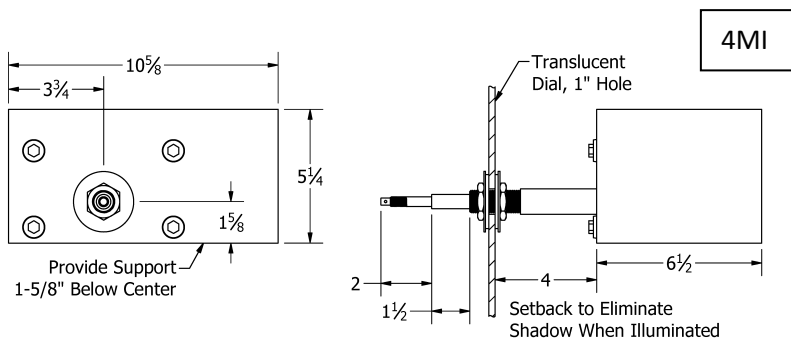
Through Wall Mounting (continued)



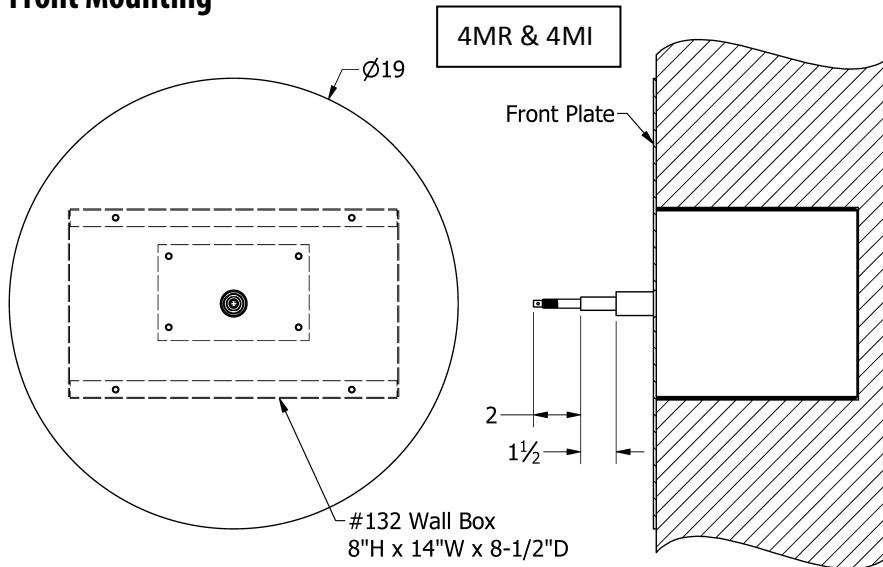
Rear Illuminated Dial Mounting



When using a translucent dial and back lighting, the EX4 shaft length will provide a set-back to eliminate the shadow of the movement housing.

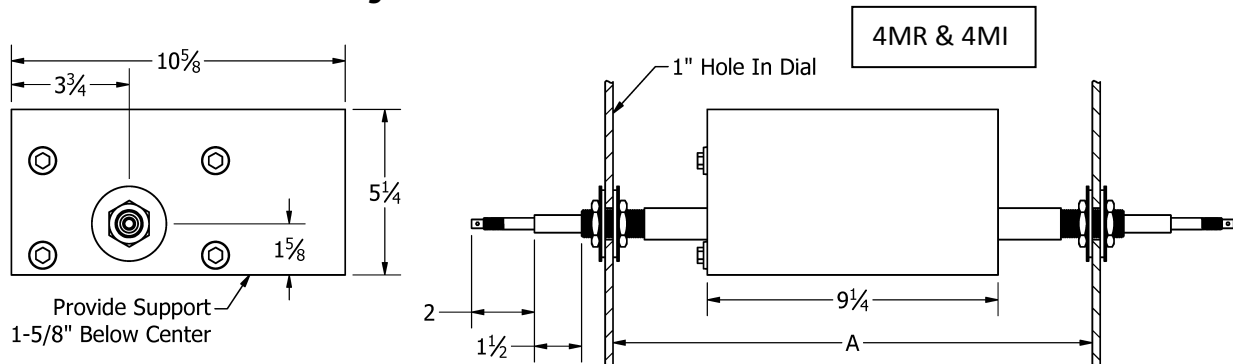


Front Mounting



Front mounting requires the 132 Wall Box mounted flush to the finished wall. An aluminum disk 19" diameter, 0.125" thick will attach to the wall box with flat head screws. Round, square, or custom shaped front plates are available. See 500 Series Clock brochure and Hand/Dial selections for typical styles or create your own vision.

Back-to-Back Double Dial Mounting



A double faced clock can be driven by a single mechanism. Distance 'A' is 15" minimum. For rear illuminated mounting, dial spacing 'A' = 15" recommended. Back to back dial distances up to 24".

Part Numbers

4M<type> -<hand length>- <extension shaft >

<type>= R, DR or I

<hand length>= Length of minute hand center to tip; blank=without hands

<extension>= Blank, LB (long bushing) or EX+ Length of extension (2-24 inches)

Add suffix “-LC” for movement less cabinet

Examples:

4MI-18-EX2 : Impulse with 18” minute hand and 2” extension

4MR-00-EX5 : “R” Series clock with 5” extension; no hands

4MI-26 : Impulse Series with 26” minute hand. Standard mount

132: Wall box for flush mount installations

132FP: Front plate for front mounting. 19” Dia. 0.125” Thick Aluminum, Primed for paint. Custom sizes available.

Consult factory for custom dimensions to fit your application

Clock Controllers



970 Manual switches



980-4-SA Manual switches



MC3 Master Clock



MC3 Master Clock with 4 Switches



MC100 and MC100-WP
Weather proof
Master Clock