

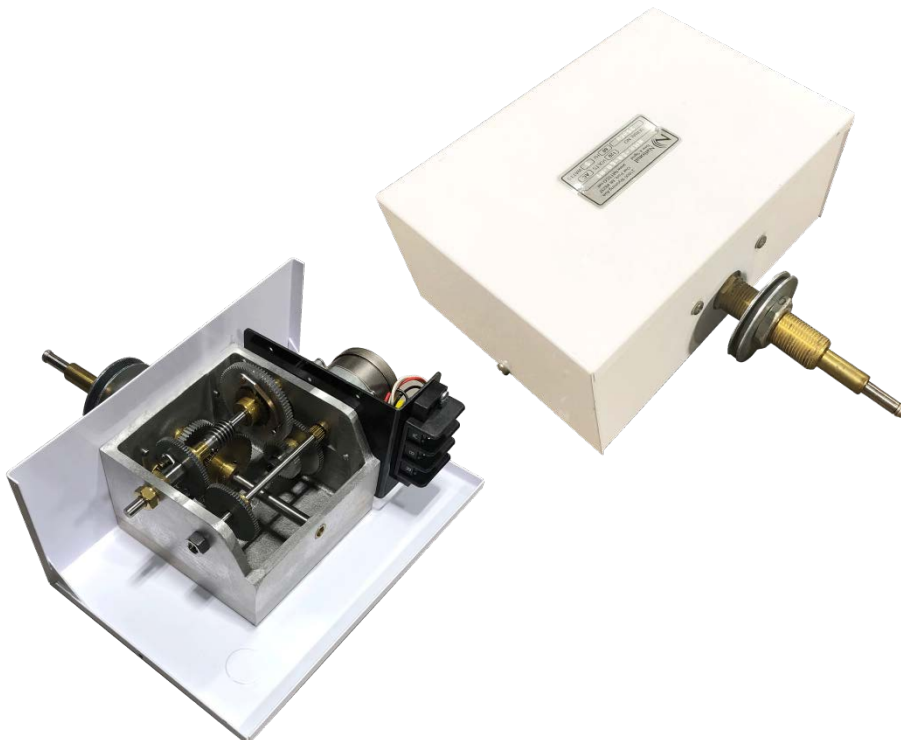
The National Time HM Series clock mechanisms are the strongest in the industry due to its cast aluminum box construction. This worm gear transmission design outperforms those with parallel plates to withstand extreme forces that may be encountered in service. The HM mechanism is driven by a permanent magnet, 115V 50Hz or 60Hz synchronous gear. These mechanisms offer mounting options to suit all applications with dial sizes up to 72" diameter. Custom shaft lengths up to 24" can be provided to meet specific project requirements.

Variations:

HMR- The HMR 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.

HMDR- The HMDR is a double face version of the HMR. A single mechanism drives back-to-back clock dials with spacing between 10" and 24" with appropriate shaft selection.

HMI- The HMI 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 HMI 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.



Common Features:

- Dial sizes to 72"
- Precision CNC machined cast aluminum box construction
- Shaft extension to eliminate illuminated dial shadows
- Through wall applications to 24"
- Double Dial Back-to-Back spacing 10" to 24"
- Front mount applications
- UL 48 Listed
- Manufactured in the U.S.A.

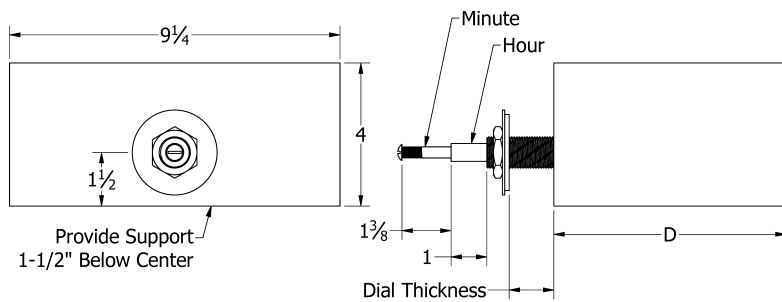
Specifications

Input power: 120 VAC (specify 50Hz or 60 Hz)

Watts: 3

Weight: 6.25 lbs – 2.84 kg. (Approximate)

Standard Mounting



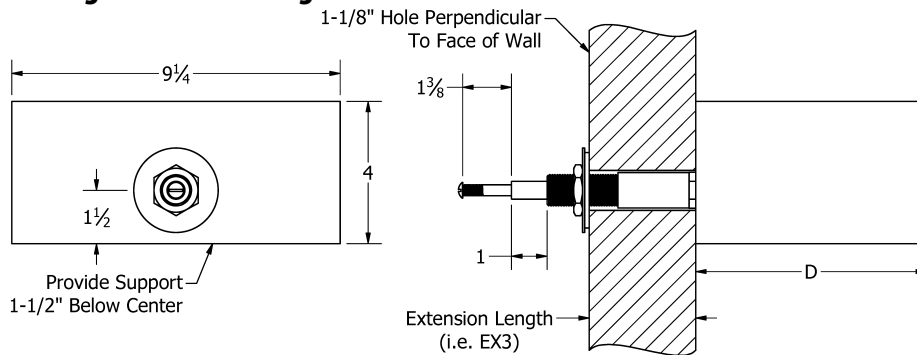
This mounting is for solid clock dials up to 1-1/4" thick

HMR: D= 6-1/2"

HMI: D= 4"

Order (-LB) for dial thicknesses up to 2-1/4".

Through Wall Mounting

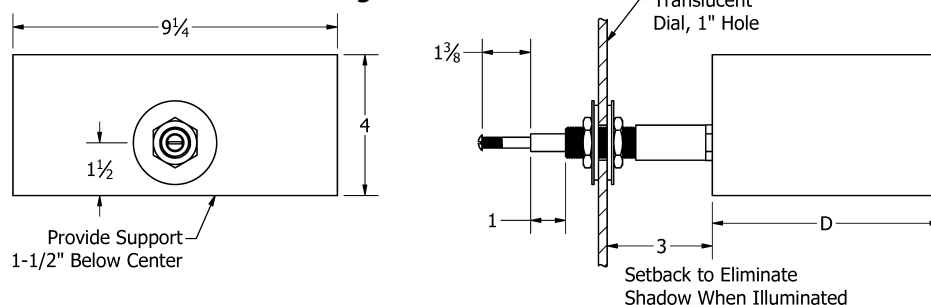


Extension shafts are available in 1" increments from 2 to 24"

HMR: D= 6-1/2"

HMI: D= 4"

Rear Illuminated Mounting

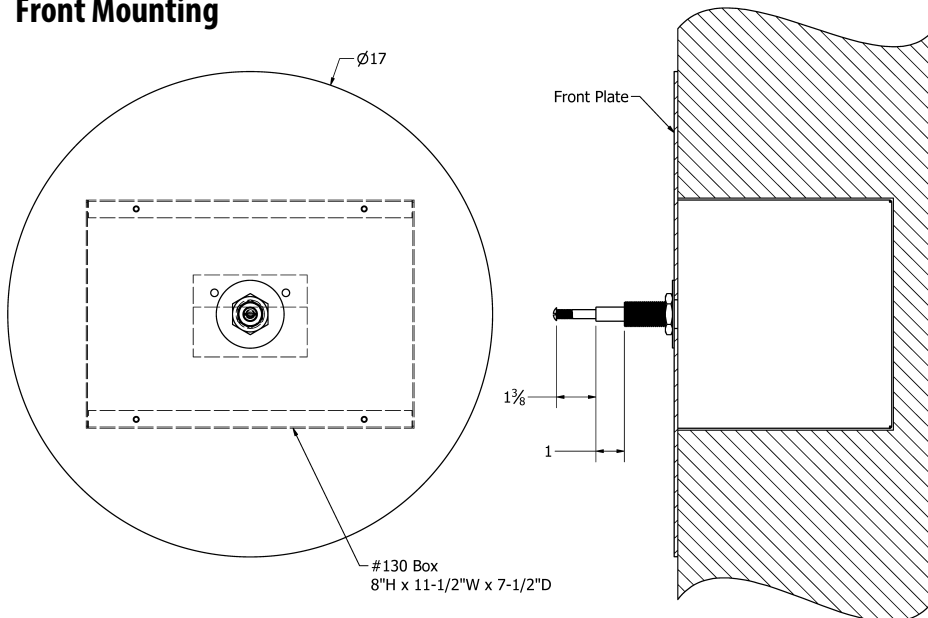


When using a translucent dial and back lighting, the EX3 shaft length will provide a set-back to eliminate the shadow of the movement housing.

HMR: D= 6-1/2"

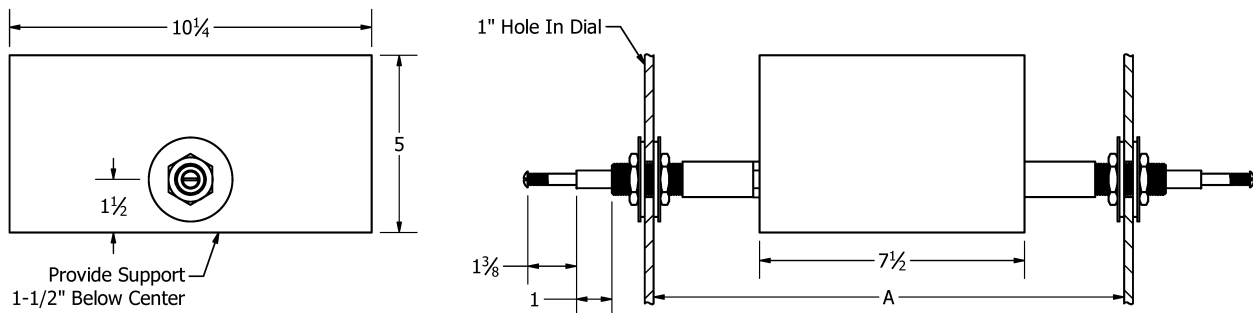
HMI: D= 4"

Front Mounting



Front mounting requires the #130 Wall Box mounted flush or slightly recessed to the finished wall. A 17" diameter aluminum front plate will cover the rough opening, support the HM mechanism and secure to the wall box with flathead screws. Square or custom shaped front plates are available. See 500 Series Clock brochure and our 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 10" minimum. For rear illuminated mounting, dial spacing 'A' = 14" recommended. Back to back dial distances up to 24".

Part Numbers

HM<type> -<hand length>- <extension shaft >

<type>= R, I, or DR

<hand length>= Length of minute hand center to tip; 00=without hands

<extension shaft>= LB (long bushing) or EX+ Length of extension (3-24 inches)

Examples:

HMI-18-EX3 : Impulse Series with 18" minute hand and 3" extension

HMR-00-EX5 : Synchronous Series with 5" extension; no hands

HMI-26 : Impulse Series with 26" minute hand. Standard mount

HMDR-30-12: Double Face mechanism, 30" minute hand, 12" back to back dials

130: Wall box for flush mount installations

130FP: Front plate. 17" diameter, 0.125" aluminum. Primed for paint. Custom shapes and sizes available.

Clock Controllers



970 Manual
Switches



980-4-SA
Manual Switches



MC3 Master Clock



MC3 Master Clock
with 4SW Switches



MC100 and MC100-WP
Weather proof
Master Clock