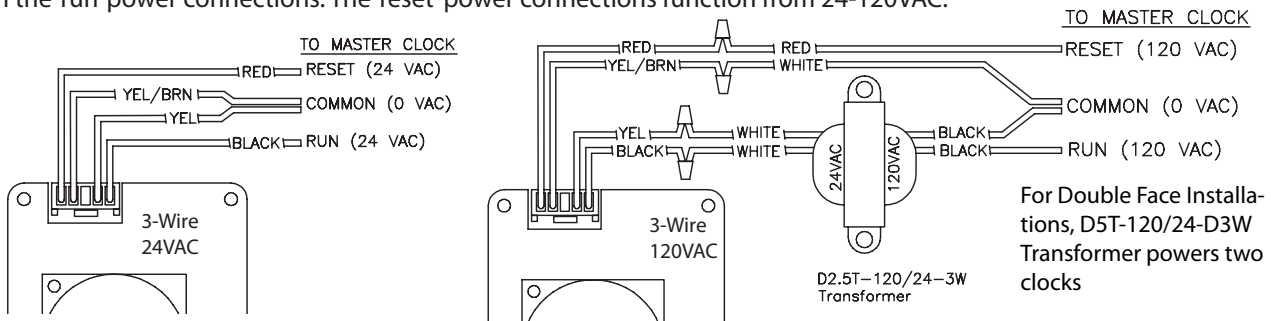


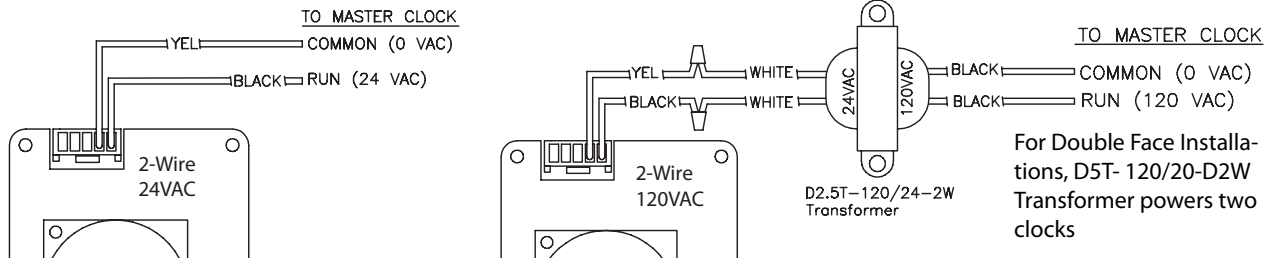
RD-3WS Series

xx-xxRD-3WS-00 Series Rotary Drive analog clocks will replace many existing 3-wire synchronous clocks by various manufacturers. See Bulletin C-430 for a complete listing. For 120VAC applications the D2T-120/24 Transformer is required on the 'run' power connections. The 'reset' power connections function from 24-120VAC.



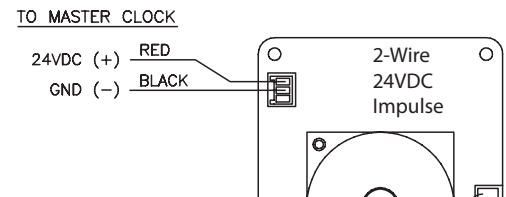
RD-2WS Series

xx-xxRD-2WS-03 Series Rotary Drive analog clocks function on only 2-wires. National Time Master Clock circuits programmed as 'NTS:D/DX/RDS' are capable of transmitting On-demand reset data on the power wires to correct the clocks to the actual time at any time. (For systems prior to 9/04, use the MC100 'NATSCO DIG' setting.) These clocks may be intermixed with the D/DX Series Digital Clocks. Alternately, for master clocks by other manufacturers, a short power interruption (0.25 sec or greater) will reset the clocks to 12:00.



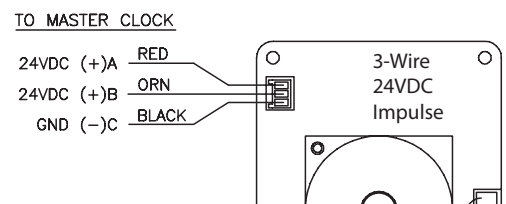
RD-2WI Series

xx-xxRD-2WI-00 Series Rotary Drive analog clocks are a 24VDC reverse polarity impulse clock. Resets are accomplished by variances in the polarity of the 24VDC pulse. The polarity shown is to aid in performing connections to the master clock. When using a National Time Master Clock, the clock circuit is programmed for 'NATSCO RDI' operation. Refer to the Master Clock manual for details. For master clocks by others, it operates as a Cincinnati D3 or D6 impulse clock and others. Refer to the Compatibility List Bulletin C-430.

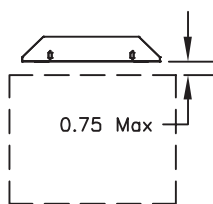
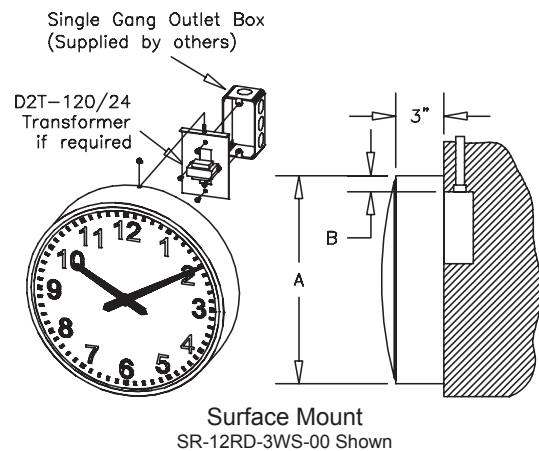
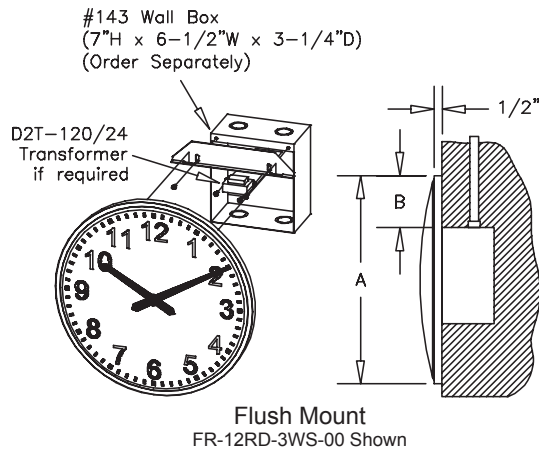


RD-3WI Series

xx-xxRD-3WI-00 Series Rotary Drive analog clocks are a 3-wire 24VDC impulse clock. Resets are accomplished by energizing lines A and B. This version is only used if extending an existing 3-wire impulse system. When using a National Time Master Clock, the clock circuit is programmed for 'CINCINTI D6' or 'CINCINTI D3' operation. Refer to the Master Clock manual for details. For master clocks by others, it operates as a Cincinnati D2 or D4 impulse clock and others. Refer to the Compatibility List Bulletin C-430.



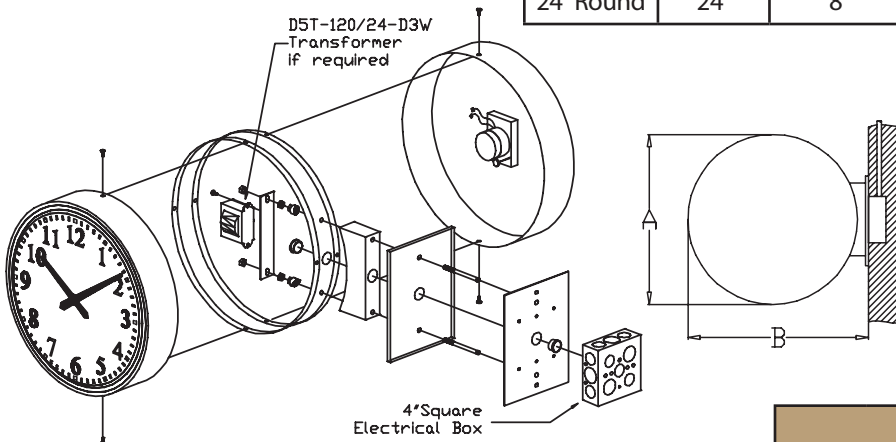
Mounting Options



If mounting the flush mount bracket over existing flush box by others, mounting flange must be within 0.75" of box top. D2.5T-120/24 transformer may be screwed to inside of box using self-drilling screws.

Flush Mount Dial Size	Dim A Outside Dia.	Dim B Box top to Clock Top
10" Round	11-1/4"	2"
12" Round	13"	3-1/4"
12" Square	12-1/2"	2-3/4"
16" Round	16-1/2"	4-3/4"
24" Round	24"	8"

Flush Mount Dial Size	Dim A Outside Dia.	Dim B Box top to Clock Top
10" Round	11-5/8"	1-1/8"
12" Round	13-7/16"	13/16"
12" Square	12-1/2"	5/8"
16" Round	17"	3/4"
24" Round	24"	11/16"



Flush Mount Dial Size	Dim A Outside Dia.	Dim B Box top to Clock Top
10" Round	11-1/4"	14"
12" Round	13-1/2"	16"
12" Square	12-1/2"	14-1/2"
16" Round	17"	19"
24" Round	24"	26"

24VDC Power Supplies:

PS-3: 75VA Transformer with circuit breaker @3.13A

Operates: 2-Wire System-(20)RD2WS or (65*)DLX225 or (40*)DLX400 clocks.

PS-6: Two 75VA Transformers each with circuit breaker @3.13A

Operates: 2-Wire System- 2ckts of (20)RD2WS or (65)DLX225 or (40)DLX400 clocks.

3-Wire System- 1 circuit (20)RD3WS or (65)DLU225 or (40)DLUU400

PS-12: Four 75VA Transformers each with circuit breaker @3.13A

Operates: 2-Wire System- 4ckts of (20)RD2WS or (65)DLX225 or (40)DLX225

3-Wire System- 2ckts of (20)RD3WS or (65)DLU225 or (40)DLX400 clocks.

*Varies with brightness selection, counts shown at maximum brightness. See Sheet C-424 for details

May be used in-line with existing clock types. On Demand resets require National's Master. On synchronous systems, On Demand resets will not effect existing clocks. On impulse systems, existing impulse clocks cannot occupy the same circuit if On Demand resets are desired.

Synchronous Resets: 8 second hour, 14 second 12hr; 25 second hour, 25 minute 12hr; 2 second 12hr; 55 second hour. See C-430 for compatibility list.

24VDC versions:19-32VDC @ 150mA; Filtered DC supply required for 24VDC On Demand resets.

24VAC versions: 17-28VAC @ 3.8W;

120VAC versions 102-132VAC @ 3W (Require D2.5T-120/24 or D5T-120/24 Transformer)

Wire Size

20ga.	18ga.	16ga.	14ga.	12ga.	10ga.
7	9	12	16	20	20

Simplified Wire Size/Distance Chart. Maximum Number of clocks per branch run. Assumes an average of 50' between evenly distributed clocks. Multiple branch runs may be connected at the power supply up to supply current rating. See C-428 for Details.