

Being ecologically friendly does not mean you have to sacrifice features. NATIONAL TIME is proud to introduce the industry's lowest power consuming digital clock with features beyond those of other manufacturers. This microprocessor based secondary clock has the intelligence to adapt to the system on which it is installed. Whether it is a 3-wire synchronous system with 58th minute correction or hourly correction, a 4-wire system with AC run and DC reset, a two wire system with on-demand actual time reset, or one you haven't seen for years... this is the clock for you. Right out of the box, this clock can distinguish and accept the most popular reset formats.

Having the industry's lowest power consumption means more clocks can be powered from a single power supply, longer wire distances and less expensive smaller wire gauges. Compare competitor's currents at 12 to 15 times our current! This adds up to savings to the installer as well as the owner with lower operating costs.

A **battery-less backup timekeeping** circuit is capable of surviving power outages over 10 days which alleviates long reset cycles even when operating on existing synchronous systems. **Stand-alone operation** without a master clock is also made possible using the included time setting buttons. **12 hour or 24 hour time format** is selectable at each clock.

This premium series also offers NATSCO's exclusive **automatic dim** feature that decreases the brightness to compensate for low ambient light levels associated with artistic and video productions. This not only provides a pleasant brightness level, but also saves energy during nighttime hours. **Nine brightness levels** may be selected to satisfy the brightest locations.

Class change **count-down timer** function is also supported. A popular option in K-12 schools. When operating on a two wire clock system, the reset input can be used to initiate a count-down timer and the duration can be individually set at each clock. (Optional beeper available, contact factory.) Alternately, a **count-up timer** function can be selected and will increment while the reset input is active for other custom applications.

Units can be powered by either 24VAC or 24VDC and have attractive 4" or 2.25" high visibility, wide-bar digits. 6-Digit versions also available, see DLU225-6 and DLU400-6. Compatible with 120VAC powered systems when the appropriate 24VAC transformer is mounted at each clock or double face unit. The **durable steel housing**, plug-in connectors and universal mounting plate simplify installation. An optional low profile surface box allows for surface mounted conduit entry. Powder grey finish standard, black and other colors upon request.



DLU225 Digital Clock

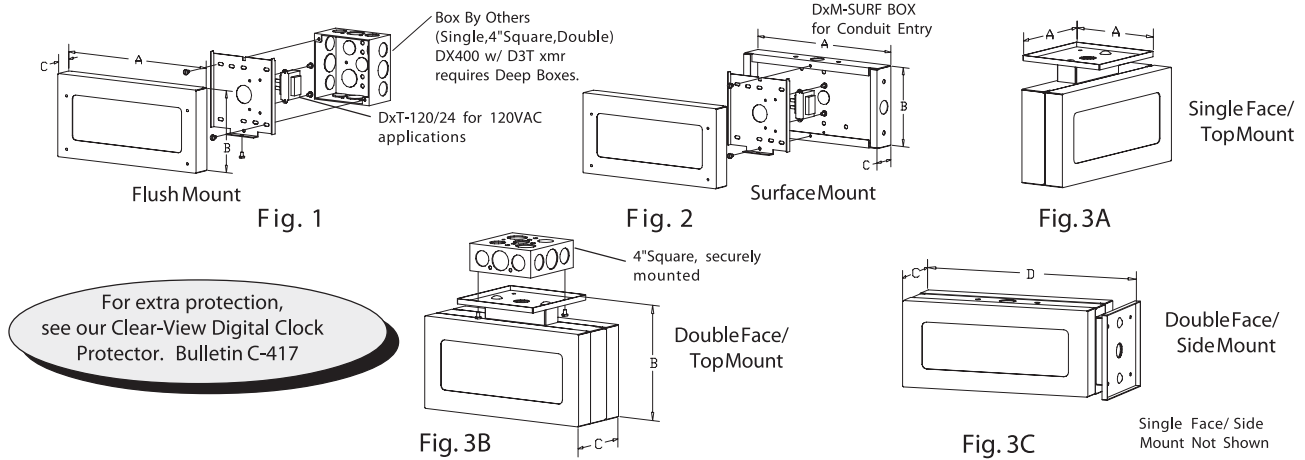


DLU400 Digital Clock  
Shown with Corridor Kit

## Features:

- Industry's Lowest Power Consumption
- Supports Many Reset Formats
- Analog Clock Compatible
- Automatic format detection
- 2,3 or 4 Wire Compatibility
- Long-Life Epoxy Sealed Display
- Auto-Dim Feature for Theatrical, Video, and Artistic Productions
- 9 Brightness Levels
- 12/24-hr Display Format
- Count-up/down Timer Capability
- Stand-Alone Operation Capable
- Battery-Less Backup Timekeeping
- Durable Steel Housing
- Plug-in Connectors
- 24VAC/DC 50/60hz Operation

## Mounting Options



## Specifications

### Voltage Requirements:

**24VAC/DC:** Clocks will function with 24VAC/DC standard.

**120VAC:** Reset circuit operates 24VAC/DC or 120VAC.

120VAC Run power is supported with the addition of these transformers:

D2T-120/24 - Single/Double Face DLU225; Single Face DLU400

D3.5T-120/24 - Double Face DLU400

The transformer mounts to the back of the mounting plate and extends into the surface box or electrical box. The D2T-120/24 protrudes 1.18", the D3.5T-120/24 protrudes 1.40". (May require a Deep back box or the D400-SURF BOX.)

### Correction Formats Supported:

**2-Wire: On Demand Correction:** When used with National Time Master Clocks, clocks can correct to any time of day.

**12 Hour Reset:** An 'off' pulse (0.5 sec. minimum) at each 12:00 will reset all clocks. 24hr Clocks reset at 12:00am.

**3-Wire: National:** Hour: 25 seconds each xx:00:00; 12-Hr: 25 minutes each 6:00:00.

**Other 3-Wire:** Simplex, Faraday, Cincinnati, Edwards, Lathem, Stromberg, American, Standard Electric; Refer to Bulletin C-427 for a growing list of supported formats.

**4-Wire:** National D62/D64, Faraday; 24VAC run, 24VDC reset. 12-Hour reset: 2 second pulse each 12:00.

**Stand-Alone Operation:** Time set using push-buttons. Battery-less backup timekeeping for at least 10 days.

**Count Up/Down Timer:** Reset input can be used to trigger count up or count down timer.

Count Up: Timer increments while reset input is active. Returns to clock mode when reset removed.

Count Down: Timer counts down when triggered by reset input. Duration set at each clock. Returns to clock mode when reaches 0:00.

For Elapsed Timer applications with remote switch control, see Bulletin C-492 Digital Elapsed Timer/Clock.

Part No.	Voltage	Range	Current@ Standard Brightness*	Current range all Brightness settings	Reset Current
DLU225	24VDC	11.5-32VDC	18mA	12-28mA	1mA
	24VAC	9-32VAC	32mA	23-46mA	1mA
	120VAC	105-132VAC	11mA	9-16mA	9mA
DLU400	24VDC	11.5-32VDC	28mA	15-51mA	1mA
	24VAC	9-32VAC	50mA	28-78mA	1mA
	120VAC	105-132VAC	16mA	11-26mA	9mA

\*Standard brightness is the factory setting of 4 which is typical for most installations

## Ordering Information

Part No.	Fig	Description	Mounting	Dim A	B	C	D
DLU225	1	2.25" Digital Clock with Mounting Plate	4 Square, Double, Single	10.13	5.06	1.13	--
DLU400	1	4" Digital Clock with Mounting Plate	4 Square, Double, Single	16.88	7.13	1.38	--
D225-SURF BOX	2	Surface Mount Box for DLU225	4 Square, Single, Wall Surface	10.13	5.06	2.63	--
D400-SURF BOX	2	Surface Mount Box for DLU400	4 Square, Single, Wall Surface	16.88	7.13	3.38	--
D225-CORR KIT	3	DLU225 Corridor Conversion Kit; Side or Top Mount*	Securely mounted 4 Square	5.00	6.30	3.75	11.40
D400-CORR KIT	3	DLU400 Corridor Conversion Kit; Side or Top Mount*	Securely mounted 4 Square	5.00	8.44	4.75	18.20
D2T-120/24-*	--	120/24VAC xfmr for Single/Dbl Face DLU225, Sgl DLU400	4 Sq, Dbl Gang, Surf/Corr. Box	--	--	--	--
D3.5T-120/24-*	--	120/24VAC xfmr for Dbl Face DLU400	D225/400 Corr Kit/Deep 4 Sq.	--	--	--	--

\*Add suffix 2W for single 2-wire installation; D2W for double face 2-Wire; 3W for 3-wire installation; D3W for double face 3-wire.