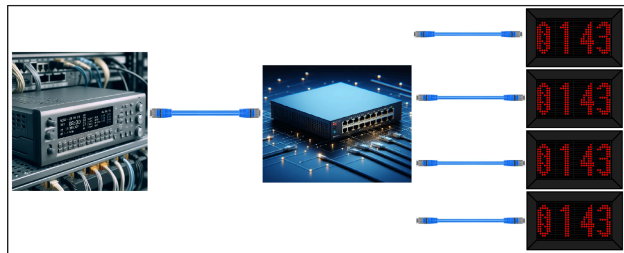


Description

Led NTP clocks offer the flexibility of serving as a standalone display system or being synchronized to display uniform time across multiple units. Leveraging NTP network time technology, these clocks synchronize with an NTP network time server over a network, negating the requirement for dedicated time distribution cables. This innovative approach allows facilities to utilize existing network cabling, eliminating the need for additional dedicated cables and streamlining the deployment of synchronized timekeeping systems.



Product Features

- Automatic synchronization with NTP network time servers over Ethernet connections.
- Clocks installed at various locations in the facility through the Ethernet port display NTP Server time.
- Ensures zero time deviation among clocks, providing uniform time across the facility.
- Modes include HHMM, HHMMSS, and Date.
- Large outdoor clocks designed for security gate time display, conference halls, departments, canteen halls, and dining halls.
- Outdoor clocks equipped with hi-bright LEDs for clear visibility even in direct sunlight.
- Weather-resistant casing with an IP65 equivalent rating for outdoor clocks.
- Display options include single-colour or multicolour configurations.

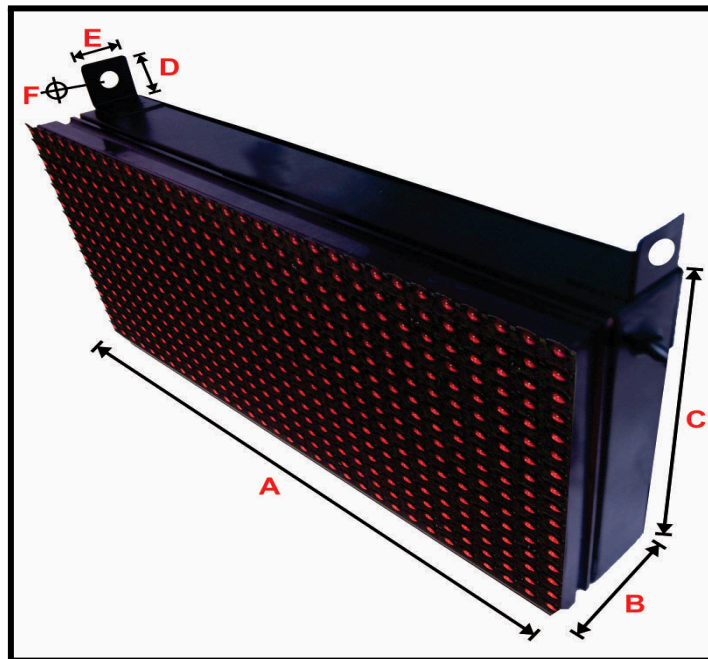
Network Time Clock

42, Mambalam High Road,
T Nagar, Chennai, 600017
sales@factorydisplay.com

- Operates on 220 Volts AC electric power.
- Highly accurate NTP digital clocks require no manual intervention.
- Automatic time updates using NTP over the network with no need for special hardware or software.
- Devices can autonomously detect available NTP time servers on the network.

Notes and Options.

- LAN cable is not included in the Clock supply package.
- All displays are available in a single colour, with the default supply being in RED.
- Other colour options are available upon request, subject to an additional cost.
- RED colour provides optimal brightness for viewing both indoors and outdoors.
- For outdoor units, the cost increases by 18% on the base price.
- Titles and fixed designs can be added to meet specific specifications.
- All units operate on 230V AC mains (110V available upon separate quotation).
- Mounting provisions include:
 - Top eye bolts for ceiling hanging.
 - Side clamps for secure bolting to supports



Sizes and Models						
Model	Type	Digit Height (mm)	Height (mm)	Width (mm)	Depth (mm)	Max Power (W)
NTP-CLK-MAT-HM-11	HH:MM	140	160	320	50	35
NTP-CLK-MAT-HM-23	HH:MM	260	320	960	50	185
NTP-CLK-MAT-HMS-12	HH:MM:SS	140	160	640	50	65
NTP-CLK-MAT-HMS-24	HH:MM:SS	260	320	1280	50	245

Technical Specifications	
VOLTAGE	230 VAC 1 PHASE MAIN POWER
OPERATING TEMP	5 TO 55°C
STORAGE TEMP	0 TO 65°C
RELATIVE HUMIDITY	UP TO 95% RH NON CONDENSING
DISPLAY	FULL MATRIX
LED COLOUR	RED, GREEN, BLUE, WHITE, MULTICOLOUR
BATTERY	CR2032 BATTERY FOR TIME KEEPING
RTC CHIP SET	HIGH PRECISION DS3231 CHIP SET
ACCURACY	The NTC clock displays shall be accurate to within 50 milliseconds of the UTC time reference provided by the NTP server(s) when synchronized.

Network Time Clock

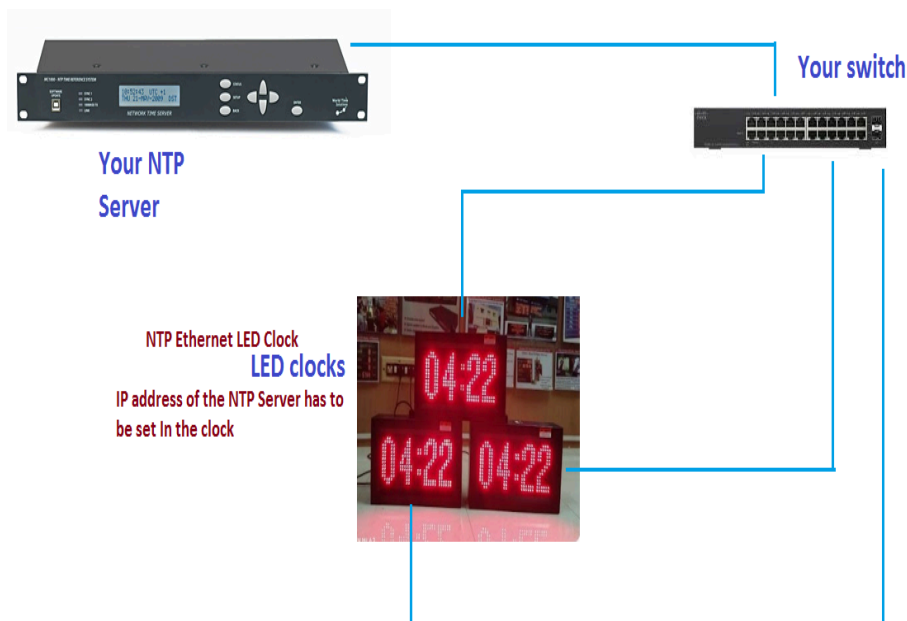
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COMMUNICATION PORT	TCP IP ETHERNET
ACCESSORIES	POWER CABLE 1 METER

Electrical connections

Hardware Installation for NTP clocks

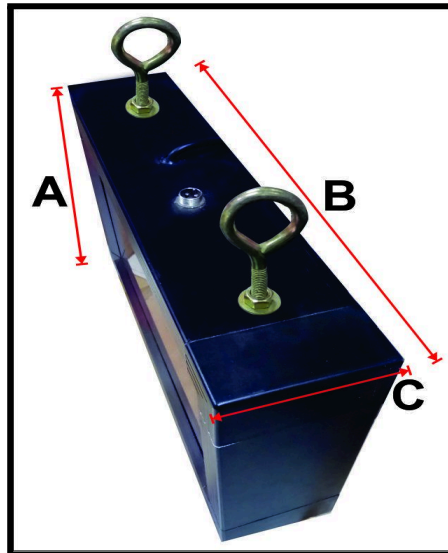
- Power on the NTP clock.
- Reserve a static IP address for each clock as it does not support DHCP.
- Before on-site installation, configure the clock with the designated IP address, subnet mask, gateway, and device name.
- Install the configured clock on-site and connect it to the NTP server via the LAN network switch.
- Using the web interface of the clock, configure the clock's IP address to match the NTP server.
- Restart the clock to apply the changes.



LAN Connector in the cabinet



Dimensions



All Units in mm

Model No	A Height (mm)	B Width (mm)	C Depth (mm)	Max Power (W)
NTP-CLK-MAT-HM-11	250	410	93	35
NTP-CLK-MAT-HM-23	410	1050	93	185
NTP-CLK-MAT-HMS-12	250	730	93	65
NTP-CLK-MAT-HMS-24	410	1370	93	245

Network Time Clock

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