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# Omni eX<sup>®</sup>

## QUICK START GUIDE



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## Out of the Box

- Before applying electrical power always visually inspect the controller's exterior for shipping damage.
- Check for loose or missing screws on the cover
  - Give the unit a firm shake to test for any loose hardware or internal components
  - Check the AC and +24VDC fuse holders to ensure they are secure.

Please contact support if any damage is found.

## Initial Power Up

- Connect the controller to the power source**
  - NEMA: Attach an 'A' (TS2-1 or TS2-2) cable
  - FLeX or 2070: Plug into standard 120 VAC outlet
- Set the Power switch to the active (I) position**
  - FLeX and eX2: Located on front of controller
  - 2070: Located inside the front panel on the power supply (2070-4A). Open the panel door to access
- The Main Menu will display after the boot up process is complete**
  - FLeX and eX2: 16 line display; Both Status and Main Menu screens will appear
  - 2070: 8 line x 40 column LCD; Either the Main Menu or Status Screen will appear. To toggle between the Status and Main Menu, press the "ESC" key, repeating as necessary

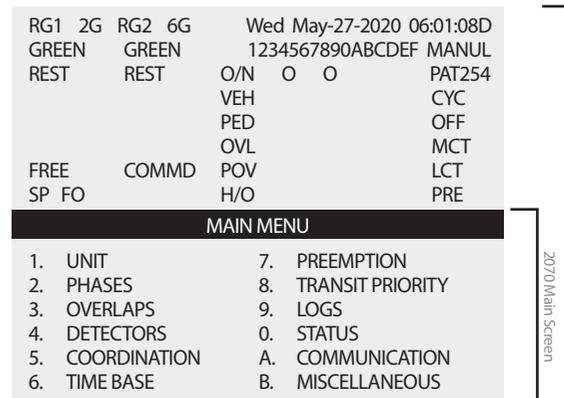


Figure 1: Main Screen

- If screen appears blank, adjust the contrast knob accordingly. Note - contrast knob not available on eX2
- Clear the database:** Main Menu > B (Miscellaneous) > 2 (DB Management) > 1 (Initialize Database) > 1 (Entire Database)
    - Choose the cabinet type that the controller is being installed in
    - Choose the appropriate Pedestrian and Overlaps Channel option
  - Initialize Database Confirmation**
    - Press Yes to proceed or ESC to start over

## Initial Power Up (continued)

- Finalize**
  - Press ENT to finalize Database Transaction
  - Restart the controller to proceed

## Bench Testing

If the controller will be bench tested prior to installation into a cabinet, there may be some additional setup required before programming the controller.

- If TS2 Type 1, TS2 Type 2, or ATC Cabinet were selected, the serial communications for Terminal Facilities (TF), Detection (Det), and Monitors (CMU or MMU) will be turned on. The TF and Monitor communications need to be disabled for the controller to work normally on a bench. Otherwise the controller will not come out of stop time.
- NEMA TS2 Type 1:**
    - Defaults the BIUs to TF 1 and 2 on, Det BIU 9 on, and MMU set to Yes.
    - To turn off the TF and MMU: Main Menu > page 1.7 > turn off all SDLC communications to these devices.
  - NEMA TS2 Type 2:**
    - Defaults the BIUs to Det BIU 9 on, and MMU set to Yes.
    - To turn off MMU: Main Menu > Page 1.7 > turn off all SDLC communications to these devices.
  - ATC (SIU):**
    - Defaults the SIUs to SIU 1 on, Input 9 on, and CMU on.
    - To turn off SIU 1 and CMU: Main Menu > Page 1.8 > turn off all SDLC communications to these devices.

## Initial Programming

After initializing the database and restarting the controller, the following is a practical order to program a controller with Omni eX 2.0.

- All references to pages are from the Main Menu
- Time Zone:** Main Menu > Page 6.2
    - Set the local time offset from GMT
    - For assistance the screen provides the US time zones: EST = -5:00:00, etc.
    - By default, the controller is set to PST (-8:00:00)
  - Date/Time:** Main Menu > Page 6.1
    - Set the date first then enter the HH:MM:SS
    - Press the Yes key to save
  - System ID:** Main Menu > Page B.3
    - 10-digit numeric value to uniquely identify this location
    - System ID also used to name the location when importing/exporting the database file on the USB utility

## Initial Programming (continued)

- System ID:** Main Menu > Page B.3
  - 10-digit numeric value to uniquely identify this location
  - System ID also used to name the location when importing/exporting the database file on the USB utility



Figure 2: System ID

- Sequence/Phase Enable Rings/Phase Concurrency:** Main Menu > Page 2.3, 2.4, and 2.5
  - The database initiation loads a standard 8-phase, 2-ring configuration



Figure 3: Sequence Setup

- IP Address:** Main Menu > Page A.2
  - The Omni controller supports two discreet IP addresses: Port 1 and Port 2
  - Input the IP Address, Subnet Mask, and Gateway for the physical port you are using
  - There are default values for the NTCIP port (161) and the AB3418 port (8001)

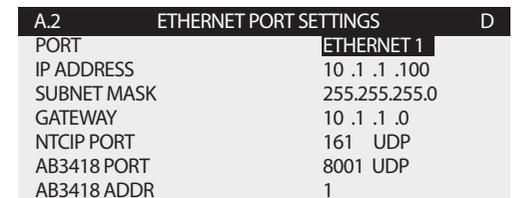


Figure 4: IP Setup

- Timing Data:** The following menu items will be used to setup the controller. Refer to the manual for additional programming of the following:
  - MM - 1 - Unit: Unit Control Operation Mode, Unit Setup, Startup, Channel Configuration, I/O Mapping, Logic Gates, NEMA TS2 Setup, ATC/ITS Setup, and Peer-to-Peer
  - MM - 2 - Phases: Phase timing/Options
  - MM - 3 - Overlaps: Vehicle and Pedestrian Overlaps
  - MM - 4 - Detectors: Vehicle and Pedestrian Detector Attributes
  - MM - 5 - Coordination: Constants, Patterns, and Split Tables
  - MM - 6 - Time Base: Schedules, Day Plans, and Actions
  - MM - 7 - Preemption: 8 Preempts
  - MM - 8 - Transit Priority: TSP Global Options, Strategy, Times
  - MM - 9 - Logs: View, Clear, Setup, Enable Logs