

TOTAL ECLIPSE Quick Start Guide for the TOTAL ECLIPSE CHEMICAL MANAGEMENT SYSTEM



The TOTAL ECLIPSE Controller is an integral part of the TOTAL ECLIPSE Chemical Management System, that also includes:

- The Machine Interface Accepts washer signals and converts them to safe, low-voltage inputs.
- The Pump Module Provides product transfer to the wash machine. The TOTAL ECLIPSE Controller is compatible with any Nova Controls' modular pumpstand. including the Eclipse, Orion or any of the Large Laundry dispensers.
- The Flush Manifold (optional) Available for water flush chemical transfer applications.

Designed for maximum versatility in OPL or large laundry machines, the TOTAL ECLIPSE Controller's selectable Operating Modes allow the system to work with trigger signals from fully-programmable washers or with manually triggered signals (or cycle time extenders) from non-programmable, fixed-time washers. The Controller's easy-to-understand, plain-text LCD display (available in English and Spanish), make operator training simple. Installation time and cost is significantly reduced with the computer-based Formula Editor program that allows an off-site technician to create sets of up to 20 industry-specific, efficient and cost-effective formulas that are loaded onto a controller with a customer-supplied USB flash drive (16 GB or smaller). Summary Reports can be saved to the same USB flash drive, providing usage and programming information to effectively analyze and manage each machine.

Components Supplied



TOTAL ECLIPSE Controller (P/N 01-08500-00, Lt. Grey/Teal) (P/N 01-08900-00, Black/Red)



Wall Mount Bracket, Kit (P/N 13-08462-00, Grey) (P/N 13-08916-00, Black)



Quick Start Guide (P/N 20-08808-00)

DOWNLOAD from the Hydro Systems website, http://www.hydrosystemsco.com and click the NOVA logo 🌇 :

- Formula Editor Software for Windows 2000/XP/Vista/7, & Mac OS 10.4 (Minimum requirements: Java JRE 1.5 or higher [90 MB disc space]; 1024 x 768 screen resolution; 128 MB RAM; 10 MB disc space; USB 2.0 and a USB flash drive [16 GB or smaller] for data transfer to TOTAL ECLIPSE controller)
 - TOTAL ECLIPSE Reference Manual Click photo of Total Eclipse Controller, then click 覚 Total Eclipse Manual

How to Use the TOTAL ECLIPSE Quick Start Guide

Use this Quick Start Guide if you are already familiar with installing and using dispensing systems. Please refer to the TOTAL ECLIPSE Reference Manual for detailed instructions, including information on the optional Relay, Event, Occurrence and Group Operating Modes. Refer also to the Installation and Operations manual that is included with your pumpstand or upgrade kit for additional instructions.

IMPORTANT NOTE: Quick Start instructions assume that Formula/Setup files will be loaded via a USB flash drive, which may override the following

TOTAL ECLIPSE Controller Specifications		
Size	5.2" W x 4.5" H x 2.5" D (13.2 cm W x 11.4 cm H x 6.4 cm D)	
Weight	0.65 lb. (0.30 kg)	
Power Rating	SELV — Power source is pumpstand	
Data Input Field Size	15 characters maximum input for custom names	
Pump Capacity	99.99 oz. (2999 ml.) 8 pump (with 3 amount settings per pump) maximum	
Environmental	IP Rating – 44 Pollution Category – 2 Installation Category – II	
Temperature	10° to 49° C (50° to 120° F) maximum	
Humidity	95% relative humidity, maximum	
Indoor Installation	Approved for indoor use only. Must not be installed outdoors.	
Altitude	Install at or below 6,500 ft. (2000 m) maximum	
Specifications subject to change without notice.		

factory default settings: Standard Operation; Eclipse Flush P.I.; Flush Time–0 sec.; Cycle Time–00 min.(Off); Signal Filter Time–2 sec.; User Prime– Disabled; Units of Measure = SAE. Default Passwords are Installer = 01234; Manager = 0123. It is recommended that default passwords are changed via the controller's keypad (and noted) after installation and system setup are complete. To change formulas, settings or passwords using controller keys, or to add a machine or company name, see the *Guide to Keypad and Menus (p. 5)* and *Initial Setup* on *Installer Menus (p. 6)*.

Installation

WARNING	Disconnect all power to the pumpstand during installation, service, and/or any time pump cabinet is opened. The TOTAL ECLIPSE should be installed by a qualified technician only, in accordance with all applicable electrical and plumbing codes.
	Desconecte toda la corriente eléctrica al dosificador durante la instalación, servicio y / o siempre que se abra el gabinete de la bomba. El equipo TOTAL ECLIPSE debe ser instalado sólo por técnicos calificados y de acuerdo con todas las normas de plomería y eléctricas que apliquen.

Step 1. Install the Machine Interface (MI)

WARNING	Keep MI and communication cable away from high voltage wires and relays. NEVER parallel the cable with high voltage lines.
\wedge	Mantenga M.I. y los cables de comunicación separados de los cables de alta tensión y relés. NUNCA instale el cable paralelo
ADVERTENCIA	con las líneas de alta tensión.

- 1. Route MI signal wires through 1/2 inch knock-out on washer (within the wiring area). Secure MI to washer with lock nut (provided).
- 2. Plug J2 cable into MI. Bundle excess J2 cable outside washer and connect other end to J2 connector on rear of Controller.
- 3. Connect J1 cable from pump module to J1 connector on Controller. The maximum distance for a J1 cable is 75 ft. (22.9 m.) unless using a break out box and hard wiring. Contact Nova Controls for additional cables, a coupler or detailed instructions.
- 4. Secure J1 and J2 cables to controller tie-down posts with tie wraps.

Step 2. Connect Signal Wires

Voltage

The Machine Interface will work with any signal voltage between 24 – 240VAC or 22 – 24VDC. With DC signals, polarity must be observed. Common is negative. The signals should be positive voltages.



Supply Trigger Wiring

Identify the washer supply signals. In Standard or Group Mode of Operation, use appropriate terminal connectors to connect signal wires to the Machine Interface wires, per table at right. (Do not use table for Event or Occurrence Modes; see Manual.)

Trigger Signal Wiring Notes:

- If one or more pump signals are not used, they do not need to be connected.
- Connect to: Supply Signal Trigger Signal Common Standard (US) Group (EU) Signal 1 Black wire White/Black Pump 1 Group 1 Signal 2 White/Brown Brown wire Pump 2 Group 1 Signal 3 Pump 3 Red wire White/Red Group 2 Signal 4 Orange wire White/Orange Pump 4 Group 2 Yellow wire White/Yellow Signal 5 Pump 5 Group 3 Blue wire White/Blue Pump 6 Signal 6 Group 4
- If you are triggering more than one pump from a single signal, connect all MI signal wires for those pumps to that signal.
- Wire nut unused wires. If washer has a single common, wire nut all commons together.

Step 3. Mount the Controller

- 1. Mount bracket with velcro-style strips, according the directions at right. Install wall board screws or nuts and allen bolts, if needed.
- 2. Slide controller down onto mounting bracket until it snaps in place.
- 3. Install pump module and make all electrical and plumbing connections for the system, but <u>do not</u> apply power to the TOTAL ECLIPSE until you are ready to select a language of operation.

Language Options

Each TOTAL ECLIPSE is shipped with English and Spanish languages installed. Additional languages, as they become available, may be downloaded from the Hydro Systems website directly to your USB flash drive (16 GB or smaller). If changing from one of the pre-installed languages, the language-enabled USB flash drive must be connected before applying power to the controller.



(2) (Optional) Install Wall Board Screws or Masonry Nuts & Allen Bolts

Mounting Bracket

(3) With J1 and J2 cables connected, slide Controller onto mounting bracket until it snaps into place.



MACHINE INTERFACE



Step 4. Select the Controller Menu Language

- 1. Apply power to pumpstand & power-up the Controller (see "Language Options" on page 2).
- 2. Select either English or Spanish LRNGURGE by moving the selection box with the UP or DOWN ARROWS until the correct language is contained within the box.
- 3. Press **Enter** to select a language. All menu and application items are displayed in the selected language. Any text previously input by the installer (pump and formula name, etc.) remains in the language of input.

Step 5. Set the Current Date and Time

- 1. After the language is set, the DATE & TIME menu appears for 15 seconds as YYYY-MM-DD (Year-Month-Day) and HH:MM (Hour:Minute). The first number of the year is the active digit, indicated by the double-arrow cursor ♣. Set to current date/time.
- 2. Press the UP or DOWN ARROW to change the active digit. Press the RIGHT ARROW to move the cursor to the next digit. Set all digits until the current Year-Month-Date and Hour:Minute display.
- 3. Press ENTER to save. The Home Screen automatically displays. (For more information, see page "Home Screen" on page 4.)

Step 6. Program the Controller via USB Flash Drive

The easiest way to program the controller is to load previously created set-up files from a USB flash drive onto the controller. Settings that are <u>not</u> transferred via a USB drive are: Passwords (Installer & Manager), Machine Name, Company Name, and Calibration.

- 1. Connect the USB flash drive containing set up files that were created in either the Formula Editor or on another controller.
- 2. From the Home Screen, press ENTER to launch the MRIN MENU.
- 3. Move the selection box to INSTALLER MENU by pressing and holding the **DOWN ARROW**.
- 4. Press ENTER and input the default Installer Password of 01234, using the UP ARROW to increment the number and the RIGHT ARROW to move the cursor.
- 5. Press ENTER to accept the password input. Select ORTR TRANSFER from the Installer Menu and follow the sequence below:



6. Remove USB flash drive. Press **EXIT** (5) to return to the Installer Menu, in order to calibrate (required) and prime pumps.

Step 7. Calibrate Pumps

You must calibrate all pumps to be used; programmed formulas will not run if pumps are not calibrated. Use CRLIBRATE [UOLUME] only for medium (12 or 18 oz. / 355 or 532 ml. per minute) pumps.



Step 8. Prime Pumps

Press Enter (2) to start and stop prime. After priming is complete, press the EXIT (5) KEY until you reach the Home Screen.





Description of Controls and Operator Menu

Home Screen

The Home Screen appears after the controller language has been selected or whenever the controller is active. If no key is pressed for 15 minutes, Power Save turns off the display's backlight. Press any key to turn the backlight on and resume normal operation. If the controller is powered off, the last formula selected is the active formula on the Home Screen when power is turned back on. See the following graphic for an explanation of the information and symbols that may appear on the Home Screen.



Formula Quick-Select

To prevent errors in data logging or chemical dispensing: Select the correct formula before washer operation starts and be sure that all programmed pumps are triggered during the cycle.

- 1. (5) From the Home Screen, press the EXIT key (also called FORMULA SELECT).
- 2. Press the **UP** or **DOWN ARROW** to move the selection box to the correct formula. All formulas appear, but only formulas with programmed pumps are selectable.
- 3. Press ENTER to start the formula and return to the Home Screen.
- 4. (Optional) Press ENTER () to reach the load size or bleach defeat settings.

Operator Main Menu

To reach the Main Menu from the Home Screen, press any key (*except* the **EXIT** key).





Limited Warranty

SELLER warrants solely to BUYER the Products will be free from defects in material and workmanship under normal use and service for a period of one year from the date of completion of manufacture. This limited warranty does not apply to (a) hoses; (b) and products that have a normal life shorter than one year; or (c) failure in performance or damage caused by chemicals, abrasive materials, corrosion, lightning, improper voltage supply, physical abuse, mishandling or misapplication. In the event the Products are altered or repaired by BUYER without SELLER'S prior written approval, all warranties will be void. NO OTHER WARRANTY, ORAL, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, IS MADE FOR THESE PRODUCTS, AND ALL OTHER WARRANTIES ARE HEREBY EXPRESSIVE XEXCLUDED. SELLER'S sole obligation under this warranty will be, at SELLER'S option, to repair or replace F.O.B. SELLER'S facility in Cincinnati, Ohio any Products

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TOTAL ECLIPSE Operator Menus





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