Modular System Manager SD Quick Start Guide

Requires Modular System Manager SD Code: SS1068

- VCCX2 Controller Code: SS1088
- VCC-X Controller Code: SS1079
- VCB-X Controller Code: SS1051 Version 2.0 and up
- VCM-X Controller Code: SS1026
- VCM-X E-BUS Controller Codes: SS1030, SS1032, SS1033, SS1034
- RNE Controller Code: SS1045
- SA E-BUS Controller Code: Y200921
- VCM Controller Code: SS1016
- VAV/CAV Controller Code: SS1003 and MUA II Controller Code: SS1004
- VAV/Zone Controller Codes: SS1001, SS1005, SS1025, SS8011
- MiniLink PD Code: SS0040, SS1061

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SD CARD UPDATING INSTRUCTIONS

The Modular System Manager SD is equipped with an SD memory card that contains the software to communicate to the various controllers. This SD card can be removed and easily updated using a computer by downloading updates as they become available from our website.

In order to perform any updates, your computer needs an SD card drive or you will need to purchase an SD card adapter.

Download instructions are found in Appendix B of this manual.
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The OE392-12 Modular System Manager SD provides a direct link to enable you to view the status and adjust the setpoints of the VCCX2, VCC-X, VCM-X, VCM-X E-BUS, VCC-X, VCB-X, NRE, SA E-BUS, VCM, VAV/CAV, MUA II or VAV/Zone Controller on the control system communications loop. The System Manager SD is housed in a beige-colored plastic enclosure. The System Manager has a programmable 4 Gigabyte SD card and is equipped with a 4-line-by-20-character backlighted display panel and a 24-key membrane keypad for data selection and entry. All keypad operations are simple and straightforward, utilizing non-cryptic plain English language messages. Menu-driven programming allows for easy setup and operation without the need for specialized training. The System Manager also has 2 integral LEDs for user notification of system alarm conditions and override initiations. Protection from unauthorized users is provided by the System Manager’s integral multi-level passcode authorization programming.

For a Stand-Alone system, a power/comm cable with modular connectors on one end and stripped wire ends on the other end is provided to facilitate connecting communications and power to the Modular System Manager from the 24 VAC power source and the HVAC unit controller communication wiring terminals. Alternatively, 2-conductor, twisted pair with shield cable can be used to wire from the RS-485 terminal block on the back of the Modular System Manager to the Controller’s communication terminal. If this is an Interconnected System, all controllers that are interconnected with communications cable can be programmed from any controller on the loop. If this is a Networked System, all controllers on the entire Networked System can be programmed from one controller.

The Modular System Manager is designed for wall mounting. Mounting holes are provided to attach the Modular System Manager to a standard handy box. It is recommended that the System Manager be mounted at approximately eye level to allow for ease of programming and reading of the display. The System Manager is typically mounted in the building manager’s or superintendent’s office or in an equipment room. The attractive enclosure is quite suitable for mounting in any location.
Stand Alone and Network Connection

As previously described, when the System Manager is to be connected to a Stand Alone system, a 12-foot cable with modular connectors on one end and stripped wire ends on the other end is provided for this purpose. This is used to facilitate connecting communications and power wiring to the Modular System Manager from a 24 VAC power source and to the HVAC unit controller communication wiring terminals. If the supplied cable wire is not long enough for your installation, a standard modular cable of the correct length can be purchased through WattMaster and one of the modular connectors can be cut off to allow for the transformer and communication terminal wiring connections. It is recommended that you do not splice the communications wire if at all possible. The transformer should be rated at 6 VA minimum power output.

Alternatively, 2-conductor, twisted pair with shield cable can be used to wire from the RS-485 terminal block on the back of the Modular System Manager to the Controller’s communication terminal. All controllers on the entire Networked System can be programmed from one controller.

See Figure 2 below for typical connection information.

Figure 2: Modular System Manager SD Connection and Wiring Details
System Manager SD Keys and Buttons

Operator Interfaces

In order to configure and program the Orion System controllers, you must have an Operator’s Interface or a personal computer with the Prism 2 computer front-end software installed. Three different Operator Interfaces are available for programming of the Orion Controls System—the Modular Service Tool SD, the Modular System Manager, the System Manager TS II (all controllers except VCC-X & VCCX2). These devices allow you to access the status and setpoints of the controllers on your communications loop. This manual describes the Modular Service Tool SD. If using the Modular System Manager or System Manager TS II, please see the VCM-X/RNE Operator Interfaces Technical Guide or the System Manager TS II Technical Guide. If using Prism 2, please see the Prism 2 Technical Guide.

The Modular System Manager SD allows you to view any input or output status and change any setpoint to fine-tune the operations of the total system. All keypad operations are simple and straightforward,

Display Screens & Data Entry Keys

See the chart below for a list of the keypad descriptions and functions.

<table>
<thead>
<tr>
<th>Keypad Description</th>
<th>Key Function</th>
<th>Modular System Manager SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREV</td>
<td>Use this key to access the Setup Screens.</td>
<td></td>
</tr>
<tr>
<td>ESC</td>
<td>Use this key to exit from screens or from data entry or to return to the Main Screen from any screen in the system.</td>
<td></td>
</tr>
<tr>
<td>ENTER</td>
<td>Use this key to enter a new value.</td>
<td></td>
</tr>
<tr>
<td>Clear</td>
<td>If a data entry mistake is made, press this key to clear the data entry field and start over.</td>
<td></td>
</tr>
<tr>
<td>Minus</td>
<td>If a setpoint with a negative value is required, press this key for the minus sign.</td>
<td></td>
</tr>
<tr>
<td>DEC</td>
<td>Press this key when entering data that requires a decimal point.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use these keys to change values in the Configuration Screens as prompted.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use these keys to step backward or forward through the screens.</td>
<td></td>
</tr>
</tbody>
</table>

Mode Selection Buttons

The Modular System Manager is provided with “Mode Selection Buttons.” These buttons give you instant access to the specific mode desired without having to scroll through several menu screens to get there.

<table>
<thead>
<tr>
<th>Button Description</th>
<th>Modular System Manager SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATUS</td>
<td>Pressing this button takes you directly to the controller “Status” screens.</td>
</tr>
<tr>
<td>SETPOINTS</td>
<td>Pressing this button takes you directly to the controller “Setpoints” screens and “Configuration” menu.</td>
</tr>
<tr>
<td>SCHEDULES</td>
<td>Pressing this button takes you directly to the controller “Schedules” screens.</td>
</tr>
<tr>
<td>OVER RIDES</td>
<td>Pressing this button takes you directly to the controller “Overrides” screen. See the “Override Button” section on page 11 for a description of this function. See Notes 1 &amp; 2 below.</td>
</tr>
<tr>
<td>ALARMS</td>
<td>Pressing this button takes you directly to the controller “Alarms” screen. See the “Alarms Button” section on page 11 for a description of this function. See Notes 1 &amp; 2 below.</td>
</tr>
</tbody>
</table>

Notes:

(1) This button only functions when the system is configured for “Network Mode” or “Multiple MGRS Mode.” It will not function in “Stand Alone Mode.”

(2) The “Search for Units” function must be performed on the System Manager upon initial system setup before this function will be available. See the “Network Mode & Multiple Managers Loop Search” on page 10 of this manual for complete instructions on performing a loop search.

Table 2: Button Descriptions

Table 1: Keypad Descriptions
Initialization & Setting the Time & Date

System Manager SD Initialization

System Manager SD Initialization Screen and Setup Screens
After connecting the System Manager to the controller with the supplied cable, press <ON>. The Initialization Screen will appear followed by the Setup Screens as shown below. If there is no SD card installed, the second screen will display, “No SD Card Connected! Powering Down!”

NOTE: Once you press <ESC> while at the Setup Screens shown above, you can access them again by pressing <PREV>.

Programming the Time
From the Setup Screen shown below, press <1> on your keypad to access the Set Time & Date Screens.

1) Set Time & Date
2) Communications
NEXT) More Options
ESC) Exit Menu

Although the times are displayed on the Main Screen in a standard 12-hour format, you must program them using the 24-hour military format. If you configured the Unit Controller to use its own Internal Schedules, the Occupied/Unoccupied modes are calculated on the basis of the current real time clock reading.

The two screens that follow will appear. To scroll through the fields, press < or > or <ENTER>. In order to save a new value, you must press <ENTER>.

Program Time/Date
Day (Sunday=0): X
Enter Hr. (0-23): XX
Enter Minutes : XX

Day - Enter the Day of the Week (0 to 6)
Sunday = 0

Hours (Hr) - Enter the Hour (0-23) in 24-Hour Military Format
(13 = 1:00 PM)

Minutes - Enter the Minutes
(0 to 59)

Programming the Date
To scroll through the fields, press < or > or <ENTER>. In order to save a new value, you must press <ENTER>.

Program Time/Date
Month (1-12): XX
Day (1-31): XX
Year (0-99): XX

Month - Enter the Month (1 to 12)
Day - Enter the Day of the Month (1 to 31)
Year - Enter the current Year (0 to 99)

When you have finished programming the time and date, press <ESC> to return to the Setup Screen.

Setting The Time & Date
The System Manager SD is equipped with a real time clock chip allowing it to maintain the correct time. Once you have programmed the correct time and date, the information is broadcast globally to all controllers on the entire system.

NOTE: A Level 1 or Level 2 User can set the time and date.

NOTE: If you are in a time zone that has daylight savings, you will need to manually adjust the time twice a year.
Setting the Operating Mode

The Operating Mode is displayed on the last line of the Main Screen as shown below. The factory default setting for the System Manager is **LS (Low Speed) Stand Alone Mode**.

The System Manager must be configured for the correct mode of operation for your system. There are 5 modes of operation available for the Orion System—**LS (Low Speed) Stand-Alone**, **HS (High Speed) Stand-Alone**, **LS (Low Speed) Network**, **HS (High Speed) Network**, and **LS (Low Speed) & HS (High Speed) Multiple MGRS**.

If you are using this System Manager on a communications loop that doesn’t have a MiniLink PD or CommLink connected to it and you have a single System Manager on your system, then you need to operate in **LS (Low Speed) Stand-Alone Mode**. If you are using a VCC-X, VCB-X, or GPC-XP Controller that is set for high speed, and you don’t have a MiniLink PD or CommLink connected to the loop, then you will need to change the setting to **HS (High Speed) Stand Alone Mode**.

If you are using the System Manager on a communications loop and have an installed MiniLink PD or CommLink, you will need to change the setting to **LS (Low Speed) Network Mode**. If you are using a VCC-X, VCB-X, or GPC-XP Controller that is set for high speed, and are using a MiniLink PD or CommLink, then you will need to change the setting to **HS (High Speed) Network Mode**.

If you are using this System Manager on a communications loop, have a MiniLink PD or CommLink installed, and have multiple System Managers, then you need to operate in **Multiple MGRS Mode**.

If your display indicates a different mode than the one you need, press **<2>** at the Setup Screen shown below. You will have to cycle power to get to this screen or by pressing **<ESC>** and **<PREV>**.

The Passcode Clearance Screen will appear as shown below.

Enter the seven digit passcode **<2337377>** to access the next screen. You will then see the screen below displayed.

**Press <↔> or <↕> if you need to change the mode of operation to LS (Low Speed) Stand-Alone, HS (High Speed) Stand-Alone, LS (Low Speed) Network, HS (High Speed) Network, LS (Low Speed) Multiple Manager or HS (High Speed) Multiple Manager and then press <ENTER> to save your selection. If you are not using Multiple Manager Mode, press <ESC> at the screen below and continue scrolling right and left.**

For **Multiple MGRS Mode**, enter the address at which you want this particular System Manager to be set.

When multiple System Managers are used on a local loop, each must be set with a unique address different from any other device on that loop. You must perform this same operation again for each System Manager installed. If you want one of these System Managers to be able to indicate alarms and overrides for the entire system, you must select either **LS** or **HS Network Mode** on that particular System Manager.

Once you have the correct number per the display above displayed, press **<ENTER>**. The following screen will appear telling you that you have changed the system mode:

**Press any key on the keyboard to exit this screen.**
System Manager Passcodes

Changing the mode of operation, updating software, changing schedules, and changing setpoints and configurations require passcode clearance. The screen below will appear if this action requires passcode clearance.

The System Manager has three levels of user access. All users can view Status Screens. Level 1 users are limited to changing the Time and Date and Operating Schedules. Level 2 users have complete system access. Any status or setpoint field can be read or reset from the System Manager.

These two levels of passcodes are programmable by any Level 2 user. The default Level 1 passcode is “1111” and the default Level 2 passcode is “2222.”

If you wish to change either Level 1 or Level 2 passcodes, please see the instructions that follow.

From the Main Status Screen, press <ESC> and then press <PREV>. The following screen will appear:

Press <→> for the Next Menu. The following screen will be displayed:

Press <3> for Change Passcodes. The following screen will be displayed:

Passcodes can only be changed by a Level 2 user. Enter the passcode and press <ENTER>. The following screen will appear:

This screen allows you to enter new Level 1 and/or Level 2 passcodes. Passcodes must always be four digits in length, so the usable range of numbers is 1000 to 9999.

CAUTION: If you change the Level 2 passcode and cannot remember what it is, you will be locked out of your system!
Loop Search and System Alarm Search

Network Mode & Multiple Managers Loop Search

When the System Manager is configured for Network Mode, a loop search must initially be performed for the System Manager to recognize alarms or overrides. Also, when you have a system that has multiple System Managers and you have one of the System Managers set to (63) Network Mode for alarm and override indication, you must also perform a loop search for that System Manager. This allows the System Manager to be aware of all alarms and overrides for all local loops on the entire system.

To access the Loop Search Screen, from the Setup Screen, press <ESC> and then press <PREV>.

Press <→> for Next Menu. The following screen will be displayed:

1) Set Time & Date
2) Communications
NEXT) More Options
ESC) Exit Menu

Press <4> for Loop Search. The following screen will be displayed:

Loop Search
Current Loop = XX
Loops Found = XX
Searching

The System Manager will now proceed to search all loops to find the MiniLink PDs that are connected to the system. The screen will display the current loop being searched and the number of loops currently found.

Once the search is completed, the following screen will be displayed:

Loop Search
Finished
Loops Found = XX
Press ESC to Exit

The screen will display the number of loops found on your system. The information will be saved into the System Manager’s memory. No further loop searches will be required unless you add an additional MiniLink PD to the Network System.

System Alarm Search

The System Manager can be used to search for all active alarms on the system. You must configure the MiniLink PD to allow for “Alarm Polling” for each controller you want polled for alarms. See the MiniLink PD programming section on page 17 of this manual for setting information.

This option will alert you of the number of alarms present on individual units, but will not tell you what type of alarm are present. You will have to perform and individual unit alarm search for detailed alarm information.

To access the Alarm Search Screen, from the Setup Screen, press <ESC> and then press <PREV>.

Press <→> for Next Menu. The following screen will be displayed:

1) Set Time & Date
2) Communications
NEXT) More Options
ESC) Exit Menu

Press <4> for Loop Search. The following screen will be displayed:

3) Change Passcodes
4) Loop Search
NEXT) More Options
ESC) Exit Menu

Press <5> for Alarm Search. The entire system is searched from this point. The following screen will be displayed:

Alarm Screen
SEARCHING!

Once the Alarm Search is complete, one of the following screens will display:

Alarm Screen
XX ALARMS ON UNIT XX
Unit Alarm Search

The System Manager can be used to search for all active alarms one controller at a time.

Press the <ALARMS> button. The Unit Selection Screen below will be displayed.

Enter Unit Address
Then Press Enter
Selected Unit#: XXXX

Enter the Unit ID of the controller you want to configure and press <ENTER>. Once communication is established, the words “Press Down” will appear at the bottom of the screen.

NOTE: If “Press Down” does not appear at the bottom of the screen, communication with the controller has not been established.

The following screen will appear. The System Manager will search for any active alarms on the unit and one of the following screens will appear:

CONTROLLER V.XXX
NO ALARMS

CONTROLLER V.XXX
ALARMS PRESENT
SCROLL DOWN TO VIEW

Press <↓> to scroll through all the alarms for the controller that the Modular Service Tool is connected to.

To clear any alarms that are found, you must fix the problem indicated in the alarm. Once the problem is fixed, the alarm will clear from the screen the next time the unit is polled.

System Manager Override Search

NOTE: In order for the Override Search to work, a Loop Search must be performed first. See page 10 for details.

When a space sensor with override option is used with any VAV/Zone Controller or Unit Controller, the System Manager can determine and report any controllers that are currently operating in an override condition. This function requires that a MiniLink PD is installed on each loop where the controllers may be located. The MiniLink PD must be configured to allow for “Alarm Polling” for each controller that Override Polling Enabled is desired for this function to work. See the MiniLink PD programming section on page 17 of this manual for setting information.

To access the Space Sensor Overrides Screen, press <OVERRIDES>. The following screen will appear.

After the System Manager completes its search, it will list the first unit on the system that is currently in the override mode. Press the <↓> button to scroll through all units that are in the Override Mode.
Schedules and Holidays

Scheduling
You can access the Controller Scheduling Screens by pressing <SCHEDULES>. The screen below will appear because Scheduling requires passcode clearance. A Level 1 or 2 passcode can change schedules.

If the correct passcode was entered, the Unit Selection Screen will be displayed.

Enter the Unit ID of the controller you want to configure and press <ENTER>. Once communication is established, the words “Press Down” will appear at the bottom of the screen.

NOTE: If “Press Down” does not appear at the bottom of the screen, communication with the controller has not been established.

The Unit Schedule Menu will be displayed.

Press the <5> button until the cursor is on the desired option and then press <ENTER>.

Week Schedules
From the Unit Schedule Menu, select Week Schedules. The following two screens will appear in order:

Event #1

<table>
<thead>
<tr>
<th>Schd</th>
<th>Sunday Event #1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start Time...: XXXX</td>
</tr>
<tr>
<td></td>
<td>Stop Time...: XXXX</td>
</tr>
</tbody>
</table>

Event #2

<table>
<thead>
<tr>
<th>Schd</th>
<th>Sunday Event #2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start Time...: XXXX</td>
</tr>
<tr>
<td></td>
<td>Stop Time...: XXXX</td>
</tr>
</tbody>
</table>

If you are using the internal scheduling capability of the Controller, set the schedule hours and holiday periods from the menu shown above. You can also force the unit to operate continuously in occupied or unoccupied mode by selecting the Schedule Override menu item and entering the desired command.

If you are using an external contact closure to signal the occupied mode, you must access the Week Schedule Screens and set all start and stop times to zero to prevent the internal schedule from turning the equipment on when you don’t want it to operate.

The screens will step through the Start Time and then the Stop Time for each day of the week. You can quit at any point in the process by pressing <ESC>. There are two Start/Stop events available per day, so the screen will show which event is being programmed. If you need only one event, keep Event #2’s times set at ZERO.

All times are in 24-hour military format, so 5:00 PM would be entered as 1700.

If both the Start and Stop Times are ZERO, the schedule is in a continuous OFF mode. (Use for Remote Signal Contact.)
Holiday Scheduling and Schedule Override

**Holiday Start/Stop Day Selection**

From the *Unit Schedule Menu*, select Holiday Schedules. The following four screens will appear in order:

1. **Holiday # 1**
   - **Start Mon/Day.: XXXX**
     - [July 4th = 704]

2. **Holiday # 1**
   - **Stop Mon/Day.: XXXX**
     - [July 5th = 705]

The screens will step through the fourteen possible holidays, one period at a time. Line 2 shows which holiday is currently being programmed. Since a holiday period can encompass more than one day, you need to program the day the holiday starts and the day the holiday ends. If your holiday only lasts one day, simply set both the Start Day and the Stop Day to the same value. Remember to combine the *month and day* into a single four-digit value.

**EXAMPLE:**

- 704 = July 4th
  - *(NOTE: Leading zero not required)*
- 1225 = December 25th

**Schedule Override**

From the *Unit Schedule Menu*, select Schedule Override. The following screen will appear:

- **Ovrd Schedule Override**
  - **Enter Override...: X**
    - [0=Auto 1=ON 2=OFF]

If you want to force the unit to operate in a continuous Occupied or Unoccupied mode, select this menu item to activate the desired method. If a Schedule Override is active, all other methods of schedule control are ignored (Push-Button, Internal, and Remote).

As you can see on the last line of the display, enter <1> to run continuously in the *Occupied Mode* or <2> to run continuously in the *Unoccupied Mode*. To restore normal schedule operations, enter <0>.

This override remains in effect until canceled and does not time-out like the Output Overrides do after 10 minutes of no communications.

**NOTE:** Do not use the Force OFF mode in place of setting all the week schedules to ZERO if you are using a Remote Signal for your scheduling since the Override has priority over the Remote Signal.

**Holiday Start/Stop Times**

- **Holiday Schedule**
  - **Start Event #1: XXXX**
  - **Stop Event #1: XXXX**

- **Holiday Schedule**
  - **Start Event #2: XXXX**
  - **Stop Event #2: XXXX**

The fourteen holidays all use the same Start and Stop times which you program on this screen and the next. You must enter the time in 24-hour military format, the same as a regular week schedule.

Normally, the holidays will operate in an unoccupied mode or a reduced schedule mode. There are two start/stop events available on holidays to match the standard schedule number of events.
APPENDIX A - SAVE, LOAD, COPY SETPOINTS

Saving & Copying Setpoints

Save Setpoints - Network Mode

From any Main screen, press <SETPOINTS>. The screen below will appear because this option requires passcode clearance. Only a Level 2 passcode can change setpoints.

THIS ACTION REQUIRES PASSCODE CLEARANCE
Enter Passcode: XXXX

If the correct passcode was entered, the Unit Selection Screen will be displayed.

Enter Unit Address Then Press Enter Selected Unit#: XXXX

Enter the Unit ID of the controller you want to configure and press <ENTER>. Once communication is established, the words “Press Down” will appear at the bottom of the screen.

NOTE: If “Press Down” does not appear at the bottom of the screen, communication with the controller has not been established.

The following screen will be displayed:

Change Setpoints Configure Unit Save/Copy/Restore

Scroll down to the ‘Save/Copy/Restore’ option and press <ENTER>. This will take you to the Save Setpoints Screen shown below.

Save Setpoints Press Enter To Save

Press <ENTER> and a setpoint file will be saved to the SD card. You will receive a message that the save was successful. This file is specific to this controller on this loop.

Copy Setpoints - Network Mode

To copy a saved setpoints file to other controllers on the network do the following:

From the screen shown below, scroll down to the ‘Save/Copy/Restore’ option and press <ENTER>.

This will take you to the Save Setpoints Screen.

Save Setpoints Press Enter To Save

Press <ENTER> once to access the Copy Setpoints Screen shown below.

Copy Setpoints From Loop 1 From Unit 2 Press Enter to Copy

In the ‘From Loop’ field, enter the Loop of the controller you want to copy the setpoints from. In this example it is ‘1’. Then press <ENTER>.

In the ‘From Unit’ field, enter the Unit ID of the controller you want to copy the setpoints from. In this example it is ‘2’. Then press <ENTER>.

Now your cursor will be on the last line, and you can press <ENTER> once more to copy the setpoint file from unit 102 to unit 103.

You will receive a confirmation that the copy was successful.
Save & Copy Setpoints - Stand-Alone Mode

The instructions for Stand-Alone Mode are exactly the same as Network Mode, except that there is no need to enter a Loop number in the Unit ID number field and in the Copy Setpoints Screen, enter a zero in the ‘From Loop’ field.

Restore Setpoints - Network or Stand-Alone Mode

The Restore Setpoints feature is used to reload a saved setpoints file from one controller back to itself. This could be useful if setpoints or configurations were changed and need to be reset.

You can perform this function on a networked system; however, the Modular Service Tool needs to be directly connected to the controller you wish to restore previously saved setpoints to.

From the screen shown below, scroll down to the ‘Save/Copy/Restore’ option shown above and press <ENTER>.

This will take you to the Save Setpoints Screen shown below.

Press <→> four times to access the Restore Setpoints Screen shown below.

Press <ENTER>. This will reload the setpoints from the saved file. You will receive confirmation that the setpoints were loaded successfully.
APPENDIX B - UPDATING THE SD CARD

SD Memory Card Update

Updating The SD Memory Card

You may need to update the SD memory card from time to time, either for a new release or to add data for another Controller.

NOTE: Some older controllers might require updating the software in the Service Tool itself. Contact Tech Support for further information.

Follow the instructions below to download the update file from our tech support webpage:

1. Insert the SD memory card in your computer’s SD drive and open the drive’s window.

2. Open your browser and type in the address: http://wattmaster.com/techsupport.

3. On the Tech Support webpage, locate the file Modular_HH_Screens.zip and double-click your mouse on it.

4. Click <Save File> when asked to save or open the file and then click <OK>. This option will save the file to the “Downloads” folder on your PC.

5. Open the “Downloads” folder in Windows Explorer. You will find a folder labeled, “Modular_HH_Screens.zip.” Right-click on this folder and choose “Extract All” from the options list. NOTE: Any compression software can be used to extract the zip folder’s contents, for example, Winzip.

6. Once you unzip the file, you will see a window similar to the one below.

7. Press <CTRL> <A> to highlight the folders in the window—App, Manuals & Scr. Press <CTRL> <C> to copy the folders.

8. Paste the folders into the SD memory card drive’s window by pressing <CTRL> <V>.

9. Remove the SD Memory Card from your computer and reinsert it in the Modular System Manager.
MiniLink PD Configuration

In order to correctly setup the MiniLink PD, you must first configure several parameters in regard to the type of system and operating parameters for the system it is installed on. Most of these values and operating parameters are only set once at the initial system setup and are never changed.

From any Main screen, press <SETPOINTS>. The screen below will appear because this option requires passcode clearance. Only a Level 2 passcode can change setpoints.

```
THIS ACTION REQUIRES
PASSCODE CLEARANCE
Enter Passcode: XXXX
```

If the correct passcode was entered, the Unit Selection Screen will be displayed.

```
Enter Unit Address
Then Press Enter
Selected Unit#: XXXX
```

All MiniLink PDs are set at address 60. Enter the correct unit loop number for the loop the MiniLink Polling Device is connected to (for Loop 1 you would enter <160>) and press <ENTER>. Once communication is established, the words “Press Down” will appear at the bottom of the screen.

**NOTE:** If “Press Down” does not appear at the bottom of the screen, communication with the controller has not been established.

The following screen will be displayed:

```
Change Setpoints
Configure Unit
Save/Copy/Restore
```

The cursor will be on Change Setpoints. Press <ENTER>. The first Configuration Screen will appear.

```
Polling Unit Config
System Type
Selection: ZONING
Use < Or > To Change
```

Select VAV or ZONING. This screen allows you to select whether you want the system to behave as a VAV system or a Zoning System. If you select VAV, this will allow tenant logging for your VAV system.

```
Polling Unit Config
Last Polled Zone
Address: XX
[Enter Last Zone]
```

This zone is the last zone on the local loop of your zoning system that is to be included in zone voting. Valid entry is 1 to 25.

```
Polling Unit Config
Mode Changeover Time
Minutes: XX
[Enter Period Time]
```

This is the amount of time that you want to allow between changeover from heating to cooling modes. Valid entry is 5 to 60 minutes.

```
Polling Unit Config
Optimal Start Target Zone..: XX
[Enter Target Zone]
```

This is the unit ID of the Zone that you want to be satisfied by the normally scheduled start time. If you enter “-1” into this box, it will average all zones instead of picking a specific zone. If you do not require Optimal Start, enter “0”. Valid entry is -1 to 58.
APPENDIX C - MINILINK POLLING DEVICE CONFIGURATION

MiniLink PD Configuration Screens

Configuration Screen #5 - Maverick Testing

<table>
<thead>
<tr>
<th>Polling Unit Config</th>
<th>Maverick Testing</th>
<th>Disabled: YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use &lt; Or &gt; To Change</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select YES or NO. Disabling the Maverick Testing allows known troubled zone(s) to continue voting without causing a Maverick alarm. In other words, all zones are included in the voting regardless of whether they are more than four degrees from setpoint.

Configuration Screws #6-65 - Alarm Polling

<table>
<thead>
<tr>
<th>Polling Unit Config</th>
<th>Enable Alarm Polling</th>
<th>Unit XX: YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use &lt; Or &gt; To Change</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select YES or NO. Enabling Alarm Polling allows any alarm from the loop to be polled. You must set this for each controller on the loop.