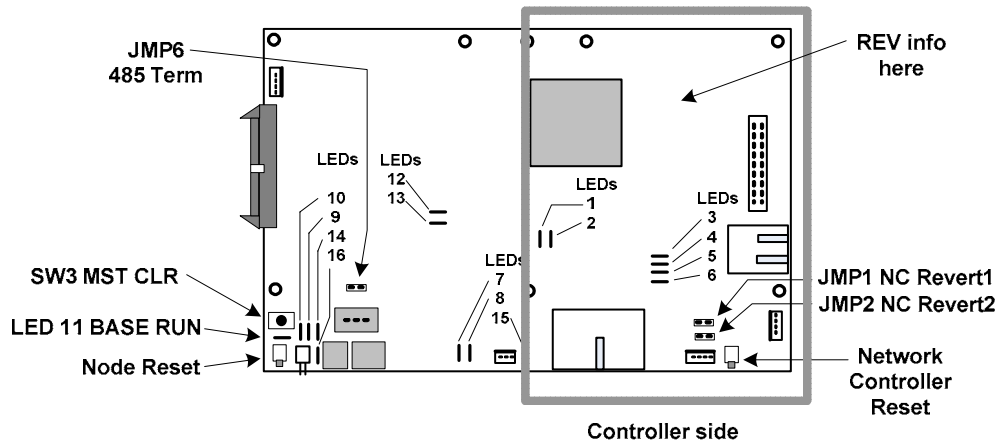




LEDs, Beeps, Jumpers, and Reset Switches for Versions 3.X

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IEI Controller/Node Blade



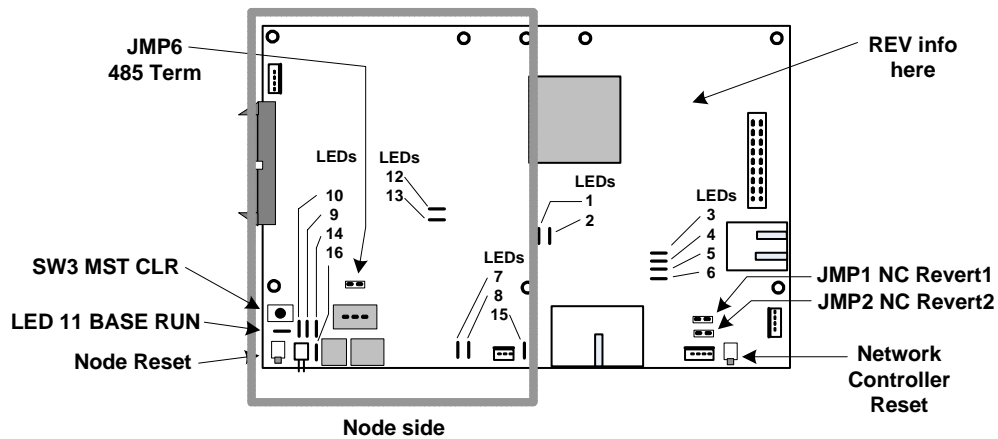
REV F Controller/Node Blade

Controller-side LEDs

The **right side** of the Controller/Node blade contains the components for the controller.

LED 1 NC to NN Activity	BLINKING RED means NC is communicating to the Node.
LED 2 NC to NN Speed	ON GREEN means 100 megabits per second. OFF means 10 megabits per second.
LED 3	Not used.
LED 4 NN	BLINKING GREEN: the blink count equals the node count. For example, 2 blinks means that 2 nodes are connected to the system.
LED 5 NTRK	ON GREEN means the controller can ping the network gateway.
LED 6 SYS	BLINKING GREEN means the system is running. BLINKS BLUE on new REV F blades NOTE: This LED will display the following sequence as it starts up. Two blinks: Compact Flash mounted. Three blinks: Network is running. Four blinks: Database started. Five blinks: Background tasks except for web server are running. Six blinks: Web server running.
Network Amber LED	ON means the network is connected.
Network Green LED	BLINKING means data activity on the port.

NOTE: If LEDs 4, 5, and 6 are blinking in the following pattern: 4-5-6-5-4-5-6-5-4, then a valid compact flash is missing and the system cannot boot.



REV F Controller/Node Blade

Node-side LEDs

The **left side** of the Controller/Node blade contains the components for the Node.

LED 7 I2C	RED, changes state when an application blade input or output occurs.
LED 8 RUN	ON GREEN means the co-processor is powered and initialized.
LED 9 ALRM	ON RED means there is an error condition.
LED 10 NC	RED means communication is active with the Network Controller.
LED 11 RUN BASE RUN for REV F	ON GREEN means the Node is powered and initialized. BLINKS BLUE on new REV F blades.
LED 12 NN to NC Speed	ON RED means 100 megabits per second. OFF means 10 megabits per second. If the blade is a Node-Only, LED 12 is not used and the Network port Amber LED assumes this function. See below.
LED 13 NN to NC Activity	BLINKING RED means Node is communicating to the NC. If the blade is a Node-Only, LED 13 is not used and the Network port Green LED assumes this function. See below.
LED 14 SYST	BLINKING GREEN indicates network communication.
LED 15	Not used.
LED 16 PWR	ON GREEN means power is properly connected. ON RED means polarity on the power connector is reversed (incorrect). The Node will not function.
Network port Amber LED	ON means the network is connected.
Network port Green LED	BLINKING means data activity on the port.

eMerge Cabinet Door LED

Green steady	The network communication is functioning and external power is on.
Green flashing	The network communication is functioning and the emerge is using battery power.
Red steady	The network communication is not functioning and external power is on.
Red flashing	The network communication is not functioning and the eMerge is using battery power.

Controller Beeps

NOTE: Nodes do not beep at any time. If readers are connected you may hear beeps from the readers as they power up.

Powering up

One beep	The system is ready. This may take several minutes.
Four beeps	Compact flash is missing. The system cannot boot.

Shutting down

NOTE: Select **Setup : System Maintenance : Utilities** to find the **Shutdown Now** button.

Two beeps	It is now safe to remove power.
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Rebooting

NOTE: You can reboot the Controller using the software. Select **Setup : Site Settings : Network Controller** and click the **Initmode Settings** link. There is a **Reboot** button on the Initmode page.

You can also reboot the Controller using the hardware reset switch. See below.

First...Two beeps	Processes have stopped. This may take several minutes.
Then...One beep	The system is ready. This may take several minutes.

Reverting to Factory Configuration Defaults

NOTE: Select **Setup : Site Settings : Network Controller** and click the **Initmode Settings** link. The **Factory Defaults** function is at the bottom of the Initmode page.

First...Two beeps	Processes have stopped. This may take several minutes.
Then...Two beeps	This may take several minutes.
Then...One beep	The system is ready. This may take several minutes.

Reverting to Factory IP and Login Defaults

NOTE: This revert function is performed using the hardware reset switch and a jumper. See below.

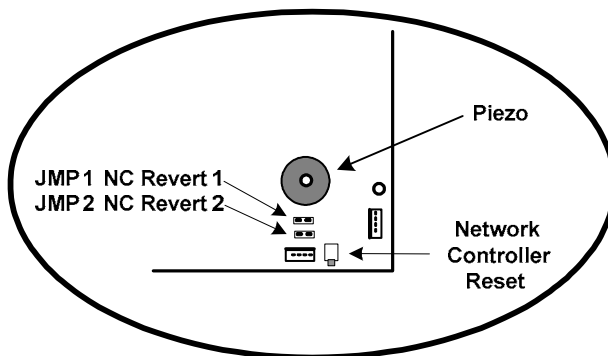
First...Three beeps	Processes have stopped. This may take several minutes.
Then...One beep	This may take several minutes.
Then...Two beeps	The system is ready for rebooting.

Controller and Node Jumpers and Reset Switches

Rebooting the Controller

1. Press the **Network Controller Reset** switch. See image below.
2. Wait until you hear a single beep. The system is now ready. This may take several minutes.

NOTE: You can also reboot the Controller from the Initmode page.



Reverting the Controller to Factory IP and Login Defaults

3. Place a jumper on **JMP1 NC Revert1**. See image above.
4. Press the **Network Controller Reset** switch.
5. The Controller will sound 3 beeps, then 1 beep, then 2 beeps. This may take a few minutes.
6. Remove the jumper and press the **Network Controller Reset** switch again.

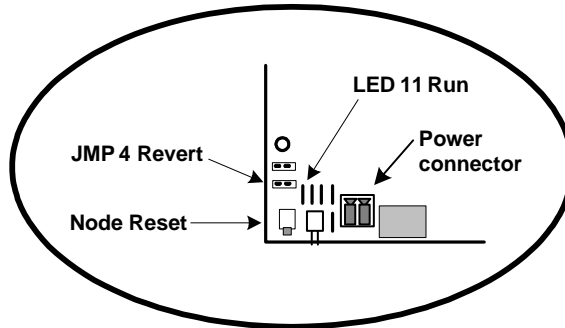
NOTE: This resets the Controller IP address to 192.168.0.250 and it resets the default login to Username = admin, Password = admin. This will not reset the system configuration.

SPECIAL NOTE: If you wish to revert the system configuration to factory defaults, you can **Reset to Factory Defaults** from the bottom of the Initmode page.

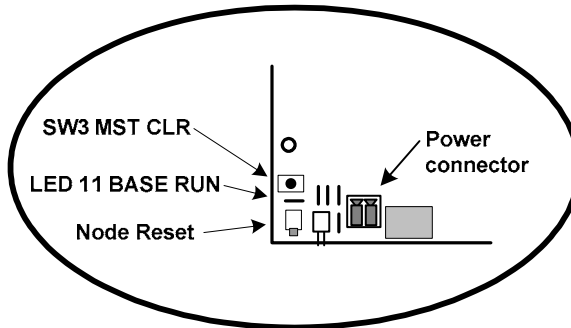
Rebooting the Node

1. Press the **Node Reset** switch. See image below. You can follow the process in the Activity Log. This may take several minutes.

NOTE: You can also reboot the node from the **Commands** tab of the **Network Nodes** page.



Board detail prior to REV F



REV F board detail

Reverting Nodes prior to REV F to Factory Defaults

1. Place a jumper on **JMP4 Revert**.
2. Press the **Node Reset** switch. See image above.
3. When **LED 11 RUN** lights up, remove the jumper.
4. This clears the current system configuration from the node and reverts the node to its factory installed application code. When the node re-connects to the controller the node will be upgraded to the most recent application code on the controller. When this is complete the current system configuration of portals, people data, etc. will be loaded on to the node. The **Activity Log** will display these activities as they happen.

CAUTION: If you revert a node that is on a separate subnet the controller may not re-connect and you will need to use the nconfig utility to get it reconfigured to connect to the controller.

NOTE: You can also revert the node to factory defaults from the **Commands** tab of the **Network Nodes** page.

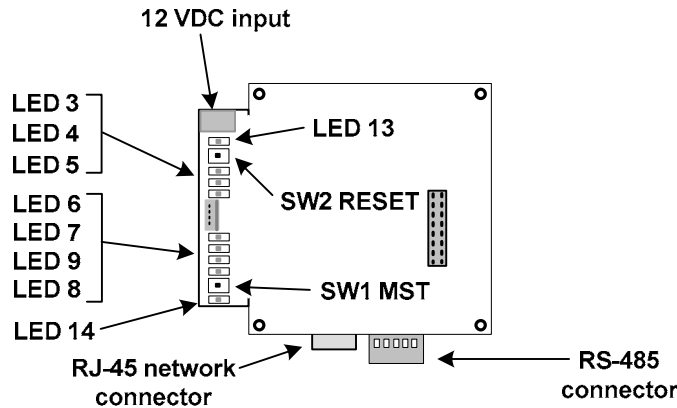
Reverting the REV F Node to Factory Defaults

1. Press and hold the **SW3 MST CLR** switch. See image above.
2. Press and release the **Node Reset** switch.

3. When **LED 11 BASE RUN** blinks blue, release the **SW3 MST CLR** switch.
4. This clears the current system configuration from the node and reverts the node to its factory installed application code. When the node re-connects to the controller the node will be upgraded to the most recent application code on the controller. When this is complete the current system configuration of portals, people data, etc. will be loaded on to the node. The **Activity Log** will display these activities as they happen.

IEI eMerge MicroNode

Node blade LEDs and Switches



LED 3 ALARM	ON RED means there is an error condition.
LED 4 S2NC	ON RED means communication is active with the Network Controller.
LED 5 RUN	ON GREEN means the MicroNode is initialized and running.
LED 6 SPEED	ON RED means 100 megabits per second. OFF means 10 megabits per second.
LED 7 LINK	ON RED means there is a physical ethernet link.
LED 8 ACT	BLINKING RED means the MicroNode is communicating to the NC.
LED 9 FULL	ON RED means full duplex communication.
LED 13 12VDC	ON GREEN indicates 12V DC power.
LED 14 POE	ON GREEN indicates power over ethernet (POE).
SW1 MST	Revert switch. See procedure below for reverting the MicroNode.
SW2 RESET	Reset switch-- reboots the MicroNode.
Network port Amber LED	ON means the network is connected.
Network port Green LED	BLINKING means data activity on the port.

Rebooting the MicroNode

1. Press the **Node Reset** switch. See image above. You can follow the process in the Activity Log. This may take several minutes.

NOTE: You can also reboot the node from the **Commands** tab of the **Network Nodes** page.

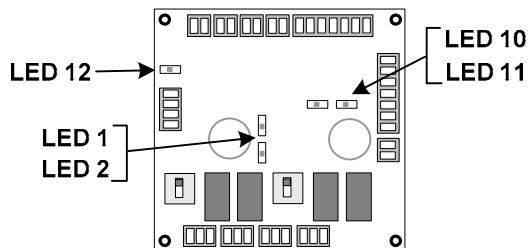
Reverting the Node to Factory Defaults

1. Press both **SW1 MST** and **SW2 RESET** simultaneously and hold for one second.
2. Release **SW2 RESET** and continue to hold **SW1 MST**.
3. When **LED 5 RUN** lights up blue, release **SW1 MST**.
4. This clears the current system configuration from the MicroNode and reverts it to its factory installed application code. When the MicroNode re-connects to the controller it will be upgraded to the most recent application code on the controller. When this is complete the current system configuration of portals, people data, etc. will be loaded on to the MicroNode. The **Activity Log** will display these activities as they happen.

CAUTION: If you revert a node that is on a separate subnet, the controller may not re-connect and you will need to use the nconfig utility to get it reconfigured to connect to the controller.

NOTE: You can also revert the MicroNode to factory defaults from the **Commands** tab of the **Network Nodes** page.

MicroNode Access blade LEDs

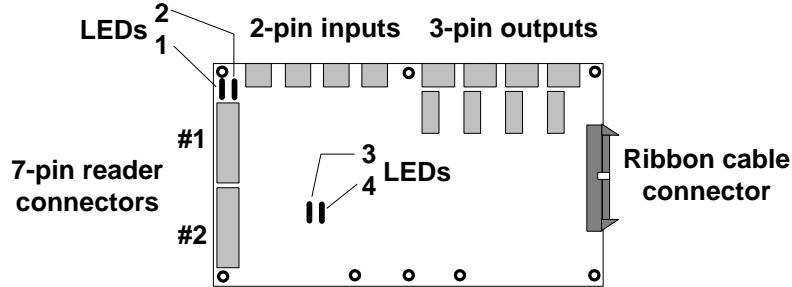


LED 1	ON BLUE means the access blade is initialized and running.
LED 2	ON RED means communication is active with the Network Controller.
LED 10	Not used.
LED 11	Not used.
LED 12 12VDC OUT	ON RED means there is power available for external devices.

IEI eMerge Application Blades

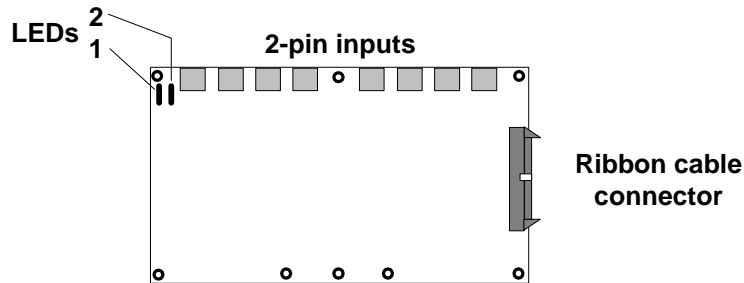
NOTE: IEI application blades do not beep at any time.

Access Blade LEDs



LED #1 RUN	ON GREEN means the blade is powered and initialized.
LED #2 I2C	RED, changes state when input or output occurs.
LED #3 IN/RDR	Not assigned.
LED #4 OUT	Not assigned.

Input, Output, and Temperature Blade LEDs



LED #1 RUN	ON GREEN means the blade is powered and initialized.
LED #2 I2C	ON RED, BLINKS OFF when the blade transmits a message to the Node.