Installation Guide

Mobile DC-DC Uninterruptible Power Supply

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There are U.S. and foreign patents pending.

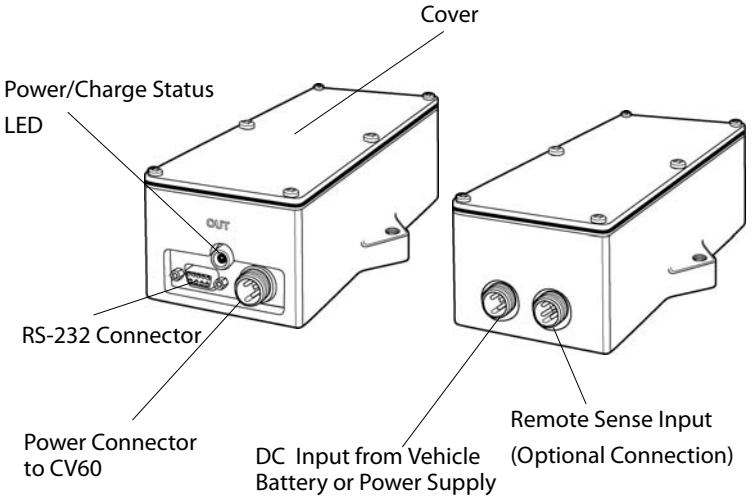
Description

An uninterruptable power supply (UPS) is a battery-operated power supply connected to a computer to keep the system running during a power failure. The UPS service for Windows XP and Windows CE detects and warns users of power failures and manages a safe system shutdown when the backup power supply is about to fail.

UPS Battery Information

The UPS battery (P/N 317-075-002) requires 3-4 hours to fully charge. Remove the six screws from the UPS cover for battery access.

Note: The battery is the only user-serviceable part. Use only Intermec-approved replacement batteries for the UPS, since they are UL-approved.



Shown with dust covers removed

Note: Visit the Intermec technical knowledge base (Knowledge Central) at http://intermec.custhelp.com to review technical information and support for battery care and use for your Intermec product.

Connecting the UPS (Smart Mode)

Note: Remove the dust cover from the serial port before connecting the cable.

1. Attach the RS-232 cable (PN 321-593-001) to COM1 or COM2 on the CV60 and tighten the screws to the DB-9 connector.
2. Connect the other end of the RS-232 serial cable to the RS-232 connector on the UPS and tighten the screws.
3. Connect the cable from the UPS power OUT to the CV60 power input connector. Tighten the connector.
4. Connect the cable (PN 226-341-003, six foot cable or PN 226-341-004, three foot cable) from the vehicle battery or power supply to the dc input connector on the UPS.

Connecting the UPS (Standard)

1. Connect the cable (PN 226-341-003, six foot cable or PN 226-341-004, three foot cable) from the vehicle battery or dc-dc converter to the dc input connector on the UPS.
2. Connect the cable from the UPS power OUT to the CV60 power input connector. Tighten the connector.

Power/Charge Status LED

The LED lights when power is applied to the UPS.

- Amber: indicates UPS is charging
- Red: indicates UPS is discharging
- Green: indicates UPS is charged.

Note: Always have power to the UPS *before* booting the CV60. Failure to do so may cause the UPS to shut down.

Remote Sense Input (Optional, CV60 only)

Use this input if you want the UPS to send a shutdown signal to the CV60 Vehicle Mount Computer.

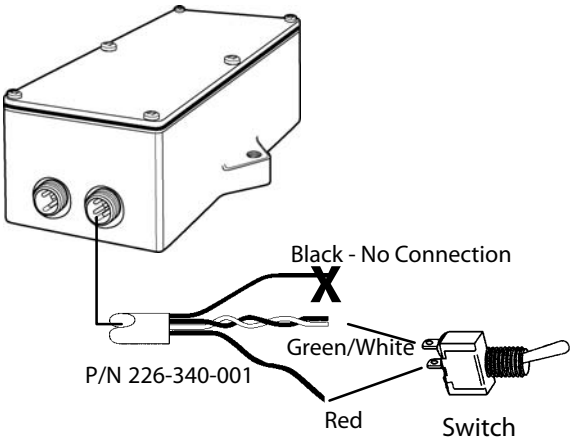
Note: Remove the dust cover from the circular connector *before* installing the cable.

Installation:

1. Cut the 2 pin connector end from the cable (P/N 226-340-001) and wire the toggle switch as shown.
2. Install the cable into the 4 pin connector.

Operation:

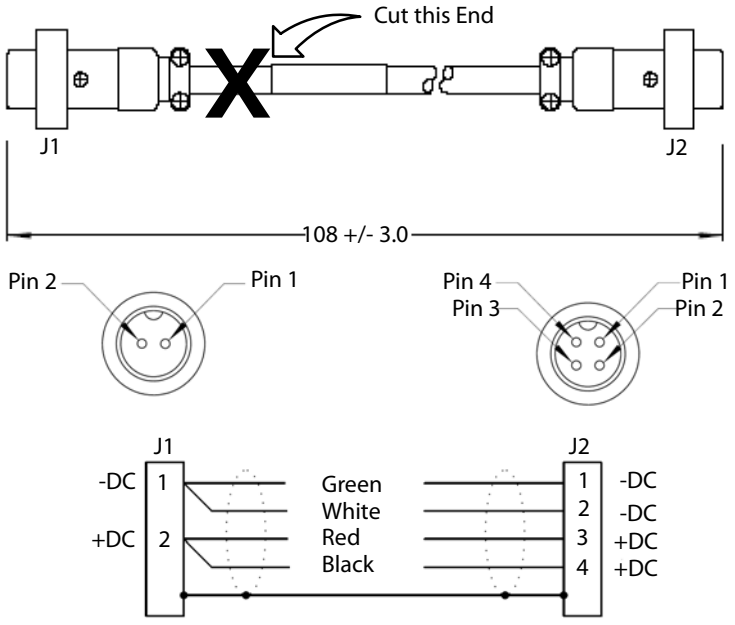
1. Close the switch (ON) to have the CV60 shutdown (*after* config uring the UPS service in software.)
2. To remove the shutdown signal to the CV60, move the toggle switch back to the OFF position.
3. When the battery is low, there are two thresholds that are reached:
   - the UPS will signal the CV60 to shut down via the low battery line
   - the UPS itself will shut down to conserve battery power. (The LED turns off).
4. The UPS will awaken when external power is applied and the battery is charged to a minimum level.



Switch Wiring Diagram

Note: The toggle switch for remote sense operation is not Intermec supplied. We recommend an SPST switch (single pole single throw) rated at 24VDC at 1mA or less for the remote sense option.

Note: Use a sealed switch for high humidity and dusty environments. Follow customary electrical wiring practices when wiring the switch.



Remote Sense Cable P/N 226-340-001

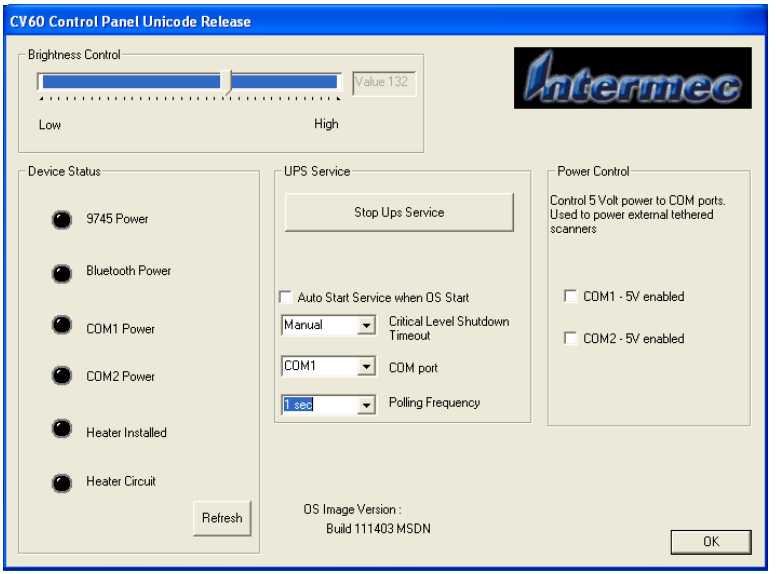
Note: New cables may not adhere to the Intermec current wiring scheme. Verify individual wire colors and their equivalent connection before proceding with the UPS installation.

Configuring the UPS Service

Windows XP

Double-tap the CV60 Settings icon to open the control panel applet.

1 On the **UPS Service** button, click **Start UPS Service**.



2 Check **Auto Start Service when OS Start** box if you want the UPS service to start at login.

3 In **Critical Level Shutdown Timeout**, select Manual, or 10, 20, 30 second intervals.

4 In **COM Port**, select the COM port where the UPS device is connected.

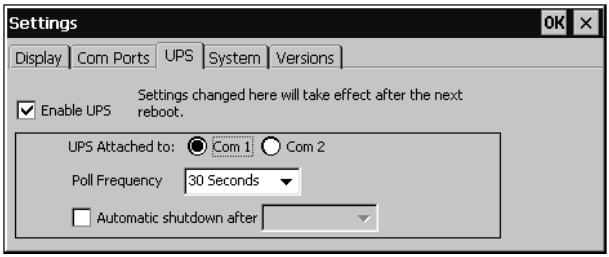
5 In **Polling Frequency** dialog box, set the intervals for 1 sec, 3 sec, or 5 sec.

Windows CE

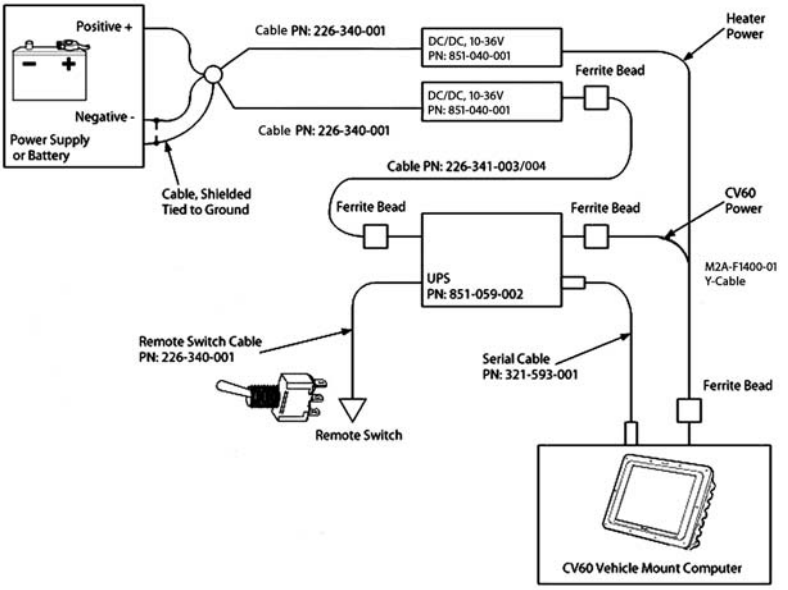
Double-tap the CV60 Settings icon to open the control panel applet.

UPS

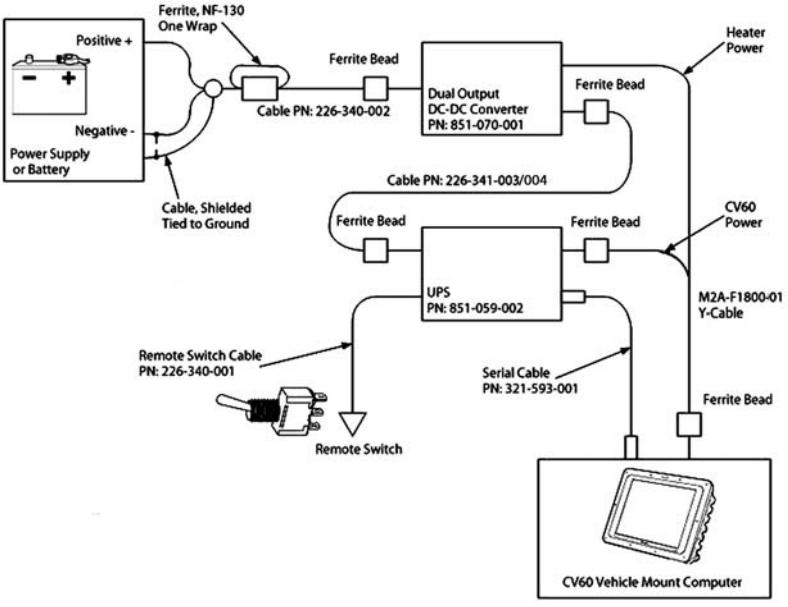
Select the UPS tab and check the Enable UPS checkbox. Click the drop-down arrow to reset the **Poll Frequency** value. Check **Automatic shutdown** before you click its drop-down arrow to adjust its value.



851-040-001 or 851-041-002 DC-DC Converters



851-070-001 DC-DC Converter



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