Falcon® Electric   *USHA Battery Parameter Setup Procedure*

Date: 11/23/2009

Purpose: The purpose of this procedure is to define the setup of USHA & USHA PRO battery parameters for all Falcon Electric SG, XG, IG, SMP & SUP models.

Requirements: PC Based Computer running MS Windows 98, 2000 or XP
                      Hyper Terminal Communications Software
                      Supplied USHA to RS-232 Interface Cable
                      Falcon UPS with a properly configured and functional internal USHA agent board or external USHA PRO agent. Refer to the USHA user's manual on the supplied CDROM for USHA setup instructions.

STOP!   **It is important at this point to verify the overall functionality of the USHA agent, This procedure assumes that the USHA agent is properly install and fully functional. Do not proceed if you cannot communicate with the USHA agent.**

Setup Procedure:

1. Disconnect the Ethernet LAN cable from the connector on the USHA agent.
2. Connect the DB-9 end of the supplied USHA interface cable to an unused serial port on a PC computer.
3. Connect the other end of the cable to the RS-232 interface connector (RJ45 type) on the USHA agent.
4. Verify the Serial port on the computer is truly unused and is not being accessed by any other software or hardware device.
5. Under Programs / Accessories / Communications, run the Hyper Terminal Program
6. Select the COM port you have connected the interface cable to. Typically COM1, press Enter.
7. Set the baud to 9600, Data Bits to 8, Parity to None, Stop Bits to 1, and Flow Control to None. Press Enter.
8. Press the Space Bar once.
9. Enter the password (admin) unless it has been previously changed.

```
+==============================================================================+
|                        [ USHA Configuration Utility Main menu ]              |
+==============================================================================+

Enter Password: **********
```

10. Enter 2, UPS Parameters and press Enter.

```
+===============================================================================+
|                    [ USHA Configuration Utility Main menu ]                   |
+===============================================================================+
     1. USHA Configuration
     2. UPS Parameters
     3. Access Control Table
     4. Trap Receiver Table
     5. Reset Configuration To Default
     6. Restart USHA
     0. Exit

Please Enter Your Choice => 2
```

11. Enter 2 and press Enter.

```
+===============================================================================+
|                          [ UPS Configuration Menu ]                           |
+===============================================================================+
     1. UPS Information Group
     2. UPS Rating Group
     0. Return to previous menu

Please Enter Your Choice => 2
```

12. Please refer to table 1 on the next page. The battery parameter information that must be entered into # 4, 5, 6 & 7 is model specific, depending on the model of Falcon UPS associated with the USHA agent. To enter the information into these fields, press the number (4-7) and enter the parameter for that field from TABLE 1. Press the Enter key after each entry then enter the next number and parameter. Continue through field 7. NOTE: The data shown is for the Falcon XG1.5kVA models.

```
+===============================================================================+
|                             [ UPS Rating Group ]                              |
+===============================================================================+
     1. Rating Voltage                  : 120
     2. Rating Current                  : 15.00
     3. Battery Voltage                 : 55
     4. Battery Low Voltage (AC failed) : 41.0
     5. Battery Full Voltage (AC failed): 50.0
     6. Battery Low Voltage (AC normal) : 46.0
     7. Battery Full Voltage (AC normal): 54.0
     8. Battery Replace Date            : 14/03/2005
     0. Return to previous menu

Please Enter Your Choice => ▮_
```

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13. Next enter 8 and press the Enter key. Now enter the battery replacement date in the following format, and then press the Enter key to save the entry.

Day/Month/Year (use the full year format, 2007 for example)

NOTE: The battery replacement date should normally be three years from the date of the UPS purchase. In critical applications you may want to enter a date two years from the date of the UPS purchase to increase the reliability model for the system. In elevated temperature applications where the ambient temperature is above 90⁰F, you may want to enter a date one year or less from the date of UPS purchase as elevated temperatures greatly reduces the UPS battery life.

14. Next press 0 three times to exit the setup utility.
15. Remove the RS-232 cable from both the computer and USHA agent and reinstall the Ethernet LAN cable into the proper connector on the USHA agent.
16. The battery parameters are now setup allowing the Battery Percentage Remaining to be reported accurately by the USHA agent.

TABLE 1
USHA Battery Parameter Values

Falcon UPS Model	Battery Parameter Value To Enter			
	#4	#5	#6	#7
All FN & FH 3kVA thru 10kVA	210	259	239	278
All SSG 1.5K models	41	50	46	54
All SSG 2.2 & 3kVA models	82	100	92	108
All SG 800VA & 1kVA models	30.8	37.5	34.5	40.5
All SG 1.5kVA & 2kVA models	61.5	75	69	81
All SG 3kVA models	82	100	92	108
All SG 5 & 6kVA tower models	295	250	230	270
All XG 1.5kVA models	41	50	46	54
All XG 2.2kVA & 3kVA models	82	100	92	108
All IG 1.5kVA models	41	50	46	54
All IG 2.2kVA models	61.5	75	69	81
All IG 3kVA models	82	100	92	108
All SMP & SUP 500VA models	10.25	12.5	11.5	13.5
All SMP & SUP 700VA models	20.5	25	23	27
All SMP & SUP 1kVA models	20.5	25	23	27