AUTHOR

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| **Department** |  | **Signature** |  | **Print Name** |  | **Date** |
| R&D |  |  |  |  |  |  |

Signatures

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| **Department** |  | **Signature** |  | **Print Name** |  | **Date** |
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Revision History

**Rev. Date Description**

0.1 UH061024 Initial draft

0.2 UH061101 Minor corrections

0.3 UH061106 Add P/F annotations

0.4 UH061113 Updates from Steute feedback; the change to the SDS from 0.4 to 0.5 do not affect test results compiled in 0.3. Add P/F initials. Complete pedal measurement table.

0.5 UH070220 Add missing information regarding drop meter calibration and P/F for one test

0.6 KW090406 Blanked fields for next run

0.7 DAT090619 Updated document to support testing of the Linemaster footswitch and changes to SRS

0.8 DAT090707 Updated after dry run on Steute footswitch

0.9 DAT090713 Updated with corrections from test execution, replace pass fail column with page signatures

A KW091016 Initial Release.

A.1 DAT091819 Modified pedal depression to account for dead band. Added indication the tests for 2.10 are not applicable if the footswitch does not have a position sensor. Added Section 3

B DAT092419 Change to Revision B

Glossary

References

1. 15000283 – DYONICS II Footswitch Software Requirement Specification
2. 15000286 – DYONICS II RS485 Accessory Protocol

Equipment required for verification

1. Dyonics Power II Footswitch:
2. Dyonics Power II EIP Control System
3. Dyonics PowerMini MDU
4. Host computer with Windows XP SP2 and the following software and hardware installed on it:
   1. RS232 Hex Com Tool software
   2. Text editor
   3. An initially-empty RESULTS folder at a suitable location on the host computer
5. An RS232 to RS485 Converter
6. An RS232 Serial Cable male to female
7. USB Software Upgrade Key with the DII Footswitch Tester Software
8. USB Software Upgrade Key with Dyonics Power II EIP Software
9. USB Software Upgrade key with Dyonics Power II Footswitch Software
10. Vice
11. Drop Meter (Calibration Info: Base #431-2485 calibrated 09/06 due 09/08; dial #431-881 calibrated 09/06 due 03/07)
12. Oscilloscope
13. 3 Oscilloscope leads
14. 4 contact pads with leads
15. 9 Volt Battery

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Footswitch Software Design Verification

# Overview

The purpose of this document is to:

* + Show the traceability of the verification procedures against the Footswitch Software Requirements Specification and the Footswitch Software Design Specification
  + Provide a summary of the Verification procedures
  + Provide a summary of the Verification results
  + Provide a link to more detailed internal engineering verification reports when required

Verification is defined as the process by which the design output meets the design input requirements. The results of the design verification, including identification of the design, method(s), the date, and the individual(s) performing the verification, shall be documented in the DHF. Design verification shall be traceable to product specifications.

The verification is traceable to the following functional requirement and specification documents:

Footswitch Software Requirement Specification - Document # 15000283

Footswitch Software Design Specification - Document # 15000284

# Test Procedure

## Test Setup

* Connect the PC to the Footswitch via an RS232 to RS485 converter and RS 232 cable. The RS485 side connect the + side to pin 11 and the – side to pin 8 and the ground to pin 2 of the Molex connector of the Footswitch Receptacle Harness Assembly (90500865).
* Start up the RS232 Hex Com Tool.
* Set the port to COM port with the RS232 to RS 485 converter.
* Set the Baud Rate to 19200, Parity None, Data Bits 8, Stop Bits 1, Hardware.
* In Options-RS-Time Interval select 10 ms.
* Close the port.
* Clear the Transmit and Receive histories.
* Load the current DII Footswitch Tester software into the DYONICS II via a USB software upgrade key.
* Turn off the DII.
* Disconnect all footswitches and handpieces from the DII.

DYONICS POWER II Footswitch under test:

REF S/N

Software Version

| **Section Number** | **Verification Procedure Summary** | **Summary Results**  **(may include links to other verification reports)** | **Pass / Fail** |
| --- | --- | --- | --- |
| 2.1a | This item cannot be verified externally. |  | N/A |
| 2.1.b  2.1.c | Connect a Dyonics Power II Footswitch to the DII.  Power on the DII. | Record the Connect Duration displayed by the DII \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Verify that the Connect Duration is less than 750 ms.  Verify that the Error Count is 0. |  |
| Disconnect the Footswitch from the DII. | Verify that the Connect Duration is 0. |  |
| Reconnect the Footswitch to the DII. | Record the Connect Duration displayed by the DII \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Verify that the Connect Duration is less than 750 ms.  Verify that the Error Count is 0. |  |
| Turn off the DII.  Disconnect the footswitch from the DII.  Turn on the DII.  While the DII is powering up connect the Footswitch to the DII. | Record the Connect Duration displayed by the DII \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Verify that the Connect Duration is less than 750 ms.  Verify that the Error Count is 0. |  |
| 2.1.d | With the footswitch still connected to the DII turn off the DII.  Turn on the DII.  Allow the DII to complete power up. | Verify that the Connect Duration is less than 750 ms.  Verify that the Error Count is 0. |  |
| Press each of the foot pedals. | Verify that the DII reports a percentage change as each pedal is pressed. |  |
| Disconnect the footswitch from the DII.  Reconnect the footswitch to the DII. | Verify that the Connect Duration is less than 750 ms. |  |
| Press each of the foot pedals. | Verify that the DII reports a percentage change as each pedal is pressed. |  |
| 2.2a | In the Hex Com Tool clear the Transmit and Receive histories and open the port.  Connect the footswitch to the DII and turn on the DII.  In the Hex Com Tool close the port and review the Receive data. | In the Hex Com ToolSet, verify that the Baud Rate is set to 19200, the Parity is set to None, Data Bits set to 8, Stop Bits set to 1, and Flow set to Hardware.  Verify that each Command Request byte from the DII has a 2 byte Response from the Footswitch. |  |
| 2.2b | Turn off the DII.  Connect an oscilloscope channel 1 to the + side of the RS485 converter (pin 11 of the Molex connector) and channel 2 to the - side of the RS485 converter (pin 8 of the Molex connector).  Set the scales to 2.0V/div and 1 ms/div.  Turn on the DII. Trigger on Channel 1 falling edge. | Verify that a continuous capture of the waveform reveals that the Footswitch is responding to each of the requests.  Capture a single sequence.  Verify that the time of the footswitch 2 byte response from the falling edge of the start bit to the end of the second stop bit is completed within 1.04 ms +/- 1%  Verify that when the footswitch is transmitting the signal Channel 1 goes low for the start bit and high for the stop bit and Channel 2 goes high for the start bit and low for the stop bit.  Verify that the footswitch drives the RS485 line only when sending a response back, and that otherwise the line is set for receiving data into the device |  |
| Disconnect the oscilloscope from the RS485 Connector |  |  |
| 2.2c  2.2d | These items are covered by testing in sections 2.3 through 2.9 |  |  |
| 2.3a  2.4a | With the Footswitch connected to the DII and the DII power on. | Record the Footswitch software version \_\_\_\_.\_\_\_\_\_.\_\_\_\_ reported on the DII display  Verify that the software version is the version under test.  Verify that the Device ID reports “Dyonics Power II Footswitch” |  |
| Disconnect the Footswitch from the DII. | Verify that the software version reports “Unknown”..  Verify that the Device ID changes to Unknown |  |
| Slowly reinsert the footswitch connector into the DII until the Device ID changes. | Verify that the software version reports “Unknown”.  Verify that the Device ID reports “On/Off Footswitch” |  |
| Completely insert the footswitch connector. | Verify that the software version reports the version under test.  Verify that the Device ID reports “Dyonics Power II Footswitch” |  |
| 2.5a | With the Footswitch connected to the DII and DII turned on and no pedals or buttons pressed.  In the Hex Com Tool clear the Transmit and Receive histories.  Open the port.  Wait for at least 20 messages.  Close the port  Review the Hex Com Tool log. | Verify that Footswitch acknowledges each occurrence of the Digital Switch Command Request (0xD2) with the response 0xFC00  Verify that Footswitch acknowledges each occurrence of the Left Foot Pedal Command Request (0x63) with the response 0xFC00  Verify that Footswitch acknowledges each occurrence of the Middle Foot Pedal Command Request (0xE4) with the response 0xFC00  Verify that Footswitch acknowledges each occurrence of the Right Foot Pedal Command Request (0x55) with the response 0xFC00 |  |
| 2.5b | For each pedal on the footswitch, traverse the full range, | Verify that DII displays a full range of travel of 0 to 100%  the Left Foot Pedal  the Middle Foot Pedal  and the Right Foot Pedal  Verify that the Error Count is 0.  Verify that the Command Duration is <= 4 ms. |  |
| 2.5c | Use a vice to control pedal depression in 10% increments, Use a drop meter to measure each position, for each pedal.  Record the Actual Travel for each Reported Percentage entry. (For 0% use the maximum Physical Depression where the Footswitch Tester reports 0%)  Calculate Full Travel as Physical Depression (100%) – Physical Depression (0%)  Dead Band = Physical Depression (0%)  Calculate Percent Travel as  (Physical Depression - Dead Band) / Full Travel | Left Pedal: Full Travel:\_\_\_\_\_\_\_\_\_ Dead Band: \_\_\_\_\_\_\_\_\_   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Reported Percentage | Physical Depression  In | Percent Travel | Allowed Percent Travel | Pass / Fail | | 0 |  |  | (0,10] |  | | 10 |  |  | (0,20] |  | | 20 |  |  | (10,30] |  | | 30 |  |  | (20,40] |  | | 40 |  |  | (30,50] |  | | 50 |  |  | (40,60] |  | | 60 |  |  | (50,70] |  | | 70 |  |  | (60,80] |  | | 80 |  |  | (70,90] |  | | 90 |  |  | (80,100] |  | | 100 |  |  | (90,100] |  |   Verify that the output values are within the Allowed Percent Travel for the left pedal.  Verify the Dead Band / Physical Depression (100%) is <= 10 % |  |
| 2.5c cont. |  | Right Pedal: Full Travel: \_\_\_\_\_\_\_\_\_\_\_\_\_ Dead Band: \_\_\_\_\_\_\_\_\_   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Reported Percentage | Physical Depression  in | Percent Travel | Allowed Percent Travel | Pass / Fail | | 0 |  |  | (0,10] |  | | 10 |  |  | (0,20] |  | | 20 |  |  | (10,30] |  | | 30 |  |  | (20,40] |  | | 40 |  |  | (30,50] |  | | 50 |  |  | (40,60] |  | | 60 |  |  | (50,70] |  | | 70 |  |  | (60,80] |  | | 80 |  |  | (70,90] |  | | 90 |  |  | (80,100] |  | | 100 |  |  | (90,100] |  |   Verify that the output values are within the Allowed Percent Travel for the right pedal.  Verify the Dead Band / Physical Depression (100%) is <= 10 % |  |
| 2.5c cont. | Use a vice to control pedal depression in 5% increments, Use a drop meter to measure each position, for each pedal.  Record the Physical Depression for each Reported Percentage entry. (For 0% use the maximum Physical Depression where the Footswitch Tester reports 0%)  Calculate Full Travel as Physical Depression (100%) – Physical Depression (0%)  Dead Band = Physical Depression (0%)  Calculate Percent Travel as  (Physical Depression - Dead Band) / Full Travel | Middle Pedal: Full Travel: \_\_\_\_\_\_\_\_\_\_\_\_\_ Dead Band: \_\_\_\_\_\_\_\_\_   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Reported Percentage | Physical Depression  in | Percent Travel | Allowed Percent Travel | Pass / Fail | | 0 |  |  | (0,20] |  | | 5 |  |  | (0,25] |  | | 10 |  |  | (0,30] |  | | 15 |  |  | (0,35] |  | | 20 |  |  | (0,40] |  | | 25 |  |  | (5,45] |  | | 30 |  |  | (10,50] |  | | 35 |  |  | (15,55] |  | | 40 |  |  | (20,60] |  | | 45 |  |  | (25,65] |  | | 50 |  |  | (30,70] |  | | 55 |  |  | (35,75] |  | | 60 |  |  | (40,80] |  | | 65 |  |  | (45,85] |  | | 70 |  |  | (50,90] |  | | 75 |  |  | (55,95] |  | | 80 |  |  | (60,100] |  | | 85 |  |  | (65,100] |  | | 90 |  |  | (70,100] |  | | 95 |  |  | (75,100] |  | | 100 |  |  | (80,100] |  |   Verify that the Percent Travel are within the Allowed Percent Travel for the middle pedal.  Verify the Dead Band / Physical Depression (100%) is <= 10 % |  |
| 2.5d | For each pedal on the footswitch, traverse the full range,  In the Hex Com Tool clear the Transmit and Receive histories and open the port.  Close the port  Review the Hex Com Tool log. | Verify that the output value is monotonic with respect to the actual depression  Left Foot Pedal  Middle Foot Pedal  Right Foot Pedal |  |
| 2.5e | Using a vice individually depress each one of the pedals. Record the foot pedal percent depression reported by the DII as the Initial value. While the foot pedal is depressed cycle power to the DII. Record the foot pedal percent depression as the Final value. | |  |  |  | | --- | --- | --- | | Foot Pedal | Percent Depression | | | Initial | Final | | Left |  |  | | Middle |  |  | | Right |  |  |   Verify that the Initial and Final values are within +/- 2% of each other. |  |
| 2.5f | Press each foot pedal separately | Verify that as each pedal is pressed the, percent depression of the other two remains 0% |  |
| Press each pair of foot pedals Left – Right,  Left –Middle, Middle - Right | Verify that as each pair of pedals is pressed the, percent depression of the third pedal remains 0%.  Verify that the states of the digital buttons are not affected.  Verify that percentage depression of the 2 pressed pedals can traverse the range of 0 to 100% separately |  |
| Press all three pedals simultaneously | Verify that percentage depression of the 3 pressed pedals can traverse the range of 0 to 100% separately  Verify that the states of the digital buttons are not affected. |  |
| 2.5g | Place electrical contacts to underside of the middle foot pedal and the plate below the middle foot pedal such that it creates a short when the pedal is at end of travel.  Turn off the DII.  Connect an oscilloscope channel 1 to the + side of the RS485 converter (pin 11 of the Molex connector).  Set the scales to 2.0V/div Channel 1, 5.0V/Div channel 2 and 100 ms/div.  Attach the positive side of a voltage source to ground clip of Channel 2 oscilloscope probe. Attached the positive side of the voltage source to one of electrode on the plate. Attach the Channel 2 oscilloscope probe to the other electrode. Set the Oscilloscope to trigger on Channel 2 rising edge.  Attach an MDU to Port A.  Turn on the DII.  In the Hex Com Tool clear the Transmit and Receive histories and open the port.  Rapidly press the middle pedal to End of Travel and release.  Close the port for Hex Com Tool  Review the Hex Com Tool log. | Find the location of the Pedal press in the Hex Com log file.  Verify that the software reported 100% deflection during the test as indicated by the occurrence of (D2FC00E4C464)  In the log file find the first occurrence of line beginning with D2FC00E4  Count the number of occurrences DCFC00E4 until the first occurrence of D2FC00E4C464.  On the oscilloscope count in the number of double message packets  Set one cursor at the beginning point of this packet.  Set one cursor at the trigger point of channel 2.  Verify that the delta time is < 35ms.  In the log file find the first occurrence of line beginning with D2FC00E4  Count the number of occurrences DCFC00E4 until the last occurrence of D2FC00E4C464.  On the oscilloscope count in the same number of double message packets  Set one cursor at the beginning point of this packet.  Set one cursor at the falling edge of pulse on channel 2.  Verify that the delta time is < 35ms. |  |
| 2.6a | Tested in section 2.5a |  |  |
| 2.6b | With the Footswitch connected to the DII and the DII turned on, press and release the left and right digital buttons separately. | Verify on the DII that the Footswitch reported the state of the Left and Right digital switches.  Verify that the Error Count is 0.  Verify that the Command Duration is <= 4 ms. |  |
| 2.6c | Press and release the left and right digital buttons separately in combination with each other and in combination with the foot pedals. | Verify that the Footswitch reported the state of the Left and Right digital switches independently of each other and independently of the Footswitches.  Verify that the Error Count is 0.  Verify that the Command Duration is <= 4 ms. |  |
| 2.6d | Turn off the DII.  Connect an oscilloscope channel 1 to the + side of the RS485 converter (pin 11 of the Molex connector) and channel 2 to the - side of the RS485 converter (pin 8 of the Molex connector).  Set the scales to 2.0V/div and 40 ms/div.  Turn on the DII. Trigger on Channel 1 falling edge.  Connect an MDU to Port A of the DII.  Press the Single Sequence key on the Oscilloscope and one of the buttons on the footswitch. | Review the trace on the scope verify that the minimum duration from 0ff to On and back Off is less than 100 ms. |  |
| Turn off the DII  Disconnect the Oscilloscope from the DII.  Disconnect the MDU from the DII. |  |  |
| 2.7a | Power off the DII.  Connect a DII Footswitch to DII.  Insert a compatible DII Footswitch Software Upgrade key into one of the DII USB ports.  Power on the DII.  Perform the software upgrade. | Verify that the software upgrade completes without error. |  |
| Remove the USB key from the back of the DII.  Cycle power to the DII | Record the software version \_\_\_\_.\_\_\_\_\_.\_\_\_\_  Verify that the software version is the version loaded during the upgrade.  Verify that the Device ID reports “Dyonics Power II Footswitch”  Verify that the Error Count is 0. |  |
| Power off the DII.  Connect a DII Footswitch to DII.  Insert a Software Upgrade key with the Footswitch software under test into one of the DII USB ports.  Power on the DII.  Perform the software upgrade. | Verify that the software upgrade completes without error. |  |
| Remove the USB key from the back of the DII.  Cycle power to the DII | Record the software version \_\_\_\_.\_\_\_\_\_.\_\_\_\_  Verify that the software version is the version loaded during the upgrade.  Verify that the Device ID reports “Dyonics Power II Footswitch”  Verify that the Error Count is 0. |  |
| 2.7b | Press each of the pedals | Verify that DII displays a full range of travel of 0 to 100%  the Left Foot Pedal  the Middle Foot Pedal  and the Right Foot Pedal  Verify that the Error Count is 0.  Verify that the Command Duration is <= 4 ms. |  |
| 2.7c | Power off the DII.  Connect a DII Footswitch to DII.  Insert a compatible DII Footswitch Software Upgrade key into one of the DII USB ports.  Power on the DII.  Start the software upgrade.  While the DII reports Updating Flash, turn off the DII.  Remove the USB key from the back of the DII.  Turn on the DII | Record the software version \_\_\_\_.\_\_\_\_\_.\_\_\_\_  Verify that the software version was not changed by the software upgrade.  Verify that the Device ID reports “Dyonics Power II Footswitch”  Verify that the Error Count is 0. |  |
| Press each of the pedals | Verify that DII displays a full range of travel of 0 to 100%  the Left Foot Pedal  the Middle Foot Pedal  and the Right Foot Pedal  Verify that the Error Count is 0.  Verify that the Command Duration is <= 4 ms. |  |
| 2.7d | Power off the DII.  Connect a DII Footswitch to DII.  Insert an incompatible DII Footswitch Software Upgrade key into one of the DII USB ports.  Power on the DII. | Verify that the software upgrade reports Invalid Upgrade File. |  |
| Remove the USB key from the back of the DII.  Cycle power to the DII | Record the software version \_\_\_\_.\_\_\_\_\_.\_\_\_\_  Verify that the software version was not changed by the software upgrade.  Verify that the Device ID reports “Dyonics Power II Footswitch”  Verify that the Error Count is 0. |  |
| 2.7e  2.7f | Power off the DII.  Connect a DII Footswitch to DII.  Insert a corrupt compatible DII Footswitch Software Upgrade key into one of the DII USB ports.  Power on the DII.  Start the software upgrade. | Verify that the software upgrade reports Upgrade Failed. |  |
| Remove the USB key from the back of the DII.  Cycle power to the DII | Record the software version \_\_\_\_.\_\_\_\_\_.\_\_\_\_  Verify that the software version was not changed by the software upgrade.  Verify that the Device ID reports “Dyonics Power II Footswitch”  Verify that the Error Count is 0. |  |
| Press each of the pedals | Verify that DII displays a full range of travel of 0 to 100%  the Left Foot Pedal  the Middle Foot Pedal  and the Right Foot Pedal  Verify that the Error Count is 0.  Verify that the Command Duration is <= 4 ms. |  |
| Power off the DII.  Connect a DII Footswitch to DII.  Insert DII Footswitch Software Upgrade key with the software under test into one of the DII USB ports.  Power on the DII.  Perform the software upgrade. | Verify that the software upgrade completes without error. |  |
| Remove the USB key from the back of the DII.  Cycle power to the DII | Record the software version \_\_\_\_.\_\_\_\_\_.\_\_\_\_  Verify that the software version was not changed by the software upgrade.  Verify that the Device ID reports “Dyonics Power II Footswitch”  Verify that the Error Count is 0. |  |
| 2.8a | With the DII turned on and a DII Footswitch connected. Press the Footswitch Soft Reset button on the DII. | Verify that the software reset completes without error.  Verify that the software reset completes in <= 750 ms  On the DII display verify that the software version is the one under test.  Verify that the Device ID is a “Dyonics Power II Footswitch”: |  |
| 2.8b | With the Footswitch connected to the DII and DII turned on.  In the Hex Com Tool clear the Transmit and Receive histories.  Open the port.  Press the Footswitch Soft Reset button on the DII.  In the Hex Com Tool Close the port  Review the Hex Com Tool log. | Verify that the Footswitch acknowledges the Software Reset Command (0x2D) with a 0xFC00  Verify that the Footswitch stops acknowledging the Device ID command (0xB1)  Verify that the Footswitch resumes acknowledging the Device ID command (0xB1) with the response 0x6401 |  |
| 2.9 | With the Footswitch connected to the DII and DII turned on.  Insert a ~2mm spacer under the left and right foot pedals and a ~3mm spacer under the middle foot pedal.  Press the Calibrate button on the DII.  While Calibrating, press each foot pedal onto its corresponding spacer.  Allow the Calibration to complete | The calibration completes without error. |  |
| Press each foot pedal onto its corresponding spacer. | Press each pedal and verify that the maximum percentage value for each footswitch is >=99%. |  |
| Cycle power to the DII. | Press each pedal and verify that the maximum percentage value for each footswitch is >=99%. |  |
| Remove the spacers from under the pedals.  Press the Calibrate button on the DII.  While Calibrating, press each foot pedal down to the base plate.  Allow the Calibration to complete. | The calibration completes without error. |  |
| Insert a ~2mm spacer under the left and right foot pedals and a ~3mm spacer under the middle foot pedal. | Press each pedal and verify that the maximum percentage value for each footswitch is < 95%. |  |
| Remove the spacers from under the pedals |  |  |
| 2.10 | Sections 2.10a through 2.10e are to be performed only for footswitches that support a Position Sensor.  Otherwise report N/A for each of the tests. | Footswitch has a Position Sensor Yes \_\_\_\_\_\_\_\_\_\_\_\_\_ No\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 2.10a | This Section verified in Sections 2.3 through 2.9 |  |  |
| 2.10b | With the Footswitch connected to the DII and DII turned on.  Stand the footswitch in the vertical position.  Press the left and right buttons. | Verify that the DII does not report either the left or right buttons as pressed. |  |
| Lay the footswitch upside down on the floor and step on the footswitch over the buttons | Verify that the DII does not report either the left or right buttons as pressed. |  |
| Lay the footswitch upside right on the floor and press the left and right buttons. | Verify that the DII reports the status of the left and right buttons.. |  |
| 2.10c | With the Footswitch connected to the DII and DII turned on.  Stand the footswitch in the vertical position.  Press the left, middle and right foot pedals. | Verify that the DII continuously reports pedal depression of the left, middle, and right foot pedals as 0%.  Verify the Error Count is 0. |  |
| Lay the footswitch upside down on the floor and step on the footswitch over the foot pedals | Verify that the DII continuously reports pedal depression of the left, middle, and right foot pedals as 0%.  Verify the Error Count is 0. |  |
| Lay the footswitch upside right on the floor and press the left, middle and right foot pedals. | Verify that the DII continuously reports pedal depression of the left, middle, and right foot pedals travel of 0 to 100%.  Verify the Error Count is 0. |  |
| 2.10d | With the Footswitch connected to the DII and DII turned on.  Stand the footswitch in the vertical position.  Press the Calibrate button on the DII display. | Verify that the DII reports the Calibration Failed.  Verify the Error Count is 0. |  |
| 2.10e | With the DII turned on unplug the footswitch.  Stand the footswitch in the vertical position.  Connect the footswitch to the DII. | Verify that the Device ID reports Dyonics Power II Footswitch.  Verify that the Software Version is the version under test.  Verify the Connect Duration is <=750 ms.  Verify the Error Count is 0. |  |
| Press the Invalid Command Test button on the DII. | Verify that the test reports Test Passed  Verify that the Error Count is 0. |  |
| Press the Footswitch Soft Reset Button on the DII | Verify that the test reports Test Passed  Verify that the Error Count is 0. |  |

# SUMMARY

## Notes

## Overall Pass/Fail Status

|  |  |
| --- | --- |
| **Overall Pass / Fail Status** |  |
| **Date** |  |
| **Signature** |  |
| **Printed Name** |  |
| **Department** |  |
| **Title** |  |