**LXT PRE-SHIPMENT INSPECTION**

1. **PURPOSE AND SCOPE**

This document provides the instructions necessary to perform a pre-shipment inspection of the LXT.

1. **RESPONSIBILITY**

Quality Assurance, or designated person, has the responsibility to follow this instruction when inspecting the products listed in section 1.0.

1. **MATERIALS AND EQUIPMENT**
* Appropriate preamplifier for product being verified, if needed
* ½” LD microphone, if needed
* Calibrator, if needed
* Four “AA” batteries
1. **INSTRUCTIONS**

Always use the instruments that are being shipped with the product.

Follow the instructions in this procedure concurrent with the D0001.2045 QA Pre-Shipment Inspection Checklist—All instruments instruction.

**4.1 Inspection for new orders**

1. Print a new copy of the order verification for new orders.
2. Verify the correct model number of preamp and microphone are with the ordered LXT using the below chart.

|  |  |
| --- | --- |
| **Item** | **Description** |
| LXT1 | SLM LXT CLASS-1 377B02 (PRMLXT1) |
| LXT1B | SLM LXT CLASS-1 BASIC UNIT **NO MIC & PREAMP** |
| LXT1L | SLM LXT CLASS-1 377B02 (PRMLXT1L) |
| LXT1L-NFR | SLM LXT CLASS-1 377B02 (PRMLXT1L) |
| LXT1L-NFR-PK1 | SLM LXT NFR CLASS-1 377B02 (PRMLXT1L), CAL200 in black bag  |
| LXT1L-RI | SLM LXT CLASS-1 LOW RANGE RI 377C20 (PRMLXT1L) |
| LXT1-NFR | SLM LXT CLASS-1 377B02 (PRMLXT1) |
| LXT1-NFR-PK1 | SLM LXT NFR CLASS-1 377B02 (PRMLXT1) CAL200 in black bag |
| LXT1-QPR | LXT1 SLM WITH 377C10 ¼" PRESSURE MIC. (PRMLXT1) |
| LXT1-RI | SLM LXT CLASS-1 377C20 RI MIC (PRMLXT1) |
| LXT1-SE-FF | SLM SOUNDEXPERT LXT CLASS-1 377B02 (PRMLXT1L) |
| LXT1-SE-RI | SLM SOUNDEXPERT LXT CLASS-1 377C20 (PRMLXT1L) |
| LXT2 | SLM LXT CLASS-2 375B02 MIC (PRMLXT2B) |
| LXT2B | SLM LXT CLASS-2 BASIC UNIT **NO MIC & PREAMP** |
| LXT2L | SLM LXT CLASS-2 LOW RANGE 375B02 (PRMLXT2L) |
| LXT2L-NFR | SLM LXT CLASS-2 375B02 (PRMLXT2L) |
| LXT2L-NFR-PK1 | SLM LXT2L NFR KIT CL2 375B02 (PRMLXT2L) CAL200 in black bag |
| LXT2-NFR | SLM LXT CLASS-2 375B02 (PRMLXT2B) |
| LXT2-NFR-PK1 | SLM LXT2 NFR CLASS-2 375B02 (PRMLXT2B) CAL200 in black bag |
| NMS-SE-FF | SYSTEM SOUNDEXPERT LXT CLASS-1 (PRMLXT1L) 377B02 |
| NMS-RI-FF | SYSTEM SOUNDEXPERT LXT CLASS-1 (PRMLXT1L) 377C20 |

1. Plug in the thumbdrive and verify the serial numbers and model of each product against the calibration certificates. Verfify the customer information and address are what the same as listed on the order verification. Verify manuals and software are in the appropriate folders
2. Verify the final checklist has the correct serial numbers, model numbers and firmware. Final checklist is located on the R drive. R:Provo\Data\CertData
3. Verify the certification date on the instruments matches the calibration certificates.
4. Verify the certification due sticker/calibration void sticker is inside the battery case over the access screw.
5. Verify the preamp tube cannot be unscrewed by hand.
6. Verify the technician has checked the order and included a signed “Technician Final Inspection Slip” (LD2014). This slip will be placed with the instrument.
	1. **New Product Cosmetic Inspection**
		1. Verify the presence of screws, feet, and the correct jewel for the product.
* Model LXT1 jewel is gold.
* Model LXT2 jewel is silver.
	+ 1. Inspect for gouges, scratches, and dents on the case.
		2. Verify the LCD is free of discolorations, scratches, or other blemishes.
		3. Verify the mechanical fit of the two halves of the case. Look for gaps and misalignments.
	1. **Service Product Cosmetic Inspection**
		1. Verify the instrument display is clean and free of fingerprints.

**4.4 Functional Inspection** for New Instruments / Brand New Demo Instruments / Demo Sale Instruments

1. Assemble the instrument with preamp and microphone.
2. Remove the battery door.
3. Install the four batteries.
4. Verify the battery door fits and clicks in place with the batteries installed.
5. Place the calibrator over the microphone.
6. Turn on the instrument by pressing the power key on the key pad.
7. Press the “Tools” key.
8. Using the arrow keys and the center key, open the “Calibrate” menu.
9. In the “Calibrate” menu, select the calibrator being used (highlight, then press the center key).
10. Turn on the calibrator and press the center key.
11. Instrument will take a few seconds to calibrate.
12. Click “Enter” to accept calibration change.

 If it says the change is more than 0.5 units, then accept change.

 If it says “Out of normal range”, do not accept and get technician.

1. Press right arrow once to “History” menu.
2. Verify right hand column against following chart—the number must be between the minimum and maximum nominal sensitivity.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Preamp** | **Mic. Type** | **Nominal In–Circuit Sensitivity (mV/Pascal)** | Nominal In–Circuit Sensitivity (dB re 1V/Pascal) | Minimum **Nominal** Sensitivity (dB re 1V/Pascal) | Maximum **Nominal** Sensitivity (dB re 1V/Pascal) |
| PRMLxT2 | 375A02 | 3.98 | -48.00 | **-44.30** | **-54.30** |
| PRMLxT2B | 375B02 | 3.98 | -48.00 | **-44.30** | **-54.30** |
| PRMLxT2 | 377B02 | 9.31 | -40.62 | **-36.92** | **-46.92** |
| PRMLxT2 | 377C20 | 9.31 | -40.62 | **-36.92** | **-46.92** |
|   |   |   |   |  |  |
| PRMLxT2L | 375A02 | 18.67 | -34.58 | **-30.88** | **-40.88** |
| PRMLxT2L | 375B02 | 27.91 | -31.08 | **-27.38** | **-37.38** |
| PRMLxT2L | 377B02 | 39.31 | -28.11 | **-24.41** | **-34.41** |
| PRMLxT2L | 377C20 | 39.31 | -28.11 | **-24.41** | **-34.41** |
|   |   |   |   |  |  |
| PRMLxT1 | 377C01 | 0.0582 | -84.70 | **-81.00** | **-91.00** |
| PRMLxT1 | 377C10 | 0.0420 | -87.60 | **-83.86** | **-93.86** |
| PRMLxT1 | 377C20 | 3.42 | -49.32 | **-45.62** | **-55.62** |
| PRMLxT1 | 377B02 | 3.42 | -49.32 | **-45.62** | **-55.62** |
|   |   |   |   |  |  |
| PRMLxT1L | 377C01 | 1.3193 | -57.59 | **-53.89** | **-63.89** |
| PRMLxT1L | 377C10 | 0.5930 | -64.54 | **-60.84** | **-70.84** |
| PRMLxT1L | 377C20 | 40.55 | -27.84 | **-24.14** | **-34.14** |
| PRMLxT1L | 377B02 | 40.55 | -27.84 | **-24.14** | **-34.14** |
| PRMLxT1L | 375A02 | 40.55 | -27.84 | **-24.14** | **-34.14** |

1. Record the offset on the QA Pre-shipment Log.
2. Right arrow 2 times to “Certification” and verify date against calibration date on the calibration certification.
3. Close all menus and return to the opening screen.
4. Push “Run”, then wait five seconds to allow observation of the instrument taking a measurement. The reading should be between 113.5 and 114.5 dB, record cal level on the QA Pre-shipment Log, then push “Stop” and then “Reset”.
5. Go back into Tools, using the arrow keys and the center key, open the “About” menu.
6. Verify the firmware on the final checklist and the calibration certification.
7. Press the right arrow 2 times to highlight the “Options” menu.
8. Verify the options with against the order and the final checklist. Initial and date the checklist and close the window.
9. Press “On/Off” once, then Off button next to screen.
10. If it asks if you want to save file, select no.
11. Add a red cap (2365.0001) to the top of the LXT.
12. Sign a “QA Final Inspection” (D0002.2003) slip and place it with the instrument.
13. Complete the Final Inspection Form (D2140.0017-1), print, sign, and place the form with the LXT.

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1. Place the **Attention** note I831.03 on the instrument so that it is visible when the unit is unpacked by the user.
2. If the instrument is being shipped on an “Ixxxxxx” order, verify the WEEE symbol is on the back of the LXT, and the bottom of the preamplifier and microphone box. If no symbol is found, add the WEEE sticker to the back of the LXT, and the bottom of the microphone, and preamplifier box.
	1. Functional Inspection for Service Instruments / Re-calibrated Demo Instruments
3. Assemble the instrument with preamp and microphone.
4. Remove the battery door.
5. Install the four batteries.
6. Place the calibrator over the microphone, push button on the side to power on.
7. Turn on the instrument by pressing the power key on the key pad.
8. Press the “Tools” key.
9. Using the keys and the center key, open the “Calibrate” menu.
10. In the “Calibrate” menu, select the calibrator being used (highlight, then press the center key).
11. Turn on the calibrator and press the center key.
12. Instrument will take a few seconds to calibrate.
13. Click “Enter” to accept calibration change.

 If it says the change is more than 0.5 units, then accept change.

 If it says “Out of normal range”, do not accept and get technician.

1. Press right arrow once to “History” menu.
2. Verify right hand column against following chart—the number must be between the minimum and maximum nominal sensitivity.

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| **Preamp** | **Mic. Type** | **Nominal In–Circuit Sensitivity (mV/Pascal)** | Nominal In–Circuit Sensitivity (dB re 1V/Pascal) | Minimum **Nominal** Sensitivity (dB re 1V/Pascal) | Maximum **Nominal** Sensitivity (dB re 1V/Pascal) |
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| PRMLxT2 | 377B02 | 9.31 | -40.62 | **-36.92** | **-46.92** |
| PRMLxT2 | 377B20 | 9.31 | -40.62 | **-36.92** | **-46.92** |
| PRMLxT2 | 377C20 | 9.31 | -40.62 | **-36.92** | **-46.92** |
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| PRMLxT1L | 377C20 | 40.55 | -27.84 | **-24.14** | **-34.14** |
| PRMLxT1L | 375A02 | 40.55 | -27.84 | **-24.14** | **-34.14** |

1. Record the offset on the QA Pre-shipment Log.
2. Close all menus and return to the opening screen.
3. Push “Run”, then wait five seconds to allow observation of the instrument taking a measurement. The reading should be between 113.5 and 114.5 dB or if the customer unit is set at 94.0dB the reading should be between 93.5dB and 94.5dB. Record cal. level on the QA Pre-shipment Log, then push “Stop” and then “Reset”.
4. If certification date is given, go back into Tools, Calibration, Right arrow 3 times to “Certification” and verify date against calibration date listed on the Calibration Certification. Push close button.
5. When applicable, verify firmware upgrade. Go into Tools, About and look at the Firmware Rev. Also, if additional options are purchased, ensure they are loaded on the unit.
6. Close all menus and return to the opening screen.
7. Press “On/Off” once, then Off button next to screen.
8. If it asks if you want to save file, select no.
9. **PAPERWORK**

Record the inspection on the QA Pre-Shipment Inspection Log, D0002.2044.

Initial and date the order. Place the unit on the inspection shelf or notify shipping that the unit is ready.

1. **REVISION HISTORY**

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| --- | --- | --- | --- | --- |
| **DCO#** | **REV** | **DATE** | **INITIALS** | **CHANGES MADE** |
|  | A | 8/14/06 | JEB | Initial release |
| 1070 | B | 5/9/08 | MRH | Updated procedure  |
| 1346 | C | 5/24/11 | AJR | Added I831.03 attention note |
| 1352(A) | D | 8/22/11 | MRF | Updated procedure |
| 1375 | E | 4/9/12 | MRF | Updated procedure |
| 1685 | F | 28Mar2017 | AJR | Corrected PRMLxT1–377C10 values |
| 1788B | G | 1/31/18 | AC | Updated Procedure |
| 1797 | H | 5/21/18 | AC | Updated Procedure |
| 1900 | I | 10/30/19 | AC | Updated 4.1, 4.4, 4.5 chart and bullet 16 and added location for final checklist. |