# AMSOsram ICC Software Manual

Spikes Casting Dispensing Machine

Date: R3, 12Jun2025

## Introduction

The core principle of ICC is to dispense randomly selected units for an initial test, analyse the results, and adjust the dispensing volume for the remaining units to achieve the desired test outcome.

In **Pass 1**, a predefined set of units from the Panel is dispensed with an initial volume. The Panel is then tested, and the ICC Server processes the test data to compute the necessary volume adjustments.

In **Pass 2**, the remaining units are dispensed using the newly determined volume to optimize the test results.

## Definitions

|  |  |
| --- | --- |
| **Input File** | Input File in xml format to retrieve from **Input Folder** to obtain initial volume. The file sample as in Appendix. |
| **Output File** | Output File in text file format located in **Output Folder** to retrieve new volume. The file sample as in Appendix. |
| **Lot File** | Lot File in text file format located in **Lot Folder** to retrieve panel in lot information. It contains all the Panel ID of the lot. The file sample as in Appendix. |
| **Input Folder** | Configurable Directory. The location to retrieve **Input File**. |
| **Output Folder** | Configurable Directory. The location to retrieve **Output File**. |
| **Lot Folder** | Configurable Directory. The location to retrieve **Lot File**. |
| **Panel ID** | The ID for the Panel, scanned or manual entry by **READ\_ID** command. |
| **Pass 1 Panel ID list** | A collection of **Panel ID**s stored locally that has been dispense as Pass 1. |
| **Pass 2 Panel ID list** | A collection of **Panel ID**s stored locally that has been dispense as Pass 2. |

## Normal Run Condition

|  |  |
| --- | --- |
| **Process/Condition** | **Description** |
| Lot Entry. | Select **Lot Entry**. *Refer to Lot Entry*.  Scan in lot information.  Select **Start Lot**.  *Recipe name of {11 SERIES} will be automatically loaded.* |
| If Recipe load fail. | Prompt error “Recipe not found or load fail.”.  *User needs to manually dispose the Panel.* |
| Load magazine. | Load magazine. |
| Start operation. | Select **Start**. |

### Run Panel

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| --- | --- |
| **Process/Condition** | **Description** |
| Panel loading. | Load Panel to **Pro Station**. |
| Scan **Panel ID**. |
| Cross check local **Pass 2 Panel ID list**. If Panel ID exist, |
| Pass 2 Panel ID exists | Prompt error “Panel ID has completed Pass 2”.  *User needs to manually dispose the Panel.* |
| Pass 2 Panel ID do not exist. | Cross check local **Pass 1 Panel ID list**. |
| Pass 1 Panel ID exists | Goto **Run Pass 2**. |
| Pass 1 Panel ID do not exist. | Goto **Run Pass 1**. |

### Run Pass 1

|  |  |
| --- | --- |
| **Process/Condition** | **Description** |
| **Input File** check. | Check for **Input File**. |
| **Input File** do not exist. | Prompt error “Input File is not found.”  *User needs to manually dispose the Panel.* |
| **Input File** exist. | Retrieve **Input File**. Decode the initial volume by element *InitialDispenserSetting="0.8"*. Update the volume as **Current Dispense Volume**. |
| Unit selection. | Select PreMap 1.  *PreMap 1 is the selected Pass 1 units to be dispensed.* |
| Dispense. | Run dispense. |
| Complete. | Unload Panel. |

### Run Pass 2

|  |  |
| --- | --- |
| **Process/Condition** | **Description** |
| **Output File** check. | Check for **Output File**. |
| **Output File** do not exist. | Prompt error “Output File is not found.”  *User needs to manually dispose the Panel.* |
| **Output File** exist. | Retrieve **Output File**. Check for **PanelID**. |
| **PanelID** do not exist. | Prompt error “PanelID is not found.”  *User needs to manually dispose the Panel.* |
| **PanelID** exist.  Update new volume. | Decode the new volume of **PanelID**. Update the new volume as **Current Dispense Volume**.  *If multiple similar* ***PanelID*** *exist, the last* ***PanelID*** *of the list will be applied.* |
| Unit selection. | Select PreMap 2.  *PreMap 2 is the selected Pass 2 units to be dispensed.* |
| Dispense. | Run dispense. |
| Complete. | Unload Panel. |

## Run Condition – No Lot Entry

When a panel is loaded without Lot Entry, it will be processed manually. The following differences apply compared to standard processing:

1. The initial volume will be based on the Z\_PATH default Nett Volume setting.
2. No Input File or Output File checking or updates of dispense value.

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| --- | --- | --- |
| **Process** | **Lot Entry** | **No Lot** |
| READ\_ID | ✓ (when enabled)  Panel ID is used for volume feedback. | ✓ (when enabled)  Panel ID is not used. |
| OSRAM\_ICC | ✓  Checking of Input File and Output File. | 🗶 |
| DOT\_ZPATH | ✓  Volume from Input File and Output File are updated. | ✓  Default Nett Volume will be used. |

Execution Comparison

## Lot Entry

Lot Entry feature needs to be enabled at Options-Process. Select type **OsramICC**.

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AI-generated content may be incorrect.

User Interface to enter Lot Data. The first 4 fields, **EMPLOYEE ID**, **LOT NUMBER**, **11 SERIES** and **DA START NUMBER** are compulsory while 4 fields are user definable.

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AI-generated content may be incorrect.

|  |  |  |
| --- | --- | --- |
| **Field** | **Desription** | **Usage** |
| **EMPLOYEE ID** | Enter Employee ID | Record purposes only. |
| **LOT NUMBER** | Lot Number on traveller | Filename of **Output File**.  Filename of **Lot File**. |
| **11 SERIES** | 11 Series on traveller | Used to Auto Load Device.  Part of filename of **Input File**. |
| **DA START NUMBER** | DA Start Number on traveller | Part of filename of **Input File**. |
| **Field5** (optional) | User configurable field. | Record purposes only. |
| **Field6** (optional) | User configurable field. | Record purposes only. |
| **Field7** (optional) | User configurable field. | Record purposes only. |
| **Field8** (optional) | User configurable field. | Record purposes only. |

## File Logistics

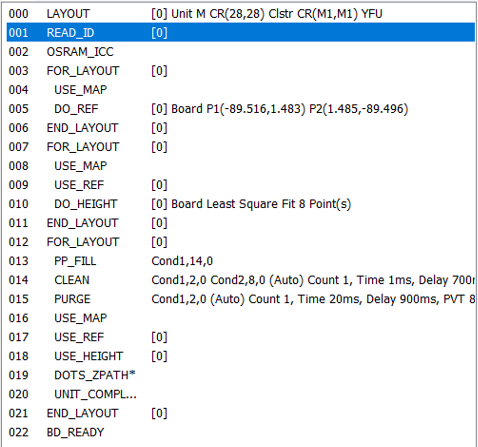
A screenshot of a computer

AI-generated content may be incorrect.

|  |  |  |
| --- | --- | --- |
| **Item** | **Desription** | **Usage** |
| **Protocol** | Select Volume adjustment Protocol. | Applies Osram ICC volume adjustment. |
| **Input Path** | Define the Input Path of Input Files. | Location to retrieve the Input Files. |
| **Output Path** | Define the Output Path of Output Files. | Location to retrieve the Output Files. |
| **Update & Check** | Update and check Input Path and Output File. | Verify the path validity. Brief colour indicators. |
| **Input File – Load** | Load the current Input File. | Test load the current input file and display the volume information. The Lot Entry must be entered prior to the test. |
| **Output File – Load** | Load the Panel ID Output file. | Test load the Panel ID Output File to memory. |
| **Output File – Lookup** | Lookup the Panel ID volume information. | Test lookup of the Panel ID and display the volume information. |
| **Lot File – Load** | Load the lot Panel ID list. | Test loading of the lot file that contains the Panel ID list. |
| **Local PanelID -**  **Load** | Load Pass1 and Pass2 local Panel ID list. | Test load the local Panel ID list. The list will store up to 100 last processes Panel ID. |
| **Local PanelID -**  **Save** | Save Pass1 and Pass2 local Panel ID list. | Test save the local Panel ID list. The list will store up to 100 last processes Panel ID. |
| **Edit Pass1, Edit Pass2** | Open the local Pass1 or Pass2 text file. | Edit the local Panel ID list. |
| **Test** | Test OsramICC function. | Test OSRAM\_ICC function for volume settings. |

## DOT\_ZPATH Command

|  |  |  |
| --- | --- | --- |
|  | **Item** | **Description** |
| **Head No** | Select Head Execution  0 – none  1: Head 1 only (Single Head)  2: (not support)  3: Head 1 and Head 2. |
| **Model No** | Select Model No to applies. |
| **Edit** | Edit Model. |
| **Dispense** | Options to enable Dispense |
| **TL Set/Goto** | Set and Goto Top Left corner of the pattern path. |
| **BR Set/Goto** | Set and Goto Bottom Right corner of the pattern path. |
| **Disp Gap** | Define the Needle distance from the detect height for dispense. |
| **End Gap** | Define the Needle distance from the detect height after dispensing of each dot. |
| **Ret Gap** | Define the Needle distance from the detect height after completing of the unit dispensing. |
| **Accel/Decel** | Define acceleration and deceleration of the path. |
| **Speed** | Define speed 1. |
| **Seepd 2 Ratio** | The ratio of Speed 2 referencing Speed 1. |
| **Speed 3** | Define speed 3. |
| **Down Wait** | Time to wait before path dispensing. |
| **Post Wait** | Time to wait after path dispensing. |
| **Volume**  **Default Nett** | Display and adjust the default Nett volume. |
| **Volume**  **Current Nett** | Display and adjust the current Nett volume. |
| **Volume**  **BackSuck** | Display and adjust the BackSuck volume. |
| **D1-D4** | Define the percentage distribution of each dot. |



Place READ\_ID after LAYOUT to execute ID Read.

Place OSRAM\_ICC after READ\_ID to execute OsramICC flow.

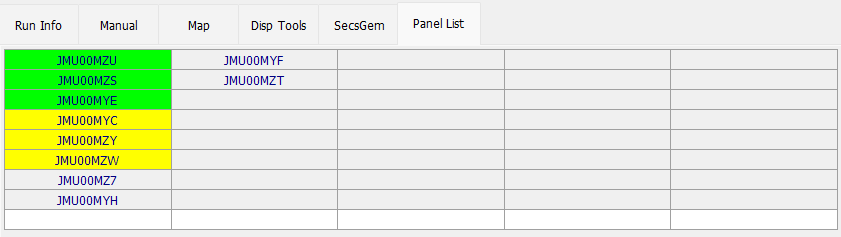
Sample for Program for ICC

## Panel List Display

Panel List on auto window will display the Panel ID of the lot and its status. The status are based on local Pass 1 and Pass 2 files.

Condition:

1. Lot is started and Active.
2. OSRAM\_ICC mode is selected.
3. The lot file exists and contains correct list of Panel IDs.
4. The status are updated according to local **Pass 1 and Pass 2 Panel ID list**



|  |  |  |  |
| --- | --- | --- | --- |
| **Color Status**  None: Panel ID is not processed.  Yellow: Panel ID has started **Pass 1**.  Green: Panel ID has started **Pass 2**. | **Panel ID** | **Pass1** | **Pass2** |
| JMU00MZU | Yes | Yes |
| JMU00MZS | Yes | Yes |
| JMU00MYE | Yes | Yes |
| JMU00MYC | Yes | No |
| JMU00MZY | Yes | No |
| JMU00MZW | Yes | No |
| JMU00MZ7 | No | No |
| JMU00MYH | No | No |
| JMU00MYF | No | No |
| JMU00MZT | No | No |

## Appendix

### Sample Input File

**Filename**: {**Input Folder**}\{**11 SERIES**}\_{**DA START NUMBER**}\_\_.xml

Input folder using Map Drive is accessibility must be provided by local IT security policy. Otherwise use the full Universal Naming Convention(UNC) Path for the network folder name.

Note:

* underscore between {**11 SERIES**} and {**DA START NUMBER**}
* ends with 2 underscores.

**Example**: {**Input Folder**}\11108864\_L15NSWDL4GWCSSRM3.PMN4P1A535K2M2700\_\_.xml

**Example content**:

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AI-generated content may be incorrect.

<SteeringSettings xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns="http://www.osram-os.com/steering/config" ProductName="Demon Poseidon BREE 3000K">

<LogFileLocation>[\\int.osram-light.com\Net-klm\!Apps\Casting\OSLONSquare\LLC\_LogFiles\</LogFileLocation](file:///\\int.osram-light.com\Net-klm\!Apps\Casting\OSLONSquare\LLC_LogFiles\%3c/LogFileLocation)>

<PanelSize RowMax="28" ColMax="28"/>

<TargetSettings InitialDispenserSetting="0.8" ColorSpace="CIE2DegreeCxCy" TargetCxCyDistance="0.4" TargetPathAngle="22"> </TargetSettings>

<ControllerSettings ControllerModule="ComixBasedController" PathLengthOffset="0.01" FloatingLength="2">

<Converters>

<Converter Name="QL905" InitialWeightPercent="3" Group="1" AllowVariation="true"/>

<Converter Name="QL904" InitialWeightPercent="3" Group="1" AllowVariation="true"/>

<Converter Name="L167" InitialWeightPercent="3" Group="2" AllowVariation="true"/>

</Converters>

</ControllerSettings>

</SteeringSettings>

### Sample Output File

**Filename**: {**Output Folder**}\{Lot Number}.txt

**Example**: {**Output Folder**}\LOTABCD.txt

Input folder using Map Drive is accessibility must be provided by local IT security policy. Otherwise use the full Universal Naming Convention(UNC) Path for the network folder name.

**Content:**

The file contains list of lines of Panel ID, Dispense 1 and Dispense 2 volume semi-colon (;) delimited.

Panel;Dispenser1;Dispenser2

{Panel ID 1};{Head 1 Volume 1};{Head 2 Volume 2}

{Panel ID 2};{Head 1 Volume 2};{Head 2 Volume.2}

…

{Panel ID n};{Head 1 Volume n};{Head 2 Volume.n}

**Example content:**

Panel;Dispenser1;Dispenser2

JMC1234;1.1112;1.1016

JMC1235;1.1242;1.0735

JMC1236;1.1034;1.1143

JMC1237;1.1143;1.1023

JMC1234;1.1200;1.1200

### Sample Lot File

**Filename**: {**Lot Folder**}\{Lot Number}.txt

**Example**: {**Lot Folder**}\KGG4113.txt

Lott folder using Map Drive is accessibility must be provided by local IT security policy. Otherwise use the full Universal Naming Convention(UNC) Path for the network folder name.

**Content:**

The file contains list of lines of Panel ID

{Panel ID 1}

{Panel ID 2}

…

{Panel ID n}

**Example content:**

JMU00MZU

JMU00MZS

JMU00MYE

JMU00MYC

JMU00MZY

JMU00MZW

JMU00MZ7

JMU00MYH

JMU00MYF

JMU00MZT

### Last Known Settings

Input File Path: [\\int.osram-light.com\!Apps\Casting\OSLONSquare\Tools\OslonDC\setting\_DC](file:///\\int.osram-light.com\!Apps\Casting\OSLONSquare\Tools\OslonDC\setting_DC)

Output File Path: [\\int.osram-light.com\!Apps\Casting\OSLONSquare\Tools\OslonDC\Dispense\_Wgt](file:///\\int.osram-light.com\!Apps\Casting\OSLONSquare\Tools\OslonDC\Dispense_Wgt)

Lot File Path: [\\int.osram-light.com\!Apps\Casting\OSLONSquare\Tools\OslonDC\Panel\_ID](file:///\\int.osram-light.com\!Apps\Casting\OSLONSquare\Tools\OslonDC\Panel_ID)

### Revision

|  |  |  |  |
| --- | --- | --- | --- |
| **Rev** | **Date** | **Author** | **Description** |
| 0 | 20250320 | NSW KN | Initial Version |
| 1 | 20250329 | NSW KN | Change PanelID to PanelID  Added DOT\_ZPATH Command, File Logistics |
| 2 | 20250415 | NSW KN | Added Last Known Settings. |
| 3 | 20250612 | NSW KN | Added Lot File support. |

End of document.