

CITY MULTI – SM – Series

Extended Warranty Process*

***It is recommended to use the CITY MULTI Startup Process document in combination with this document.**

I. Purpose

- A. The SM-Series Extended Warranty Process is a guide to completing the procedure for extended parts and compressor warranty.
- B. Items that must be submitted to apply for extended warranty are:
 - 1. Diamond System Builder file (as built)
 - 2. System Information
 - a. This will allow us to understand how the system is configured at start up.
 - 3. A one-hour Maintenance tool (M-Tool) run in a specific operational pattern, as shown in section IV of this document, for each system being submitted.


II. Diamond System Builder (DSB)

- A. DSB has fields that will allow input of items such as serial numbers, installing contractors, design engineer and more.
 - 1. Each field with a red asterisk (*) beside it is a required field and will need appropriate information before being submitted.
- B. The DSB file must be complete and truly represent how the system is installed including correct piping lengths (as built). Remember the M-Tool file you submit shows the indoor model and addresses connected. To ensure your application is not rejected, check that the M-Tool record and DSB are in fact reflecting the same information.
- C. When any system component is selected there are areas to enter refrigerant piping length, unit height, unit address, connected refrigerant port (R2 systems only), and unit serial number.
- D. There is a tab in the Project Properties Box marked “Extended Warranty”, all of the fields in this box marked with the red asterisk (*) must be completed.
- E. M-Tool run time and system information files are to be attached to the DSB in the Project Properties Box under the “Extended Warranty” tab.

Project Properties

Project Info Unit Config Design Conditions Water Quality Submittal Package Extended Warranty Sharing

Project Definition

☒ Design-Build 

☐ Plan and Spec

LAN Connection

☒ Without (independent centralized control system)

☐ With (connection between each centralized control system)

Region US (UL) ▼

Model Generation Both ▼

Update Project to Current

Default Brand Mitsubishi Electric ▼

Update Project Default Brand

Default Display Marketing Name ▼

CAD Comments

Frequency

☐ 50 Hz ☒ 60 Hz

Refrigerant

☒ R410A/CO2 ☐ R22

Project Date

Select a date 15

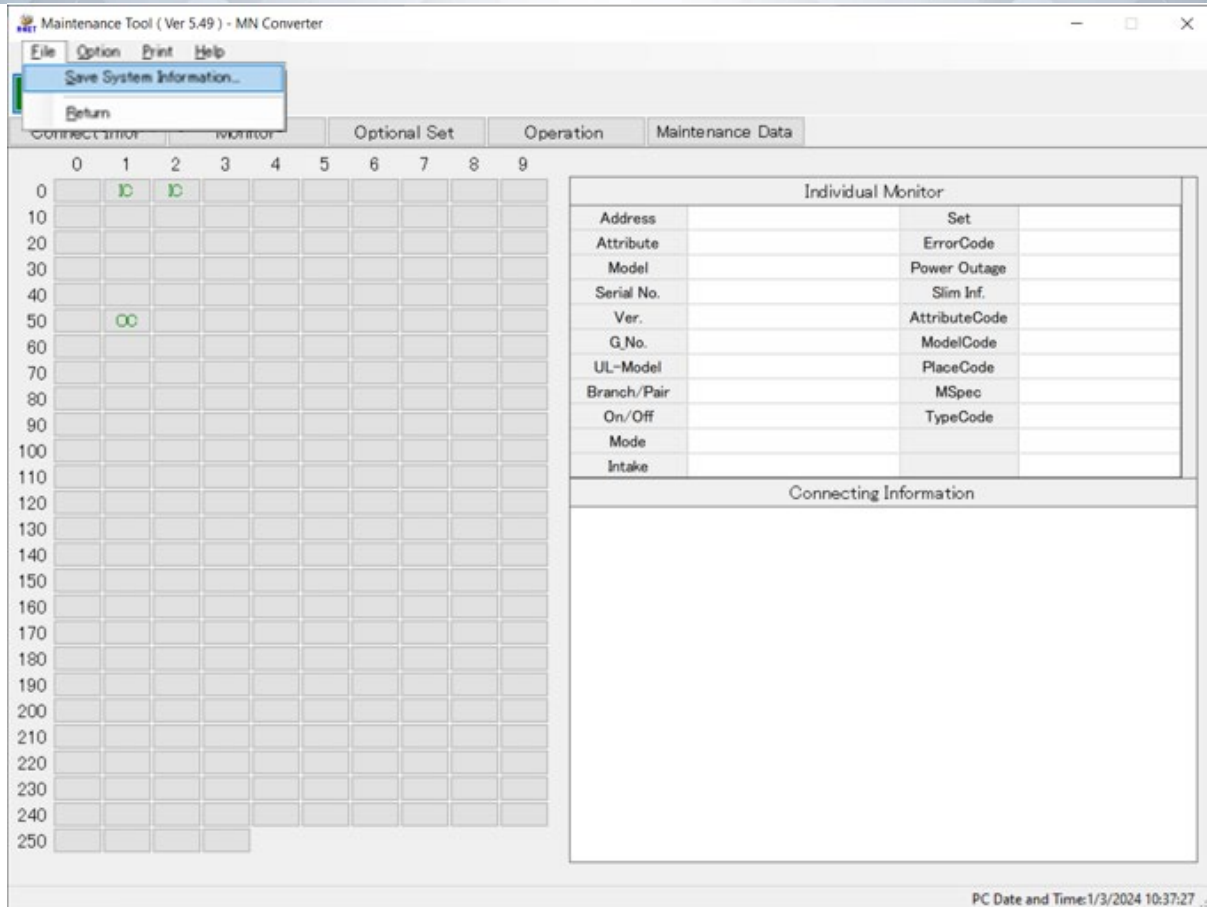
Cont. Number

OK Cancel

III. System Information

A. System information

1. For S-Series systems, once all addresses are correct, the information can be saved.
2. System information must be saved and submitted. Be sure all information is correct.
 - a. M-Tool may take several minutes to finish its system mapping process before data can be saved.
3. Once all addresses are correct the information can be saved.
 - a. Select **File** at the top left of the grid screen. Then click **Save System Info**.



- b. The information will save and store in the **Offline Analyze** section of Maintenance Tool.
 1. Offline Analyze will be one of the options when you first open M-Tool on the Select Monitor Mode Screen.
 2. The steps for retrieving the information will be covered in section V.

IV. One Hour Monitor Record

- A. Record all indoor units in **Test Run**. (Refer to City Multi Startup process Document)
 1. System must be in either **Heating** or **Cooling** (all indoor units in the same mode) for a minimum of one hour.
 2. Must be in **State Test Run** (not Initial) for a minimum of one hour.
 3. All indoor and outdoor units must stay in operational (thermal on) during Test run. Note that all controls should be “locked out” to prevent scheduled or occupant changes that can alter the system during this time. When using the thermostat interface (**PAC-US444CN-1**) or (**PAC-US445CN-1**) it will not be possible to force test mode, so setting the lowest set point for Cool or highest set point for Heat is recommended. If you cannot keep all units in thermal on for the recording period,

please contact your technical Mitsubishi support representative.

Operation Status Monitor (Trend)

Return Time-Searching Print View Option Drive Operation Window Help

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Operation data Spreadsheet Refrigerant Circuit Diagram

OC MXZ-SM48NAMHZ-U1 Adres051 Ver47.10

OPERATION MODE	State	F/Hz	FAN	LEV_A	LEV_B	VDC(V)	I(input)(A)	I(comp)(A)	W(comp)	GR
Cooling	Test Run	20	0	5	43	380.0	0.9	4.9	413	72

63HS	63LS	TH2	TH3	TH4	TH6	TH7	TH8	Demand(%)	SC	SCm	HIC SC	HIC SCm
167.8	86.8	25.7	55.8	82.2	53.6	42.8	80.4	0	1.0	24.0	15.1	24.0

21S4	SV1	SV2	SV3	SS/BH	52C	CN3D-2	demand	CN3S-2	CN3N-2	CN3N-3	CN3D-3	Pdm	ETm
OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	31.5	6.0

SCm1	SCm2	SCm3	SCm4	SCm5	SCm6	SCm7	SCm8	SCm9	SCm10	SCm11	SCm12	SCm13	SCm14	SCm15
8.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SCm16	SCm17	SCm18	SCm19	SCm20	SCm21	SCm22	SCm23	SCm24	SCm25	SCm26	SCm27	SCm28	SCm29	SCm30
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SC1	SC2	SC3	SC4	SC5	SC6	SC7	SC8	SC9	SC10	SC11	SC12	SC13	SC14	SC15
5.4	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SC16	SC17	SC18	SC19	SC20	SC21	SC22	SC23	SC24	SC25	SC26	SC27	SC28	SC29	SC30
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

LEV1	LEV2	LEV3	LEV4	LEV5	LEV6	LEV7	LEV8	LEV9	LEV10	LEV11	LEV12	LEV13	LEV14	LEV15
172	172	60	60	60	60	60	60	60	60	60	60	60	60	60

LEV16	LEV17	LEV18	LEV19	LEV20	LEV21	LEV22	LEV23	LEV24	LEV25	LEV26	LEV27	LEV28	LEV29	LEV30
60	60	60	60	60	60	60	60	60	60	60	60	60	60	60

IC

	Model	G_No	B_No	TH1	TH2	TH3	TH4	SH/SC	Li	TO	Save	O/F	Mode	State	IC S	Fan
001	24	1	0	60.8	28.4	52.7		24.1	172	71.0	100	Test	Cooling	ON	Cool ON	Hi
002	24	2	0	61.3	27.9	53.2		25.2	172	69.0	100	Test	Cooling	ON	Cool ON	Hi

PC Date and Time:1/3/2024 10:54:01

- A. When exiting the **Monitor** screen, you will be prompted to **Confirm Data Save**
 4. You are also given the option to modify the **Data Name**, and add comments and customer information.
 - a. It is recommended that you use the **Job Name** in the **Data Name** field and if there are multiple systems onsite to put the **system designation or number** in the **Comment Field**.
- B. The saved data will store in the **Offline Analyze** section of M-Tool.
 5. Changing the name and adding comments will make location of the files faster.

Operation Status Monitor (Trend)

Return Time-Searching Print View Option Drive Operation Window Help

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Operation data Spreadsheet Refrigerant Circuit Diagram

OC MXZ-SM48NAMHZ-U1 Adres:051 Ver47.10

OPERATION MODE	State	F/Hz	FAN	LEV_A	LEV_B	VDC(V)	I(input)(A)	I(comp)(A)	W(comp)	GR
Cooling	Test Run	30	0	5	57	380.0	2.9	6.2	690	71

63HS	63LS	TH2	TH3	TH4	TH6	TH7	TH8	Demand(%)	SC	SCm	HIC SC	HIC SCm
189.2	62.6	16.9	56.5	123.4	65.7	42.8	96.4	0	4.6	24.0	24.1	24.0

21S4	SV1	SV2	SV3	SS/BH	52C	CN3D-2	demand	CN3S-2	CN3N-2	CN3N-3	CN3D-3	Pdm	ETm
OFF	OFF	ON	OFF										

Confirm Data Save

Are you sure you want to save?

Data Name : OM 20240103 113711

Area :

Customer :

System :

Comment :

☐ Monitor the Pre-error data

☐ Monitor the malfunc log

Save Not Save

SCm1	SCm2	SCm3	SCm4	SCm5	SCm6	SCm7	SCm8	SCm9	SCm10	SCm11	SCm12	SCm13	SCm14	SCm15	SCm16	SCm17	SCm18	SCm19	SCm20	SCm21	SCm22	SCm23	SCm24	SCm25	SCm26	SCm27	SCm28	SCm29	SCm30
8.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SC1	SC2	SC3	SC4	SC5	SC6	SC7	SC8	SC9	SC10	SC11	SC12	SC13	SC14	SC15	SC16	SC17	SC18	SC19	SC20	SC21	SC22	SC23	SC24	SC25	SC26	SC27	SC28	SC29	SC30
11.7	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

LEV1	LEV2	LEV3	LEV4	LEV5	LEV6	LEV7	LEV8	LEV9	LEV10	LEV11	LEV12	LEV13	LEV14	LEV15	LEV16	LEV17	LEV18	LEV19	LEV20	LEV21	LEV22	LEV23	LEV24	LEV25	LEV26	LEV27	LEV28	LEV29	LEV30
150	150	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60

Model	G_No	B_No	TH1	TH2	TH3	TH4	SH/SC	Li	TO	Save	O/F	Mode	State	ICS	Fan
001	24	1	0	63.9	17.4	55.2	38.2	150	71.0	100	Test	Cooling	ON	Cool ON	Hi
002	24	2	0	64.6	16.9	55.9	38.9	150	69.0	100	Test	Cooling	ON	Cool ON	Hi

PC Date and Time: 1/3/2024 11:34:42

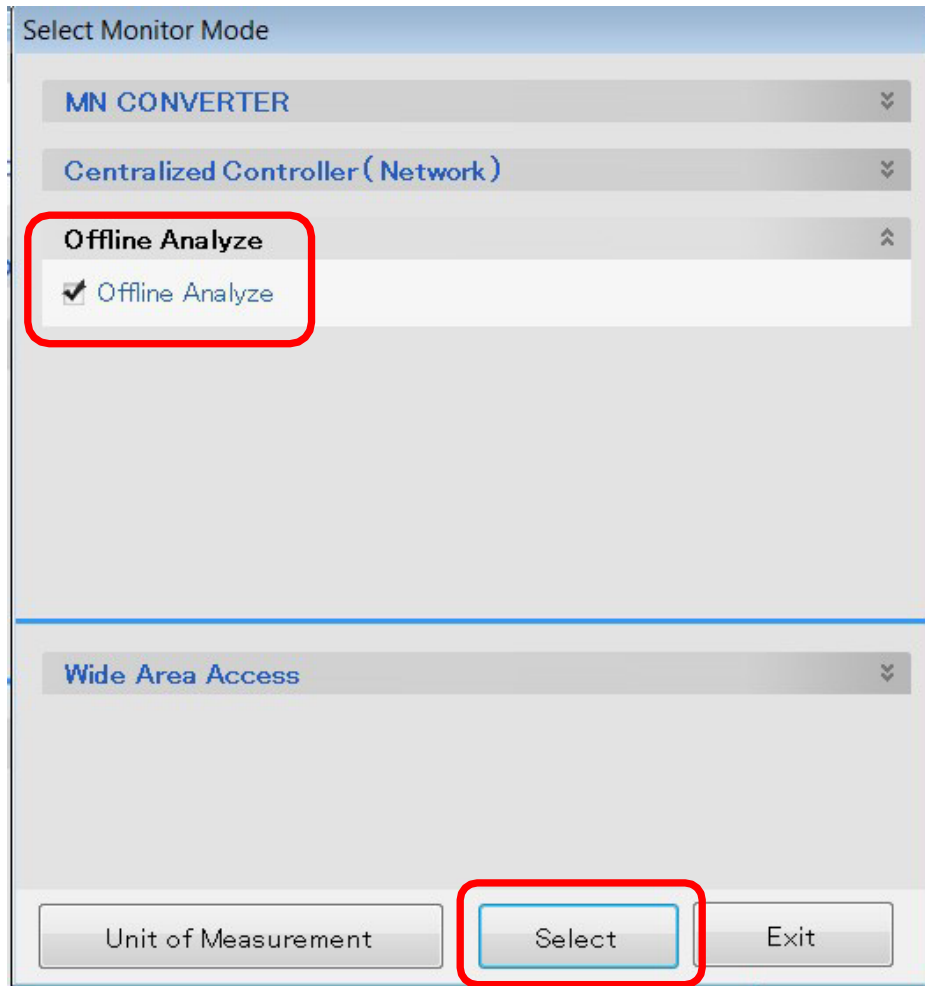
V. Retrieving Saved Maintenance Tool Data

A. Saved data will store in the **Offline Analyze** section of M-Tool.

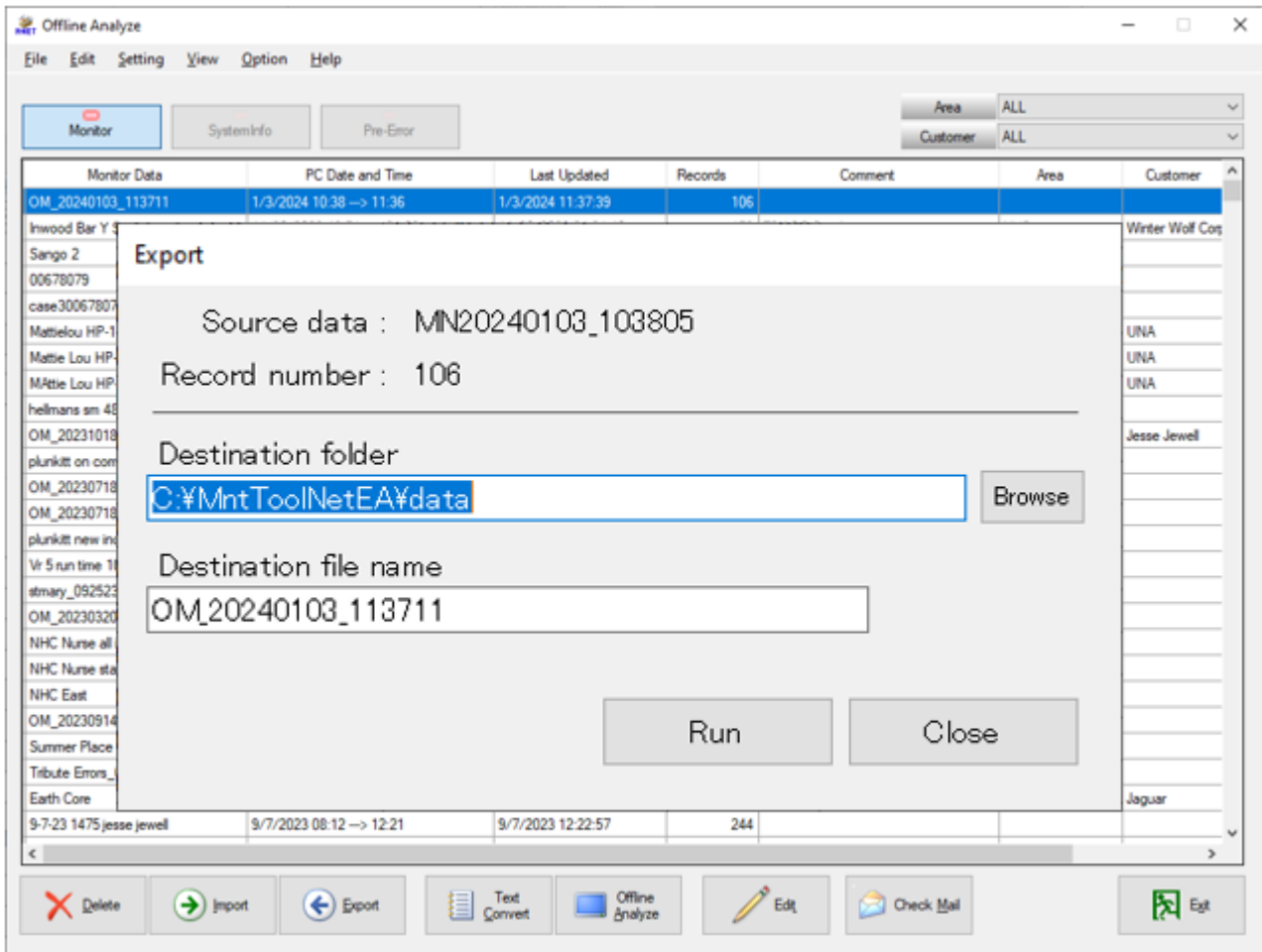
- Here you can highlight the **system information** and **runtime data** and export it to a location where it can be easily found, also they will be in the correct format for submittal.
- A folder, where all saved information can be stored, should be created.

B. Start Maintenance Tool and select “**Offline Analyze**”, make sure the box is checked

and click select at the bottom of the window.



- C. Click the **"Monitor"** button, select the file to be exported and select **"Export"** button at bottom of the window to export the run time data.
 1. Another window will open giving you the option to select the destination folder created in step V.A.2 above.



D. Click the “**System Info**” button, select the file to be exported and select “**Export**” button at the bottom of the window to export the system information data.

1. Just as above a window will open giving the option to select the destination folder created in step V.A.2 above.

VI. Submitting Extended Warranty Files

- A. Attach the Exported M-Tool System Information and Runtime files to the DSB in the extended warranty tab in the project properties section.

*Is this a complete project? ☐ Yes ☐ No

*Attach Maintenance Tool Data:

*Required field

Browse Clear Selected Clear All Submit

Export to Excel

1. Select “**Browse**” and navigate to the folder created in step V.A.2 to select the files to attach.
 2. Once files have been attached to the As Built DSB file select “**Submit**” to send the project in for review.
 - a. If there is any missing information the DSB program will give a notification of errors to correct before the file can be properly submitted.
- B. For additional information on the DSB submission process please view our **Extended Warranty DSB** Tech Tip on www.mylinkdrive.com under the Tech Tips section.
- C. The following data must be submitted
1. Diamond System Builder file (As Built)
 2. Maintenance Tool System Information
 3. Maintenance Tool Run Time Data (Minimum 60 Minutes for each system)
- D. The data **MUST** be submitted within **45 Days** of **Startup**.
- E. The Extended Warranty will **NOT** take effect until a warranty authorization number has been issued.
- F. If you have any questions regarding collection of data and submission you can contact your distributor DSG or METUS area service manager.