

SNET Pro 2

Service Software

User Manual



Specifications and information contained are subject to change without notice.
Always refer to install manuals provided with equipment and controls before installation.

SNET Pro Service Software

- SNET Pro 2 service software is used to monitor and program Samsung DVM S systems
- Although not mandatory, it is strongly recommended that SNET Pro 2 service software is used during system setup and commissioning
- This section will cover basic use of SNET Pro 2
- Throughout the remainder of the training other functions of SNET Pro 2 will be covered



SNET Pro 2 Service Software

- Part number: MIM-C02N comes with the converter, USB cable, and firmware update cable
- The firmware update cable is used to connect direct to a PCB and reprogram the MICOM with new firmware

RS23-to-RS485 converter



USB cable



Firmware update cable

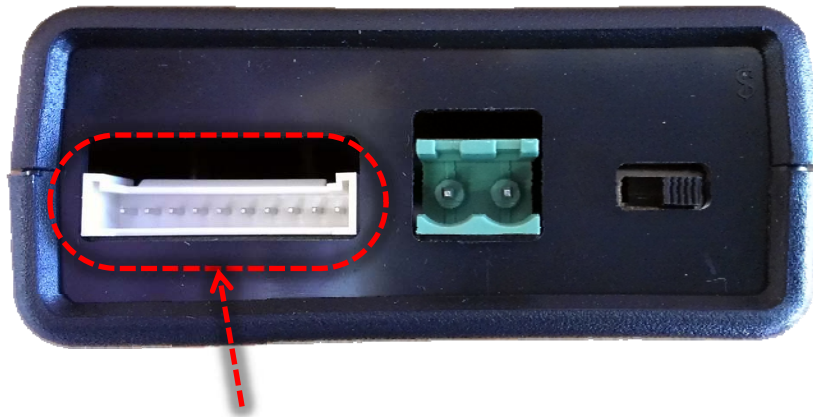


Software and driver will need to be downloaded from www.DVMdownload.com

SNET Pro 2 Service Software

MIM-C02N Components

RS23-to-RS485 converter bottom



Firmware update cable



- Equipment/control PCB update cable connection
- Included cable will allow connection of iConverter to indoor, outdoor, MCU and controller PCB's for firmware upgrades
- This is one of two ways to reprogram a PCB with updated firmware

Software and driver will need to be downloaded from www.DVMdownload.com

SNET Pro 2 Service Software

Connection

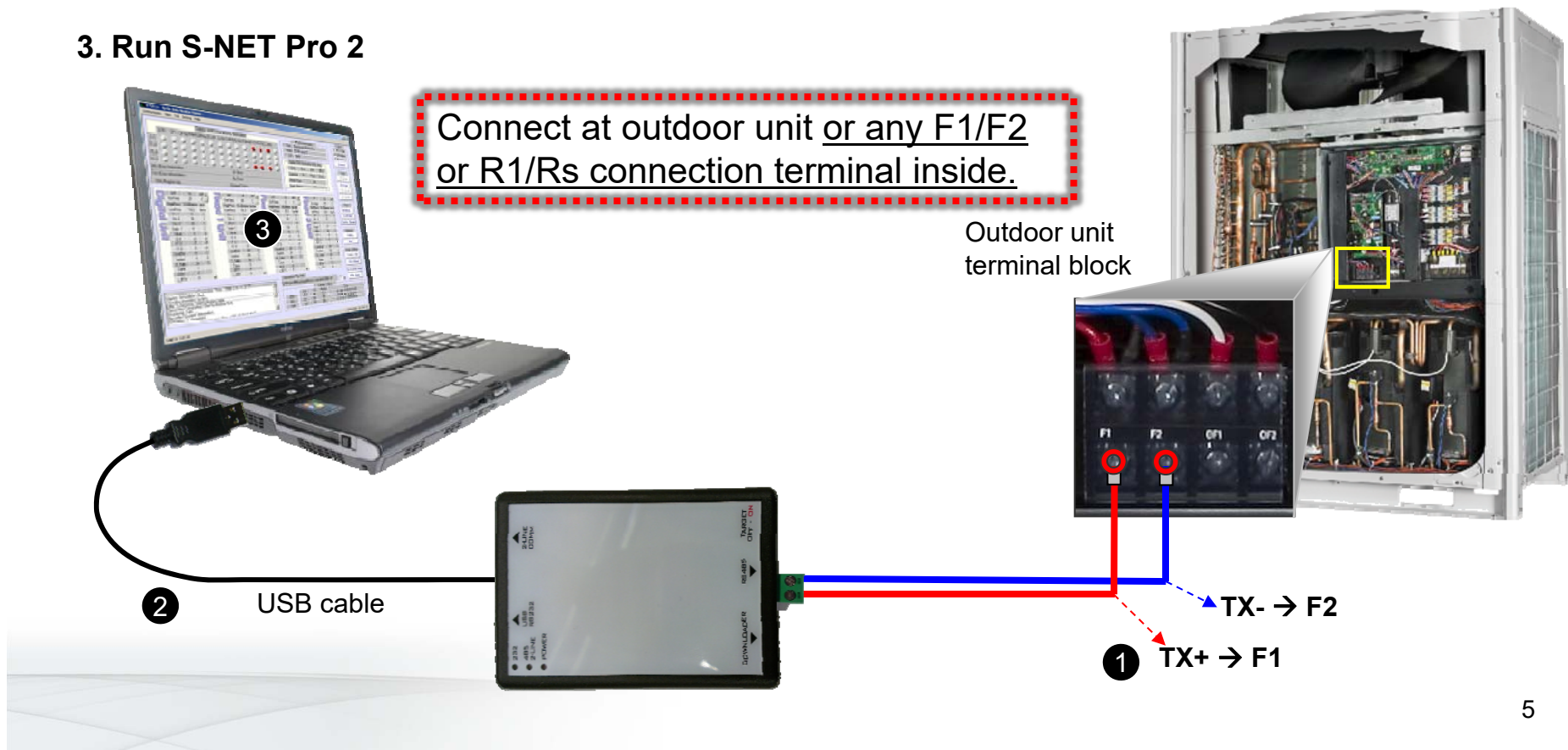
1. USB cable

- Connect the USB cable to the PC and the converter
- After connection wait 30 seconds before opening software, this allows Windows to configure COM port

2. RS485 Communication

Connect TX+ and TX- on the converter to **F1 and F2** at any F1/F2 or **R1/R2** at any R1/R2 connection point with field-provided wire (R1/R2 connection requires SNET Pro 2 version 1.4.6 or newer)

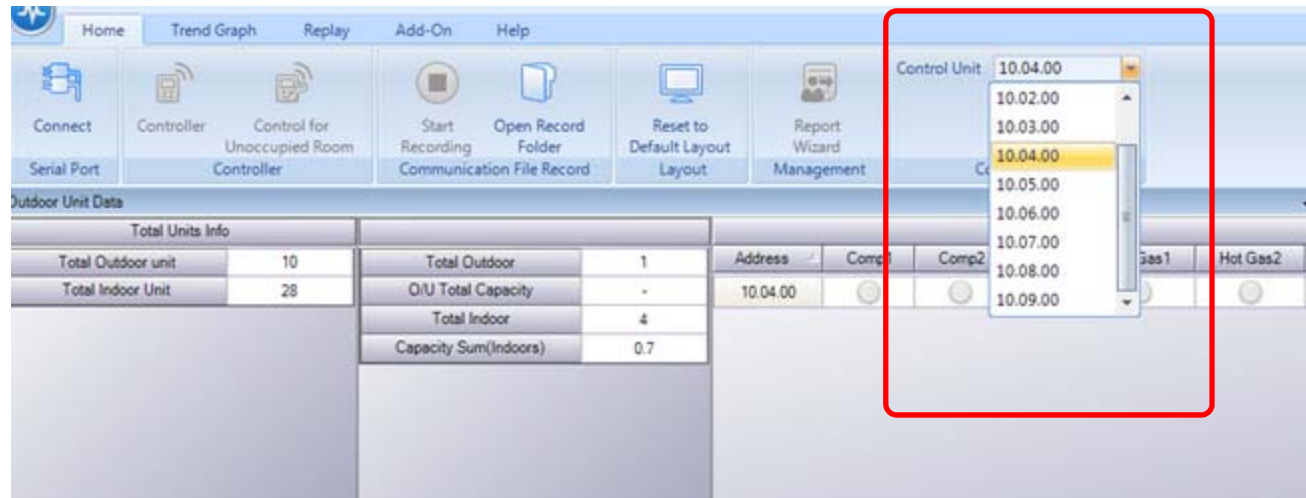
3. Run S-NET Pro 2



SNET Pro 2 Service Software

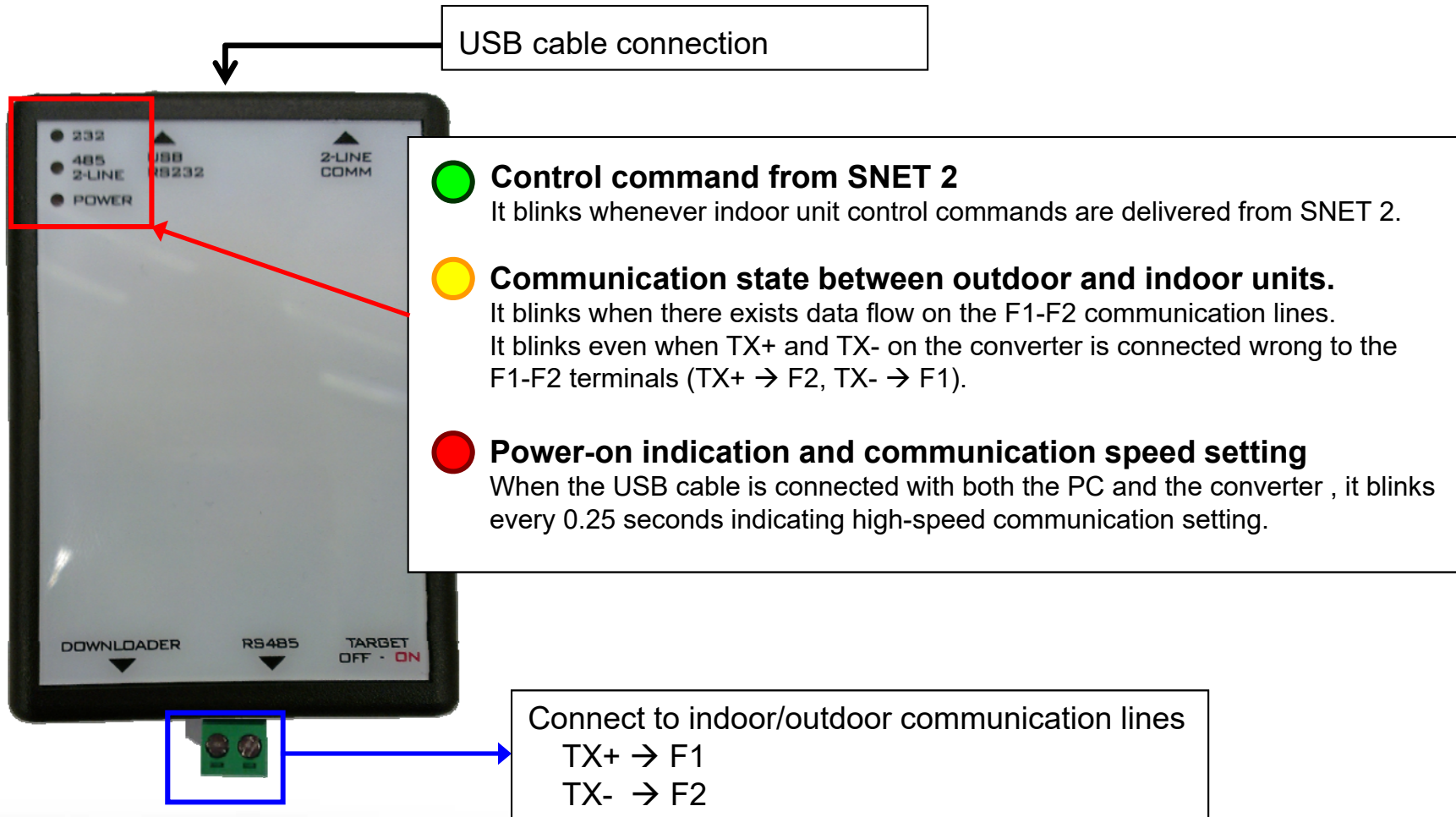
Connection

- SNET Pro 2 version 1.4.6 or newer will allow connection to R1/R2
- This will allow connection of multiple systems on a central controller R1/R2 communication line



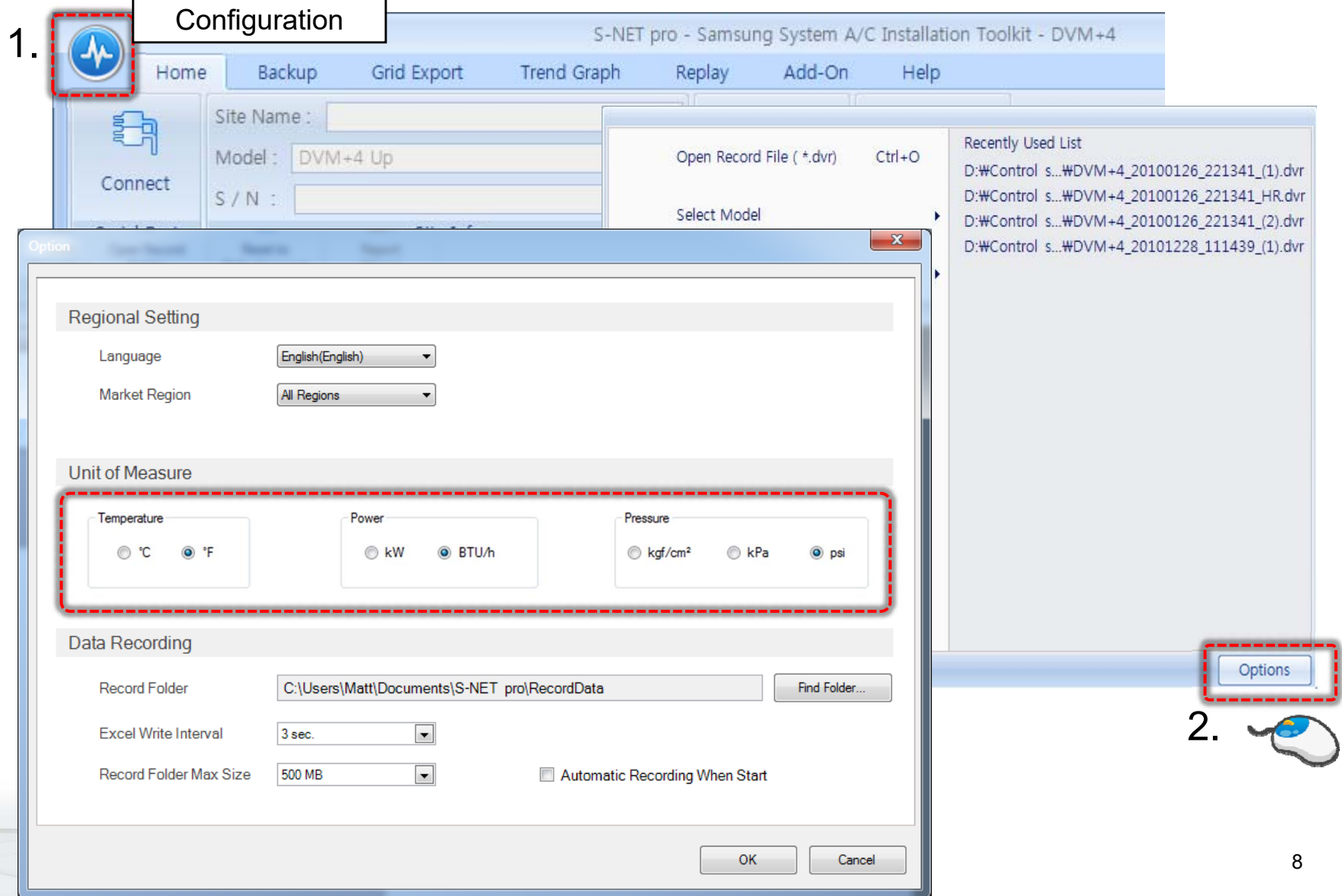
SNET Pro 2 Service Software

Status lights



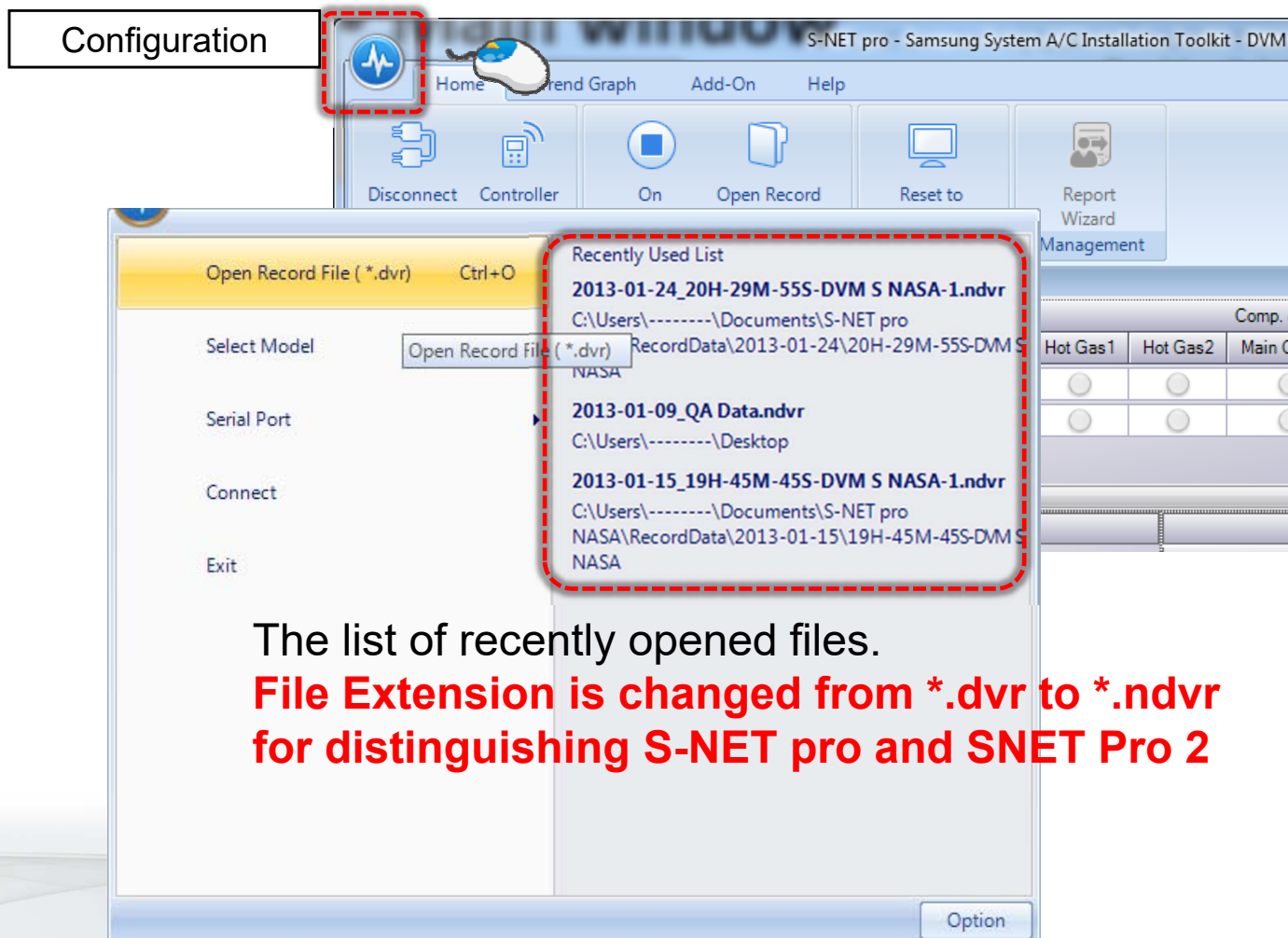
SNET Pro 2 Service Software

- The first time using SNET Pro 2, click the configuration button, then select “Options”
- Here you can change from Metric to Standard units



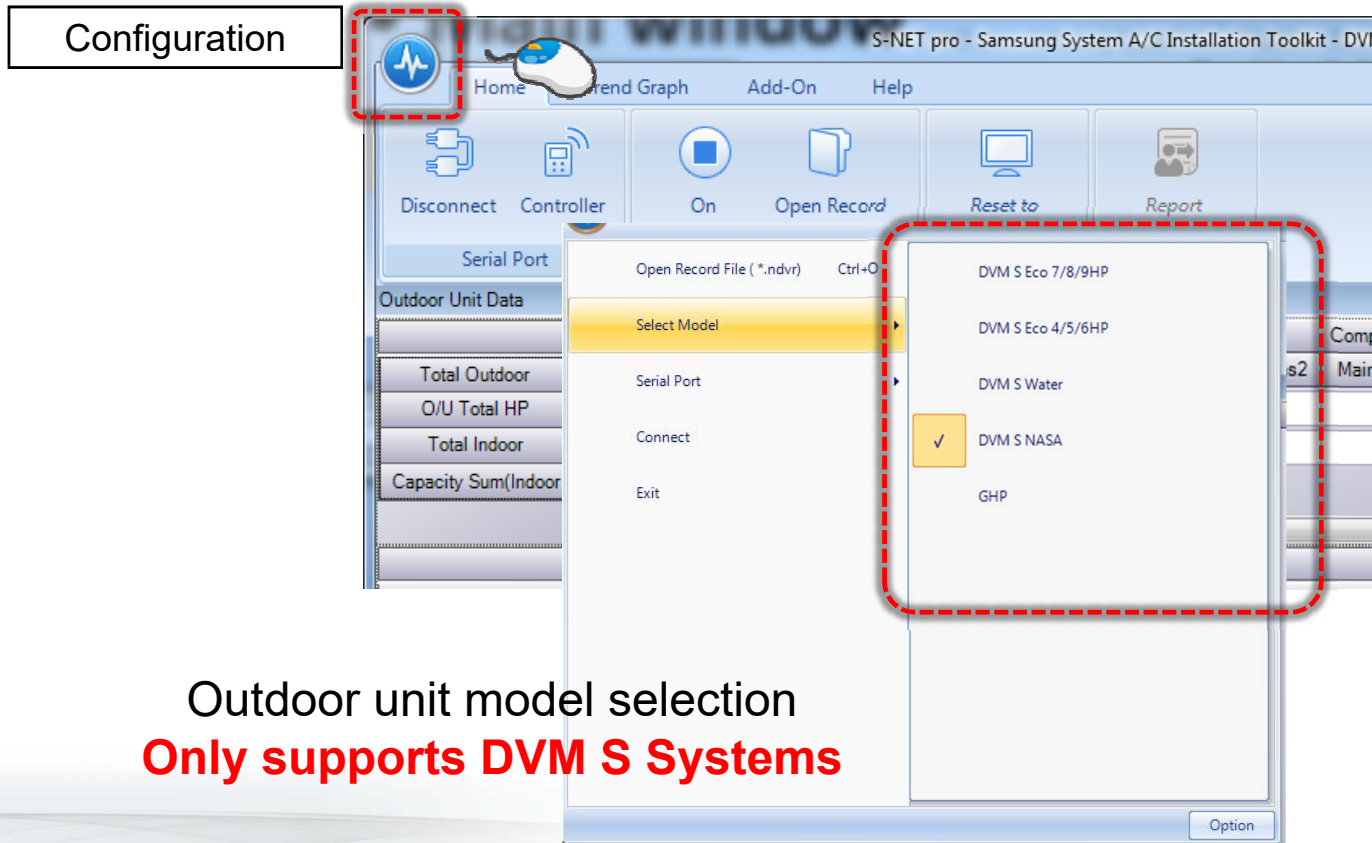
SNET Pro 2 Service Software Configuration

- In the configuration section, the first option is “Open Recorded File”
- This will allow you to specify a recording of a DVM S system in operation



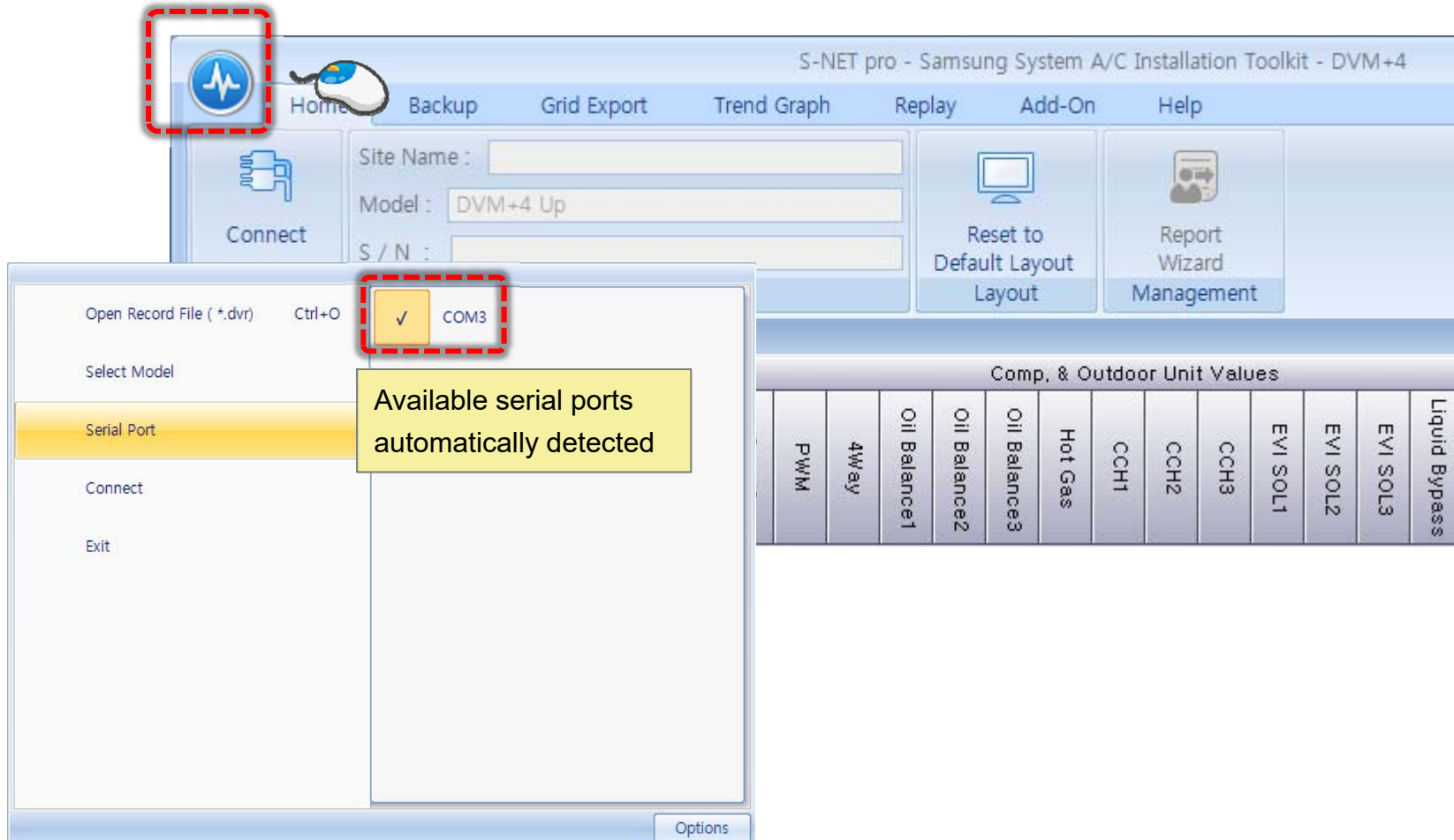
SNET Pro 2 Service Software Configuration

- The second option allows outdoor unit type specification
- Specify if you are connected to DVM Eco or DVM S (3ø)
- NOTE: Version 1.4.6 or newer does not have this setting option as system type is automatically detected



SNET Pro 2 Service Software Configuration

- SNET Pro 2 should auto detect the COM port being used
- Click “Serial Port” to adjust COM ports if communication is not present

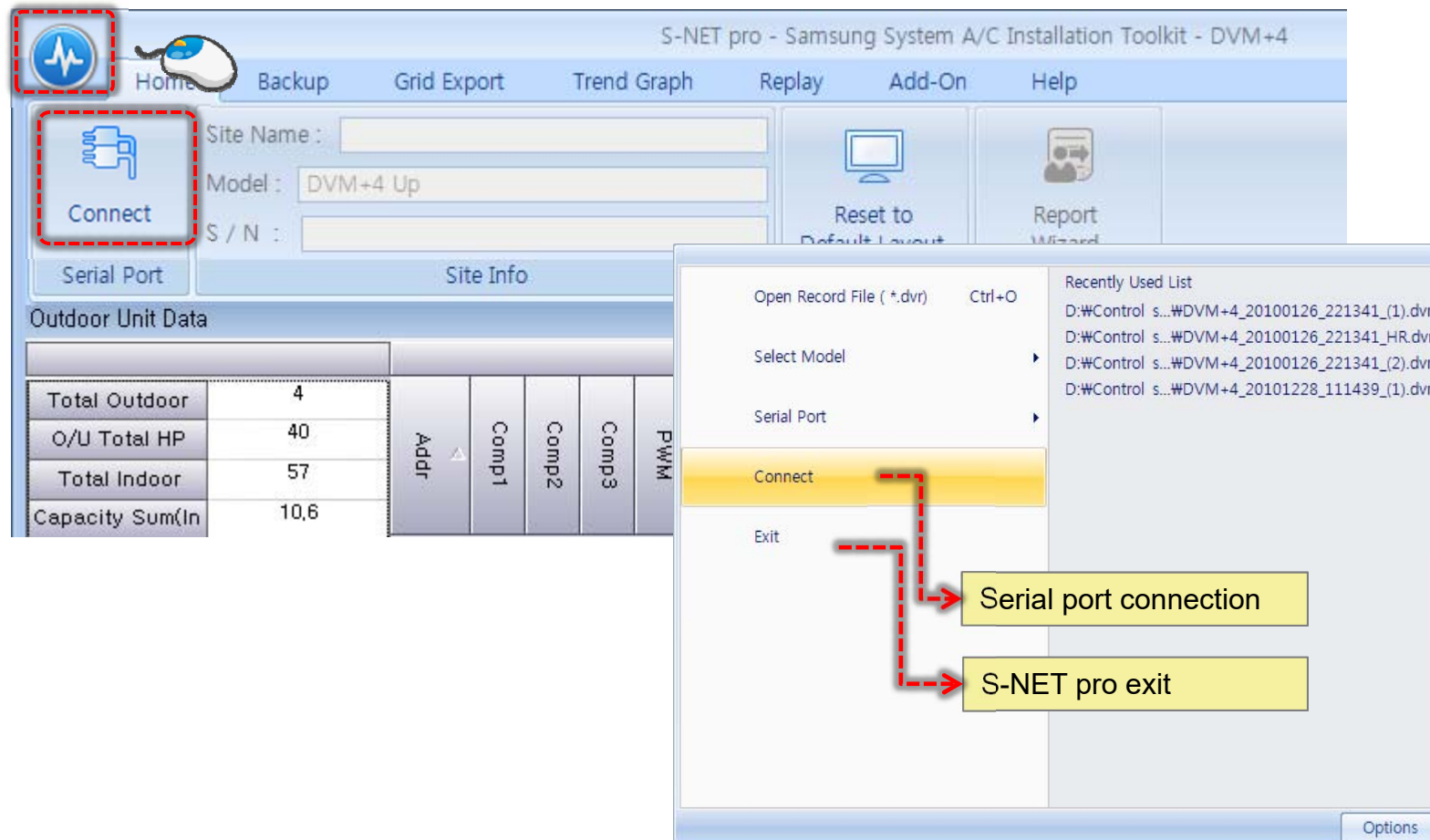


USB-to-Serial port selection

(will auto detect if communication tool is connected to computer before SNET Pro 2 is opened)

SNET Pro 2 Service Software Configuration

Click “Connect” to initiate communication with the DVM S system



Connect and Exit

SNET Pro 2 Service Software

Main Screen – Basic Layout

The screenshot shows the main interface of the SNET Pro 2 Service Software. The window title is "S-NET pro - Samsung System A/C Installation Toolkit - DVM S NASA". The interface includes a top menu bar with "Home", "Trend Graph", "Add-On", and "Help". Below this is a toolbar with icons for "Disconnect", "Controller", "On Recording", "Open Record Folder", "Reset to Default Layout", and "Report Wizard Management". A "Configuration" label points to the top-left corner. A "Main menu" label points to the toolbar. A "Automatic start-up report generation to PDF file" label points to the "Report Wizard Management" icon. A "SNET Pro 2 connection" label points to the "Disconnect" icon. A "Layout initialization" label points to the "Reset to Default Layout" icon. A "Replay data file location opening" label points to the "Open Record Folder" icon. A "Data backup" label points to the "On Recording" icon, with a sub-label "1. Comm. data 2. Excel data". A "Communication state (flickering)" label points to the status bar at the bottom right. The main area displays "Outdoor Unit Data" and "Indoor unit control panel" sections. The "Indoor unit control panel" shows various parameters like "O/U Total HP", "Total Indoor", "Address", "Comp", "Hot Gas2", "Main Cooling", "EEV Valve", "EVI Sol1", "EVI Sol2", "EVI Bypass", "ARV", and "CCH". The "Outdoor Unit Info #2" section shows parameters like "TestOperation(UP)", "Comp Top1", "Comp Top2", "Outdoor Temp.", "Compressor1 Current", "Compressor2 Current", "IPM1 Temp.", "IPM2 Temp.", "CondOut Temp.", "Liquid Tube Temp.", "Suction1 Temp.", "Suction2 Temp.", "Main EEV", "EVI EEV", and "EVI IN". The status bar at the bottom shows "Version 0.3.4", "Unit - Temp.: °C", "Power : kW", "Pressure : kgf/cm²", the date "2013-01-25", time "오전 10:49", and a "COM1" status indicator.

Configuration

Main menu

Automatic start-up report generation to PDF file

SNET Pro 2 connection

Layout initialization

Replay data file location opening

Data backup
1. Comm. data
2. Excel data

Communication state (flickering)

Software version
Version 0.3.4

Indoor unit control panel

Address	10.01.00	10.01.01
Operation Mode	CompDown	-
Operation Status	Undefined	-
Error Code	291	-
HP	8	-
Target1 Frequency	0	-
Order1 Frequency	0	-
Current1 Frequency	0	-
Target2 Frequency	-	-
Order2 Frequency	-	-
Current2 Frequency	-	-
High Pressure	0 kgf/cm²	-
Saturated T _{Pd}	-51 °C	-
Low Pressure	0 kgf/cm²	-
Saturated T _{Ps}	-51 °C	-
Discharge1	0 °C	-

Address	10.01.00	10.01.01
TestOperation(UP)	Not Completed	-
Comp Top1	0 °C	-
Comp Top2	0 °C	-
Outdoor Temp.	0 °C	-
Compressor1 Current	0	-
Compressor2 Current	-	-
IPM1 Temp.	-	-
IPM2 Temp.	-	-
CondOut Temp.	0 °C	-
Liquid Tube Temp.	0 °C	-
Suction1 Temp.	0 °C	-
Suction2 Temp.	0 °C	-
Main EEV	35	-
EVI EEV	0	-
EVI IN	0 °C	-

Unit - Temp.: °C Power : kW Pressure : kgf/cm² 2013-01-25 오전 10:49 COM1

SNET Pro 2 Service Software

Main Screen

Installation information

Total Outdoor	2
O/U Total HP	8
Total Indoor	3
Capacity Sum(Indoor)	0

Outdoor unit valve state

Comp. & Outdoor Unit Valves													
Address	Comp1	Comp2	4Way	Hot Gas1	Hot Gas2	Main Cooling	EEV Valve	EVI Sol1	EVI Sol2	EVI Bypass	ARV	CCH	
10.01.00													
10.01.01								-	-		-		

Outdoor unit cycle data PAGE 1

Outdoor Unit Info #1		
Address	10.01.00	10.01.01
Operation Mode	CompDown	-
Operation Status	Undefined	-
Error Code	291	291
HP	8	-
Target1 Frequency	0	-
Order1 Frequency	0	-
Current1 Frequency	0	-
Target2 Frequency	-	-
Order2 Frequency	-	-
Current2 Frequency	-	-
High Pressure	0 kgf/cm ²	-
Saturated T_Pd	-51 °C	-
Low Pressure	0 kgf/cm ²	-
Saturated T_Ps	-51 °C	-
Discharge1	0 °C	-

Outdoor unit cycle data PAGE 2

Outdoor Unit Info #2		
Address	10.01.00	10.01.01
TestOperation(UP)	Not Completed	-
Comp Top1	0 °C	-
Comp Top2	0 °C	-
Outdoor Temp.	0 °C	-
Compressor1 Current	0	-
Compressor2 Current	-	-
IPM1 Temp.	-	-
IPM2 Temp.	-	-
CondOut Temp.	0 °C	-
Liquid Tube Temp.	0 °C	-
Suction1 Temp.	0 °C	-
Suction2 Temp.	0 °C	-
Main EEV	35	-
EVI EEV	0	-
EVI IN	0 °C	-

Data monitoring tabs

Outdoor Unit Data | Outdoor Unit Installation Data | Indoor Unit Data | Indoor Unit Installation Data | MCU Unit Data

Version: 0.3.4 | Unit - Temp.: °C | Power: kW | Pressure: kgf/cm² | 10:49 | COM1

SNET Pro 2 Service Software

Main Screen

Outdoor Unit Data Summary

Item	Value	Address	Comp
Total Outdoor	2	10.01.00	10.01.01
O/U Total HP	8		
Total Indoor	3		
Capacity Sum(Indoor)	0		

Outdoor Unit Info #1

Address	10.01.00	10.01.01
Operation Mode	CompDown	-
Operation Status	Undefined	-
Error Code	291	291
HP	8	-
Target1 Frequency	0	-
Order1 Frequency	0	-
Current1 Frequency	0	-
Target2 Frequency	-	-
Order2 Frequency	-	-
Current2 Frequency	-	-
High Pressure	0 kgf/cm ²	-
Saturated T_Pd	-51 °C	-
Low Pressure	0 kgf/cm ²	-
Saturated T_Ps	-51 °C	-
Discharge1	0 °C	-

Outdoor Unit Info #2

	10.01.00	10.01.01
TestOperation(UP)	Not Completed	-
Comp Top1	0 °C	-
Comp Top2	0 °C	-
Outdoor Temp.	0 °C	-
Compressor1 Current	0	-
Compressor2 Current	-	-
IPM1 Temp.	-	-
IPM2 Temp.	-	-
CondOut Temp.	0 °C	-
Liquid Tube Temp.	0 °C	-
Suction1 Temp.	0 °C	-
Suction2 Temp.	0 °C	-
Main EEV	35	-
EVI EEV	0	-
EVI IN	0 °C	-

Callout Boxes:

- Number of outdoor units (points to Total Outdoor: 2)
- Total capacity of outdoor units (points to O/U Total HP: 8)
- Number of indoor units (points to Total Indoor: 3)
- Sum of indoor unit capacities (points to Capacity Sum(Indoor): 0)

Bottom Bar:

- Version 0.3.4
- Outdoor unit data monitoring
- 2013-01-25 오전 10:49
- COM 1

SNET Pro 2 Service Software

Main Screen

S-NET pro - Samsung System A/C Installation Toolkit - DVM S NASA

Home Trend Graph Add-On Help

Disconnect Controller On Recording Open Record Folder Reset to Default Layout Layout Report Wizard Management

Serial Port Communication File Record

Outdoor Unit Data

Total Outdoor		Comp. & Outdoor Unit Valves													
		Address	Comp1	Comp2	4Way	Hot Gas 1	Hot Gas 2	Main Cooling	EEV Valve	EVI Sol1	EVI Sol2	EVI Bypass	ARV	CCH	
O/U Total HP	8	10.01.00													
Total Indoor	3	10.01.01													
Capacity Sum(Indoor)	0														

Main outdoor unit

Sub1 outdoor unit

Sub2 outdoor unit (if present)

Outdoor Unit Info #1			Outdoor Unit Info #2		
Address	10.01.00	10.01.01	Address	10.01.00	10.01.01
Operation Mode	CompDown	-	TestOperation(UP)	Not Completed	-
Operation Status	Undefined	-	Comp Top1	0 °C	-
Error Code	291	291	Comp Top2	0 °C	-
HP	8	-	Outdoor Temp.	0 °C	-
Target1 Frequency	0	-	Compressor1 Current	0	-
Order1 Frequency	0	-	Compressor2 Current	-	-
Current1 Frequency	0	-	IPM1 Temp.	-	-
Target2 Frequency	-	-	IPM2 Temp.	-	-
Order2 Frequency	-	-	CondOut Temp.	0 °C	-
Current2 Frequency	-	-	Liquid Tube Temp.	0 °C	-
High Pressure	0 kgf/cm²	-	Suction1 Temp.	0 °C	-
Saturated T_Pd	-51 °C	-	Suction2 Temp.	0 °C	-
Low Pressure	0 kgf/cm²	-	Main EEV	35	-
Saturated T_Ps	-51 °C	-	EVI EEV	0	-
			EVI IN	0 °C	-

Outdoor unit data monitoring

Outdoor Unit Data Outdoor Unit Installation Data Indoor Unit Data Indoor Unit Installation Data MCU Unit Data

Version 0.3.4 Unit - Temp.:°C Power :kW Pressure : kgf/cm² 2013-01-25 오전 10:49 COM 1

SNET Pro 2 Service Software

Main Screen – DVM Eco Outdoor Unit Data

S-NET pro 2 - DVM S Eco 4/5/6HP

Home Trend Graph Replay Add-On Help

2/7/2014 4:33:05 PM
Duration 00:15:27

2/7/2014 5:07:04 PM
Current Time 2/7/2014 4:48 PM

1x Fast Slow

Player

Outdoor Unit Data

Outdoor Unit Info #1		Outdoor Unit Info #2	
Address	10.00.00	Address	10.00.00
Total Indoor	5	Discharge1	145°F
Capacity Sum(Indoors)	59514.1	TestOperation(UP)	Completed
Compressor		Comp Top1	132.1°F
4Way Valve		Outdoor Temp.	64.6°F
Hot Gas Valve		Compressor Current1	12.3
Operation Mode	Test	IPM1 Temp	141.8°F
Operation Status	Heat	CondOut Temp.	49.5°F
Error Code	0	Liquid Tube Temp.	97.7°F
HP	6HP	Suction1 Temp.	48°F
Target Frequency1	69	Main EEV	602
Order Frequency1	69	EVI EEV	0
Current Frequency1	69	Fan RPM	750
High Pressure	396.8	Location	-
Saturated T_Pd	116.6°F	Serial Number	-
Low Pressure	126.6	Main Micom	DB91-01541A 13/05/09
Saturated T_Ps	44.6°F	Inverter1 Micom	DB91-01413A 12/03/07
Mid Pressure	0	EEPROM Version	DB82-01445A 13/01/25

Outdoor Unit Data Indoor Unit Data Indoor Unit Installation Data

Version 1.1.0 Unit-Temp.:F Power:Btu Pressure:psi 2/10/2014 3:21 PM COM-1

Data monitoring tabs



Details
on following page

SNET Pro 2 Service Software

Main Screen – DVM Eco Outdoor Unit Data

Outdoor Unit Info #1		Outdoor Unit Info #2	
Address	10.00.00	Address	10.00.00
Total Indoor	5	Discharge1	145°F
Capacity Sum(Indoors)	59514.1	TestOperation(UP)	Completed
Compressor		Comp Top1	132.1°F
4Way Valve		Outdoor Temp.	64.6°F
Hot Gas Valve		Compressor Current1	12.3
Operation Mode	Test	IPM1 Temp	141.8°F
Operation Status	Heat	CondOut Temp.	49.5°F
Error Code	0	Liquid Tube Temp.	97.7°F
HP	6HP	Suction1 Temp.	48°F
Target Frequency1	69	Main EEV	602
Order Frequency1	69	EVI EEV	0
Current Frequency1	69	Fan RPM	750
High Pressure	396.8	Location	-
Saturated T_Pd	116.6°F	Serial Number	-
Low Pressure	126.6	Main Micom	DB91-01541A 13/05/09
Saturated T_Ps	44.6°F	Inverter1 Micom	DB91-01413A 12/03/07
Mid Pressure	0	EEPROM Version	DB82-01445A 13/01/25

Editable – An outdoor unit name/location can be entered. This will save to the ODU EEPROM

- Target Frequency = Target compressor frequency
- Order Frequency = Frequency steps while changing compressor frequency
- Current Frequency = Current compressor frequency
- Discharge1 = Compressor discharge temperature
- Comp Top1 = Temperature of top of compressor
- Compressor Current1 = Operating current of compressor
- IMP1 Temp = IPM (inverter PCB) temperature
- CondOut Temp. = refrigerant temperature exiting condenser coil (cooling cycle)
- Liquid Tube Temp. = refrigerant temperature exiting outdoor unit subcooler
- Main EEV = Expansion valve step for heating
- EVI EEV = subcooler expansion valve step
- Main MICOM = MICOM model and firmware date of Main PCB
- Inverter1 MICOM = MICOM model and firmware date of Inverter PCB
- EEPROM Version = MICOM model and firmware date of EEPROM PCB



SNET Pro 2 Service Software

Main Screen

S-NET pro 2 - DVM S NASA

Home Trend Graph Add-On Help

Disconnect Controller Start Recording Open Record Folder Reset to Default Layout Report Wizard Management

Serial Port Communication File Record Layout Management

Outdoor Unit Installation Data

Address	10.04.00
Location	HR-1_Roof
Serial Number	
Main Micom	DB91-01472A 13/01/11
Sub Micom	DB91-01137B 11/08/17
Inverter1 Micom	DB91-00000A 00/00/00
Inverter2 Micom	DB91-00000A 00/00/00
Fan1 Micom	DB91-00000A 00/00/00
Fan2 Micom	DB91-00000A 00/00/00
EEPROM Version	DB82-01332A 13/02/12
Total Comp	1
Comp. Cut	No Apply
Cool Calibration	10~12°
Heat Calibration	30%
Current Limit	90%
Oil Return	Option
Defrost	Basic
Fan Calibration	Option
Night Silence	Level3
Head	No Apply
Pipe Length	Level1
Power Saving	Apply
Rotate Defrost	No Apply
Cool Low/Temp Limit Ex	No Apply
Channel Address	Manual Setting : 4

- Displays option settings from the outdoor unit(s) done via tact buttons (K buttons)
- Any yellow box can be modified
- Double-click to change a unit's name
- This will save to the removable EEPROM of each unit

Outdoor unit installation option settings

Outdoor Unit Data Outdoor Unit Installation Data Indoor Unit Data MCU Unit Data

Version 1.1.0 Unit - Temp.:F Power:Btu Pressure:psi 1/23/2014 2:23 PM COM 7



Integrated 2 Management System

SNET Pro 2 – Video

Changing outdoor unit name - DVM S (3ø)

S-NET pro 2 - DVM S NASA

Home Trend Graph Add-On Help

Address Change AC Unit S/W Update UART Update Refrigerant Check Abnormal Data Backup Add-On Outdoor EEPROM Write Indoor Option Writer Auto Start Up Result

Outdoor Unit Data

		Comp. Outdoor Unit Valves													
		Address	Comp1	Comp2	4Way	Hot Gas1	Hot Gas2	Main Cooling	EEV Valve	EVI Sol1	EVI Sol2	EVI Bypass	ARV	CCH1	CCH2
Total Outdoor	1	10.04.00													
O/U Total Capacity	12														
Total Indoor	3														
Capacity Sum(Indoors)	0														

Outdoor Unit Info #1

Address	10.04.00
Operation Mode	Stop
Operation Status	Cool
Error Code	0
Capacity	12HP
Target Frequency1	0
Order Frequency1	0
Current Frequency1	0
Target Frequency2	0
Order Frequency2	0
Current Frequency2	0
High Pressure	209.1
Saturated T_Pd	73.4°F
Low Pressure	85.3
Saturated T_Ps	24.8°F
Discharge1	46.4°F
Discharge2	-

Outdoor Unit Info #2

Address	10.04.00
TestOperation(UP)	Completed
Comp Top1	70.9°F
Comp Top2	-
Outdoor Temp.	75.7°F
Compressor Current1	0
Compressor Current2	-
IPM1 Temp	32°F
IPM2 Temp	-
CondOut Temp.	75.4°F
Liquid Tube Temp.	75.6°F
Suction1 Temp.	75.2°F
Suction2 Temp.	-58°F
Main EEV	35
EVI EEV	0
EVI IN	75.4°F
EVI OUT	75.4°F
Outdoor Fan	0

Outdoor Unit Data Outdoor Unit Installation Data Indoor Unit Installation Data Indoor Unit Data MCU Unit Data

Version 1.1.0 Unit - Temp.:°F Power:Bluetooth Pressure:psi 1/23/2014 2:02 PM COM 7

SNET Pro 2 Service Software

Indoor Unit Data Screen

S-NET pro 2 - DVM S NASA

Home Trend Graph Replay Add-On Help

Connect Controller Start Recording Open Record Folder Reset to Default Layout Report Wizard Management

Serial Port Communication File Record Layout Management

Indoor Unit Data

Address	Capacity	Power	Mode	Fan Speed	Set Temperature	Room Temp.	Eva In	Eva Out	EEV	Discharge(Duct)	Error Code	Serial Number	MTFC Status
0	7538.5	●	Cool	High	37.4°F	66.2°F	37.6°F	45.9°F	330	46°F	0	Y76APAGD400005K	●
1	8728.7	●	Cool	High	37.4°F	63.5°F	41.9°F	40.6°F	293	-58°F	0	Y76APAGD700030J	●
2	37295.5	●	Cool	High	37.4°F	66.4°F	69.4°F	67.1°F	0	66.2°F	0	Y7KBPALD700030J	●
3	7538.5	●	Cool	High	37.4°F	61.9°F	36.3°F	47.5°F	331	-58°F	0	B112P3HF100002R	●
4	11902.8	●	Cool	High	37.4°F	60.4°F	39.9°F	43.2°F	327	-58°F	0	Y76APAGDB00002R	●
5	7538.5	●	Cool	High	37.4°F	63.7°F	42.8°F	45°F	302	-58°F	0	Y7KEPAGDB00002R	●
6	17457.5	●	Cool	High	37.4°F	61.2°F	43.2°F	43.3°F	313	-58°F	0	Y7JWPAGD400001B	●

Outdoor Unit Installation Data Outdoor Unit Data Indoor Unit Installation Data Indoor Unit Data MCU Unit Data

Version 1.1.5 Unit - Temp.:°F Power :Btu Pressure : psi 6/5/2014 11:02 AM COM 4

Item	Description
Capacity	Indoor unit capacity (variable depending on heat load)
Mode	Operation mode
Speed	Fan speed
Set temp	Set temperature
Intemp	Room temperature
EVA IN	Evaporator inlet temperature
EVA OUT	Evaporator outlet temperature
EEV	EEV open position
Discharge (Duct)	Duct unit discharge air temperature. Cassette and wall units will display "-58" at all times.
MTFC Status	Multi-Tenant Function Controller Status (MCM-S210N)

SNET Pro 2 Service Software

Indoor Unit Installation Data Screen

Indoor Unit Installation Data

Address	Model	RMC	Location	Product Option	Installation Option	Installation Option2	Main Micom	MTFC
0	Global 4Way	00	-	[0]1404F-[1]950C7-[2]04848-[3]30000	[0]20010-[1]00000-[2]00000-[3]00000	[0]50000-[1]00000-[2]00000-[3]00000	DB91-01507A 13/01/23	
1	NeoForte	01	-	[0]10044-[1]1648F-[2]04848-[3]30020	[0]20010-[1]00000-[2]00000-[3]00000	[0]50000-[1]00000-[2]00000-[3]00000	DB91-01508A 13/01/23	
2	Global 4Way	02	-	[0]1404F-[1]950C7-[2]04848-[3]30000	[0]20010-[1]00000-[2]00000-[3]00000	[0]50000-[1]00000-[2]00000-[3]00000	DB91-01507A 13/01/23	
3	NeoForte	03	-	[0]10044-[1]1648F-[2]04848-[3]30020	[0]20010-[1]00000-[2]00000-[3]00000	[0]50000-[1]00000-[2]00000-[3]00000	DB91-01508A 13/01/23	
4	NeoForte	04	-	[0]10044-[1]1744D-[2]02323-[3]30000	[0]20010-[1]00000-[2]00000-[3]00000	[0]50000-[1]00000-[2]00000-[3]00000	DB91-01508A 13/01/23	
5	NeoForte	05	-	[0]10044-[1]1648F-[2]04848-[3]30020	[0]20010-[1]00000-[2]00000-[3]00000	[0]50000-[1]00000-[2]00000-[3]00000	DB91-01508A 13/01/23	
6	NeoForte	06	-	[0]10044-[1]1648F-[2]04848-[3]30020	[0]20010-[1]00000-[2]00000-[3]00000	[0]50000-[1]00000-[2]00000-[3]00000	DB91-01508A 13/01/23	
7	Global 4Way	07	-	[0]1404F-[1]950C7-[2]04848-[3]30000	[0]20010-[1]00000-[2]00000-[3]00000	[0]50000-[1]00000-[2]00000-[3]00000	DB91-01507A 13/01/23	

Double Click

New location info

ASCII text max length 32

OK Cancel

Indoor unit installation information

Indoor Unit Installation Data

Version 1.1.5 Unit - Temp.:F Power :Btu Pressure : psi 6/5/2014 10:42 AM COM 4

- "Location" can be edited in with SNET Pro 2.
- It is also shown in DMS 2 as "device name"
- This will stay with the unit for controller setup and future SNET Pro 2 use

Multi-Function Tenant Controller (MCM-C210N) status 22

on next page

SNET Pro 2 Service Software

Video

Changing indoor unit name

The screenshot displays the S-NET pro 2 - DVM S NASA software interface. The top menu bar includes Home, Trend Graph, Add-On, and Help. Below the menu is a toolbar with icons for Address Change, AC Unit S/W Update, UART Update, Refrigerant Check, Abnormal Data Backup Add-On, Outdoor EEPROM Write, Indoor Option Writer, and Auto Start Up Result. The main area shows the 'Indoor Unit Installation Data' table with columns for Address, Model, RMC, Location, Product Option, Installation Option, Installation Option2, Main Micom, and MTFC. The table contains three rows of data. The bottom status bar shows Version 1.1.0, Unit Temp, Power, Pressure, Date/Time (1/23/2014 2:01 PM), and COM 7.

Address	Model	RMC	Location	Product Option	Installation Option	Installation Option2	Main Micom	MTFC
18	Slim 1Way	7		[0]17044-[1]180C8-[2]01616-[3]30010	[0]20010-[1]00000-[2]30000-[3]00000	[0]50000-[1]00000-[2]00000-[3]00000	DB91-01507A 13/01/23	
53	Global 4Way	53		[0]1404F-[1]95097-[2]02D2D-[3]30000	[0]20010-[1]00000-[2]00000-[3]00000	[0]50000-[1]00000-[2]00000-[3]00000	DB91-01507A 13/01/23	
57	Global 4Way	57		[0]1404F-[1]95097-[2]02D2D-[3]30000	[0]20010-[1]00000-[2]00000-[3]00000	[0]50000-[1]00000-[2]00000-[3]00000	DB91-01507A 13/01/23	-

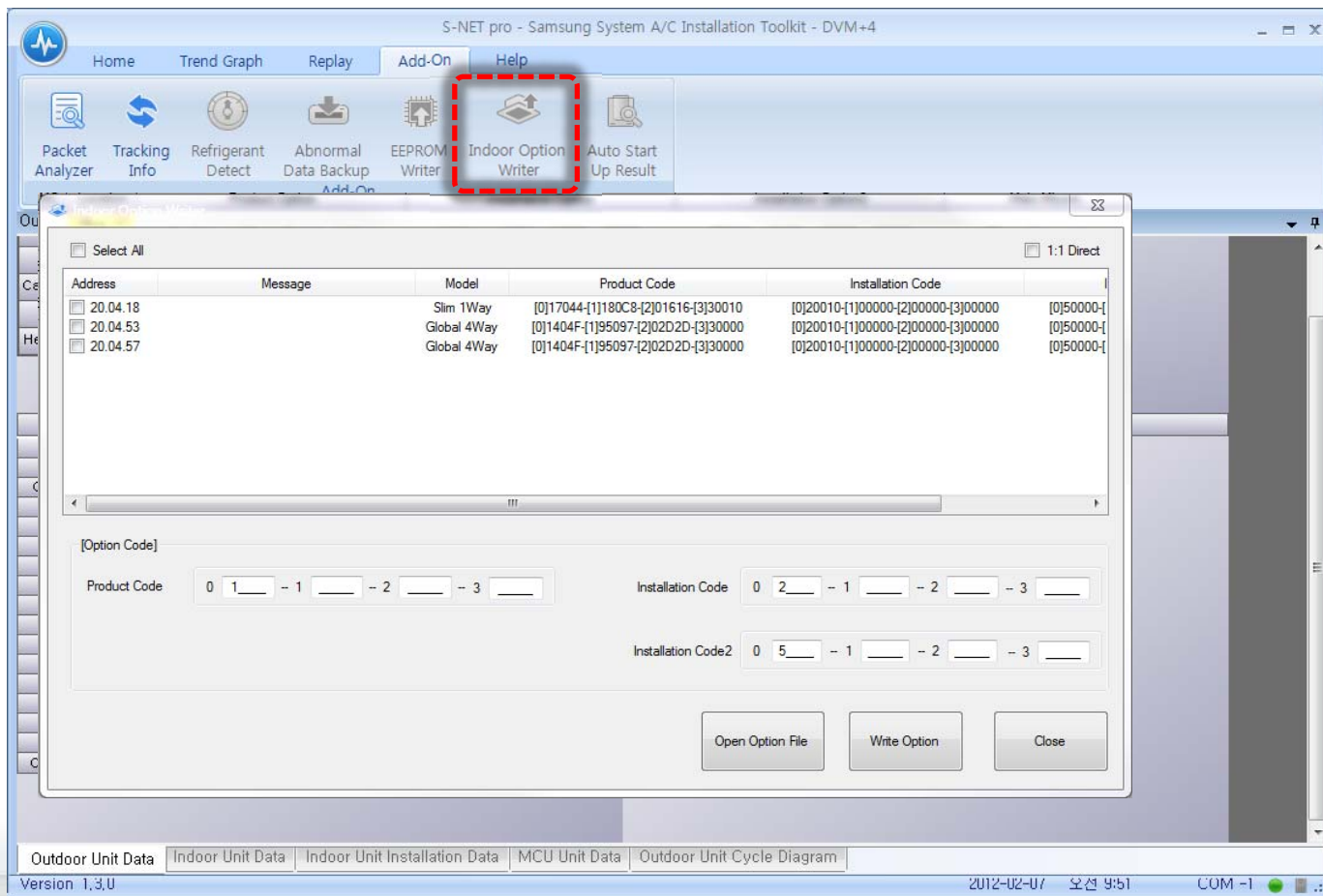
Outdoor Unit Data Outdoor Unit Installation Data Indoor Unit Installation Data Indoor Unit Data MCU Unit Data

Version 1.1.0 Unit - Temp.:F Power:W Pressure:psi 1/23/2014 2:01 PM COM 7

SNET Pro 2 Service Software

Add-On – Indoor Unit Option Writer

- In the Add-On tab, click “Indoor Option Writer” to change indoor basic option settings, advanced option settings, and factory option codes
- This will be covered further in the “Indoor Option Settings” section



SNET Pro 2 Service Software

MCU Tab

Item	Explanation
MCU Addr.	MCU Address
MCU oper.	MCU operation mode
A,B,C,D,E,F port	Indoor unit address and running mode
LBV	Prevent refrigerant accumulation and evaporator freezing
Subcool EEV	EEV position for MCU subcooler

The screenshot shows the SNET Pro 2 Service Software interface. The top menu bar includes Home, Trend Graph, Add-On, and Help. Below the menu is a toolbar with icons for Disconnect, Controller, On Recording, Open Record Folder, Reset to Default Layout, and Report Wizard. The main area displays the MCU Unit Data tab, which is divided into sections for Port A, Port B, Port C, Port D, Port E, and Port F. Each port section contains a table of data, including Address, A-Address, A-EEV, A-Heat, A-Cool, B-Address, B-EEV, B-Heat, B-Cool, C-Address, C-EEV, C-Heat, C-Cool, D-Address, D-EEV, D-Heat, D-Cool, E-Address, E-EEV, E-Heat, E-Cool, F-Address, F-EEV, F-Heat, F-Cool, LBV, SubCool EEV, SubCooler In Temp., SubCooler Out Temp., Main DBCode\Version, and Serial Number. The data is organized into a grid with columns for each parameter and rows for each port. Annotations include:

- MCU address**: Points to the Address column in the Port A section.
- MCU port address (indoor unit main address connected to each port)**: Points to the A-Address, B-Address, C-Address, D-Address, E-Address, and F-Address columns.
- Cool and heat valve status**: Points to the A-EEV, A-Heat, A-Cool, B-EEV, B-Heat, B-Cool, C-EEV, C-Heat, C-Cool, D-EEV, D-Heat, D-Cool, E-EEV, E-Heat, E-Cool, F-EEV, F-Heat, and F-Cool columns.
- MCU operation state**: Points to the MCU Unit Data tab.
- xx/xx/xx**: Points to the Main DBCode\Version field, with sub-annotations for Year, Month, and Date.
- MICOMM and software version**: Points to the Serial Number field.

The bottom status bar shows Version 0.3.4, Unit Temp.: °C, Power : kW, Pressure : kgf/cm², and the date/time 2013-01-25 오전 11:31. The COM port is set to COM 1.

SNET Pro 2 Service Software

Main Screen - Controller

S-NET pro - Samsung System A/C Installation Toolkit - DVM+4

Controller

☐ Select All

Address	Model	Power	Operation Mode	SetTemp
20.01.00	-	-	-	-
20.01.01	-	-	-	20
20.01.02	Globa...	Off	NullMode	-

Set Temp.

0 ▼ ▲ On Off

Operation Mode

Auto Cool Heat Fan Dry

Fan Speed

Auto Low Mid High

External Control

Network Reset

Outdoor Unit Data

Capacity Summ	Total MCU	Heating Capacit
3	01	02
2,3		

Outdoor Unit

Addr	01	02
Operation Mode	Primary Cool	Primary
Operation Status	General OP	Safety
Error Code		
HP	14	12
Capacity	20	18
Loading time	-	-
Outdoor Temp.	5	5
High Pressure	16	17
Low Pressure	7,4	7,2
Discharge1	63	49
Discharge2	28	30
Discharge3	0	0
Sump1 Temp.	36	29
Sump2 Temp.	25	22
Sump3 Temp.	0	0
Oil Balance Temp.	7	8

Outdoor Unit Info #2

02	9,6	0	0	6	14	18	9	-	-	0	1	7	12	0	2
R,01	11-02-16	R,01	10	10-11-10											

Version 1,3,0

- Set layer network reset
- This will completely reset the system
- Equivalent to pressing K3 in outdoor unit
- Resets system like cycling power to outdoor unit

SNET Pro 2 Service Software

Backup

- If the system has disabled itself due to system error and nobody has reset the system, data leading up to the error code can be retrieved.
- If data is available, the “EEPROM Backup” icon will be available
- Click and follow prompts to save data for review

S-NET pro - Samsung System A/C Installation Toolkit - DVM+4

Home Backup Grid Export Trend Graph Replay Add-On Help

Location D:\Control system\WS-S-NET pro

Start Backup EEPROM Backup Network Data

Outdoor Unit Data

EEPROM data backup

EEPROM Backup Progress

Please wait for a minute. Collecting EEPROM data now.

EEPROM data backup has been completed

확인

DVM+4_EEPROM_20110315_205122.xls

DVM+4_EEPROM_20110315_205122.txt

DVM+4_EEPROM_20110315_205122.xls

- Download of 30-minute backup data before system error

- File name: Modelname_EEPROM_Date_Time.xls

- File save location:

1. Default: C:\...\My Documents\S-NET pro\RecordData
2. User-set location

SNET Pro 2 Service Software

Trend Graph

1. Click "Add" to create a new window
2. Click "Add" to add items/monitor points to that window

1. Add **2.** Delete

Max Min Cumulate Timeline
Time Span
Auto Range Apply Y-Axis Timeline

Outdoor Unit Data

Total Outdoor	4	
Total Indoor	57	
Capacity Sum(In	93.6	
Total MCU	12	
Heating Capacit	-	

Add/delete data in graph window

Add/delete graph windows (maximum 4 graph windows)

Addr	01	02
Operate Mode	Heat	Heat
Operate Status	Oil Balance OP	Oil Balance OP
Error Code	E416	E416
HP	14	12
Capacity	20	20
Loading time	20	20
Outdoor Temp.	-3	-4
High Pressure	20.9	21.1
Low Pressure	4.3	4.2
Discharge1	114	58
Discharge2	103	38
Discharge3	49	0
Sump1 Temp.	32	5
Sump2 Temp.	-	-
Sump3 Temp.	-	-
Oil Balance Temp.	0	-1

	02	03	04
	9	8.2	-
	8.3	0	-
	0	0	-
	-8	-7	-
	-12	-3	-
	-	-	-
	25	23	-
	562	252	-
	0	252	-
	0	0	-
	18	18	-
	0	-3	-
	4	3	-
HR EEV	0	0	-
Total Comp	3	2	-
Main Micom Version	09-05-20 R,01	09-05-20 R,01	09-05-20 R,01
Sub Micom Version	08-02-??	08-02-??	08-02-??

Outdoor Unit Data Indoor Unit Data Indoor Unit Installation Data MCU Data Outdoor Unit Cycle Diagram

1, 1, 4 COM U

SNET Pro 2 Service Software

Trend Graph

The screenshot shows the S-NET pro - Samsung System A/C Installation Toolkit - DVM+4 interface. The 'Trend Graph' tab is active. A red dashed box highlights the 'Add' button in the 'Graph' section. A yellow text box explains: 'Add data to be displayed in the graph window → All the parameters which can be graphically display start flickering. Select items to monitor from all tabs'. Below this, a 'Graph 1' window is shown with a list of parameters to be monitored. The main window displays a table of data for four units (01, 02, 03, 04).

Graph 1

Addr	01	02	03	04
Operate Mode	Heat	Heat		
Operate Status	Oil Balance OP	Oil Balance OP		
Error Code	E416	E416		
HP	14	12		
Capacity	20	20		
Loading time	20	20		
Outdoor Temp.	-3	-4		
High Pressure	20,9	21,1		
Low Pressure	4,3	4,2		
Discharge1	114	58		
Discharge2	103	38		
Discharge3	49	0		
Sump1 Temp.	32	5		
Sump2 Temp.	-	-		
Sump3 Temp.	-	-		
Oil Balance Temp.	0	-1		

Outdoor Unit Data

Addr	01	02	03	04
Operate Mode	Heat	Heat		
Operate Status	Oil Balance OP	Oil Balance OP		
Error Code	E416	E416		
HP	14	12		
Capacity	20	20		
Loading time	20	20		
Outdoor Temp.	-3	-4		
High Pressure	20,9	21,1		
Low Pressure	4,3	4,2		
Discharge1	114	58		
Discharge2	103	38		
Discharge3	49	0		
Sump1 Temp.	32	5		
Sump2 Temp.	-	-		
Sump3 Temp.	-	-		
Oil Balance Temp.	0	-1		

HR EEV

Addr	01	02	03	04
HR EEV	0	0	0	0
Total Comp	3	2	3	3
Main Micom Version	09-05-20 R,01	09-05-20 R,01	09-05-20 R,01	09-05-20 R,01
Sub Micom Version	08-02-??	08-02-??	08-02-??	08-02-??

Outdoor Unit Data | Indoor Unit Data | Indoor Unit Installation Data | MCU Data | Outdoor Unit Cycle Diagram

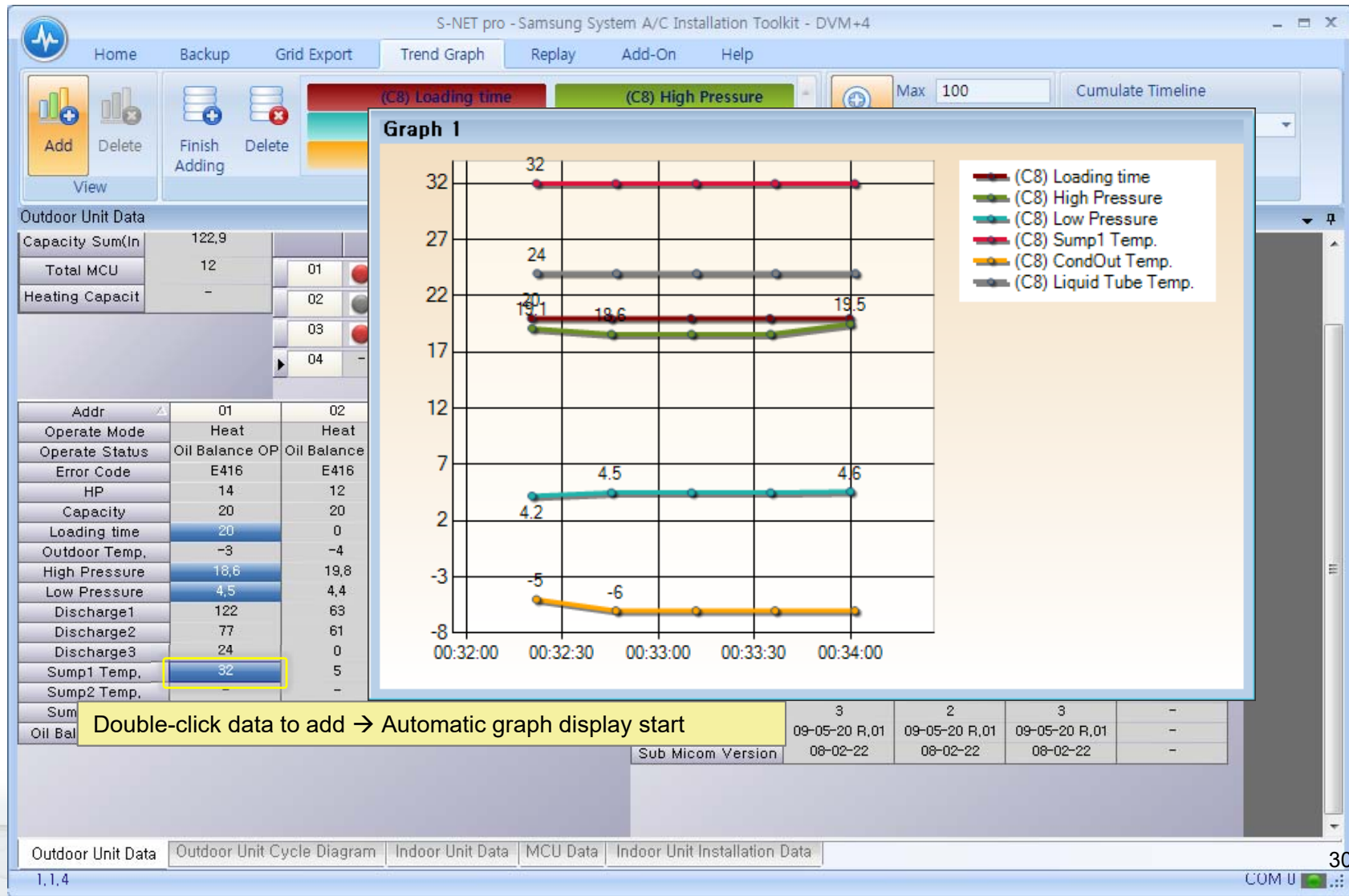
1,1,4

COM U

SNET Pro 2 Service Software

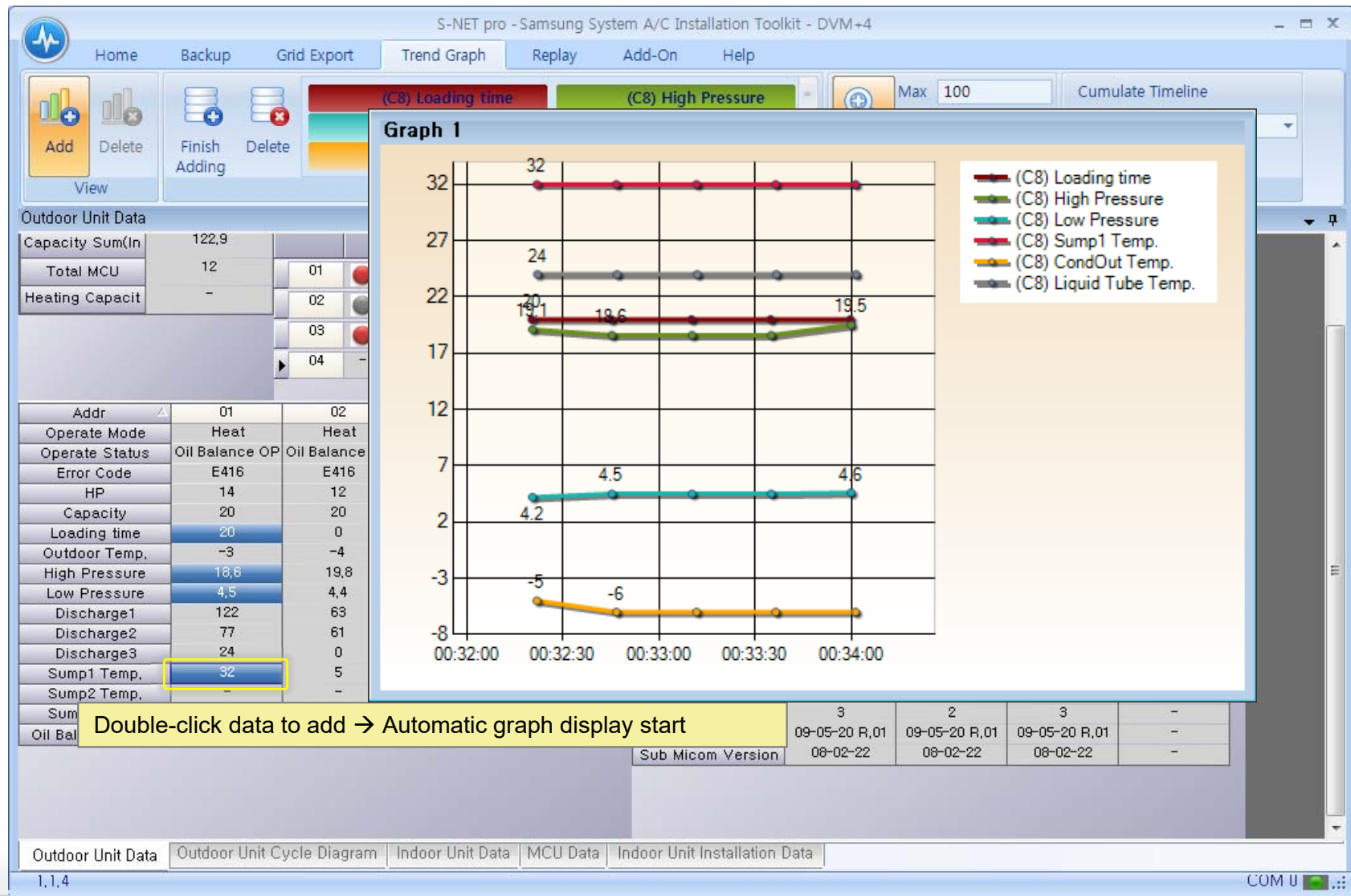
Trend Graph

- All available monitor points will flash
- Double-click indoor, outdoor, or MCU points that you would like to trend



SNET Pro 2 Service Software

Trend Graph



SNET Pro 2 Service Software

Trend Graph



SNET Pro 2 Service Software

Trend Graph

- To delete a monitor point, click that item then click “Delete”



SNET Pro 2 Service Software

Replay

- In the Replay tab, you can view the current position during recorded file viewing
- Here you can also speed up the playback, rewind, or fast forward

Replay at x1~x8 speed

Outdoor Unit Data

Parameter	Value	Unit
Total Outdoor		
O/U Total HP		
Total Indoor	57	
Capacity Sum(In	140	
Total MCU	12	
Heating Capacit	-	

Addr	01	02	03
Operate Mode	Primary Heat	Primary Heat	Primary Heat
Operate Status	General OP	General OP	General OP
Error Code	E416	E416	E416
HP	14	12	14
Capacity	49	49	49
Loading time	9	15	20
Outdoor Temp.	-4	-4	-4
High Pressure	18.9	19.2	19
Low Pressure	5.7	5.5	5.6
Discharge1	89	52	53
Discharge2	101	51	50
Discharge3	20	0	-2
Sump1 Temp.	29	6	15
Sump2 Temp.	-	-	-
Sump3 Temp.	-	-	-
Oil Balance Temp.	-1	-1	0

Addr	01	02	03
Compressor1 Curren	8.5	8.9	8.5
Compressor2 Curren	7.1	8.2	5.1
Compressor3 Curren	7.1	0	0
CondOut Temp.	1	-4	-1
Suction1 Temp.	-6	-7	-6
Suction2 Temp.	-	-	-
Liquid Tube Temp.	19	20	18
EEV1	1142	548	575
EEV2	1142	0	527
EVI EEV	0	0	0
Outdoor Fan	18	18	18
EVI IN	5	0	-3
EVI OUT	31	-1	-2
HR EEV	213	211	211
Total Comp	3	2	3
Main Micom Version	09-05-20 R,01	09-05-20 R,01	09-05-20 R,01
Sub Micom Version	08-02-22	08-02-22	08-02-22

SNET Pro 2 Service Software

Main Menu – Help

- In the “Help” tab, click “Error Codes” to view all error codes with a brief description

The screenshot shows the SNET Pro 2 Service Software interface. The top menu bar includes Home, Trend Graph, Add-On, and Help. The Help tab is active, and the 'Error Codes' button is highlighted with a red dashed box. Below the menu bar, there are three buttons: 'Error Codes', 'Manual', and 'About This Program'. The 'Error Codes' button is selected, and a window titled 'Error information - Samsung' is open. This window displays a tree view on the left with 'Protect Error' selected. The main area shows a table of error codes with their numbers and descriptions.

NUM	ERROR COMMENT
401	OUT DOOR FREEZING CHECK1
402	OUT DOOR FREEZING CHECK2
403	OUT DOOR FREEZING CHECK3
404	OUTDOOR TEMP OVERLOAD 1 PROTECT
405	OUTDOOR TEMP OVERLOAD 2 PROTECT
406	OUTDOOR TEMP OVERLOAD 3 PROTECT
407	Compressor stop by high pressure's protection control.
408	Compressor stop by high pressure's protection control 2.
409	Compressor stop by high pressure's protection control 3.
410	Compressor stop by low pressure's protection control.
411	Compressor stop by low pressure's protection control 2.
412	Compressor stop by low pressure's protection control 3.
413	Protection control by sump sensor.

The background window shows various system data fields such as Total Outdoor, O/U Total Capacity, Total Indoor, Capacity Sum(Indoor), Address, Serial Number, Operation Mode, Operation Status, Error Code, Capacity, Target Frequency1, Order Frequency1, Current Frequency1, Target Frequency2, Order Frequency2, Current Frequency2, High Pressure, Saturated T_Pd, Low Pressure, Saturated T_Ps, Discharge1, and Discharge2. The bottom status bar displays Version 1.1.5, Unit - Temp.:F, Power:Btu, Pressure:psi, and the date/time 9/18/2014 11:10 AM.

SNET Pro 2 Service Software

Main Menu – Manual

- In the “Help” tab, click “Manual” for

The screenshot displays the S-NET pro 2 - DVM S NASA software interface. The top menu bar includes Home, Trend Graph, Add-On, and Help. The Help tab is active, showing a sub-menu with Error Codes, Manual, and About This Program. The Manual option is highlighted with a red dashed box. Below the menu bar, the Outdoor Unit Data section is visible, showing various parameters like Total Outdoor, O/U Total Capacity, Total Indoor, and Capacity Sum(Indoors). A table of unit data is also present, listing Address, Serial Number, Operation Mode, Operation Status, Error Code, Capacity, and various frequency and pressure readings.

The main window displays the 'Basic Functions' section, titled 'Starting Communication'. It provides instructions on how to select a project and connect to the serial port. The 'Select Model' button is highlighted with a red dashed box. Below the instructions, a dialog box is shown with the 'Select Model' button highlighted, and the 'DVM S NASA' project is selected in the list.

Starting Communication

Before you monitor the A/C, you have to select corresponsive project and choose the serial port connected to the serial converter.

Selecting the project

1. Click main menu button.
2. From "Select Model" list, choose corresponsive project name. If you successfully load the project, S-Net Pro2 remembers the project. When you run S-Net Pro2 later again, the last used project will be selected by itself.

Setting serial port and connecting

1. Click main menu button.