Total Automation Solutions

Man/Machine Interfaces

Aromat
Subsidiary of **Matsushita Electric Works**

NAiS A Worldwide Brand

Cimrex Series

VT Series

GT Series

ATM Series

AROMAT Is...

Aromat Corporation is an American company founded in 1974 to serve the North and South American markets. It is a subsidiary of Matsushita Electric Works, Ltd. (MEW), a $11 billion dollar company known throughout the world for the quality and innovation of it's products.

Headquartered in Osaka, Japan, MEW is a major developer, manufacturer, and marketer of electrical construction materials, home appliances, residential building materials, automation control products, wiring devices, and electronic materials and components. MEW is a sister company of Matsushita Electric Industrial Co., Ltd., also of Osaka, Japan, the force behind world-famous brands such as Panasonic, Technics, and Quasar.

Drawing upon the tremendous resources of MEW, Aromat has grown into a $200 million dollar company with over 500 employees located in two modern manufacturing facilities, three fully stocked distribution centers, nine sales and service offices, and corporate headquarters in New Providence, NJ. Aromat has become a recognized industry leader in creating advanced-technology products. Throughout its growth, Aromat has remained dedicated to long term performance through growth, value, and technology.

Aromat's line of operator panels provide the customer with quality and up to date technology to make designing applications easy. All panels have Aromat's trademark capability of pass through communications. This unique feature gives the user the ability to communicate to the operator panel and PLC through only one cable. This reduces the hassle of switching back and forth between programming cables.

AROMAT'S FAMILY OF OPERATOR PANELS

	ATM-10/10N ATM-40/40N	GT-10	VT-30	Cimrex 71	Cimrex 91
Display Type	LCD	STN Mono. LCD Touchscreen	Color LCD / Mono. LCD Touchscreen	Color LCD Touchscreen	Color TFT Touchscreen
Display Size	2 X 16 Char. 4 X 20 Char.	160 X 64 Pixels	320 x 240 Pixels (5.7")	320 X 240 Pixels (5.7")	640 X 480 Pixels (10.4")
Function Keys	6 8			8	
Keypad	No Yes				
LED	2 8				
Comm. Ports	DB15 DB9	5 Pin Terminal Base 5 Pin Mini-Din	DB15 5 Pin Mini-Din	DB9 DB25	DB9 DB25
Ethernet Capability				Yes	Yes
Pass Thru Capability	Yes Yes	Yes	Yes	Yes	Yes
Software	ATMSOFT32	GTWIN	VTSOFT	CimrexProg	CimrexProg
Alarm Logging			Yes	Yes	Yes
Graphics Display		Yes	Yes	Yes	Yes
Memory	8KB 32KB	384KB	256KB 512KB	400KB	2MB
Password	Function Keys Only			8 Levels	8 Levels
Recipe	Yes Yes			Yes	Yes
Trend Graph		Real Time	Real Time	Historic	Historic
Buzzer		Yes	Yes	Yes	Yes
Expansion Slot				2	2
Real Time Clock	ATM-10N	Yes	Yes	Yes	Yes
Power Supply	5VDC 5VDC	24VDC	24VDC	20-30VDC	100-240V AC
Bitmap Import		Yes	Yes	Yes	Yes
Page Number	5	6	7	14	16

CIMREXPROG
Powerful Programming Software

CimrexProg is a powerful programming tool that makes developing screens very easy! A different tool bar appears on each screen to provide all the quick access items that are possible for programming.

The **block manager** is the main screen that shows how your screens or "blocks" are linked together. With this layout, blocks can be simply added or reorganized without having to significantly alter your original structure.
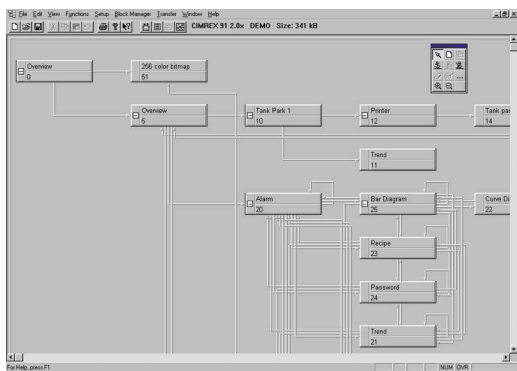
Graphic or text blocks gives you flexibility in designing screens for Cimrex model's 30 and up. Text blocks allow you to write multiple text lines easily and printouts are much clearer. Graphic blocks allow you to be creative. Pre-prepared symbols such as tanks, valves, switches, tend graphs, bar graphs, and analog meters are provided, or you can make your own.
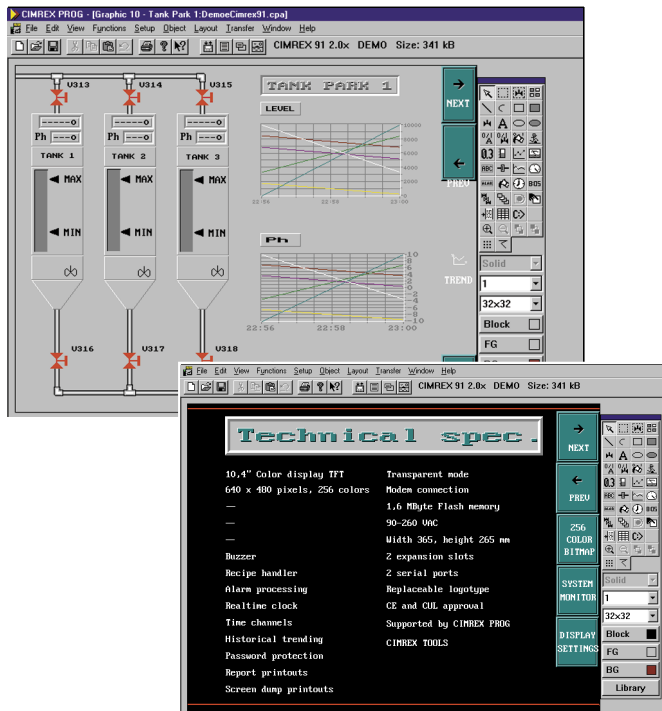
Pre-prepared symbols such as these are standard in CimrexProg.

The **Symbol Manager** is a tool that allows you to create your own symbols by importing bitmaps and customizing them.
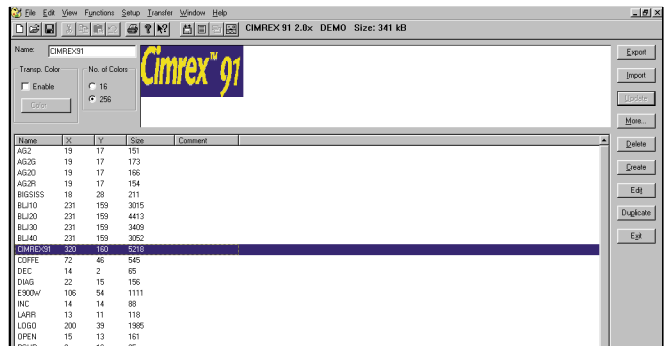
Standard drawing tools are provided to aid in your design.
- Align
- Make same size
- Space Evenly
- Tile
- Move to front/back
- Grid
- Grid Settings
- Group/Ungroup

A bitmap editor icon is also provided to allow you to link to any editing software that you choose.

Various languages such as English, Spanish, German, French, Danish, Swedish, Russian, and Slavic are supported.
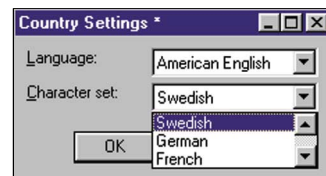
Required System

Processor	Pentium 90 or faster
Hard Disk	60Mb
RAM	24Mb
Operating System	Windows 95, 98, NT

Ordering Information

Part Number	Description
CimrexProg	Programming Software
GK-CAB-P2 or GK-CAB-P4*	Programming Cable

* If connecting to an Aromat PLC, GK-CAB-P4 must be used.

4

ATM-10/10N/40/40N
Text Display Operator Panel

ATM-40

ATM-40N*

ATM-10

ATM-10N*

*To design your own overlay, we recommend contacting Stankraft at (860) 676-2222 or visit them at:
http://www.stankraft.com.

The **ATM-10/10N** is a super bright LCD operator interface that can store up to 128 messages and supports pass through communications. Model **10N** allows you to customize your own overlay. **(Please see picture.)**

Key Features:

- 2 Lines X 16 Characters Super Bright LCD Display
- 2 System Keys
- 6 Function Keys
- 4 Key Function Types: (Momentary, Toggle, Set, Reset)
- 128 Messages Memory Capacity
- Scrolling and Flashing Messages
- 5 Internal Recipe Storage Variables (Built-in Recipe Storage Area)
- Bar-Graph Data Display
- 2 LED's for Alarm Annunciation
- Pass Through Communications
- Real Time Clock **(ATM-10N ONLY)**

The **ATM-40/40N** is a highly compact operator interface capable of storing up to 532 messages and supports pass through communications. Model **40N** allows you to customize your own overlay. **(Please see picture.)**

Key Features:

- 4 Lines X 20 Characters LCD Display
- 2 System Keys
- 8 Function Keys
- 4 Key Function Types: (Momentary, Toggle, Set, Reset)
- 532 Messages Memory Capacity
- Scrolling and Flashing Messages
- 255 Internal Recipe Storage Variables (Built-in Recipe Storage Area)
- Bar-Graph Data Display
- 8 LED's for Alarm Annunciation
- Pass Through Communications

ATMSOFT32 is a simple programming tool that helps you build your applications quickly and easily. Whether it is a small application to monitor data or a bigger application to monitor and change data, ATMSOFT32 can do it all. This software supports all FP Series PLCs.
System requirements include:

- 386 or higher processor
- Windows 3.1 or higher
- Dos Version 5.0 or higher
- Display resolution of 640x480 (VGA), No EGA/CGA

Specifications

	ATM-10/10N	ATM-40/40N
Display	High Brightness Backlit LCD	High Brightness Backlit LCD
Display size	2 x 16 Characters	4 x 20 Characters
Character size	0.2 inches	0.2 inches
LED	2	8
Function keys	6	8
Memory	8KB EEPROM	32KB EEPROM
Calendar Time Clock	ATM-10N	None
Communication port	2 Ports DSUB-15 (PLC) DSUB-9 (PC)	2 Ports DSUB-15 (PLC) DSUB-9 (PC)
Password	None	None
Expansion slot	None	None
Other function	None	None
Power Supply	5V (PLC Port)	5V (PLC Port)
Current Consumption	180mA	200mA
Ambient temperature	32 to 122 ° F (0 to 50 °C)	32 to 122 ° F (0 to 50 °C)
Ambient Humidity	90% Non Condensing	90% Non Condensing
Protection(Front)	IP65	IP65
Dimensions (mm)	108 (w) x 60 (h) x 44(d)	182 (w) x 101 (h) x 37(d)
Panel Cutout (mm)	90 (w) x 44 (h)	160 (w) x 74 (h)
Communication Baud Rate	19,200 or 9600 BPS	19,200 or 9600 BPS

Ordering Information

Item	Part Number
ATM-10	ATM-10
ATM-40	ATM-40
Software	ATMSOFT32-CD
Software Kit - includes software, manual, programming cable, & 1.5m cable to FP0/M/2	XKIT-ATM32-ALL
Cable to FP0/M/2 (0.5m)	AFC15205-US
Cable to FP0/M/2 (1.5m)	AFC15215-US
Program Cable (Pass Thru Port)	AFP15IBM-US

GT-10
Small Touchscreen

The **GT-10** has an easy-to-read liquid crystal display with 3 selectable colors (red, green, orange) to help make equipment conditions more easily noticed.

Key Features:

- Monochrome Touchscreen
- 3 Color Backlight (red, green, orange)
- 160 (W) x 64 (H) pixels
- Up to 160 Screens (384Kb)
- 2 RS232C Ports
- Pass Through Communications
- Bitmap Import
- Two Button Activation
- Create your own parts
- Bar Graphs, Lamps, Switches, Data, etc.
- Modem Capability
- Real Time Clock

Two button activation is a unique feature of this unit. It is possible to activate two different bits at the same time. This is useful when you want to activate a jog command and specify the direction at the same time.

GTWIN is the software used to create screens for the GT-10. This software automatically detects and identifies the display communications. You can also view multiple screens at the same time which makes duplicating screens much easier. Downloading options include transferring individual screens or the entire project.
Applicable OS: Windows 95/98/2000/NT (4.0 or later version).
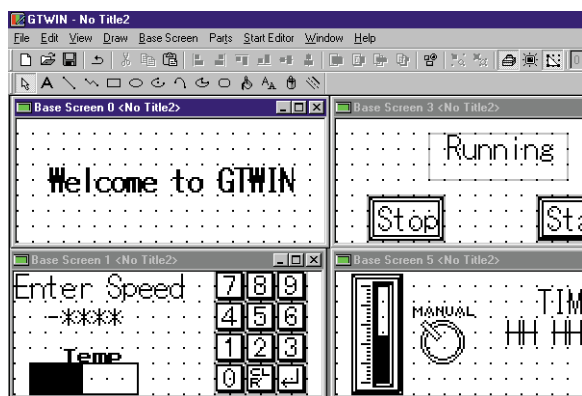
The **3D parts library** is GTWIN's standard library to create touch buttons, bar graphs, message panels, meters, and keypads.
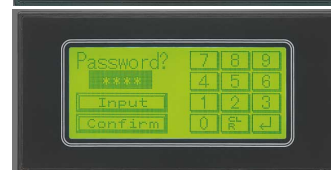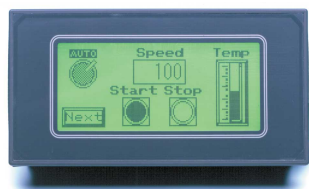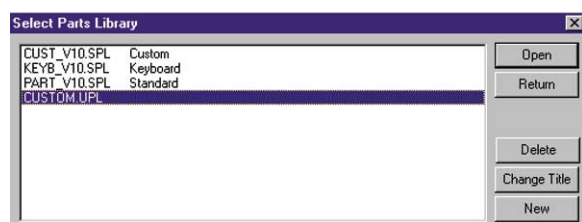
Specifications

Display	Touch LCD
Display Type	STN Monochrome
Display Size	160 (W) x 64 (H) pixels
Memory (Flash)	384KB standard (approx.160 screens)
Buzzer	No
Calendar Time Clock	Yes
Communication Ports	2 ports RS232C, RS232C
Communication Speeds (bps)	9600, 19.2K, 38.4K, 57.6K, 115.2K Pass-Thru/Program to PC:9600, 19.2K, 115.2K
Power Supply	24Vdc
Current Consumption	208mA
Ambient Temperature	32 to 104 ° F (0 to 40 °C)
Ambient Humidity	10-85%RH Non Condensing
Protection (Front)	IP65
Dimensions-Outer Frame (mm)	144 (w) x 72 (h) x 36(d) (5.67" x 2.84" x 1.42")
Dimensions-Screen (mm)	97 (w) x 40 (h) (3.82" x 1.56")
Dimensions-Panel Cutout (mm)	139 (w) x 67 (h) (5.47" x 2.64")
Backlighting	3-Color LED (green, red, orange) No replacement necessary
LCD Life	Avg. 50,000 hours @ normal temp. 25°C, 77°F
Protection(Front)	IP65
EMC	CE

Ordering Information

Item	Part Number
GT-10	AIGT1000B
Software-GTWIN	AIGT8001
Open ended cable to FP0/M/2/2SH Tool port (1.5m)	AFC1500-US
Programming Cable	AFC1520M-US9
Protective Sheets (10Pack)	AIGT180
Gasket - Waterproof Packing (10/Pack)	AIGT181

VT-30
Low Cost 5.7" Color Touchscreen

The **VT-30** has a viewing angle of 120°, twice the viewing angle of a typical 5.7" color touch panel of 60°. Therefore, it is not necessary to be directly in front of the screen to see it clearly.

Key Features:

- Monochrome or Color
- 360 X 240 Pixels
- Up to 400 Screens (512 Kb)
- Max. of 38 x 36 Characters with Smallest Font
- Two Button Activation
- 3D Parts Library
- Create your own parts
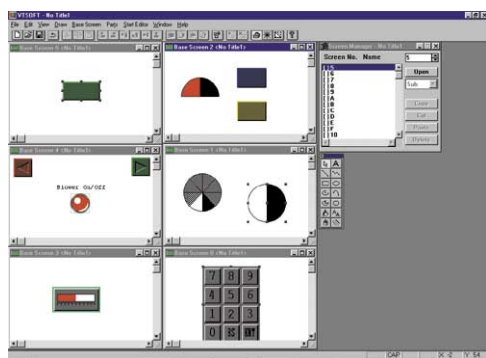- Bar Graphs
- Pass Through Communications

Two button activation is a unique feature of this unit. It is possible to activate two different bits at the same time. This is useful when you want to activate a jog command and specify the direction at the same time.

VTSoft is the software used to create screens for the VT-30. This software automatically detects and identifies the display communications. You can also view multiple screens at the same time which makes duplicating screens much easier. Downloading options include transferring individual screens or the entire project.

The **3D parts library** is VTSoft's standard library to create touch buttons, bar graphs, message panels, meters, and keypads.
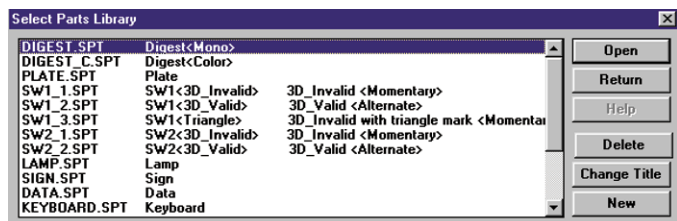
Specifications

Display	38 x 36 Max. Char (with smallest font)
Display Type	8 Colors or Monochrome
Display Size	360 x 240 pixels 5.7" Viewing Screen 120° Viewing Angle (+/- 60°)
Memory (Flash)	256KB standard (approx. 200 screens) 512KB expanded (approx.400 screens)
Buzzer	Yes
Calendar Time Clock	Yes
Communication Ports	2 ports RS232C/RS422, RS232C
Communication Speeds (bps)	9600, 19.2K, 38.4K, 57.6K, 115.2K Pass-Thru/Program to PC:9600, 19.2K
Power Supply	24Vdc
Current Consumption	0.5A
Ambient Temperature	32 to 120 ° F (0 to 40 °C)
Ambient Humidity	45-85% Non Condensing
Protection (Front)	IP65
Dimensions-Outer Frame (mm)	158 (w) x 126 (h) x 52(d) (6.22" x 4.96" x 2.05")
Dimensions-Screen (mm)	117 (w) x 88 (h) (4.61" x 3.46")
Dimensions-Panel Cutout (mm)	151 (w) x 119 (h) x 52 (d) (5.94" x 4.68" x 2.05")
Back Light Life	20,000 Hours

Ordering Information

Item	Part Number
VT-30Color Type	AIV3101BT09
VT-30 Monochrome Type	AIV3001HT08
Software	VTSOFT-CD
Software Kit - includes software, manual, & programming cable	XKIT-VT30-ALL
Cable to FP0/M/2Prog Por (1.5m)	AFC15VT0-US
Cable to FP1 Programming Port	AFC15VT1-US
Cable to FP3 Programming Port	AFC15VT3-US
Cable to FP1/M/2 Secondary Port Cable to FP3 CCU Cable to FP10SH Prog /Sec. Port	AFP15VT10SH-US
Programming Cable (3m)	AFC1520M-US9

CIMREX 71

5.6" 256 Color Touchscreen

The **CIMREX 71** is bright backlit touchscreen that can display detailed graphics in color and offers 8 customizable function keys.

Key Features:

- **320 x 240 pixels**
- **8 Programmable Function Keys**
- **8 Leds (2 colors)**
- **400 KB Flash Memory**
- **2 Programming Ports (RS-422, RS-232C)**
- **Pass Through Communications**
- **Backlit LCD**
- **Built-in Calendar Time Clock**
- **Recipe Handling**
- **Trend Graphs**
- **Color Bitmaps**
- **2 Expansion Slot**

256 Color **Images** in JPEG, tif, or bitmap format can be imported by using the Symbol Manager in the programming software. If you are worried about the lack of memory, you can expand up to 8 MB by adding a PCMCIA card in the expansion slot (needs IFC-MC card).

Pass Through Communications is a unique feature offered only by *Aromat*. This feature allows you to program the CIMREX 20 and *Aromat/Matsushita* PLC through just one cable. There are no hassles with switching cables back and forth between PLC and operator panel. It definitely saves time and makes programming a convenience.

Recipe Handling can be used to store analog and digital signal values for motion profiles, PID settings, and batch timers with a simple keyboard operation. No complicated programming in the PLC is necessary. Values can be easily read from the operator panel's memory, and up to 8 password levels can be assigned to protect from unauthorized use.

Two Expansion Slots allows an Ethernet card, Profibus card, PCMCIA expansion memory card, or parallel printer port card to be attached for added functionality. The Ethernet card can be used for either 10 base T or coax type. The Profibus card allows the unit to be attached to a network as a slave. The expansion memory can extend the unit's memory up to 4 or 8 MB.

Web Functions are also available. It is possible to control and monitor a Cimrex terminal via the Internet or Intranet. With these functions, you can set data in the controller, transfer alarm messages, recipes and trend files, and send email. These features require terminal firmware version 3.0.

Other PLC Support is available for most of the market's leading PLC brands.

- Allen-Bradley DF1 or DH
- GE Fanuc SNPX
- Modicon Modbus
- Siemens MPI/PPI/ 3964R/RK512
- Idec
- Koyo
  and more. (See Page 14)

Specifications

Display	Backlit Touch LCD
Display Type	Graphics
Display Size	320 x 240 pixels
Number of Colors	256 for Bitmap 16 for Drawing
LED	8 (Red/Green selectable)
Function Keys	8 page sensitive or global
Memory	400KB flash memory
Buzzer	Yes
Calendar Time Clock	Yes
Communication Ports	2 ports RS232C (DB9), RS422/485 (DB25)
Password	8 levels
Expansion Slot	2 Slots
Other Function	Alarm Logging, Bitmap Import Trend Graph, Recipe
Power Supply	24Vdc (20-30Vdc)
Current Consumption	600 mA or less
Protection (Front)	NEMA4, IP65
Dimensions (mm)	211.5 (w) x 198 (h) x 87(d)
Conforming	UL & cUL, (file#: E192000)
EMC	CE EN5008-1, EN5008-2

Ordering Information

Item	Part Number
CIMREX71	CIMREX71
Software	CIMREXPROG
Programming Cable	GK-CAB-P4* (RS-422 port) (Pass thru capability)
Communication cable between FP0/2/2SH to RS232C	AFC15CM03-US9
Communication cable between FP2 secondary port to RS232C	AFP15CMSH3-US9
Communication cable between FP0 com port to RS232C	GK-CAB-CP
Communication cable between FP1 Tool port to RS422	GK-CAB-CF

*If connecting to other PLC manufacturers, a GK-CAB-P2 programming cable may be required. Please refer to the table on page 18 for other PLC manufacturer's interface cable.

CIMREX 91

10.4" 256 Color TFT Touchscreen

The **CIMREX91** has a large color TFT touchscreen. The viewing angle is at least 140°, and the bright color presentation will satisfy your need for an impressive display. The CIMREX 91 will also make your machines stand out from all the rest.

Key Features:

- ◆ **640 x 480 pixels**
- ◆ **2 MB Flash Memory**
- ◆ **2 Programming Ports (RS-422, RS-232C)**
- ◆ **Pass Through Communications**
- ◆ **Backlit LCD**
- ◆ **Built-in Calendar Time Clock**
- ◆ **Recipe Handling**
- ◆ **Trend Graphs**
- ◆ **Color Bitmaps**
- ◆ **2 Expansion Slot**

***256 Color* Images** in JPEG, tif, or bitmap format can be imported by using the Symbol Manager in the programming software. If you are worried about the lack of memory, you can expand up to 8 MB by adding a PCMCIA card in the expansion slot (needs IFC-MC card).

Pass Through Communications is a unique feature offered only by *Aromat*. This feature allows you to program the CIMREX 20 and *Aromat/Matsushita* PLC through just one cable. There are no hassles with switching cables back and forth between PLC and operator panel. It definitely saves time and makes programming a convenience.
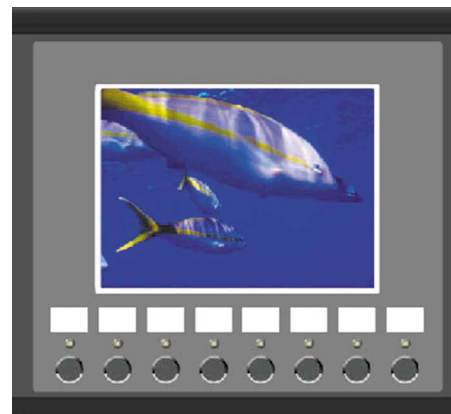
Recipe Handling can be used to store analog and digital signal values for motion profiles, PID settings, and batch timers with a simple keyboard operation. No complicated programming in the PLC is necessary. Values can be easily read from the operator panel's memory, and up to 8 password levels can be assigned to protect from unauthorized use.

Two Expansion Slots allows an Ethernet card, Profibus card, PCMCIA expansion memory card, or parallel printer port card to be attached for added functionality. The Ethernet card can be used for either 10 base T or coax type. The Profibus card allows the unit to be attached to a network as a slave. The expansion memory can extend the unit's memory up to 4 or 8 MB.

Web Functions are also available. It is possible to control and monitor a Cimrex terminal via the Internet or Intranet. With these functions, you can set data in the controller, transfer alarm messages, recipes and trend files, and send email. These features require terminal firmware version 3.0.

Other PLC Support is available for most of the market's leading PLC brands.

- Allen-Bradley DF1 or DH
- GE Fanuc SNPX
- Modicon Modbus
- Siemens MPI/PPI/ 3964R/RK512
- Idec
- Koyo
  and more. (See Page 14)

Specifications

Display	Backlit Color TFT Touch Screen
Display Type	Graphics
Display Size	640 x 480 pixels
Number of Colors	256 for Bitmap 256 for Drawing
LED	None
Function Keys	None
Memory	2 MB flash memory
Buzzer	Yes
Calendar Time Clock	Yes
Communication Ports	2 ports RS232C (DB9), RS422/485 (DB25)
Password	8 levels
Expansion Slot	2 Slots
Other Function	Alarm Logging, Bitmap Import Trend Graph, Recipe
Power Supply	100-120 VAC
Current Consumption	.35 A or less
Protection (Front)	NEMA4, IP65
Dimensions (mm)	290 (w) x 247 (h) x 109(d)
Conforming	UL & cUL, (file#: E192000)
EMC	CE EN5008-1, EN5008-2

Ordering Information

Item	Part Number
CIMREX91	CIMREX91
Software	CIMREXPROG
Programming Cable	GK-CAB-P4* (RS-422 port) (Pass thru capability)
Communication cable between FP0/2/2SH to RS232C	AFC15CM03-US9
Communication cable between FP2 secondary port to RS232C	AFP15CMSH3-US9
Communication cable between FP0 com port to RS232C	GK-CAB-CP
Communication cable between FP1 Tool port to RS422	GK-CAB-CF

*If connecting to other PLC manufacturers, a GK-CAB-P2 programming cable may be required. Please refer to the table on page 18 for other PLC manufacturer's interface cable.

DRIVERS FOR CIMREX

* Can not be used for the Cimrex 5
** Can not be used for Cimrex 5, 10, or 20

Company	PLC Type	Available Driver
ABB	Sattcon	Comli Master*
Allen-Bradley	SLC500, MicroLogix	DF1
Allen-Bradley	SLC500	DH485** Not available for Cimrex 5,10, & 20
Aromat / Matsushita	FP-Series	Mewtocol-Com
Atlas Copco	DMC/DMC$_2$	Serial*
Control Techniques	Unidrive	ANSI*
Delta Tau	PMAC/UMAC	ASCII*
Demo	Internal	Demo
DVT Vision System	SmartImage Sensor	ASCII Data TCP/IP**
Festo/Beck	IPC/FEC Series	FST CI*
GE Fanuc	Series 90	SNPX
Hitachi	H Series	HCOM*
IAI	SuperSEL	Serial*
IDEC	FA-3	FA-3 PC Link*
IDEC	FA-1/2/Junior/Micro-1	FA-1/2 PC Link*
IDEC	Micro-3	Computer Link
Klockner Moeller	PS4-201/271/141/151-MM1 & PS-241-MM1	SUCOM-A*
Koyo	DL-Series	K-Sequence
Koyo		DirectNet*
Modicon	All	Modbus Master ASCII
Modicon	All	Modbus Master RTU
Modicon	All	Modbus Slave RTU*
OMRON	All	Host Link
SAIA	PCD Series	SBUS*
SEW Eurodrive	MoviDrive	MOVILINK*
SEW Eurodrive	MoviDyn	MOVIDYN*
SEW Eurodrive	MoviTrac	MOVITRAC*
Siemens	SIMATIC S5	3964R/RK512*
Siemens	SIMATIC S5	Profibus DP**
Siemens	SIMATIC S5	PG/AS511
Siemens	SIMATIC S7/200	PPI
Siemens	SIMATIC S7-300/400	MPI-Adapter*
Siemens	SIMATIC S7-300/400	3964R/RK512
Siemens	SIMATIC S7-300/400	PROFIBUS-DP**
Steeplechase	VLC	Serial*
Telemecanique	TSX (Nano, Micro, Premium)	UniTelway*
Toshiba	PROSEC T-Series	Computer Link
VT100	VT100	VT100**
Yaskawa	MP 930/940	Memobus*

For a list of current and updated drivers, please visit: http://www.cimrex.com.

Connecting a Cimrex to an Aromat PLC :

PC

Cimrex 71 or 91

CAB6 (3m)
RS232C

DB9 ◄─────► DB25

AFC15CM03-US9: FP0/2/2SH Programming Port (3m)
Please see drawing on page 20

DB9 ◄──RS232C──► 5 pin Minidin

DB9 ◄──RS232C──► DB9

AFP15CMSH3-US9: FP10SH Programming Port (3m)
FP2/2SH/10SH Optional Port (3m)
Please see drawing on page 21
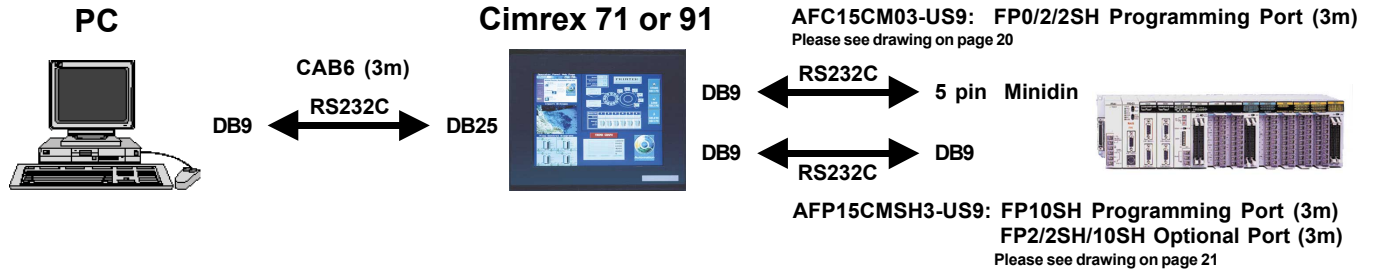
For Other PLC Manufacturers:

Other PLC Manufacturers	Cable Part Number / Description
Allen-Bradley MicroLogix	Programming port (Mini Din8) to RS-232 port, DF1 Protocol Part Number: **CAB2**
Allen-Bradley SLC500	DH-485 port, RJ-45 connector to RS-422 port Part Number: **CAB10** **Cimrex 10 & 20 does not support DH-485**
Allen-Bradley 1747KE	Allen Bradley 1747KE converter module (9 pin) to RS-232 port Part Number: **CAB5**
GE Fanuc 90-30 / 90-70 90 Micro	Programming port (15 pin) to RS-422 port, SNPX Protocol Part Number: **CAB4**
Omron PLC System	Programming port (9 pin) to RS-232 port, Computer Link Part Number: **CAB3**
Modbus RS485	Modbus ASCII or RTU, RS-485 open connector to RS-422 port (Cimrex is Master) Part Number: **CAB8**
Siemens 20mA Current Loop	Siemens 20mA current loop (15 pin) to RS-422 port Part Number: **CAB7**
Siemens S5PG Adapter	Siemens Converter (25 pin) to RS-232 port Part Number: **CAB1**
Siemens S7 HMI Adapter	Siemens S7 HMI Adapter (9 pin) to RS-232 port Part Number: **CAB5**

Cable Drawings and Pin Configurations:

CAB1 - Cimrex DB9 RS232C Port to Siemens S5PG Adapter

25 pin Male   9 pin Female

3 ──────────────────────────── 3 ◄ RXD ─►
2 ──────────────────────────── 2 ◄ TXD ◄─
7 ──────────────────────────── 5 ◄ GND

Shield connected to D-sub cover

Siemens Converter
6ES5 734-1BD20

CAB1 / 0.5m

Operator Terminal
4-40
Gray

4-40
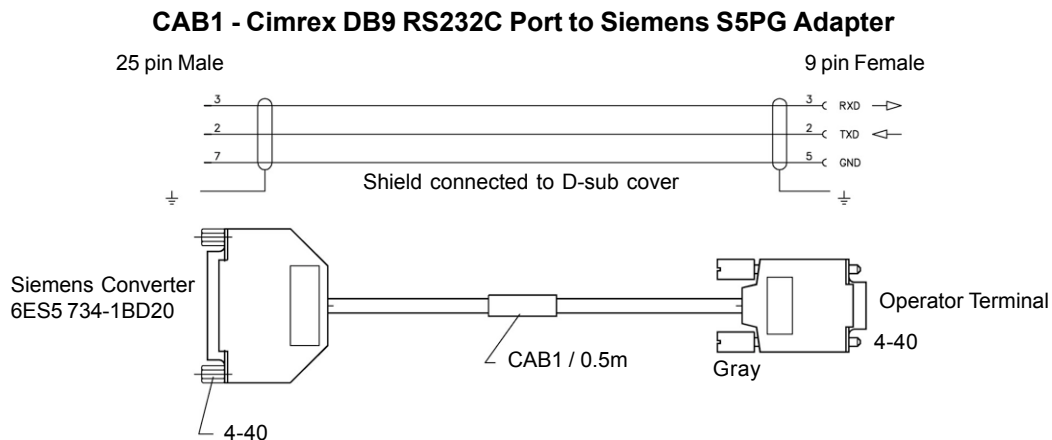
CAB2 - Cimrex DB9 RS232C Port to Allen-Bradley MicroLogix

9 pin Female

							8 pin Minidin
TXD	2				4	RXD	
RXD	3				7	TXD	
GND	5				2	GND	

Shield connected to D-sub cover

Operator Terminal

Gray

4-40

CAB2 / 2m

AB MicroLogix

Metalized Plastic Cover
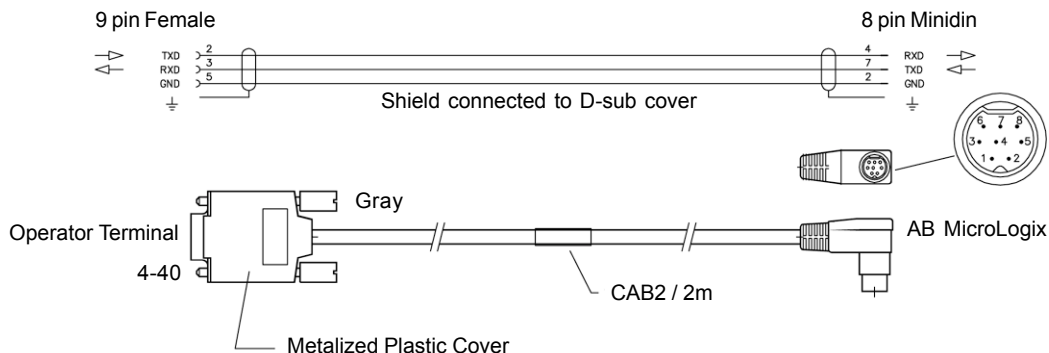
CAB3 - Cimrex DB9 RS232C Port to Omron C200Hx

9 pin Male

						9 pin Female
TXD	2			3	RXD	
RXD	3			2	TXD	
GND	9			5	GND	

Shield connected to D-sub cover

Omron PLC

Red

Gray

Operator Terminal

M2.5

CAB 3 / 3m

4-40
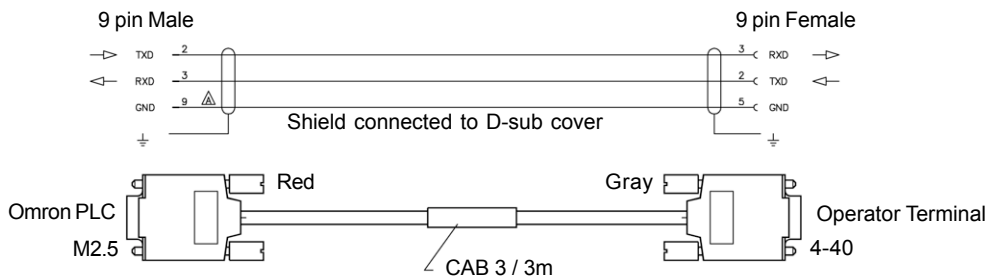
CAB4 - Cimrex DB25 RS422 Port to GE Fanuc 90-30 / 90-70 / 90 Micro

25 pin Male

15 pin Female

Dataflex 6706

					5		+5V	
					2			
CTS+	5	GRAY	PURPLE		14	RTS(B')		
CTS−	18	WHITE	BLACK	PAR5	6	RTS(A')		
RXD+	3	BROWN	RED		13	SD(B')		
RXD−	16	WHITE	BLUE	PAR4	12	SD(A')		
RTS+	4	GREEN	PINK		8	CTS(B')		
RTS−	17	WHITE	GRAY	PAR3	15	CTS(A')		
TXD+	2	ORANGE	YELLOW		11	RD(B')		
TXD−	15	WHITE	GREEN	PAR2	10	RD(A')		
GND	7	BLUE	BROWN		7	GND		
GND	8	WHITE	WHITE	PAR1	3			

Shield connected to D-sub cover

Metalized Plastic Cover

Metalized Plastic Cover

Gray

Blue

M3

Operator Terminal

GE Fanuc

4-40

CAB 4 / 3m

CAB5 - Cimrex DB9 RS232C Port to PC / AB 1747KE / Siemens S7 HMI Adapter

9 pin Female   9 pin Female

TXD	2	WHITE	2	RXD
RXD	3	BROWN	3	TXD
GND	5	GREEN	5	GND
			7	RTS
			8	CTS
			6	DSR
			1	DCD
			4	DTR

Shield connected to D-sub cover

Black   Gray   4-40   Max 15

Operator Terminal   Max 33   PC / AB / Siemens

4-40

CAB5 / 3m
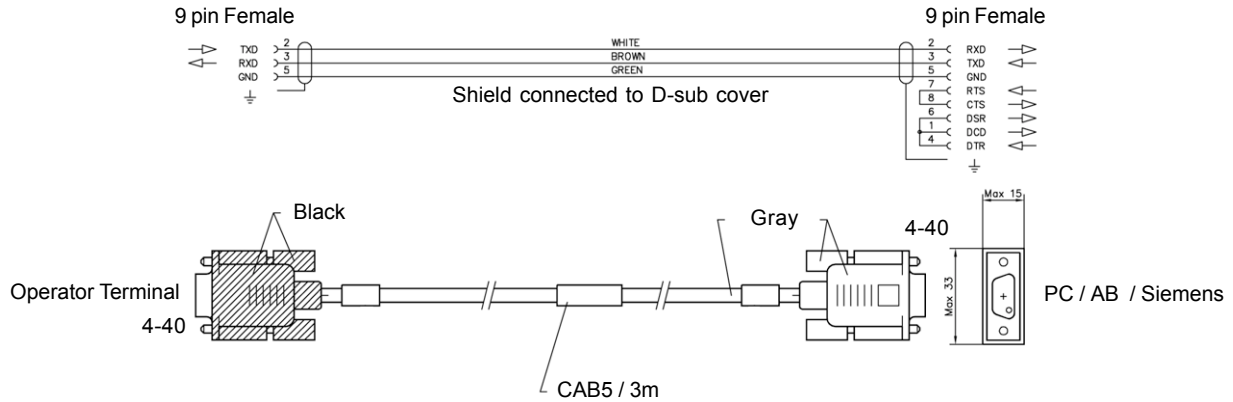
CAB6 - Cimrex DB25 RS422 Port to PC 9 Pin RS232C Port

25 pin Male   9 pin Female

RXD	+ 2 / 15	120 ohm	P1	Brown	Brown	2 (TXD)
CTS	+ 4 / 17		P2	Black	Gray	8 (RTS)
TXD	+ 3 / 16		P3	Red	White	3 (RXD)
RTS	+ 5 / 18	+10V	P4	Yellow	Yellow	7 (CTS)
+5V	14 VCC		P5	Orange	Green	5 0V
0V	8 / 7					

Shield connected to D-sub cover

Gray

Operator Terminal   CAB6   4-40   PC

4-40   CAB6 / 3m

Metalized Plastic Cover
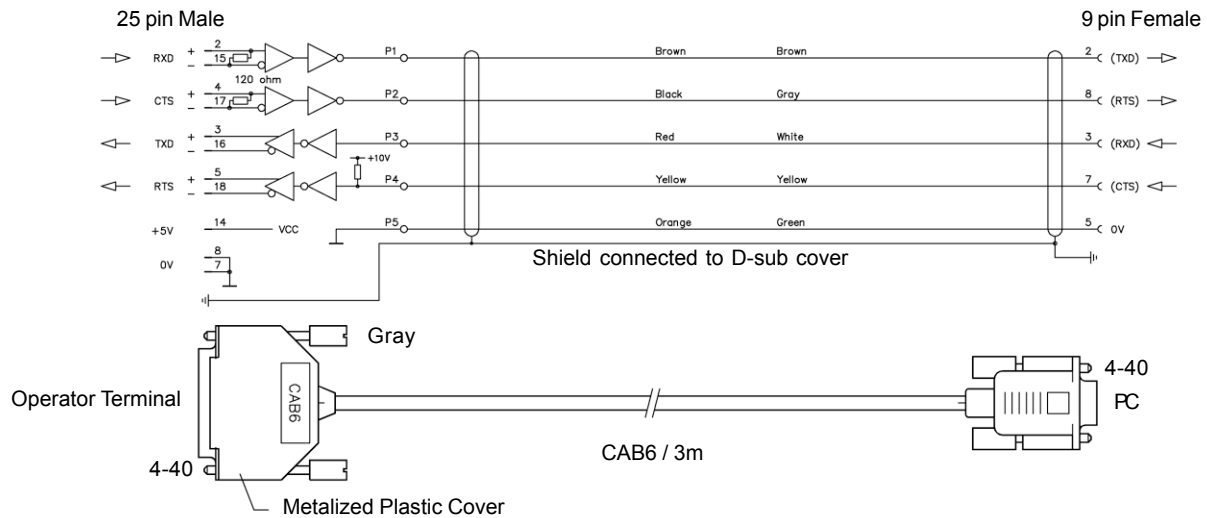
CAB7 - Cimrex DB25 RS422 Port to Siemens 20mA Current Loop

15 pin Male   25 pin Male

	7	Green	Grön	P1		14	+5V
0V	12	Brown	Brun	P2		3 / 16	+ −
	2	White	Vlt	P4		2 / 15	+ −
	6 / 11			P3	100 ohm	7 / 8	0V / 0V
	9 / 13						

Shield connected to D-sub cover

Gray

Siemens PLC 20 mA Current Loop   CAB7   Operator Terminal

CAB7 / 3m   4-40

Metalized Plastic Cover   Metalized Plastic Cover
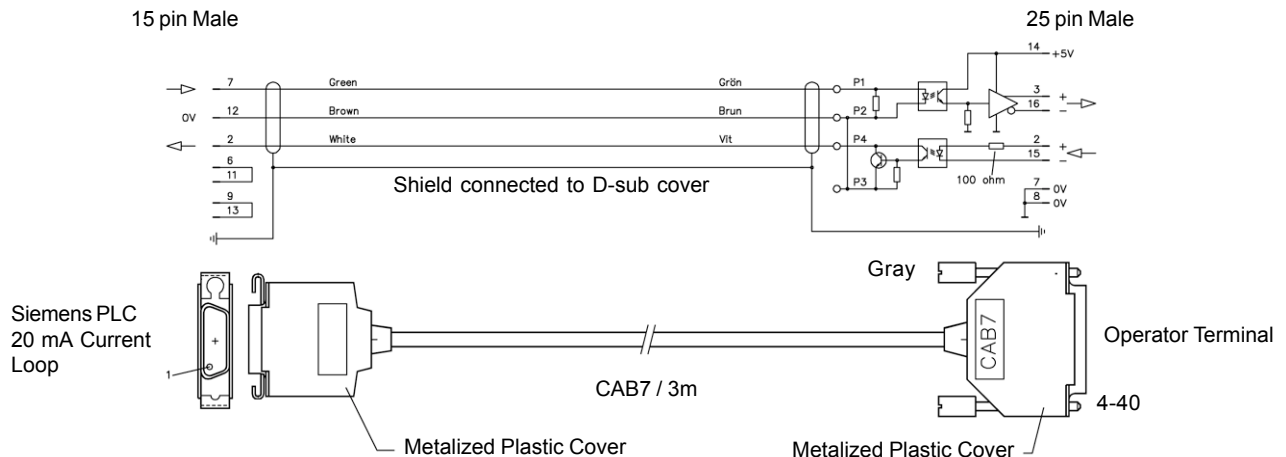
CAB8 - Cimrex DB25 RS422 Port to Modbus RS-485 ASCII or RTU
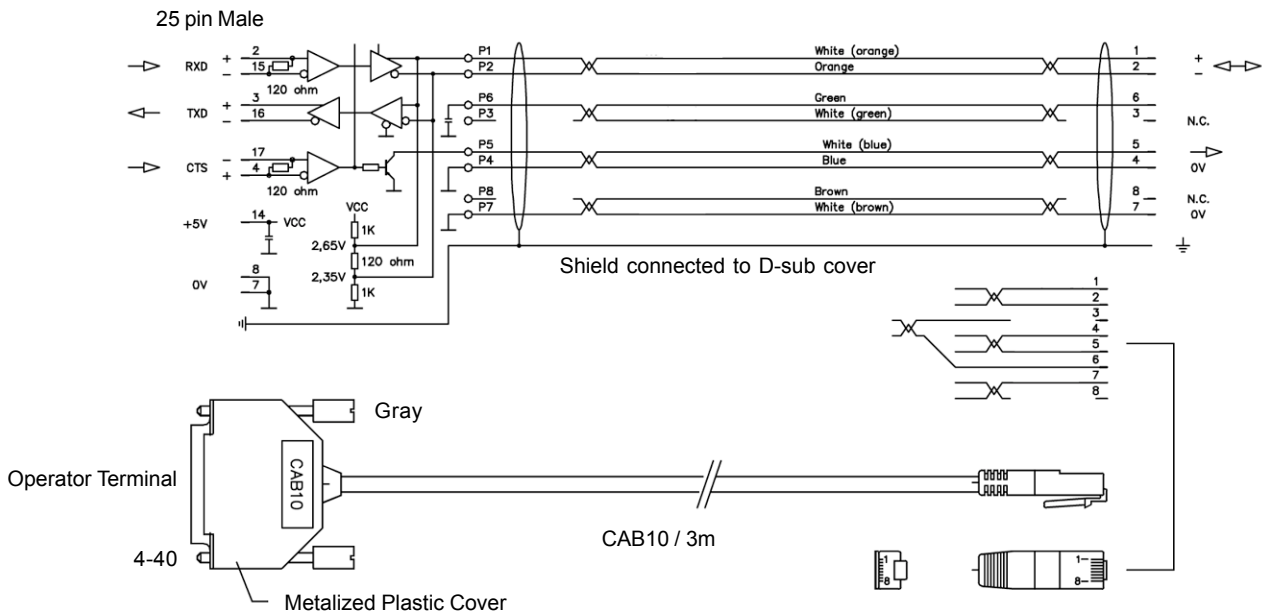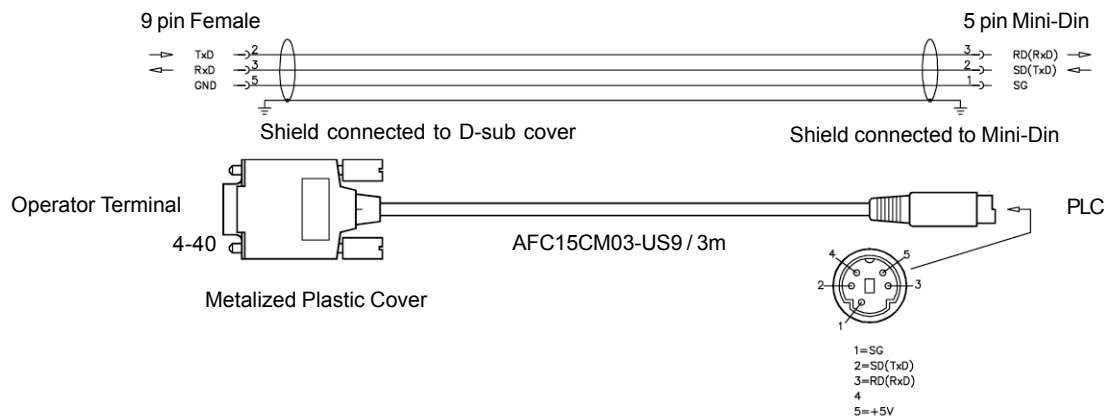### CNET Adapter - RS232C / RS422 to RS485 ASCII (Please see page 23)

Operator Terminal RS-422

Bus RS-485
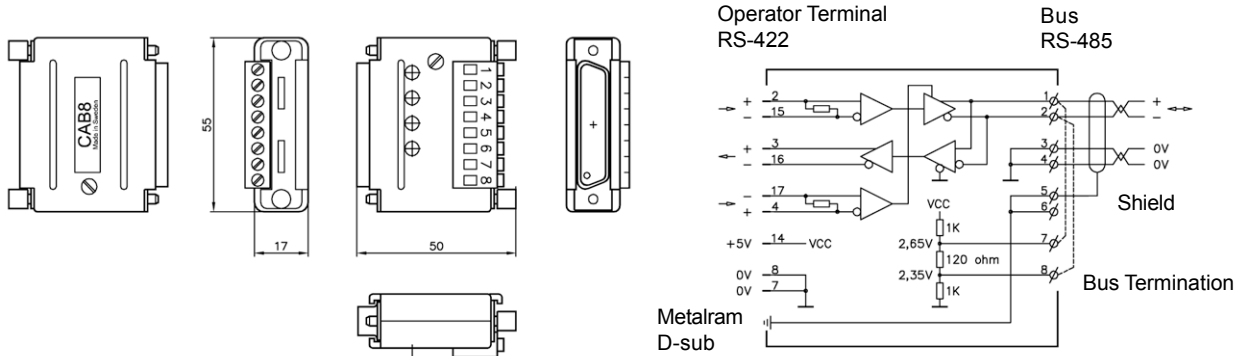
CAB10 - Cimrex DB25 RS422 Port to Allen Bradley SLC500 DH-485

25 pin Male

Shield connected to D-sub cover

Operator Terminal

CAB10

Gray

4-40

Metalized Plastic Cover

CAB10 / 3m

AFC15CM03-US9 - Cimrex DB9 RS232C Port to Aromat's FP 0/2/2SH PLC

9 pin Female

5 pin Mini-Din

Shield connected to D-sub cover

Shield connected to Mini-Din

Operator Terminal

4-40

AFC15CM03-US9 / 3m

PLC

Metalized Plastic Cover

1=SG
2=SD(TxD)
3=RD(RxD)
4
5=+5V

AFC15CMSH3-US9 - Cimrex DB9 RS232C Port to Aromat's FP M/1/2/2SH/10SH 9 Pin Port

9 pin Female

9 pin Male

TXD	2	
RXD	3	
GND	5	

3	RXD	
2	TXD	
7	GND	
4	RTS	
5	CTS	
6	DSR	
8	DCD	
9	DTR	

Operator Terminal

PLC

AFC15CMSH3-US9 / 3m
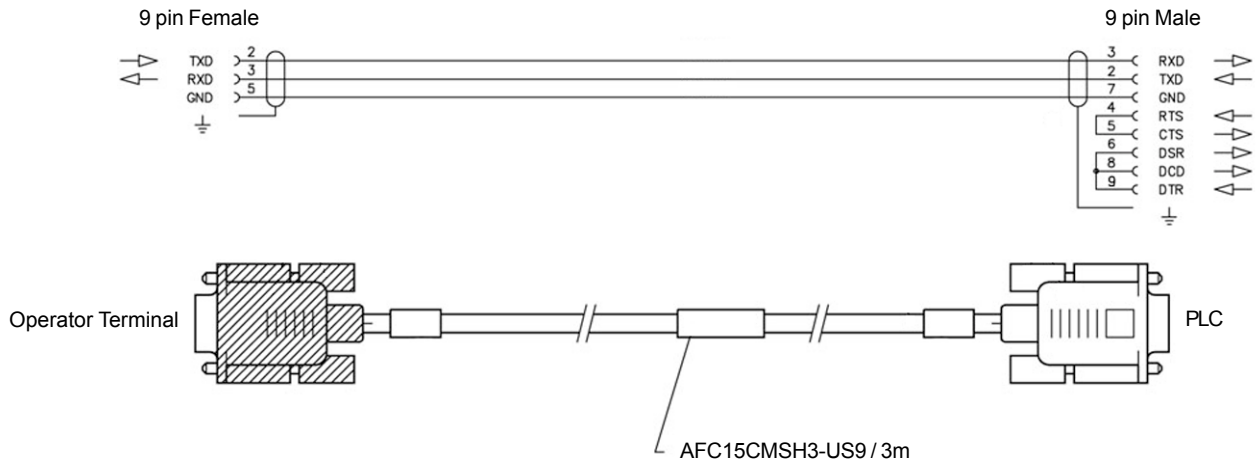
AFC15CM03P-US9 - Cimrex 5/10 DB9 RS232C Port with Power Plug to Aromat's FP 0/2/2SH 9 Pin Port

9 pin Female

5 pin Mini-Din

TxD	3	
RxD	2	
GND	5	
+5V	9	

2	RD(RxD)	
3	SD(TxD)	
1	SG	
5	+5V	

5VDC Power Plug −
                 +

Operator Terminal

4-40

AFC15CM03P-US9 / 1.5m

PLC

5VDC + −⊂− −

1=SG
2=SD(TxD)
3=RD(RxD)
4
5=+5V

MULTIPLE PLC NETWORK

CNET Adapter
RS232C / RS422 to RS485
Converter

RS485 Multi Drop Network, Twisted Pair Cable, 1200m (4000 ft.)

FP PLC with CNET
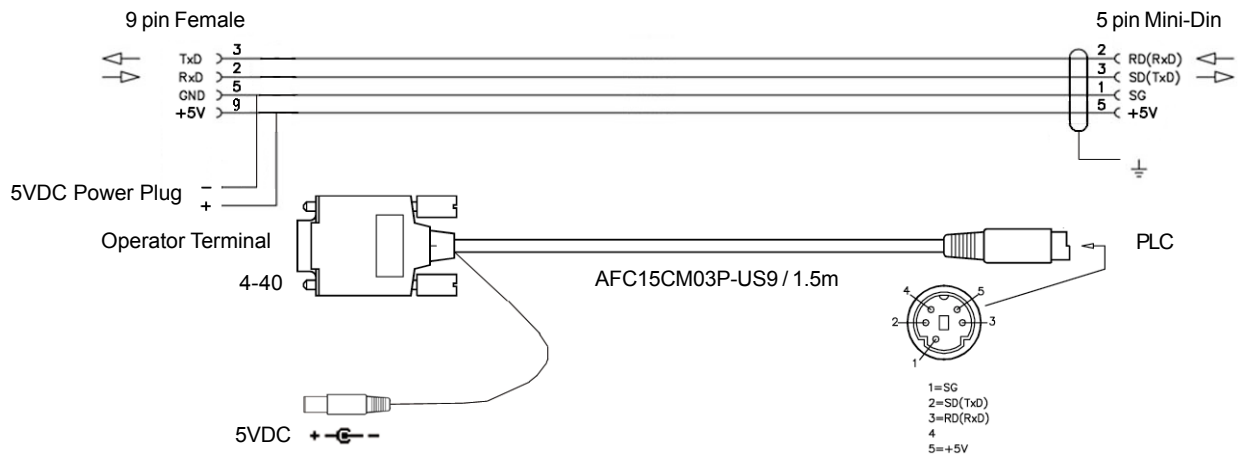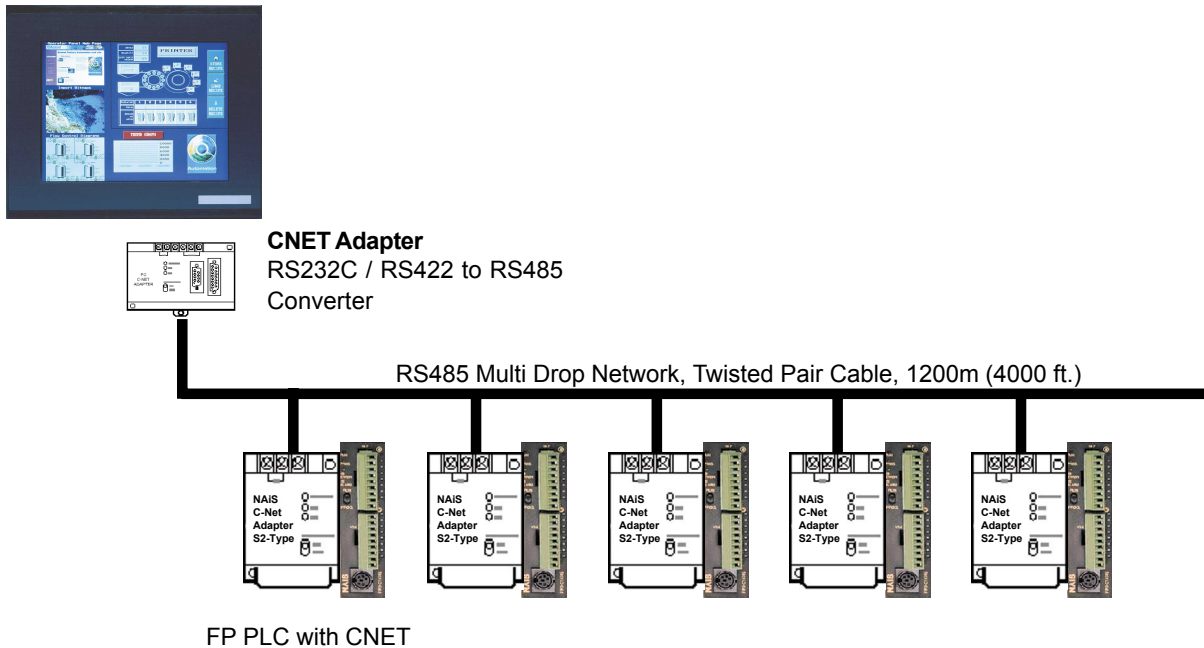
EXPANSION SLOT BOARDS

Part Number	Description
IFC-ETCX or GK-IFC-EC	Ethernet coaxial interface - 10 Mbps Supports TCP/IP
IFC-ETTP or GK-IFC-ET	Ethernet twisted pair - 10 Base T interface, 10 Mbps Supports TCP/IP RJ45 connector
IFC-MC or GK-IFC-MC	PCMCIA memory interface card - 4 or 8 MB Flash Increase memory for programming or use for back-up
GK-MC-4M	Memory card 4 MB
GK-MC-8M	Memory card 8 MB
IFC-PBDP or GK-IFC-PB	Profibus-DP (EN50170) Slave Expansion Card
	Baud Rate - 9600 bps to 12Mbps
	Number of Nodes - 32 without repeater, 96 with repeater
	Number of Bytes - 32 to 200 bytes (16 to 100 words)
	Distance - 200m (660 ft) @ 1.2Mbps, 3000m (10,000 ft) @ 9600bps
IFC-PI	Parallel Printer Interface (Printer must support PCL5 Mode) (Must have at least 5MB of internal memory to print graphics)

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