Installation

Summary

This manual describes the mechanical, electrical and software installation for the Elite PI from C.E. Electronics, Inc.

1 Table of Contents

1 Safety Advice

Safety Requirements

All persons involved must know and follow all company and local safety regulations, with special attention to the following:

- Make sure that there is enought light to work safely.
- Immediately replace damaged or lost safety equipment.
- Keep all tools in good condition.
- Follow instructions when using tools.

2 Prerequisites

Summary

This chapter defines the tools and documents along with the installation steps that must be carried out before installing the Elite PI system.

Installation Documentation

The following related documentation is available for the products discussed in this manual.

Document	Reference
Detailed ELBNK-B Wiring	ELBNK-BM.pdf
Detailed ELBNK-C Wiring	ELBNK-CM.pdf
Micro Comm Driver Wiring	MCCA-X_with_Mamm1.pdf

2.1 Mechanical

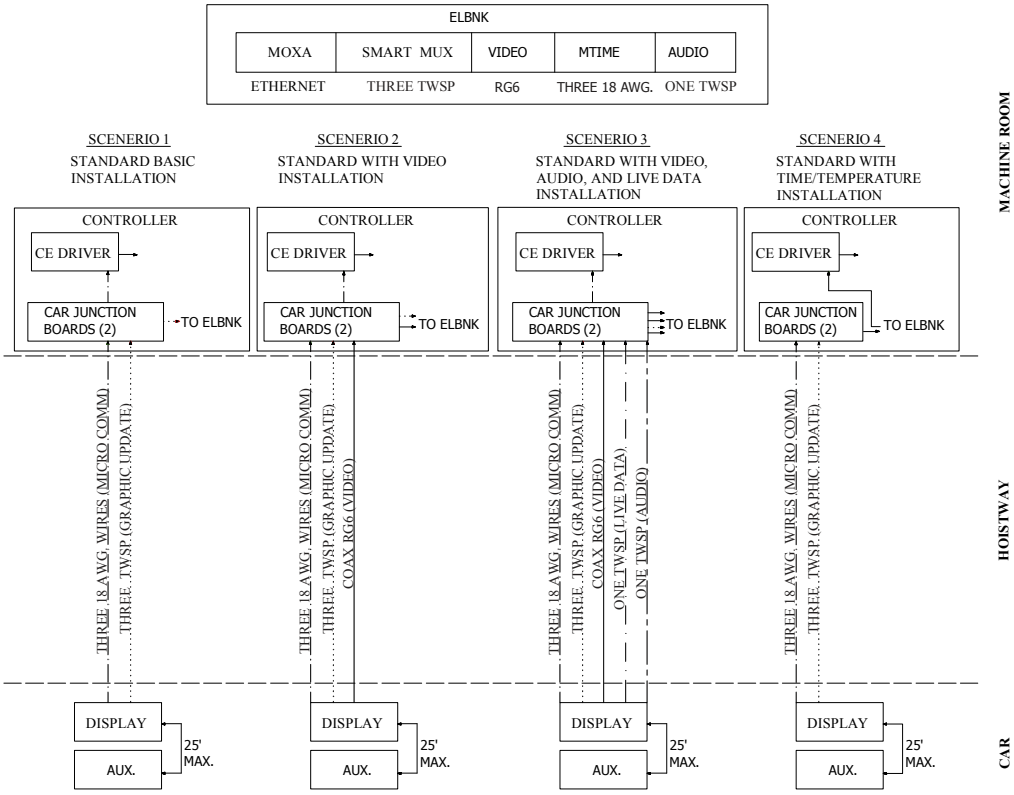
The following table lists the mechanical size as well as the viewable screen are of the most popluar models of the Elite PI. These are the actual product dimesions. Please verify the avaliability of additional space for related and unrelated wiring before installing.

Space Requirements

Part Number	Mechanical Size			Screen Size	
	Width	Height	Depth	Width	Height
EX084-CX	8.375”	12.000”	2.875”	6.800”	5.174”
EX104-CX	10.000”	11.750”	2.750”	8.347”	6.269”
EA104-CX*	10.000”	11.750”	2.750”	8.347”	6.269”
EX104-BX	9.900”	12.000”	2.800”	8.347”	6.269”
EA104-BX*	9.900”	12.000”	2.800”	8.347”	6.269”
EX104-PX	7.750”	11.500”	2.625”	6.269”	8.347”
EX104-SX**	9.900”	9.500”	2.750”	8.347”	6.269”
EX121-AX	11.750”	11.000”	3.125”	9.685”	7.264”
EA121-AX*	11.750”	11.000”	3.125”	9.685”	7.264”
EX150-CX	13.900”	12.750”	3.125”	11.974”	8.980”
EA150-CX*	13.900”	12.750”	3.125”	11.974”	8.980”
EX150-PX	11.120”	15.750”	3.125”	8.980”	11.974”
* Auxillary displays require a main for operation.					
** EX104-S display uses remote power supply. 6”W X 1.75”H X 3.25”D					

2.2 Wiring Scenerios

Typical Scenerios Diagram



2.3 Wiring (Traveling Cable)

Wiring Overview

The following table list the wiring needed for both required and optional features of the Elite PI system. Please verify the availibilty of wires in the traveller for features required by the job.

Cable Requirements

Feature	Traveler Wiring	Description
MICRO COMM	Three 18 gauge wires	Allows the display to know position, direction, door strobe, priority messages, etc.
Graphics Update	Two twisted shielded pairs and a common (24 AWG or larger)	Allows customer to make changes to the screen content using a host computer. While changes are being transferred, normal display operation will continue.

Feature	Traveler Wiring	Description
Graphics Update (USB)	None	Allows customer to make changed to screen content using USB flash memory stick. The flash memory is hand carried to each display. It can be used in conjunction with or in place of the 485 system. A panel-mount USB connector will need to be installed near the display.
Live Video (coax)	One Coax (RG6 Recommend-ed)	Allows a real-time composite video image to be displayed on the screen (i.e. CCTV, Security Desk, News Network, etc.).
Live Video (twp)	One twisted pair (24 AWG or larger)	Allows a real-time composite video image to be displayed on the screen. This option requires more hardware than live video over coax and it is more difficult to control video quality.
Audio	One twisted shielded pair (24 AWG or larger)	Allows audio to be used in conjunction with the Live Video. Speaker is customer supplied.
Live Data	One twisted shielded pair and a common (24 AWG or larger)	Allows custom data to be displayed (i.e. stock data, traffic data, etc.). Please consult factory. Additional charges may apply.

3 Scope of Material

Summary

This chapter gives an overview of the basic Elite PI components. For more detailed information or special installation options, please contact **C.E. Electronics, Inc** at (419) 636-6705.

Material Overview

Material	Amount	Description
Main Display **EX104-XX** **EX084-XX** **EX121-XX** **EX150-XX** Fill in “X’s” for complete product configuration. See catalog page.	Installation specific 1 or 2 per car	Elite PI Main Display See section 2.1
Aux Display **EA104-XX** **EA084-XX** **EA121-XX** **EA150-XX** Fill in “X’s” for complete product configuration. See catalog page.	Installation specific 1 per Main display	Elite PI Auxiliary Display See section 2.1
MICRO COMM ® Link (MCCA & MAMM1 typical) Or via controller manufacture Interface.	1 per car	C.E. Electronics, Inc. MICRO COMM® driver and message module or via controller
ELBNK-XXX	1 per group **Complete *X*s for product configuration**	Networkable bank data distribution. Used to send graphics updates to screens. **ELBNK-M8X** typical (Indlucdes connection for composite video, audio and customer’s Ethernet.)

Material	Amount	Description
CE2773 (Car Junction Board)	1 per car	Used as a junction point in the controller. Includes junctions points for Graphics Data, MICRO COMM and Live Data.
CE3409 (Car Junction Board)	1 per car when composite video and audio are required.	Used as a junction point for Live Video and Audio signals.
Computer	1 per installation	Customer supplied Windows-based computer. Used to create and manage screen content.

4 Mechanical Installation

Summary

The chapter describes the mechanical installation:
- In the machine room
- In the car

4.1 Machine Room

Machine Room

No	Step
401	Mount **ELBNK-XXX** to machine room wall or wire trough.
402	Mount **CE2773** inside controller cabinet
403	Mount **CE3409** inside controller cabinet (Optional step for jobs with composite video and audio)
404	Mount **CCU** in or to the controller cabinet.

4.2 Car

Behind the COP

No	Step
404	Open the car operating panel.
405	Mount **Elite PI** to the foreseen place in the car operating panel
406	Mount auxillary **Elite PI** or second main **Elite PI** to the foreseen place in the car operating panel (Optional)
407	Mount a 8Ω speaker if audio is required. A speaker is not provided by C.E. Electronics, Inc.

5 Electrical Installation

Summary

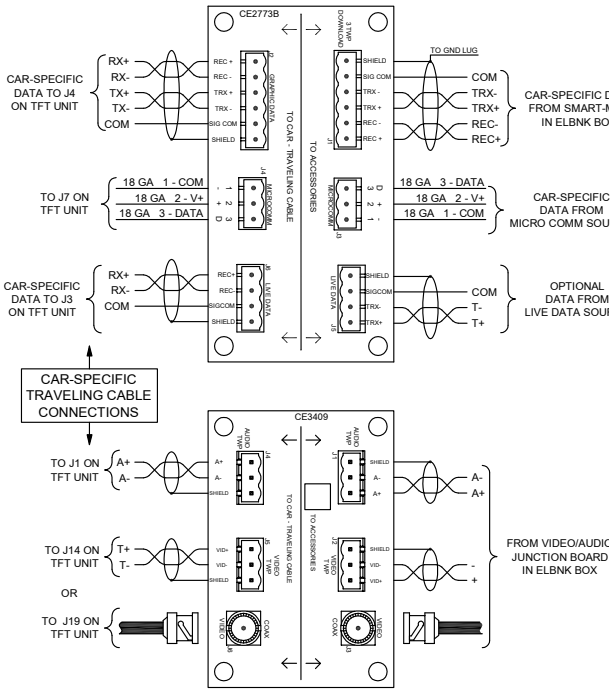
The chapter describes the electrical installation:
- In the machine room
- In the car

5.1 Machine Room

Machine Room

No	Step
501	Connect a chanel on board **CE2512** located in **ELBNK-XXX** to **CE2773**
502	Connect board **CE3410** located in **ELBNK-XXX** to **CE3409** (Optional step for jobs with composite video and audio)
503	Connect board **CE2773** to MICRO COMM® driver
504	Connect board MICRO COMM® driver to elevator controller (may be preinstalled)
505	Connect the **CE2773** to the travelling cable
506	Connect the shield from J1 on **CE2773** to ground lug in the controller
507	Connect the **CE3409** to the travelling cable (Optional step for jobs with composite video and audio)
508	Repeat the steps above for each car in group.

Junction Boards Diagram



5.2 Car

Behind the COP

No	Step
509	Open the car operating panel.
510	Connect cables from car junction board **CE2773** to **Elite PI**
511	Connect cables from car junction board **CE3409** to **Elite PI** (Optional step for jobs with composite video and audio)
512	Connect speaker output on **Elite PI** to 8Ω speaker (Optional step for jobs with composite video and audio)
513	Connect the **Elite PI's** power supply to 110 or 220 VAC
514	Connect second main **Elite PI** by repeating the steps above (optional)
515	Connect auxillary **Elite PI** using the cable provided with auxillary display (optional)

6 Work by Others

Summary

This chapter describes the work that is typically done by other trades.

- Moxa setup on Ethernet network
- Connection of **CE3410** to a audio/video distribution amplifier (optional)

6.1 Moxa Installation

Moxa Procedure Overview

The Moxa device includes directions for installation and the step below are intended only to be an overview of the process of configuring the device. These steps will need to be done by the person(s) in charge of the Ethernet network to which the Moxa(s) will be connected.

No	Step
601	Install the software included with the Moxa
602	Use the **Configurator** software to assign a static IP address to the Moxa 
603	Using the **RealCOM Installer** software on the PC that will use the Elite PI Transfer software, map the Moxa to a virtual COM port. 
604	Repeat **Configurator** and **RealCOM Installer** steps for each Moxa taking note the physical location of each Moxa.
605	Install the **Elite PI Designer** and **Elite PI Transfer** software

6.2 Audio/Video Installation

Audio & Video Connection

Some models of the Elite PI have inputs for baseband composite video and line level audio. The installation of this service may require skill by another trade. The connection points are simplified and removed from the controller and placed in the **ELBNK** to provide a clear d-mark. The video and audio signals will require a VDA (Video Distribution Amplifier) which is not provided by C.E. Electronics, Inc.

No	Step
606	Provide composite video signal to the machine room
607	Provide line level audio to machine room (if required)
608	Install video/audio distribution amplifier

609	Connect one video output from the distribution amplifier to **CE3410** located in the **ELBNK**.
610	Connect one audio output from the distribution amplifier to **CE3410** located in the **ELBNK**.