

ACCU-SORT®

AXIOM-X™ Omnidirectional Bar Code Reader Quick Reference Guide



An AXIOM-X typically includes:

- AXIOM-X Scan Head
- Wiring Base
- Power Supply

Options that may be included:

- Universal Mounting Bracket
- Trigger Photoeye
- Height Tracking Photoeyes

Time Required: 45 minutes / unit

- Mechanical installation (30 minutes)
- Electrical installation (15 minutes)
- Setup (see AXCESS Quick Start Guide)

Tools Required:

- Phillips Long-Handled #2 Screwdriver
- Slotted screwdriver (1/8")
- Adjustable Wrench (open-ended)
- Tape Measure

Quick Start References:

- AXIOM/AXIOM-X Product Line Manual
- Mounting structure drawings

Other Useful References:

- AXCESS for AXIOM Quick Start Guide
- Interconnect drawings located in AXIOM/AXIOM-X Manual, App. E (p.209):
 - 107480 - Controller/Client with Tach
 - 107481 - Controller/Client/Client w/Tach
 - 107482 - Start/End Trigger Photoeyes
 - 107483 - Stack Light with Internal Relays
 - 109364 - Height Tracking Photoeyes

NOTICE: Application-specific documentation provided with your equipment may supersede the information provided here.

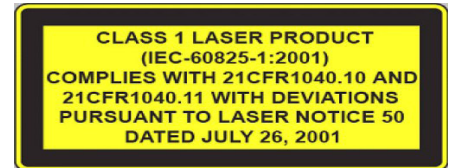
Introduction

The AXIOM-X is designed for easy installation and setup. Use this guide as a cross reference to locate the content you need in the **AXIOM / AXIOM-X Product Line Manual**.

Safety Precautions *(Chapter 2)*

Observe all safety precautions regarding:

- Power, electrical, grounding (p. 13)
- Electrostatic discharge (ESD) (p. 14)
- Laser Exposure (p. 15)



Observe Laser Safety Warnings on AXIOM-X

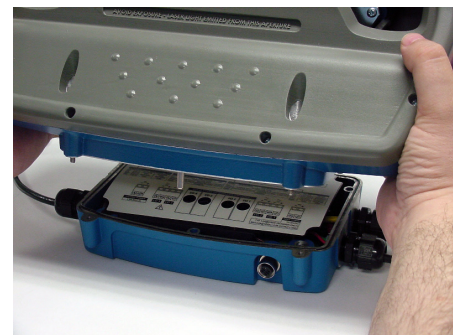
Mechanical Installation *(Chapter 3, see also mounting illustrations, side 2)*

1. Assemble mounting structure according to your mounting diagram, if applicable.
2. Mount wiring base in the defined location using orientation consideration as a guideline (p. 19-21). A universal mounting bracket is available (p. 24-26).
3. Mount the Trigger Photoeye and reflector (p. 30).
Mount optional Height Tracking Photoeyes, if applicable (p. 31-32).
4. Mount the tachometer, if applicable (p. 33).
5. Install optional I/O modules into wiring base, if applicable (p. 34-35).

Electrical Installation *(Chapter 4, Appendix E)*

Use the wiring base label (*see side 2*) as a reference when performing electrical installation.

1. Properly ground wiring base to protective earth (PE) ground (p. 46-47).
2. Connect power supply to wiring base and perform polarity check (p. 51-53).
3. Connect Trigger photoeye to Trigger terminal blocks (p. 54).
4. Connect tachometer to TACH terminal blocks and use ferrite clamps (p. 55-56).
5. Connect RS232/422 communications to SERIAL COM terminals (p. 57).
6. Connect Ethernet communications to ETHERNET terminals (p. 58).
7. Connect I/O module wiring to I/O 1 through I/O 4, as required (p. 59-60).
8. Install scan head to wiring base as outlined in Chapter 3 (p. 39-42).



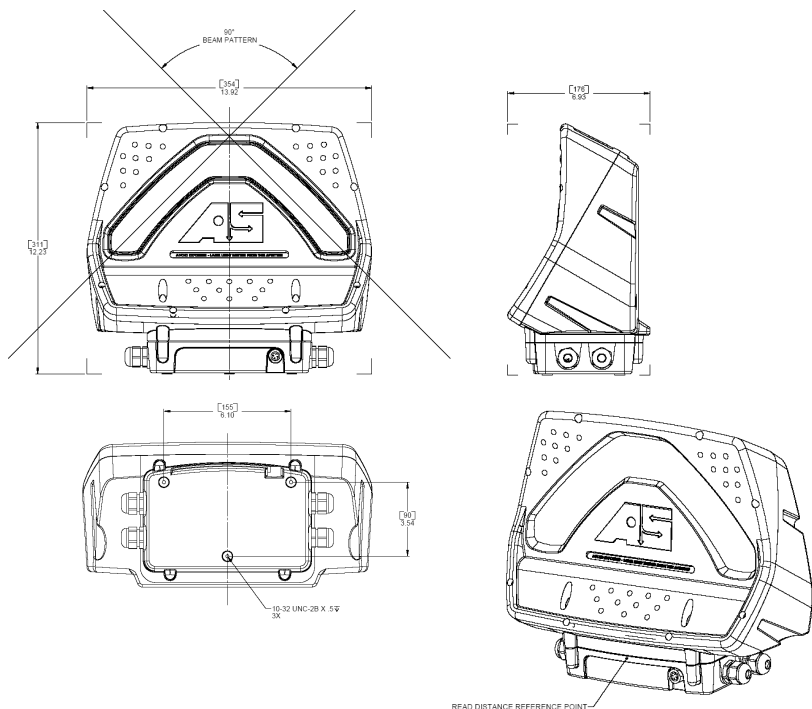
Installing Scan Head to Wiring Base

Setup and Operations *(Chapter 5 and 6)*

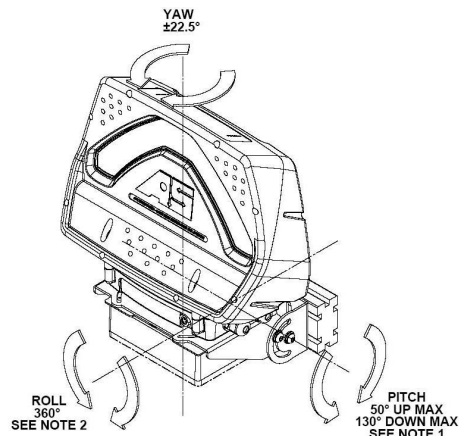
1. Use the first-time startup / setup procedures and operations checklist (p. 118-119).
2. Use AXCESS and a setup cable (p. 71) or network connection (p. 73) to modify operating parameters (p. 75-104).
3. Monitor operations using AXIOM Monitor and Log Viewer diagnostics (p. 124).
4. Backup parameters to the wiring base using AXCESS or the connector panel (p.104).

AXIOM-X™ Quick Reference Guide

Mounting Dimensions (See Appendix E for dimensions with mounting bracket)



Range of Motion with UMB



NOTES:
 1) WHEN UNOBSTRUCTED AND WITHOUT POWER SUPPLY, WITH POWER SUPPLY DOWNWARD TRAVEL IS LIMITED TO 105°. OTHER OBSTRUCTIONS MAY LIMIT TRAVEL.
 2) WHEN MOUNTED ON ACCU-SORT STRUCTURAL EXTRUSION, RE-POSITIONING OF MOUNTING BOLTS MAY BE REQUIRED.

Wiring Base Label

Use the **wiring diagrams** on the wiring base label to determine the proper connections for power, trigger, tachometer, communications and I/O. (For details, see p. 51-60.)

ETHERNET				TACH				TRIGGER				SERIAL COM			
TERM 10-45	BI/ATIA 1588A	BI/ATIA 1588B		TERM	NPN OUTPUT	PNP OUTPUT	24V SUPPLY VOLTAGE	TERM	NPN OUTPUT	PNP OUTPUT	24V SUPPLY VOLTAGE	TERM	RS-232	RS-422	
TX+	PN 1	WHT/GRN	WHT/GRN	V+	JUMPER TO V+	TACH OUTPUT	+ OUTPUT	TX1	TRANSMIT	TRANSMIT+		TX2	RTS (OPT)	TRANSMIT-	
RX+	PN 2	GRN	ORG	TACH-	JUMPER TO GND	TACH OUTPUT	- OUTPUT	RX1	RECEIVE	RECEIVE+		RX2	CTS (OPT)	RECEIVE-	
RX-	PN 3	WHT/ORG	WHT/GRN	GND		COMMON		GND		COMMON		GND		GND	
	PN 4	ORG	GRN												

SOLID STATE I/O MODULES (OPTIONAL)

I/O 4	I/O 3	I/O 2	I/O 1

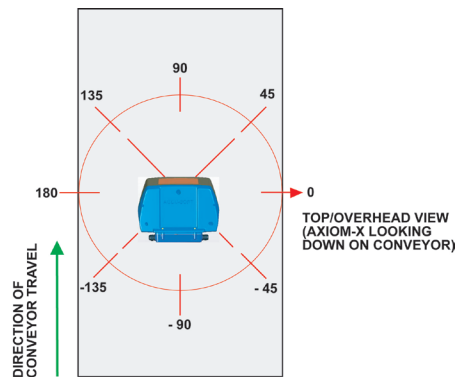
OUTPUT POWER 2.5A MAX

INPUT POWER 12-30VDC

TYP 1.0A@24VDC (SCANNER ONLY)
 MAX 5.0A@12VDC (2.5A OUTPUT LOAD)

AXIOM-X Orientation to Bar Code Scanning Area

(See pg. 21, 97-102)



AXIOM-X Control Panel

Use the **AXIOM-X control panel** to monitor operational status including trigger, communications and read quality. (For details, see p. 120-121, 140-141.)

STATUS

- TRIGGER
- READ
- RX/TX
- NETWORK
- LINK

CLASS 1 LASER PRODUCT
 (IEC-60825-1:2001)
 COMPLIES WITH 21CFR1040.10 AND 21CFR1040.11 WITH DEVIATIONS PURSUANT TO LASER NOTICE 50 DATED JULY 26, 2001

ACCU-SORT SYSTEMS INC TELFORD PA PAT. PEND.

Need further assistance?
 Contact Accu-Sort Technical Support:

ACCUSORT® SYSTEMS, INC.
 511 School House Road
 Telford, PA 18969
 1-800-BAR-CODE™

info@accusort.com
www.accusort.com

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