

D-BOX

3250i ACTUATORS

(3 actuators, 3 axis system)



INSTALLATION GUIDE

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IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Do not expose this apparatus to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the apparatus.
16. To completely disconnect this apparatus from the AC Mains, disconnect the power supply cord plug from the AC receptacle.
17. The mains plug of the power supply cord shall remain readily operable.
18. Do not expose batteries to excessive heat such as sunshine, fire or the like.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.



This symbol indicates that you must communicate with the manufacturer for disposal of the equipment.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

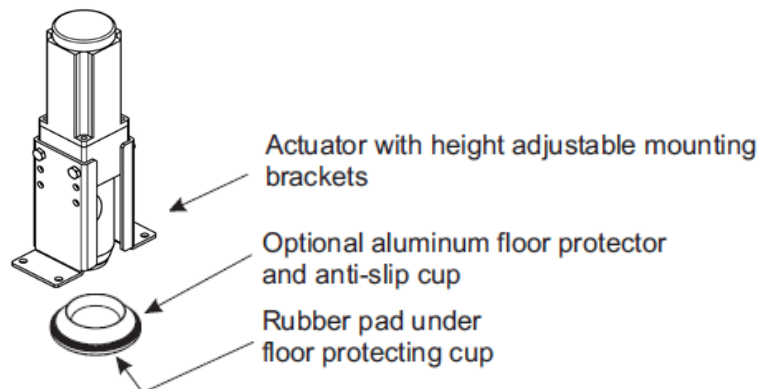
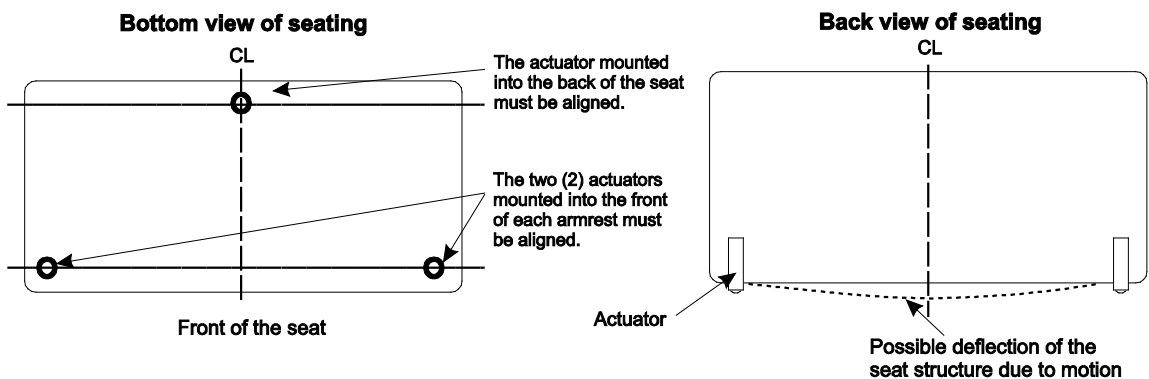


WARNING! USE CAUTION WHEN HANDLING ACTUATOR CABLES AND CONNECTIONS INSIDE THE ACM. THESE PRODUCTS OPERATE UNDER EXTREMELY HIGH VOLTAGE. SERIOUS INJURY OR DEATH COULD OCCUR IF HANDLED WHILE IN OPERATION.

The D-BOX 3250i Actuator System is designed to be installed into the armrest of qualified home theater seating.

When properly installed, the system will give you a three (3) axis motion designed for home entertainment. The seat will move you front to back (pitch), side to side (roll) and up and down (heave).

Each actuator has a piston that will go in and out of the cylinder, thus making the motion. At the end of each piston there is a plastic pivot piece that will be in contact with the floor (or a floor protector and the provided anti-skip cup). Under each cup there is a rubber pad protecting the floor and ensuring the installation will remain in place when operating.



1 Components and Required Tools

Description	Quantité
ACM Unit (Actuator Control Module)	1
Actuator	3
Power Cable, 6 feet (000-090-0010-Z00)	1
Single Cup, Aluminum (810-0002)	3
Screw, Bolt, Hex, Cap, 1/4-20 X 3/4, Black (100-0551))	12
Washer, Lock, 1/4, Black (102-0051)	12
Included with the L/U bracket option (#801-0001)	
Washer, Lock, tooth, 1/4, Zn (102-0053)	12
Screw, Bolt, Hex, Cap, 1/4-20 X 1, Black (000-100-0555-Z00)	12
Tiewrap, 7 3/8" (190-0014)	8
CAT5 cable, 10 feet (000-090-0011-Z00)	1
L bracket	4
U bracket	1
Clamp, Cable, 3/8" (094-0007)	1
Clamp, Cable, 1/2" black (094-0012)	8
Plate, Plastic, Adhesive, Tiewrap (190-0007)	1
ACM bracket	1
Included with the L bracket option (#801-0004)	
Washer, Lock, tooth, 1/4, Zn (102-0053)	12
Screw, Bolt, Hex, Cap, 1/4-20 X 1, Black (000-100-0555-Z00)	12
Tiewrap, 7 3/8" (190-0014)	8
CAT5 cable, 10 feet (000-090-0011-Z00)	1
Support en L	6
Clamp, Cable, 3/8" (094-0007)	1
Clamp, Cable, 1/2" black (094-0012)	8
Plate, Plastic, Adhesive, Tiewrap (Tiewrap) (190-0007)	1
Support ACM (<i>Actuator Control Module</i>)	1
Included with the U bracket option (#801-0005)	
Washer, Lock, tooth, 1/4, Zn (102-0053)	12
Screw, Bolt, Hex, Cap, 1/4-20 X 1, Black (000-100-0555-Z00)	12
Tiewrap, 7 3/8" (190-0014)	8
CAT5 cable, 10 feet (000-090-0011-Z00)	1
U bracket	3
Clamp, Cable, 3/8" (094-0007)	1
Clamp, Cable, 1/2" black (094-0012)	8
Plate, Plastic, Adhesive, Tiewrap (Tiewrap) (190-0007)	1
ACM bracket	1
Required Tools	
➤ 3/8 inch drive ratchet	
➤ 3/8 inch drive 7/16 inch socket	
➤ Phillips screwdriver / electric screwdriver	
➤ Wire cutters	

2 Actuators

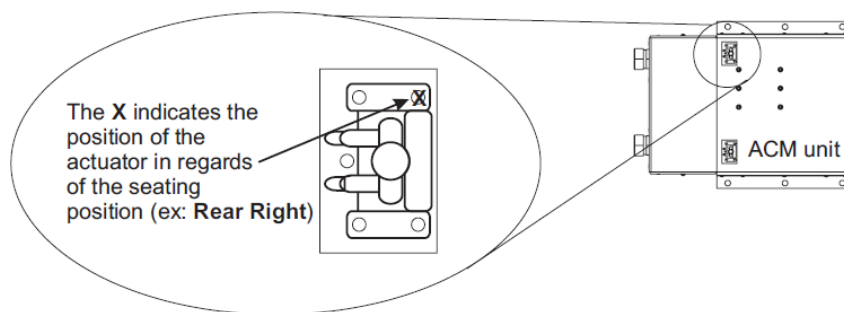
2.1 Setting the ACM

Set the ACM, with the actuators attached, in front of the installation you have chosen.



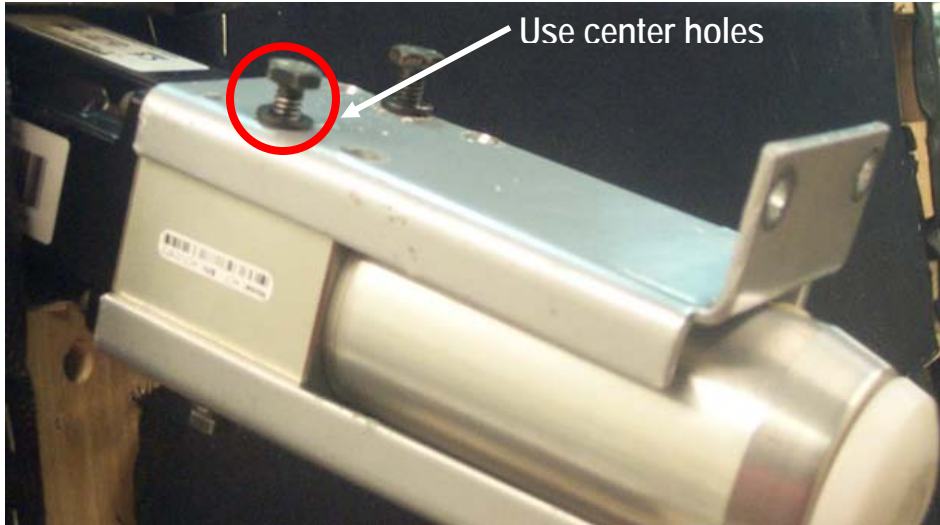
2.2 Front Right Actuator

Place the front right actuator (identified with a sticker on the ACM). Note that the right side of the installation is actually on your left, as you face the installation.



Secure the brackets to the actuator with the supplied bolts and lock washers through the **center hole**.

⚠ Do not over tighten the bolts. Damage to the actuator could occur.



Slide the actuator with its brackets back into the square hole of the installation and secure it with four (4) of the supplied bolts and lock washers, through the predrilled holes.

⚠ Do not over tighten the bolts. Damage to the tee nut could occur.

2.3 Front Left Actuator

Repeat previous steps for the left actuator. Note that the right side of the installation is actually on your left, as you face the installation.

2.4 Rear Actuator

Using the supplied bolts and lock washers, secure the rear actuator bracket to the rear of the installation through the predrilled holes.

⚠ Do not over tighten. Damage to the tee nut could occur.

Using the supplied bolts and lock washers, secure the rear actuator to the rear actuator bracket using the bottom set of holes.

⚠ Do not over tighten. Damage to the actuator could occur.


3 ACM

3.1 Placing the ACM

Place the ACM into the installation where it will not interfere with the any other mechanism.

3.2 Securing the ACM

Secure the ACM to the bottom panel of the installation using the supplied bolts and lock washers into the predrilled holes.

 **Do not over tighten.** Damage to the tee nut could occur.

4 Cables

WARNING! WHEN SECURING CABLES TO THE INSTALLATION, BE CAREFUL NOT TO DAMAGE THE ACTUATOR CABLES. ENSURE CABLES ARE SECURED IN A WAY THAT THEY CANNOT BE PINCHED BY ANY MOVING PARTS. THESE CABLES HAVE VERY HIGH VOLTAGE. IMPROPER HANDLING OR INSTALLATION COULD CAUSE SERIOUS INJURY OR DEATH.

Secure the actuator cables, using the supplied cable clips and screws.

5 Tests

5.1 Routing the Cables

Set the 3250i in its final position. Route the CAT5 and power cables from the back of the ACM (Actuator Control Module) ensuring they do not interfere, go under or near any of the actuators.

Route the CAT5 cable to the motion controller.



Connect the CAT5 cable to the motion controller, and the power cable to an electrical outlet.

5.2 Series IV-BD Motion Controller

Turn on the power on the motion controller. After it has booted, push the red button twice to enter the Demo mode.



The chair will cycle through test movements.

Please see the device user manual for further details regarding this application.

5.3 340C Motion Controller

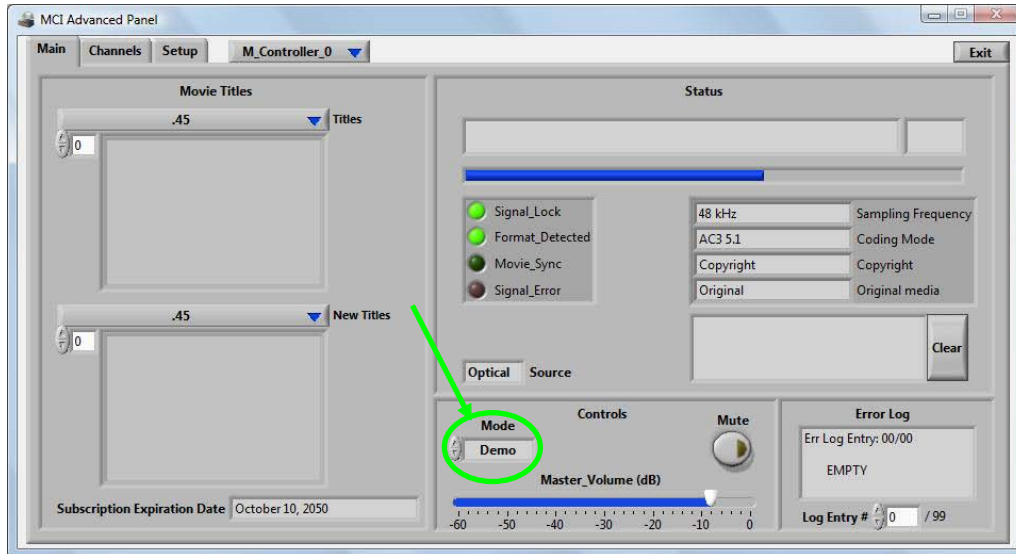
Turn the power on the motion controller. After it has booted, the red light will switch amber. Press the power button again and the motion controller will activate. Push the green button to access the main menu. Use the bottom arrow to scroll down to "Demo". Push the green button again to initiate the "Demo" mode.



The chair will cycle through test movements.

5.4 PC Motion Controller (MCI-4P or MCI-2P)

Power on your PC and launch the D-BOX Motion Controller Interface. In the Main menu, switch the Mode to “Demo.”



The chair will cycle through test movements.

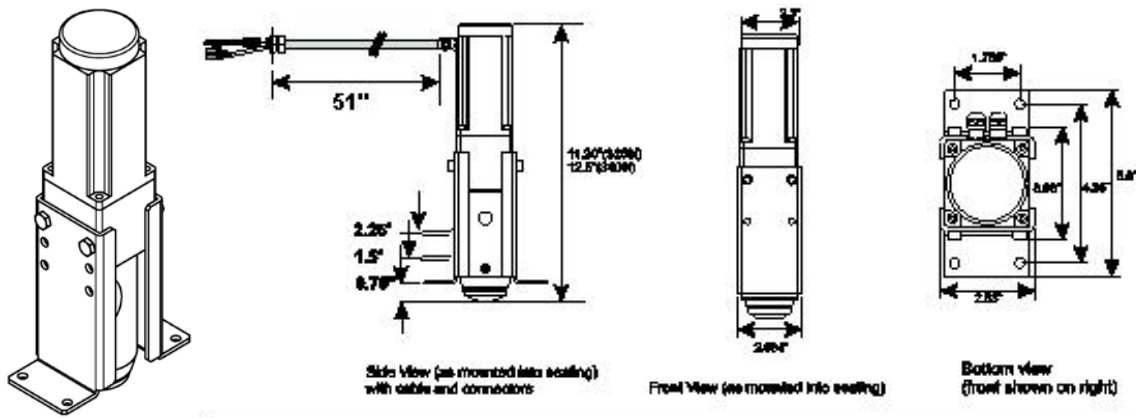
5.5 PC Motion Controller (KAI-1P)



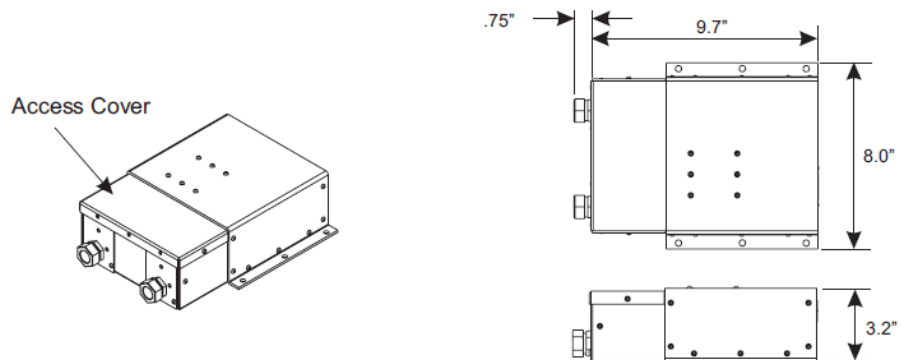
The KAI-1P device automatically controls one KineLink platform without user intervention.

6 Technical Drawings

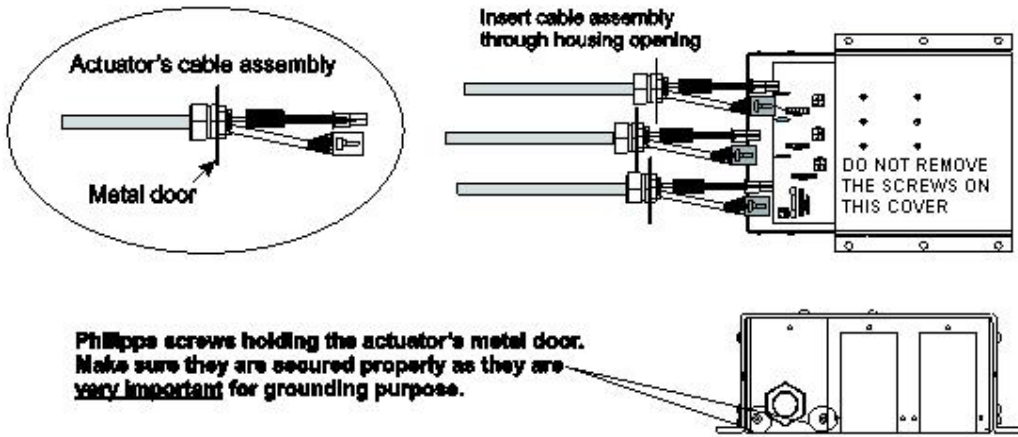
6.1 D-BOX 3250i Actuator Dimensions (.75" Bracket)



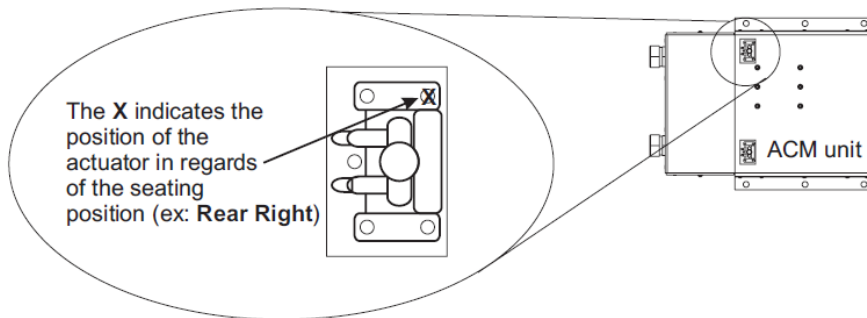
6.2 Actuator Control Module (ACM) Dimensions



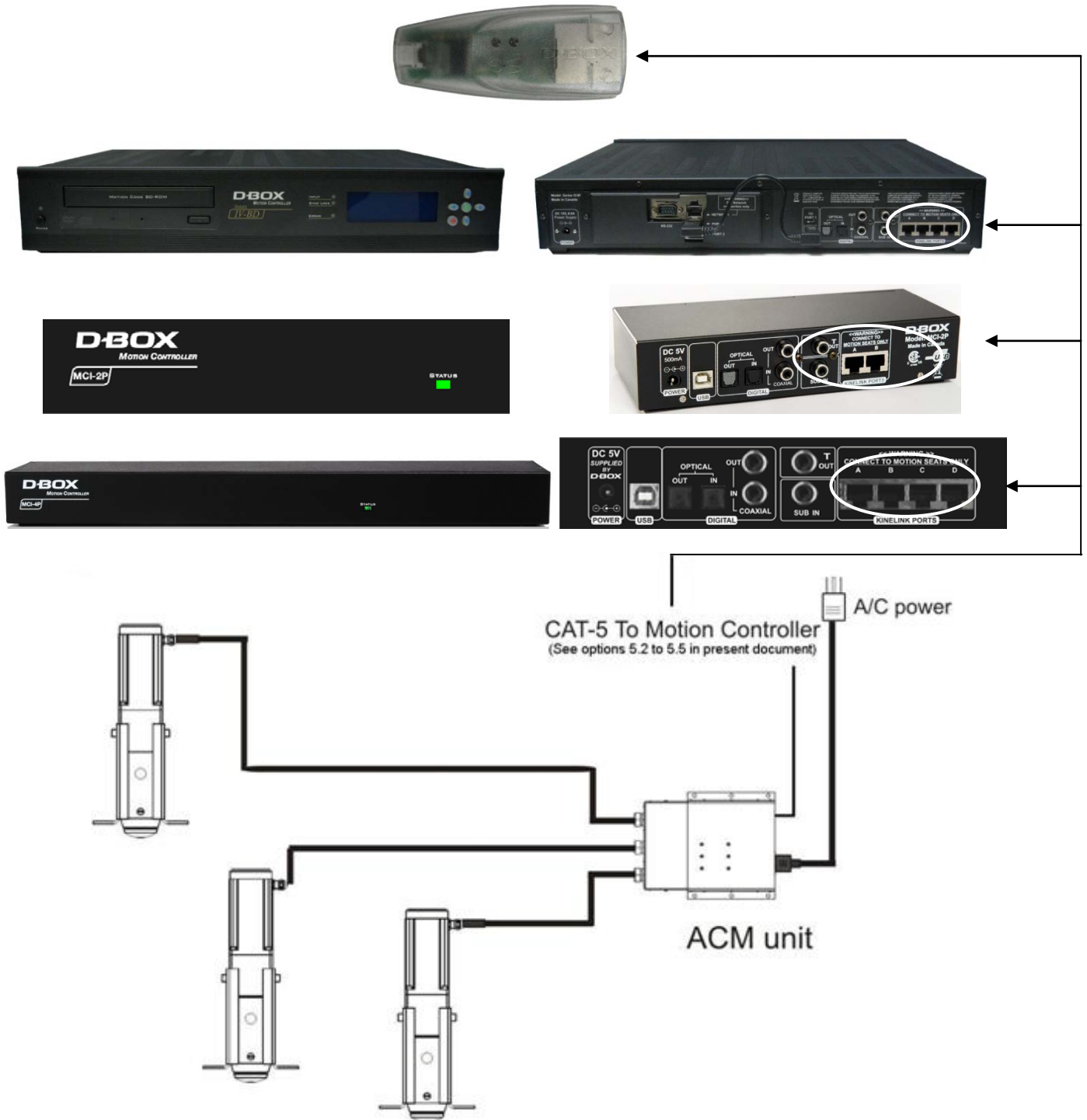
6.3 Connections to the ACM Unit



6.4 Connections to the ACM Unit



6.5 D-BOX 3250i Electrical diagram



Appendix 1

Installation of the ACM bracket

Step 1:
The mounting bracket needs to be fixed with two wood screws.

Step 2:
Make sure that the ACM unit is pushed all the way into the bracket channel.

Step 3:
Add two wood screws at the bottom of the ACM unit to securely fasten it.

