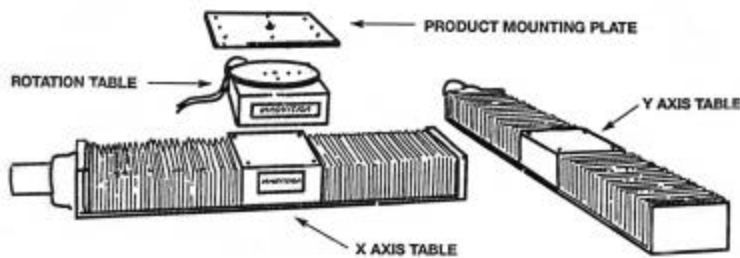


# **innovision<sup>®</sup>** **OPTICS**

## Mini Mover Motion Control Systems



## Setup and Operating instructions

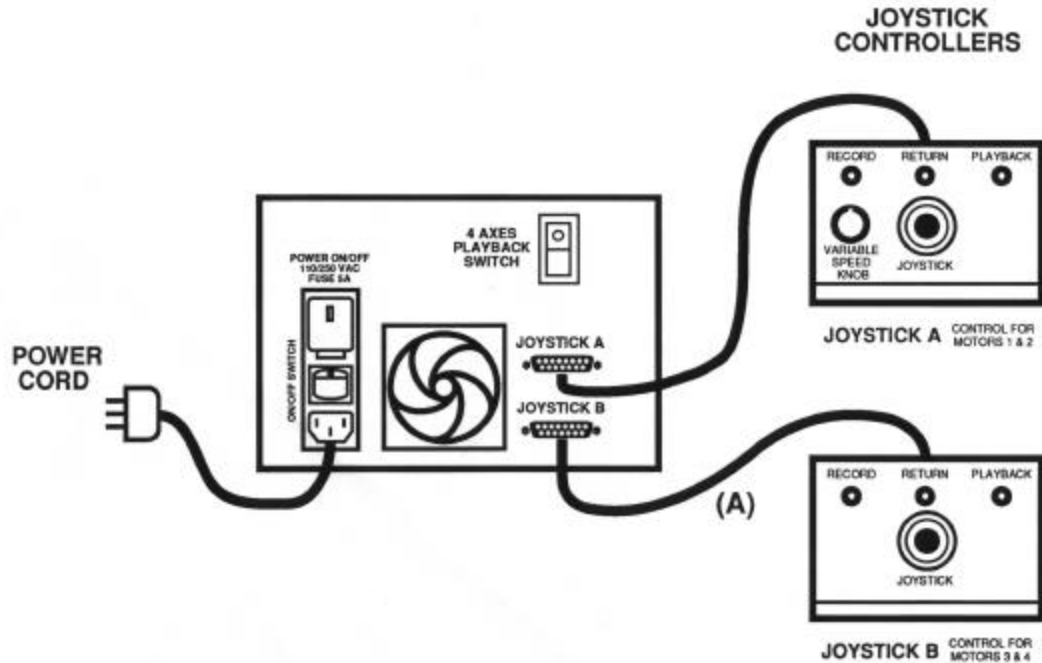
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# Setup Instructions

## Side View



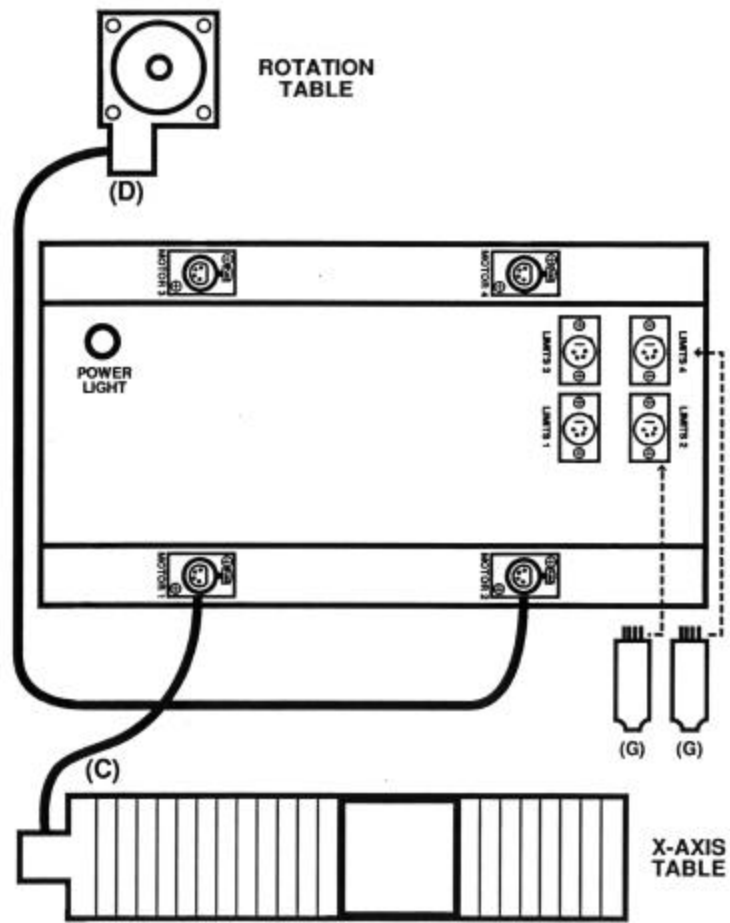
### SET UP

1. Connect all cables: Joysticks, limit plugs, motors and power supply. (both joysticks must be connected for proper operation)
2. Move the power switch to the ON position located on the end of the brain controller.
3. Wait 30 seconds before moving joysticks while the brain “boots up”
4. Joystick A and Joystick B work independently from each other in the RECORD, RETURN AND PLAYBACK modes. Each joystick controls 2 motors (two axes).
5. Joystick A controls motors #1 and #2. Joystick B controls motors #3 and #4.
6. Variable speed knob on Joystick A simultaneously controls speed for both joysticks.
7. Move joysticks in a north-south-east-west direction to move motion control devices. Move joysticks in a diagonal direction to move two axes at the same time.
8. When operating a linear table and rotation table, the operator has a choice of controlling both tables from one joystick. By using both joysticks, the operator may control one table from each joystick. Make sure the motors of each table are connected to the proper motor outputs on the power supply.

For technical assistance, please call 310-394-5510

# Wiring Diagram

## Top View

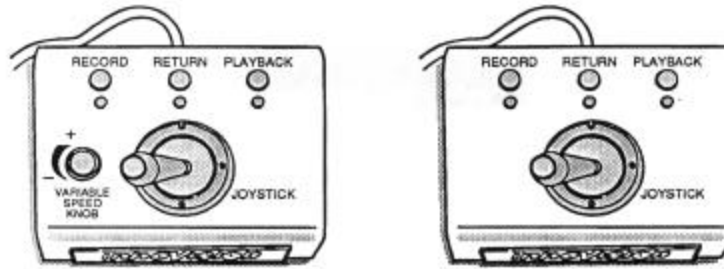


### SET UP

1. Connect all cables before applying power to the system.
2. Wait 30 seconds before moving joysticks while the brain “boots up”
3. Joystick A controls motors #1 and #2. Joystick B controls motors #3 and #4.
4. Variable speed knob on Joystick A simultaneously controls speed for both joysticks.
5. Move joysticks in a north-south-east-west direction to move motion control devices. Move joysticks in a diagonal direction to move two axes at the same time.
6. When operating a linear table and rotation table, the operator has a choice of controlling both tables from one joystick. By using both joysticks, the operator may control one table from each joystick. Make sure the motors of each table are connected to the proper motor outputs on the power supply.

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# Operating Instructions



**JOYSTICK A**

**JOYSTICK B**

## **RECORD MODES**

1. To RECORD motion on ONE joystick, press the RECORD button and the red light will go on. Any movement of the joystick will be recorded in memory continuously up to 10 minutes. Press the RECORD button again after the move is finished and the red light will go off. The recording will stop.
2. To RECORD motion on TWO joysticks simultaneously, press the RECORD button on each joystick separately and the red lights will go on. Any movement of the joysticks will be recorded in memory continuously up to 10 minutes. Press the RECORD buttons again after the move is finished and the red lights will go off. The recording will stop.
3. To RECORD motion on TWO joysticks separately to be played back simultaneously, RECORD the first move, RETURN that joystick, press RECORD on the second joystick and PLAYBACK on the first joystick. Press the RECORD button again on the second joystick after the move is finished and the recording will stop.

## **RETURN MODE**

4. Press the RETURN button, the yellow light will go on and the motion control device will return to the start point of the motion movement that was recorded.

## **PLAYBACK MODES**

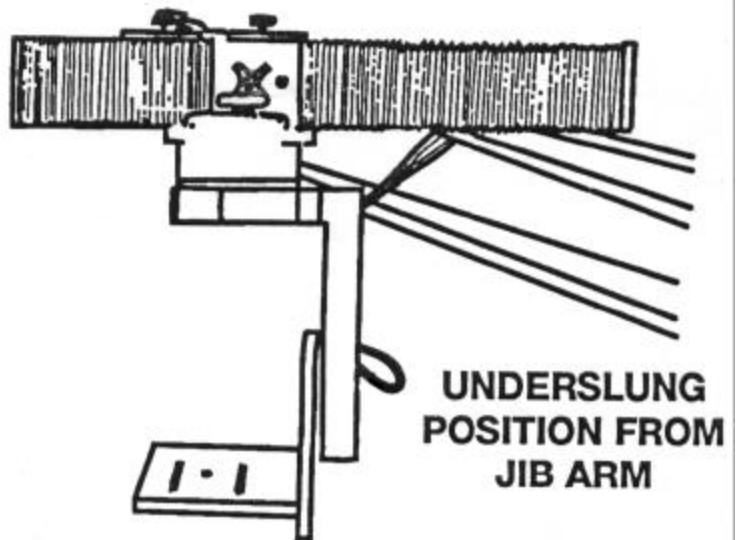
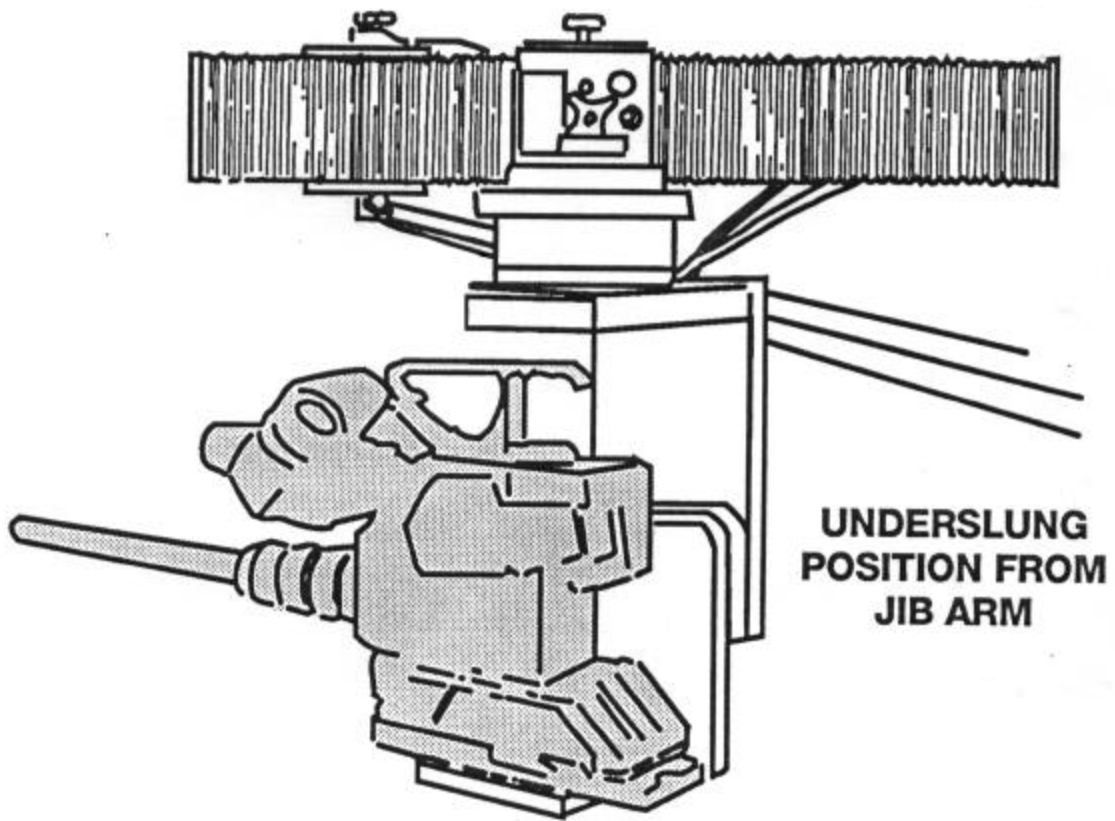
5. To PLAYBACK motion on ONE joystick, set the 4 AXIS PLAYBACK switch to OFF, press the PLAYBACK button on either joystick and the green light will go on. The recorded movement of the motion control device(s) will be repeated.
6. To PLAYBACK motion on TWO joysticks, set the 4 AXIS PLAYBACK switch to ON, press the PLAYBACK button on either joystick and the green lights will go on. The recorded movement of the motion control devices will be repeated.
7. While in 4 AXIS PLAYBACK mode, both joysticks must be in a RETURN state before PLAYBACK can begin.
8. To repeat your recorded move over and over, repeat steps 4 to 6.

## **NOTES**

9. The previously recorded motion control movements will be held in memory until the RECORD button (red light) is pressed. All memory will be erased if a new motion control movement is recorded or if the brain controller power is turned off.
10. Do not push buttons for a different mode while one mode is finishing its move.
11. While any of the modes are in operation, they can be stopped with another button push of the same mode.

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# Various Pan & Tilt Setups



For technical assistance, please call 310-394-5510

# Specifications

## 4" Pan & Tilt Head

Weight: 20Lbs  
Dimensions: 13"H x 5.5"W x 13"L  
Pan Range: 360°  
Tilt Range: 360°  
Load Capacity: 25 Lbs  
Speed : 90° per Second  
Features: Belt Drive and Worm drive construction, Micro Stepping motors.

## 32" Linear Table

Weight: 45Lbs  
Dimensions: 4"H x 6"W x 52"L  
Travel: 32"  
Load Capacity: 150 Lbs  
Speed : 4" per Second  
Features: Micro Stepping motors, Ballscrew Drive construction.

## 4-Axis Brain Controller

Weight: 16Lbs  
Dimensions: 7"H x 10"W x 16"L  
Power in: 110VAC 50-60Hz, 1.5A  
Power out: 50VDC, 2.5A per phase  
Memory records movements over 10 minutes in duration.  
Features: Real time manual Velocity control of all 4 axes.

## 6" Pan & Tilt Head

Weight: 30Lbs  
Dimensions: 15"H x 8"W x 13"L  
Pan Range: 360°  
Tilt Range: 360°  
Load Capacity: 65 Lbs  
Speed : 45° per Second  
Features: Belt Drive and Worm drive construction, Micro Stepping motors.

## 20" Linear Table

Weight: 45Lbs  
Dimensions: 4"H x 6"W x 40"L  
Travel: 24"  
Load Capacity: 125 Lbs  
Speed : 4" per Second  
Features: Micro Stepping motors, Ballscrew Drive construction.

## Dual Joysticks

Weight: 1.5Lbs  
Dimensions: 6"H x 7"W x 6"L  
Controls: Variable Speed, 2 -Axis movement, Record, Home position, Playback.  
Each axis speed is proportional to the joystick angle to allow low or high speed operation.

## Remote Linear Arm

Weight: 45Lbs  
Dimensions: 4"H x 6"W x 52"L  
Travel: 32"  
Load Capacity: 75 Lbs  
Speed : 4" per Second  
Features: Micro Stepping motors, Ballscrew Drive construction.

## 8" Linear Table

Weight: 45Lbs  
Dimensions: 4"H x 6"W x 28"L  
Travel: 8"  
Load Capacity: 100 Lbs  
Speed : 4" per Second  
Features: Micro Stepping motors, Ballscrew Drive construction.

## 2-Axis Controller

Weight: 14Lbs  
Dimensions: 5"H x 9"W x 14"L  
Controls: 2-Axis movement, Direction reverse switches.  
Power in: 85-230VAC 50-60Hz  
Power out: 48VDC, 2A per phase  
Each axis speed is proportional to the joystick angle to allow low or high speed operation.

## 6" Rotation Table

Weight: 13Lbs  
Dimensions: 13"H x 5.5"W x 13"L  
Rotation Range: 360° Continuous  
Load Capacity: 100 Lbs  
Speed : 45° per Second  
Features: Worm drive construction, Micro Stepping motors, Aluminum work surface with threaded inserts.

For technical assistance, please call 310-394-5510