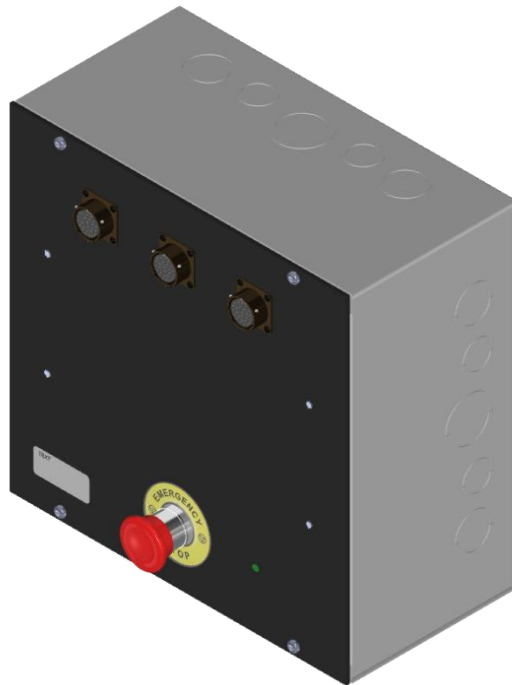


# Linkable P26 Flybox

Flyboxes

## USER MANUAL

Flybox, XXCH P26,  
E-Stop,  
Linkable, HXW XD  
A-26-001-XXXX



This User Manual is intended for professional use only.  
Read this entire document before installing operating or using  
this Linkable P26 Flybox.

■ ORIGINAL INSTRUCTIONS

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Part Number: A-26-001 Linkable P26 Flybox-UM  
Release: 03-2024

Original Instructions  
Flyboxes  
Rev ORG  
Released 03-2024

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Other functions not described in this document may be available. However, this fact shall not constitute an obligation to  
supply such functions with a new product or when servicing.

We have checked that the contents of this document correspond to the device described.  
There may be discrepancies nevertheless, and no guarantee can be given that they are completely identical.  
The information contained in this document is reviewed regularly and any necessary changes will be included in the next  
edition.

We welcome suggestions for improvement.

Motion Laboratories Inc. intends this document, whether printed or electronic, to be provided in its entirety.



**1.800.227.6784** **FOR MORE INFORMATION**  
<http://www.motionlabs.com/>  
520 Furnace Dock Road . Cortlandt Manor, New York 10567 . Phone: (914)788-8877 Fax: (914)788-8868

## FOREWORD

### • USER DOCUMENTATION



#### **WARNING**

Before installing and commissioning the Permanently installed control system, all safety instructions and warnings must be read carefully including all the warning labels attached to the equipment. Make sure that the warning labels are kept in legible condition and replace missing or damaged labels.

### REGIONAL CONTACTS

#### **Motion Laboratories Inc.**

520 Furnace Dock Road,  
Cortlandt Manor,  
NY 10567  
USA

**Tel:** 1.800.227.6784

**Tel:** +1 (914) 788-8877

**Fax:** +1 (914) 788-8866

[www.motionlabs.com](http://www.motionlabs.com)

[Info@motionlabs.com](mailto:Info@motionlabs.com)

### • CENTRAL TECHNICAL SUPPORT

#### **Motion Laboratories Inc.**

520 Furnace Dock Road,  
Cortlandt Manor,  
NY 10567  
USA

**Tel:** 1.800.227.6784

**Tel:** +1 (914) 788-8877

**Fax:** +1 (914) 788-8866

[www.motionlabs.com](http://www.motionlabs.com)

[Info@motionlabs.com](mailto:Info@motionlabs.com)

### • USE FOR INTENDED PURPOSE ONLY

The equipment may be used only for the application stated in the manual and only in conjunction with devices and components recommended and authorized by Motion Laboratories Inc.



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520 Furnace Dock Road . Cortlandt Manor, New York 10567 . Phone: (914)788-8877 Fax: (914)788-8866

Linkable P26 Flybox - User Manual - Forward

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## WARNINGS

### WARNINGS

#### Symbols



#### **DANGER**

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



#### **WARNING**

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



#### **CAUTION**

Used with the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.  
Used without a safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

### Don'ts

Do NOT allow lifting operations unless carried out by a competent person.

Do NOT operate hoists without a clear view of the load or reliable communication with an observer.

Do NOT operate hoists unless the hazard zone has been cleared.

Do NOT operate the system until a full risk assessment for your application has been completed.

Do NOT operate the system until all safety conditions have been assessed and only in emergency situations or initial setup.

Do NOT operate the system until the Emergency stop system has been connected and tested.

Do NOT operate the system unless all operators and observers have been informed of the location of all Emergency Stop (E-stop) switches.

## SAFETY INSTRUCTION

### General Safety Information

This manual must be kept by the person in charge in a suitable place and ready for consultation, in optimal conditions. Should it be lost or damaged, the manual can easily be retrieved on the manufacturer's website: [www.motionlabs.com](http://www.motionlabs.com).

The manufacturer retains all material and intellectual rights on the manual, and restricts its duplication, even partial, for any commercial use.



#### CAUTION

All marking data should not be removed by grinding, abrasion, or peeling, whether accidental or not. Any unit that does not carry the proper identification references should be removed from service until those references can be replaced.



#### WARNING

This equipment contains dangerous voltages and controls potentially dangerous rotating mechanical parts. Non-compliance with or failure to follow the instructions contained in this manual can result in loss of life, severe personal injury, or serious damage to property.

### Electrical Safety Information

Permanently installed control systems operate at high voltages. There are no user serviceable parts inside the enclosure.



#### DANGER

Risk of electric shock. Disconnect the power supply across all poles before opening the equipment for access. Repairing equipment must only be carried out by trained NA service technicians familiar with technical specifications contained in this unit.

To ensure proper operation and dependability, any defective electrical component must be replaced using parts contained in the relevant spare parts list.

### Operational Safety Information

Permanently installed control systems have setup and configuration for safe and reliable operation. It is imperative that the user read and understand the instructions contained in the manual before attempting to operate.



#### DANGER

Manual Control will by-pass some safety features. Care must be taken to assess the situation carefully before operating in these modes.

This Flybox uses industry standard color codes. Red mushroom with yellow backing is for Emergency stop buttons.

### OVERVIEW

#### Product Definition

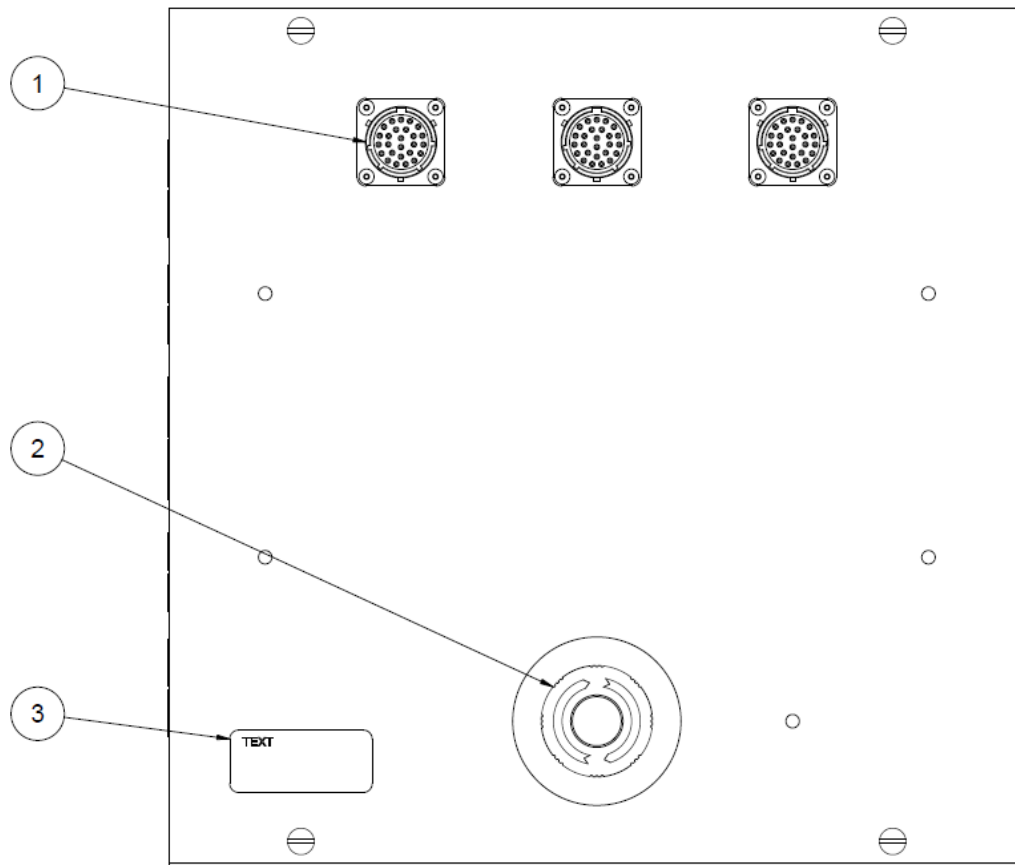
The Linkable P26 Flybox identified in this manual is a component in a permanently installed Motion Laboratories control system. It enables the system to have more than one secondary point of control. Each Linkable P26 Flybox offers an additional secondary point of control. These boxes are only used for secondary control points. In all these control systems there is one primary point of control, usually on the control cabinet. These Flyboxes may not be used in Soft Limit systems as the Touch Screen Operating System operates as the secondary point of control.

#### Product Performance

The Linkable P26 Flybox identified in this manual includes the following features:

- Connection for the Multi-Hoist Hand Held Remote.
- Ability to have multiple secondary points of control.

## Front Panel



1. **Female P26 Connector.** For connection of the Multi-hoist Hand Held Remote.
2. **Emergency Stop Button.** Red mushroom button that, when pressed, activates an E-stop.
3. **Label.** Part number and serial number information.

## TECHNICAL SPECIFICATIONS

### Part Numbers

| PART NUMBER CONFIGURATION              |   |                                   |   |  |   |
|----------------------------------------|---|-----------------------------------|---|-------------------------------------------------------------------------------------|---|
| <b>GROUP</b><br>A = Top Level Assembly | - | <b>CATEGORY</b><br>26 = Fly Boxes | - | <b>SUBDIVISION</b><br>001 = Low Voltage Control                                     | - |
|                                        |   |                                   |   | <b>ID NUMBER</b><br>xxxx = Iteration                                                |   |

| PART NUMBER TABLE |                  |                                             |  |  |
|-------------------|------------------|---------------------------------------------|-------------------------------------------------------------------------------------|--|
| Part Number       | Type             | Description                                 |                                                                                     |  |
| A-26-001-3004     | LINKABLE FLY BOX | Flybox, 16CH P26, E-Stop, Linkable, 12X12X6 |                                                                                     |  |
| A-26-001-4002     | LINKABLE FLY BOX | Flybox, 24CH P26, E-Stop, Linkable, 12X12X6 |                                                                                     |  |

NOTE: Other sizes available upon request.

### System Capacity

The Linkable P26 Flybox can be configured from four to thirty two channels in the standard MLI increments of: 4, 6, 8, 12, 16, 24, 32.

### Electrical Specifications

Supply Voltage..... 14 VDC,  
Supplied by the low voltage control circuit

### Physical Specifications

Enclosure..... Mild steel, screw-cover enclosure  
with knockouts, ANSI 61 gray  
Front Panel..... .125" Aluminum, black powder coat finish

### Environmental Specifications

Indoor Use Only  
NEMA..... NEMA Type 1  
Operating Temperature Range..... 0°C to 60°C

## Cable Specifications

### • 26 PIN REMOTE CABLE

The 26 pin Remote Cable uses 26C 22AWG cable with Soriau 26pin ¼ turn connectors. Cable is a MLI product, part number 1500-50-00-02-002. Remote cable is also available in black.

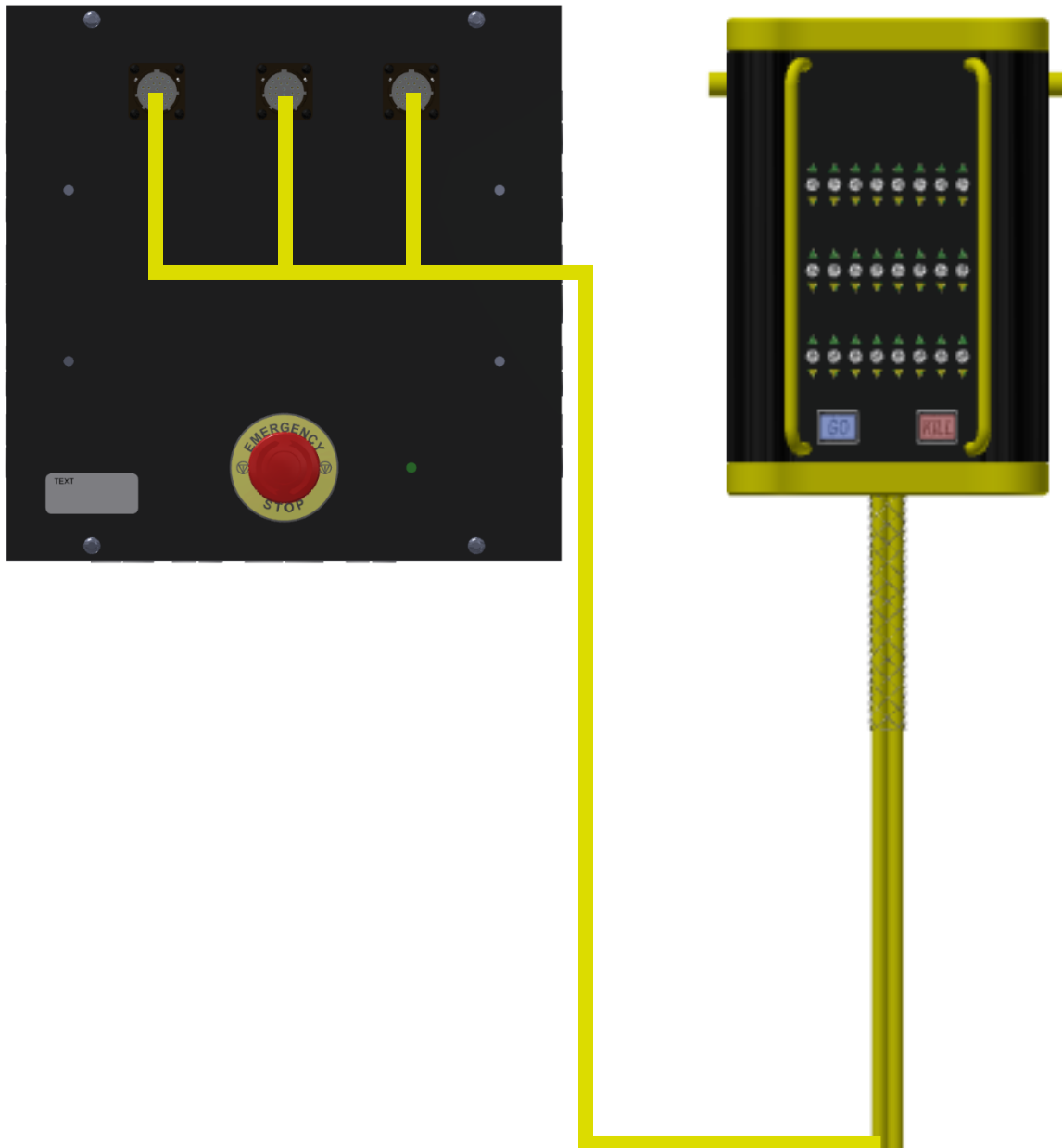
| PART NUMBER TABLE  |              |                                                       |
|-------------------------------------------------------------------------------------------------------|--------------|-------------------------------------------------------|
| Part Number                                                                                           | Type         | Description                                           |
| 1400-05-39-07-001                                                                                     | REMOTE CABLE | Cable, Multi Pin, Custom, 22/26, Yellow, 10ft, 26Pin  |
| 1400-05-39-04-001                                                                                     | REMOTE CABLE | Cable, Multi Pin, Custom, 22/26, Yellow, 25ft, 26Pin  |
| 1400-05-39-03-001                                                                                     | REMOTE CABLE | Cable, Multi Pin, Custom, 22/26, Yellow, 50ft, 26Pin  |
| 1400-05-39-01-001                                                                                     | REMOTE CABLE | Cable, Multi Pin, Custom, 22/26, Yellow, 100ft, 26Pin |
| 1400-05-39-08-001                                                                                     | REMOTE CABLE | Cable, Multi Pin, Custom, 22/26, Yellow, 125ft, 26Pin |
| 1400-05-39-09-001                                                                                     | REMOTE CABLE | Cable, Multi Pin, Custom, 22/26, Yellow, 150ft, 26Pin |

| 26 PIN REMOTE CABLE  |             |
|--------------------------------------------------------------------------------------------------------|-------------|
| Pin                                                                                                    | Function    |
| A                                                                                                      | 1 UP        |
| B                                                                                                      | 1 DOWN      |
| C                                                                                                      | 2 UP        |
| D                                                                                                      | 2 DOWN      |
| E                                                                                                      | 3 UP        |
| F                                                                                                      | 3 DOWN      |
| G                                                                                                      | 4 UP        |
| H                                                                                                      | 4 DOWN      |
| J                                                                                                      | 5 UP        |
| K                                                                                                      | 5 DOWN      |
| L                                                                                                      | 6 UP        |
| M                                                                                                      | 6 DOWN      |
| N                                                                                                      | 7 UP        |
| O                                                                                                      | 7 DOWN      |
| P                                                                                                      | 8 UP        |
| Q                                                                                                      | 8 DOWN      |
| T                                                                                                      | KILL        |
| U                                                                                                      | GO          |
| V                                                                                                      | 12VDC+      |
| W                                                                                                      | 0VDC        |
| b                                                                                                      | Jumper to c |
| c                                                                                                      | Jumper to b |

## INSTALLATION

### Multi-hoist Hand Held Remote Connections

This section outlines how the multi-hoist hand held remote connects to the Linkable P26 Flybox.



## OPERATION

In a standard Motion Laboratories permanently installed control system there are normally two points of control for the system, a primary point of control and a secondary point of control. The primary point of control will always take priority over any secondary point of control. For example, if you had a multi-hoist hand held remote connected to the primary control located on your control cabinet and a person plugs another multi-hoist hand held remote into a secondary point of control the primary would still have full control of the system and the secondary would not operate the system. In the inverse scenario, if a secondary point of control was being used and a person plugs into the primary point of control, the primary would then override the secondary control. Only one point of control can be active at a time in this system.

Most likely a system utilizing the Linkable P26 Fly box will have multiple units in the system. The secondary control priority works on a first come first serve principle. If there is a multi-hoist hand held plugged into a Linkable P26 Fly box and a person plugs in another multi-hoist hand held into a different Linkable P26 Fly box nothing would change as the system has served the first connection. The first connection would have to be removed before plugging into another Linkable P26 Fly box to gain control.

Here are some basic rules of operation:

- When both the primary and secondary have multi-hoist hand helds plugged into them, if you disconnect the primary, the secondary point of control will become active.
- If one Linkable P26 Fly box is connected to a multi-hoist hand held, plugging into another will not override it.
- If two Linkable P26 Fly boxes are connected to multi-hoist hand helds, unplugging the active secondary connection will not engage the other connected secondary.
- For the intended Linkable P26 Fly box to engage, no other multi-hoist hand held can be plugged into other Linkable P26 Fly boxes.

## DEFINITIONS

---

### DEFINITIONS

**Primary Control** – A control point that always engages when connected, even if a secondary point of control is also connected.

**Secondary Control** – A control point that engages when connected, only if a primary point of control is a not connected.

### RELATED PRODUCT LINE COMPONENTS

Linkable P26 Flyboxes are a part of a larger permanently installed control system. These larger systems usually consist of:

- Control Cabinets of the 1225-B Series.
- Power Cabinets of the 1225-A Series.
- Other Flyboxes of the A-26 Series.
  - a. A-26-001 Low Voltage Control
  - b. A-26-002 Emergency Stop
  - c. A-26-003 Data
  - d. A-26-004 Operator Interface
  - e. A-26-201 Hoist Power and Control
- Multi-Hoist Hand Held Remotes detailed in Technical Specifications.

### MAINTENANCE

Maintenance and inspections should be carried out by competent personnel.

Information on general preventative maintenance may be found at: [www.motionlabs.com](http://www.motionlabs.com). Check all components of the system prior to operation.



### SPARE PARTS AND DISPOSAL

#### Spare Parts

Only original spare parts may be used. Motion Laboratories Inc. cannot be held responsible for failures and breakdowns caused by the use of non-OEM or incorrect spare parts.

In case of necessity, please contact:

#### **Motion Laboratories Inc.**

520 Furnace Dock Road, Cortlandt Manor, NY 10567, USA

**TEL:** 800.277.6784 | **TEL:** +1 (914) 788-8877 | **FAX:** +1 (914) 788-8866

[www.motionlabs.com](http://www.motionlabs.com)

#### Disposal

Flyboxes should be scrapped by cutting, so that it can no longer be used, whether at the end of its expected lifetime.

Upon demolition, plastic parts must be separated from electric components and must be sent to selective collections according to regulations in force.

With regard to metal elements and components, all materials shall be separated by type such as ferrous materials or aluminum and shipped for recycling.

Separate and recycle all materials according to local guidelines. Whatever cannot be recycled should be disposed of as landfill waste.

