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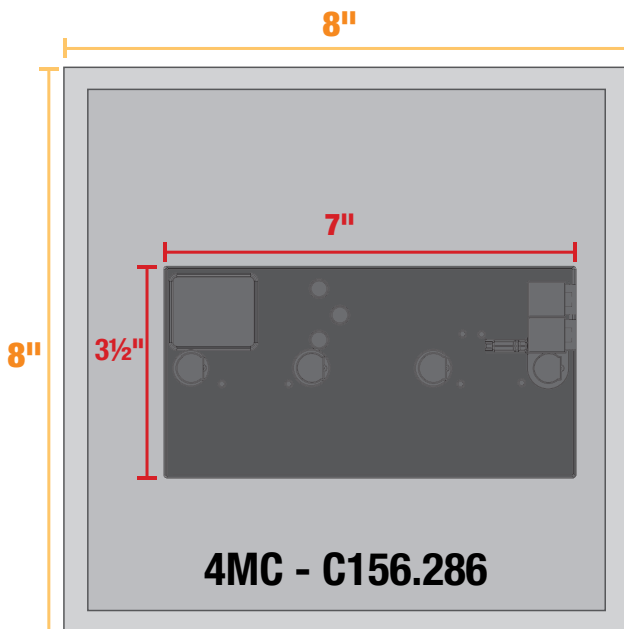
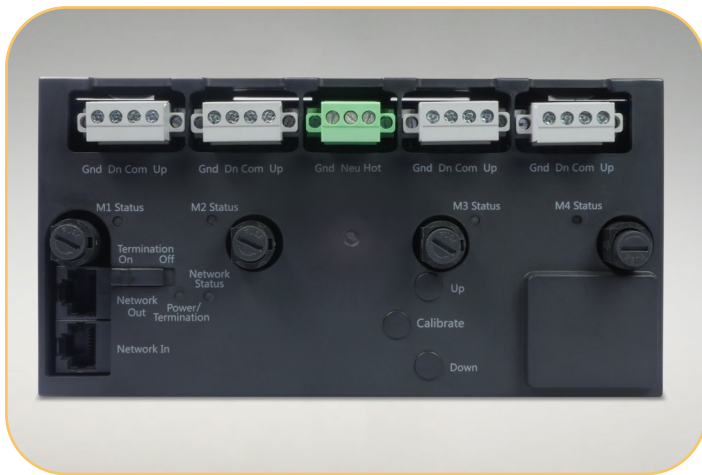
IntelliFlex I/O™  
Component  
Instructions

### Overview

The 4MC is a 4 motor controller that can be used with motorized roller shades, Venetian blinds and louver systems. Each port is independently operated and can be configured to respond to wall switches, RF remotes and signals from 3rd party systems.

### Features

- Robust RS-485 network with built in network termination
- On-board buttons for testing and configuring motors
- Pluggable terminal blocks for easier wiring
- Comes packaged in a metal enclosure ready for installation



**4MC - C156.286**

4MC w/Enclosure  
**C156.286SA**

### Technical Specifications - **Single Motor Controller**

Input Power - **110-230VAC @ 50 / 60Hz**

Output Power - **Maximum 4A @ Input Voltage**

Fuse - **5x20mm 250V Slow Blow 125% of Load**

Material - **ABS plastic**

Operating Temp - **32 - 140 ° F (0 - 60° C)**

Dimensions - **3 1/2" x 7" x 1 7/8" (89 x 178 x 48mm)**

Enclosure - **8" x 8" X 4" (203 x 203 x 102mm)**

Shipping Weight - **2 lb. 0.9 kg**

Network Bus - **RS-485**

Indoor Use Only

Section 1 - Overview

4MC - Default Settings:

Shade Type: Roller Shade

To modify these default settings, the MLT Motor Limit Tool (C202.060) is required. (see section 3)

Section 1.1 - On-board button control

UP BUTTON  
Moves motor UP until released.



DOWN BUTTON  
Moves motor DOWN until released.



CALIBRATE BUTTON



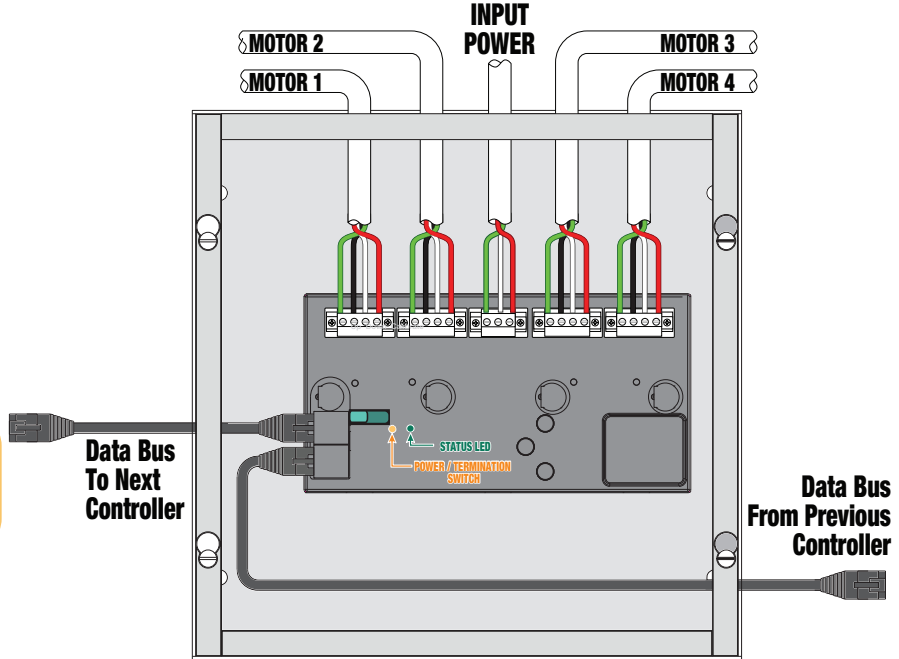
**Calibrate All Motors:**  
Hold for 7 seconds to calibrate all motors.




During calibration, motors will cycle once to determine move times.  
Motors must be calibrated before they can be operated by other devices on the network.

TERMINATION SWITCH



The TERMINATION SWITCH should be in the ON position if 4MC is at the end of the network bus, otherwise it should be OFF.



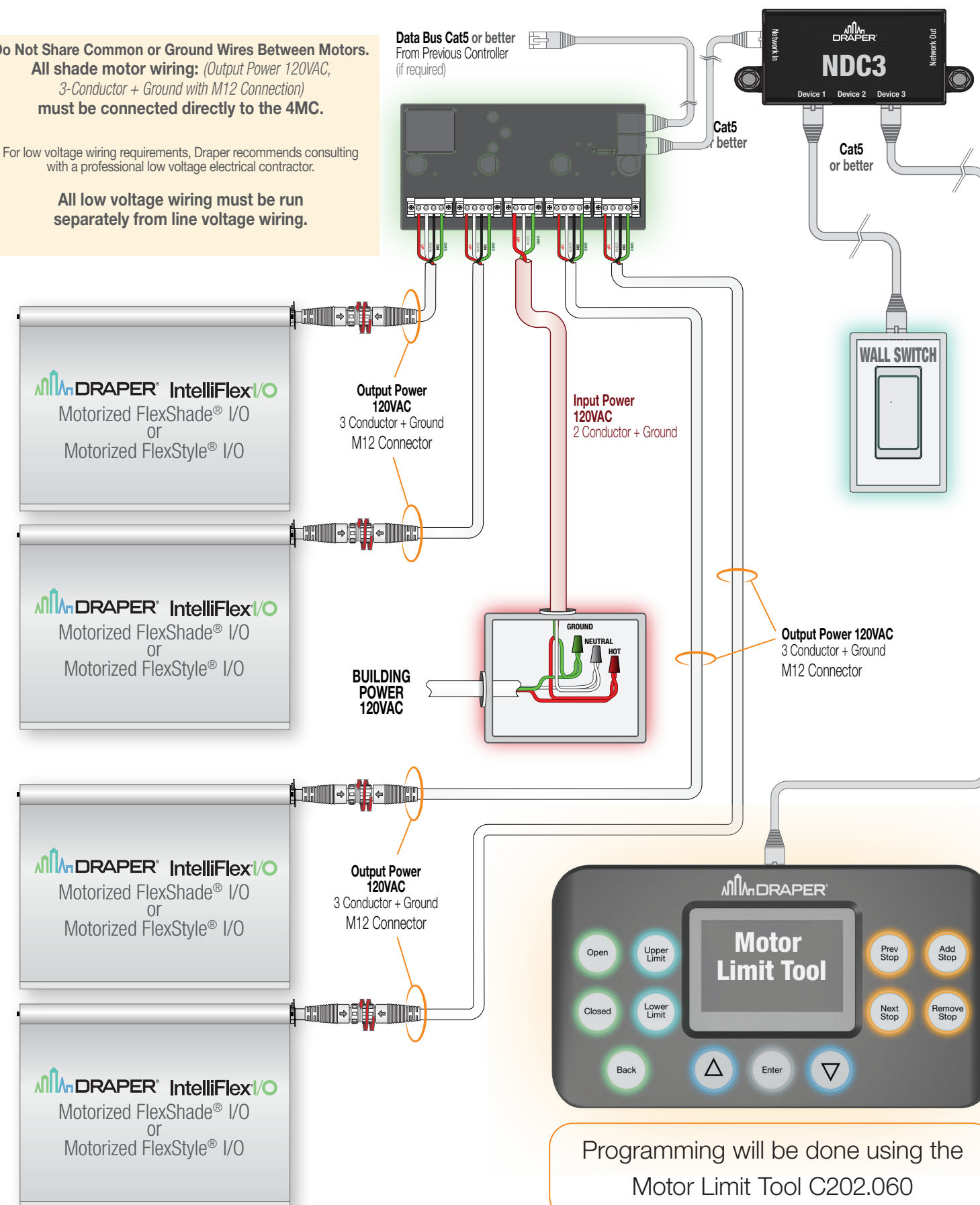
LED NAME	LED COLOR	DESCRIPTION
POWER TERMINATION		POWER TO DEVICES
		NETWORK TERMINATION HAS BEEN SET ON
NETWORK STATUS		COMMUNICATION ON NETWORK Blink Pattern shows TOTAL number of devices on network. Short Blink = 1 Device Long Blink = 10 Devices

Section 2 - Wiring

**Do Not Share Common or Ground Wires Between Motors.**  
All shade motor wiring: (Output Power 120VAC, 3-Conductor + Ground with M12 Connection) must be connected directly to the 4MC.

For low voltage wiring requirements, Draper recommends consulting with a professional low voltage electrical contractor.

All low voltage wiring must be run separately from line voltage wiring.



Programming will be done using the Motor Limit Tool C202.060

Section 3 - Programming Motor Settings with Motor Limit Tool

Section 3.1 - Identify/Select Motor

1. From MLT main menu, select MOTOR SETTINGS then select SELECT MOTOR.
2. Choose desired motor from the list. Motor will identify by jogging once highlighted.
3. Selecting highlighted motor will enter into motor configuration screen.

```

MLT SCREEN
Select Motor
>183027 Motor 1
 263944 Motor 1
 263944 Motor 2
 263944 Motor 3
 263944 Motor 4
    
```

Section 3.2 - Motor Configuration

Motor configuration screen is used to configure all parameters for the motor as detailed in the following sections.

Section 3.2.1 Renaming Motor

Renaming the motor allows easier identification during programming.

1. Select RENAME from Motor Configuration Screen
2. Press ENTER to begin editing motor name.
3. The base name will be highlighted. Use THE UP/DOWN ARROWS to change the base name and then press ENTER to confirm.

Possible base names: (Motor, North, South, East, West, Floor, Room, NONE)

4. The motor number will then be highlighted. Use the Up/Down arrows to change the motor number and then press ENTER to confirm.
5. The motor extension will then be highlighted. Use the Up/Down arrows to change the value and then predd ENTER to confirm.
6. Select CONFIRM to save changes or press the BACK button to cancel.

```

MLT SCREEN
183027 Motor 1
>Rename
Roller Shade
Uncalibrated
Normal Dir
No Preset Stops
Set Groups
Copy Settings
Paste Settings
Factory Reset
    
```

```

Rename Motor
183027 Motor 1
>Motor 1
Confirm
    
```

Section 3.2.2 Shade Type

By default the 4MC will operate as a Roller Shade.

Select this option from the motor configuration screen to change motor type to Venetian Blind or Louver.

Section 3.2.3 Motor Calibration

Motor must be calibrated before it will operate from other devices on the network.

Calibration can be done in two ways:

Auto Calibrate-

Select this option to automatically calibrate the motor.

The motor will run cycle up/down to determine the run times.

Manual calibration

Used if auto calibration can not be done, manual calibration can be done by entering the OPEN/CLOSE TIMES.

```

MLT SCREEN
183027 Motor 1
>Auto Calibrate
Open Time          0.0 s
Close Time         0.0 s
    
```

Section 3 - Programming Motor Settings with Motor Limit Tool (Continued)

Section 3.2.4 Motor Direction

Motor polarity can be reversed without rewiring.

1. Select NORMAL DIR from motor configuration screen to change this option.

Section 3.2.5 Preset Stops

64 Preset stops can be programmed into the 4MC.

Setting equally spaced preset stops

1. Select PRESET STOPS from the motor configuration screen, then select the # of equally based stopping points.

Setting Custom Preset Stops

1. Setting Custom preset stops (mullion alignment). Move the shade to the desired stopping point. Use the ADD STOP button to set a preset at this custom position.

```

MLT SCREEN
183027 Motor 1
>4 Preset Stops
Confirm
20% 40% 60% 80%
    
```

Section 3.2.6 Set Groups

4MC motor can be configured to respond to any of the 64 global groups available via the MLT.

1. Select SET GROUPS from motor configuration screen.
2. Check the box for all groups this motor should be included in.

*\* Please Note- Shade Groups that share the same name will respond regardless of the location in the network. (example: if a Shade Group on Floor 1 and a Shade Group on Floor 2 are both named "Group 1", both Shade Groups will respond to commands sent to Group 1.)*

```

MLT SCREEN
1MC-1830278
>Group      Master
Priority    Normal
Profile    Standard
Override Time
None
Factory Reset
    
```

Section 3.2.7 Copy/Paste Settings

Motor configuration parameters can be copied from 1MC and pasted to any other 1MC or 4MC on the network.

1. Select COPY SETTINGS.
2. Select PASTE SETTINGS to apply previously copied configuration to selected motor.

Section 3.2.8 Factory Reset

1. Select FACTORY RESET from the motor configuration screen to restore the 4MC to factory default settings.

This reset can be done at one of 3 levels:

1. **Clear Presets:** Erases preset stopping points from 4MC.
2. **Clear Groups:** Erases group settings from 4MC.
3. **Clear All:** Restores 4MC to factory default settings.

```

MLT SCREEN
Factory Reset
>Clear Presets
Clear Groups
Clear All
    
```