

SCAN QR FOR
ACCESS to ALL



Overview

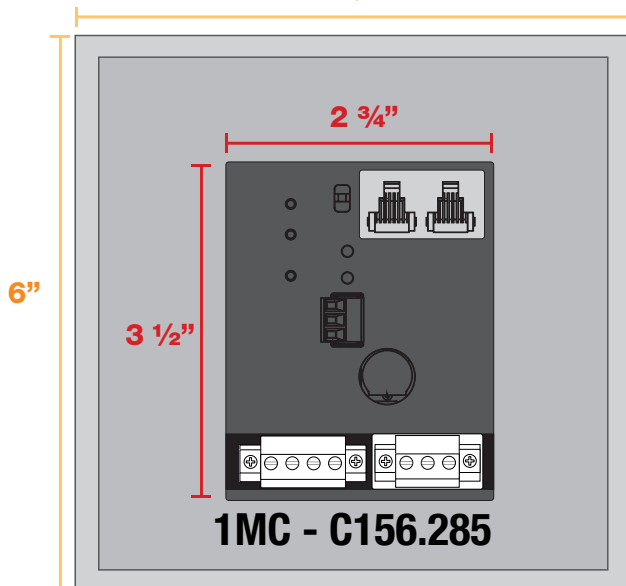
The 1MC is a single motor controller that can be used with motorized roller shades, Venetian blinds and louver systems. The 1MC can be used stand alone or part of a network. Even when networked, each 1MC can be independently operated and can be configured to respond to wall switches, RF remotes and signals from 3rd party systems. An on-board contact closure interface can be used as a local control for both networked and stand alone operation.

Features

- **Robust RS-485 network with built in network termination**
- **On-board buttons for testing and calibrating motors**
- **Pluggable terminal blocks for easier wiring**
- **On-board contact closure terminal connection for local control**
- **Comes packaged in a metal enclosure ready for installation (SA Only)**



6"



1MC - C156.285

**1MC w/Enclosure
C156.285SA**

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 - **2 3/4" x 3 1/2" x 2 1/8" (70 x 90 x 54mm)**

Enclosure - **6" x 6" X 4" (152 x 152 x 102mm)**

Shipping Weight - **1 lb. 0.45 kg**


Network Bus - **RS-485**

Indoor Use Only

Section 1 - Overview

Section 1.1 - On-board button control

UP BUTTON
Moves motor UP until released.



DOWN BUTTON
Moves motor DOWN until released.



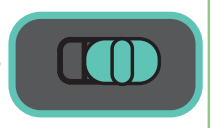
CALIBRATE BUTTON



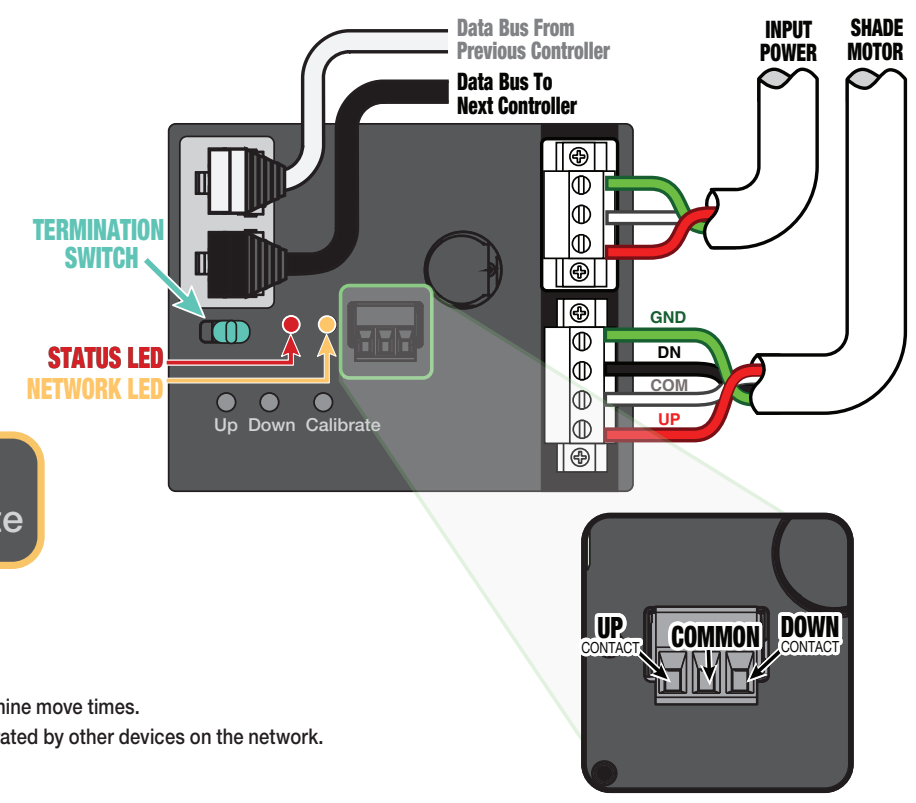
Calibrate All Motors:
Hold for 7 seconds to calibrate all motors.
During calibration, motors will cycle once to determine move times.
Motors must be calibrated before they can be operated by other devices on the network.

TERMINATION SWITCH

The TERMINATION SWITCH should be in the ON position if 1MC is at the end of the network bus, otherwise it should be OFF.



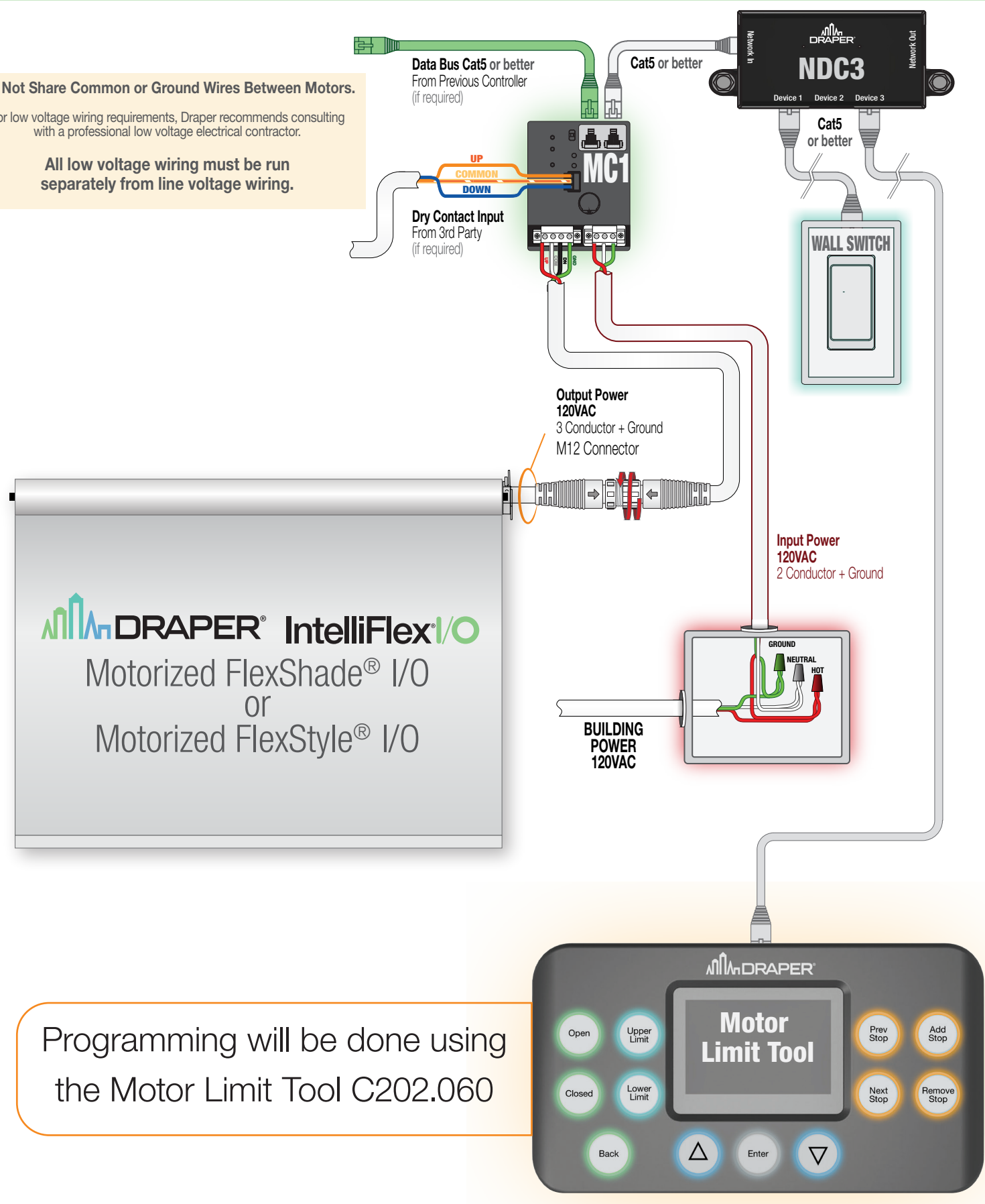
1MC - Default Settings:
1. Shade Type: Roller Shade
2. Contact Closure Control
• Master control (all networked motors)
• Standard Profile #1 (see section 4)
To modify these default settings, the MLT Motor Limit Tool (C202.060) is required. (see section 3)



LED NAME	LED COLOR	DESCRIPTION
STATUS LED	Green	POWER TO DEVICES
STATUS LED	Red	NETWORK TERMINATION HAS BEEN SET ON
BLINKING NETWORK LED	Yellow	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.
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 press 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 1MC will operate as a Roller Shade. Select this option from the motor configuration screen to change motor type to Venetian Blind or Louvre.

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.

```

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

Manual calibration

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

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 1MC.

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

1MC 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 1MC to factory default settings.

This reset can be done at one of 3 levels:

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

```

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

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IntelliFlex I/O™
Component
Instructions

Section 4 - Programming from Motor Limit Tool

Section 4.1 - Identify/Select Contact Closure Interface (CCI)

1. From Motor Limit Tool Main Menu, select DEVICE SETTINGS then select CONTACT CLOSURE.
2. Select 1MC from the list of devices on the network.
3. To identify 1MC, highlight 1MC and LEDs will begin blinking rapidly.

Section 4.2 - Configuring Contact Closure Parameters

1. Select CONTACT CLOSURE GROUP to configure.
2. From this menu, you can configure the following parameters:

Group: Refer to Section 3.2.6.

Priority:

Low: 1MC GROUP will only operate if there are no other overrides on the group.

Normal: 1MC GROUP will operate shade group if no HIGH priority overrides on the group.

High: 1MC GROUP will lock-out all other controls until cleared.

Profile: Please refer to section 5 for profile descriptions.

Override Time: Time in minutes that the 1MC GROUP override will be active.
The range can be NONE (indefinite override) or anywhere from 1-999 minutes

Section 4.3 - Factory Reset

1. Select FACTORY RESET from the menu to return Contact Closure to default factory settings (master control).

Section 5 - Profile Descriptions

PULSE = Close contact for 500ms or less. HOLD = Close contact for 1500ms or more.

Profile 1: Standard Profile	
ALL GROUPS	
Pulse U	Previous Stop
Hold U	Full Up
Pulse D	Next Stop
Hold D	Full Down
Hold U & D	Stop

Profile 2: Toggle	
ALL GROUPS	
Pulse U or D	Stop if moving, otherwise move fully in the opposite direction of the last move <i>(Pulse from full up/full down will trigger full run in opposite direction)</i>

Profile 3: No Presets	
ALL GROUPS	
Pulse U	Full Up
Hold U	Momentary Up (Stop on Release)
Pulse D	Next Stop
Hold D	Momentary Down (Stop on Release)

Profile 4: Key Switch	
ALL GROUPS	
Maintained Movements	
Close U	Full Up
Close D	Full Down
Open	Clear Override