

Section 1 - **Overview**



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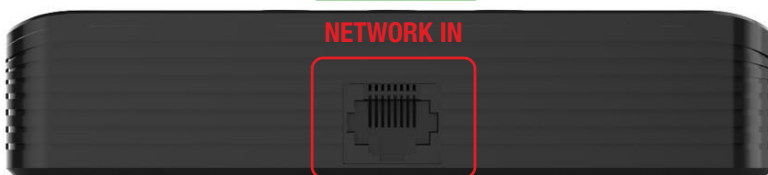
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**BOTTOM**



**TOP**

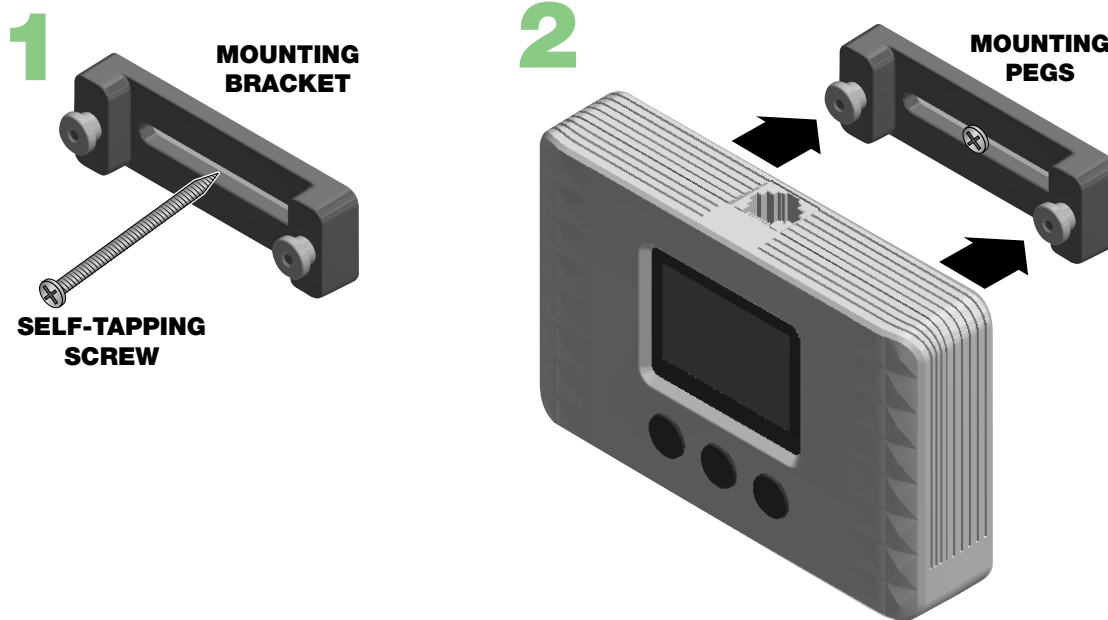


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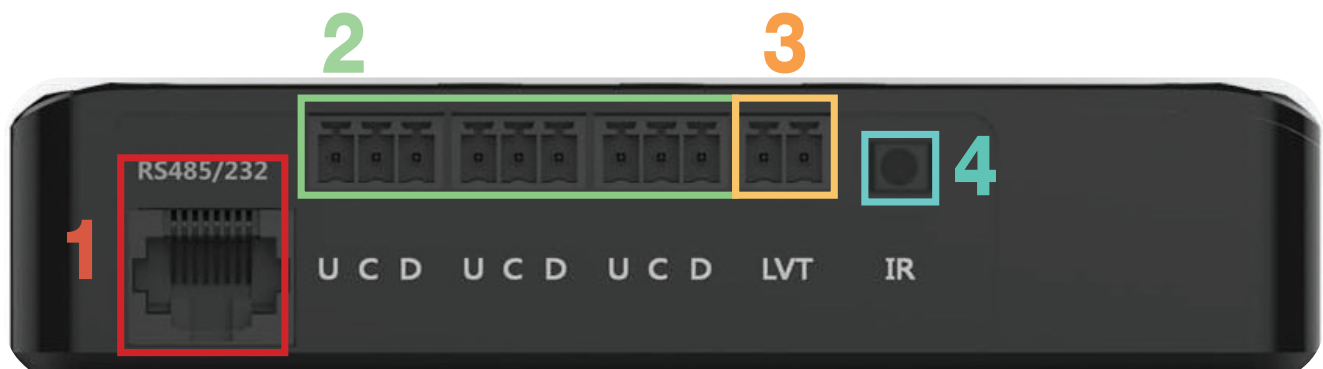
## Section 2 - Mounting to Structure

1. Determine mounting location of AV Gateway and mark on wall or ceiling.
2. Locate Mounting Bracket and provided mounting hardware.
3. Line up the mounting holes on the back of the AV Gateway with the mounting pegs on the mounting bracket.



## Section 3 - 3rd Party Component Integration Methods

The AV Gateway allows various 3rd party control components to integrate with an IntelliFlex I/O network.



The integration methods supported are:

- 1. RS-232 and RS-485 serial communication**
- 2. Contact Closure**
- 3. Low Voltage Input**
- 4. IR**

By default, all inputs will control every shade in the network.

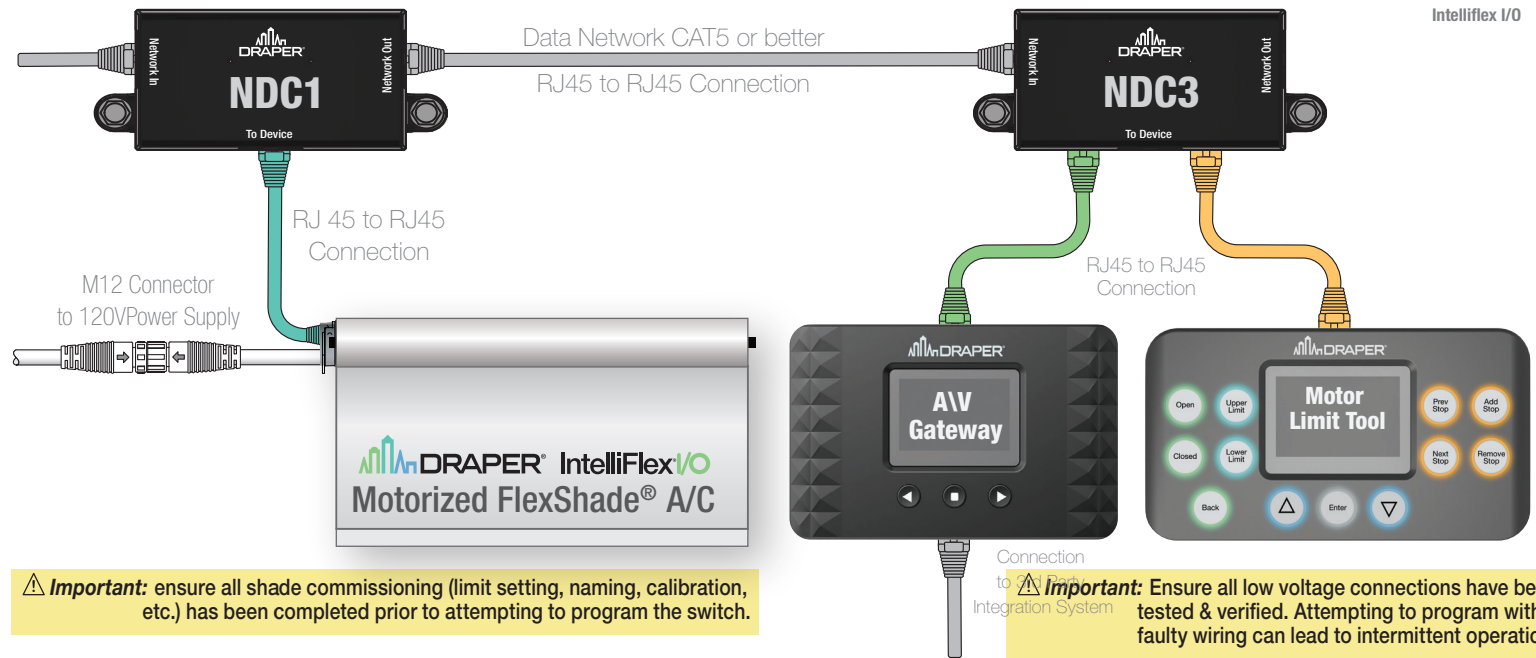
To limit the operation to select groups of shades use the following procedures

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## Section 4 - Wiring Diagram



## Section 5 - Configuring AVG Serial Group Parameters

### Section 5.1 - Programming from MLT

#### Section 5.1.1 - Identify/Select AVG (if multiple)

1. From MLT main menu, **SELECT DEVICE SETTINGS**, then **SELECT SERIAL PORT**.
2. Choose **AVG** from list of devices on network.
3. To identify AVG, highlight AVG and screen on AVG will blink rapidly to identify it.

```

AVG 1234567
>Rename
Group 1 Grp 23
Group 2 Master
Group 3 Custom
*..*
Group 64 Master
Factory Reset
    
```

#### Section 5.1.2 - Renaming AVG

1. **SELECT RENAME**.
2. AVG can be assigned a numerical value for easier identification.

#### Section 5.1.3 - Configuring AVG parameters

From this menu, you can configure the following parameters:

**Group:** Assigning AVG Group to previously configured shade group or assign as a **MASTER**.

**Priority:**

- Low:** AVG Group will only operate if there are no other overrides on the group.
- Normal:** AVG Group will operate shade group if no **HIGH** priority overrides on the group.
- High:** AVG Group will lock-out all other controls until cleared.

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

```

AVG 1234567
Group 1
>Group Grp 23
Priority Normal
Override Time
None
    
```

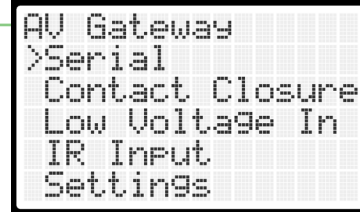
#### Section 5.1.4 - Factory Reset

1. Select **Factory Reset** from the menu to return AVG to default factory settings (master control)



**Section 5.2 – Programming from AVG**

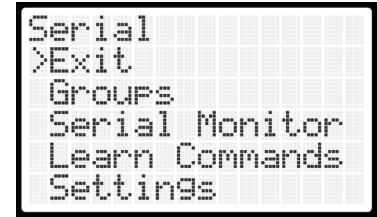
1. **SELECT SERIAL** from the Main Menu.



**Section 4.2.1 – Configuring Serial Groups**

1. From the serial menu, **SELECT GROUPS** to show list of 64 serial groups.
2. **SELECT GROUP TO BE CONFIGURED** and choose one of the following options:

**Master:** This will control every shade that is connected to the IPG network.  
**Custom:** This group can be configured directly on the IPG by using the add/skip method listed below.  
**Global (1-64):** This group can be configured via the MLT.  
 Please reference MLT (C202.060) instructions for configuring a custom group.



3. After initializing, one shade will begin to identify. **SELECT ADD** to assign that shade to the group, or, **SKIP** to move on to next shade. Once all shades have been added to the group **SELECT DONE**.

**Section 5.2.2 – Serial Monitor**

1. The **SERIAL MONITOR** option will display string commands that are received by the AVG.  
 This can be helpful to troubleshoot any communication issues.

**Correct**



**Incorrect**



**Section 5.2.3 – Learn Commands**

The AV Gateway can learn commands to integrate more easily with other systems.

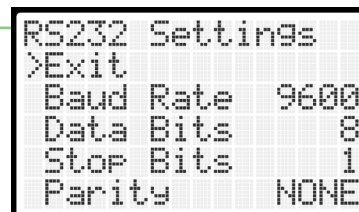
1. Select **LEARN COMMANDS** from the **SERIAL** menu.
2. Up to 100 commands can be learned. Select the command number from the list.
3. Select **COMMAND** to begin learning the new command.  
 Once the display shows “Learning...”, send the command to learn through the RS232 or RS485 interface.  
 Once learned it will show in the **COMMAND** field. (Note: Max Command size is 32 Characters)
4. Select the **ACTION** to take when the command is received.  
 The following are selectable actions to choose from:  
 (Open, Close, Stop, Clear, Next, Prev, Tilt Open, Tilt Closed, Tilt Prev, Tilt Next, Pre 1,....,Pre 32, Tilt 1,....,Tilt 32)
5. Select the **GROUP** number that the command should control.



**Section 5.3 - RS-232 and RS-485 Serial Control**

To change the default serial port settings:

1. Select **SETTINGS** from the **SERIAL** menu.
2. Select the protocol being used: **RS232** or **RS485**.
3. Use the menu to set the values for **BAUD RATE**, **DATA BITS**, **STOP BIT** and **PARITY**.



**Section 5.4 – Serial Protocol**

Serial interface uses a ASCII protocol for communication as described below:

START	ADDRESS	COMMAND	END
1 Char	2 Chars	1 - 4 Chars	1 Char
G	XX	YYYY	!

XX = The Group Number to command from 01 to 64.  
 This must be a two digit number; 0 must precede any single digit number.  
 Y-YYYY = Shade command from the following table

**EXAMPLES:**

COMMAND	ACTION
G010!	Move motor group 1 fully open.
G0486!	Move motor group 4 to 86% closed.
G15S!	Stop motor group 15.

COMMAND	ACTION
O	FULLY OPEN
C	FULLY CLOSE
S	STOP
P	PREVIOUS STOP
N	NEXT STOP
T	TOGGLE
CO	CLEAR OVERRIDE
0-100	MOVE to %
PS0 - PS64	MOVE to PRESET STOP
TO	TILT OPEN
TC	TILT CLOSED
TP	TILT to PREVIOUS STOP
TN	TILT to NEXT STOP
T0-T100	TILT to %
TS0 - TS64	TILT to PRESET STOP

**DEFAULT SERIAL SETTINGS**

BAUD RATE	9600
DATA BITS	8
STOP BITS	1
POLARITY	NONE

PIN	FUNCTION
1	RS485 B (+)
2	RS485 A (-)
3	RS232 TX → RX
4	RS232 GND
5	RS232 GND
6	RS232 RX → TX
7	RS485 GND
8	RS485 GND

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## Section 6 - Contact Closure Control

### Section 6.1 - Configuring Contact Closure Parameters from MLT

From the main menu:

1. Select Device Settings.
2. Select Contact Closure.
3. Select the desired AVG (if multiple).
4. Select Contact Closure Group to configure.
5. From this menu, you can configure the following parameters:

**Group:** Assigning Contact Closure Group to previously configured shade group or assign as a MASTER.

**Priority:**

**Low:** Contact Closure Group will only operate if there are no other overrides on the group.

**Normal:** Contact Closure Group will operate shade group if no HIGH priority overrides on the group.

**High:** Contact Closure Group will lock-out all other controls until cleared.

**Profile:** Please refer to section 6.3 for profile descriptions. Profile selection will apply to all 3 Contact Closure groups.

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

```

AVG 1234567
Group 1
>Group      Master
Priority Normal
Profile      Standard
Override Time
              None

```

### Section 6.2 - Configuring Contact Closure Parameters from AVG

#### 6.2.1 Setting Contact Closure Groups

1. From the Contact Closure menu, select Groups2.  
There are 3 sets of contact closures on the AV Gateway.
2. Select the group to configure from the list.
3. Choose one of the following options:
  - Master:** This will control every shade that is connected to the AVG network.
  - Custom:** This group can be configured directly on the AVG by using the add/skip method listed below.
  - Global (1-64):** This group can be configured via the MLT.  
Please reference MLT (C202.060) instructions for configuring a custom group.
4. After initializing, one shade will begin to identify. **SELECT ADD** to assign that shade to the group, or, **SKIP** to move on to next shade. Once all shades have been added to the group **SELECT DONE**.

```

Contact Profile
>Exit
Standard
1:Standard
2:Standard
3:Standard

```

#### 6.2.2 Setting Contact Closure Profile

1. From the Contact Closure menu, select Profile.
2. Please refer to section 6.3 for profile descriptions.  
Profile selection will apply to all 3 Contact Closure Groups.

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**Section 6.3 - Contact Profiles***Pulse = Close contact for 500ms or less. Hold = Close contact for 1500ms or more.***Profile 1: Standard Profile**

ALL GROUPS	
<b>Pulse U</b>	Previous Stop
<b>Hold U</b>	Full Up
<b>Pulse D</b>	Next Stop
<b>Hold D</b>	Full Down
<b>Hold U &amp; D</b>	Stop

**Profile 2: Venetian Blinds**

Group 1 - Extend Only		Group 2 - Tilt Only		Group 3 - Standard	
<b>Pulse U</b>	Previous Stop	<b>Pulse U</b>	Previous Stop	See Profile 1	
<b>Hold U</b>	Full Retract	<b>Hold U</b>	Next Stop		
<b>Pulse D</b>	Next Stop	<b>Pulse D</b>	Tilt Fully Up		
<b>Hold D</b>	Full Extend	<b>Hold D</b>	Tilt Fully Down		
<b>Hold U &amp; D</b>	Stop				

**Profile 3: Toggle**

ALL GROUPS	
<b>Pulse U or D</b>	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 4: No Presets**

ALL GROUPS	
<b>Pulse U</b>	Full Up
<b>Hold U</b>	Momentary Up (Stop on Release)
<b>Pulse D</b>	Next Stop
<b>Hold D</b>	Momentary Down (Stop on Release)
<b>Hold U &amp; D</b>	Stop

**Profile 5: Presets**

Group 1	Group 2	Group 3
See Profile 4 above	<b>Pulse U</b> Preset 1	<b>Pulse U</b> Preset 3
	<b>Pulse D</b> Preset 2	<b>Pulse D</b> Preset 4

**Profile 6: Key Switch**

ALL GROUPS	
Maintained Movements	
<b>Close U</b>	Full Up
<b>Close D</b>	Full Down
<b>Open</b>	Clear Override

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## Section 7 - **Low Voltage Control**

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1. Select **LOW VOLTAGE IN** from **MAIN MENU**.
2. Refer to section 4.2.1 for how to set group to be controlled from the low voltage input.

**\*\*Applying a 5-24VDC signal to the low voltage input terminal will move shade group closed. Once the signal is removed, shades will move open.\*\***

## Section 8 - **IR Control** *(can be used with Part #121227 - IR Transmitter & Receiver)*

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1. Select **IR INPUT** from **MAIN MENU**.
2. Refer to section 4.2.1 for how to set group to be controlled from the low voltage input.

**\*\*The group can now be controlled using the UP, DOWN and STOP BUTTONS on IR remote.\*\***

## Section 9 - **Settings**

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1. Select **SETTINGS** from the **MAIN MENU**.
2. Select **FACTORY RESET** and confirm to restore the original factory settings to the AV Gateway.

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