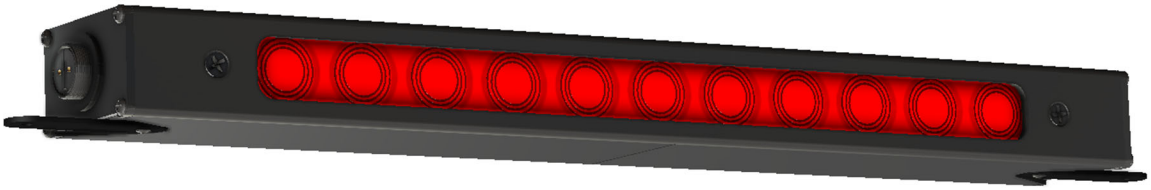
WARNING LIGHTS FOR SLIDE GATES

INSTALLATION MANUAL FOR VMAG GATES

122325

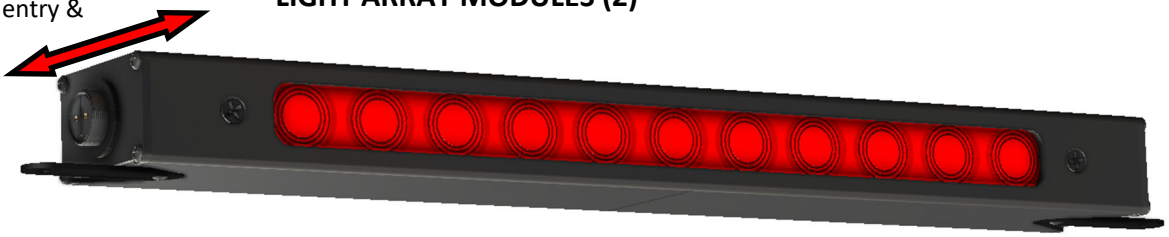
CONTENTS

PARTS IDENTIFICATION

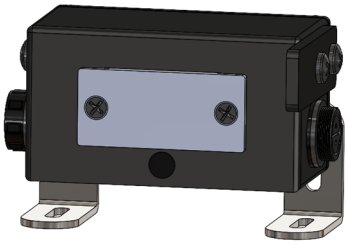


Each array has two LED strips for entry & exit

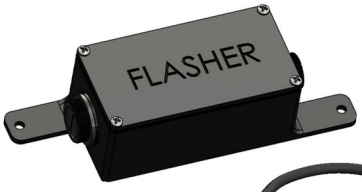
LIGHT ARRAY MODULES (2)



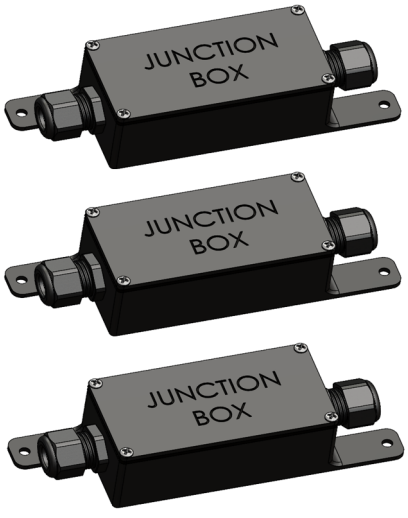
Wireless Power Transmitter
(1)



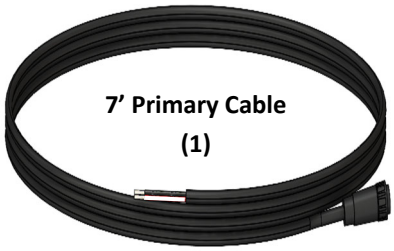
Wireless Power Receiver
(1)



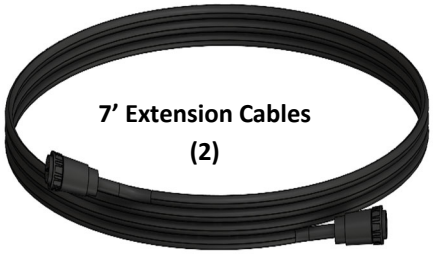
FLASHER
(with 1' cable)



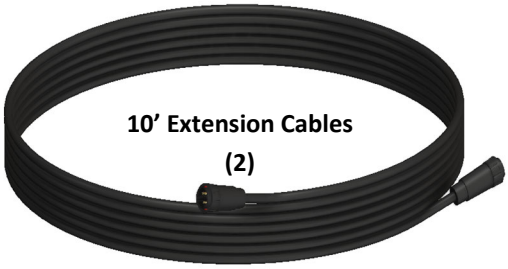
Junction Boxes
(3)
(2 wire nuts with dielectric grease included)



7' Primary Cable
(1)



7' Extension Cables
(2)



10' Extension Cables
(2)

COUPLERS
(3)

ITEMS INCLUDED

All fastener hardware is stainless steel

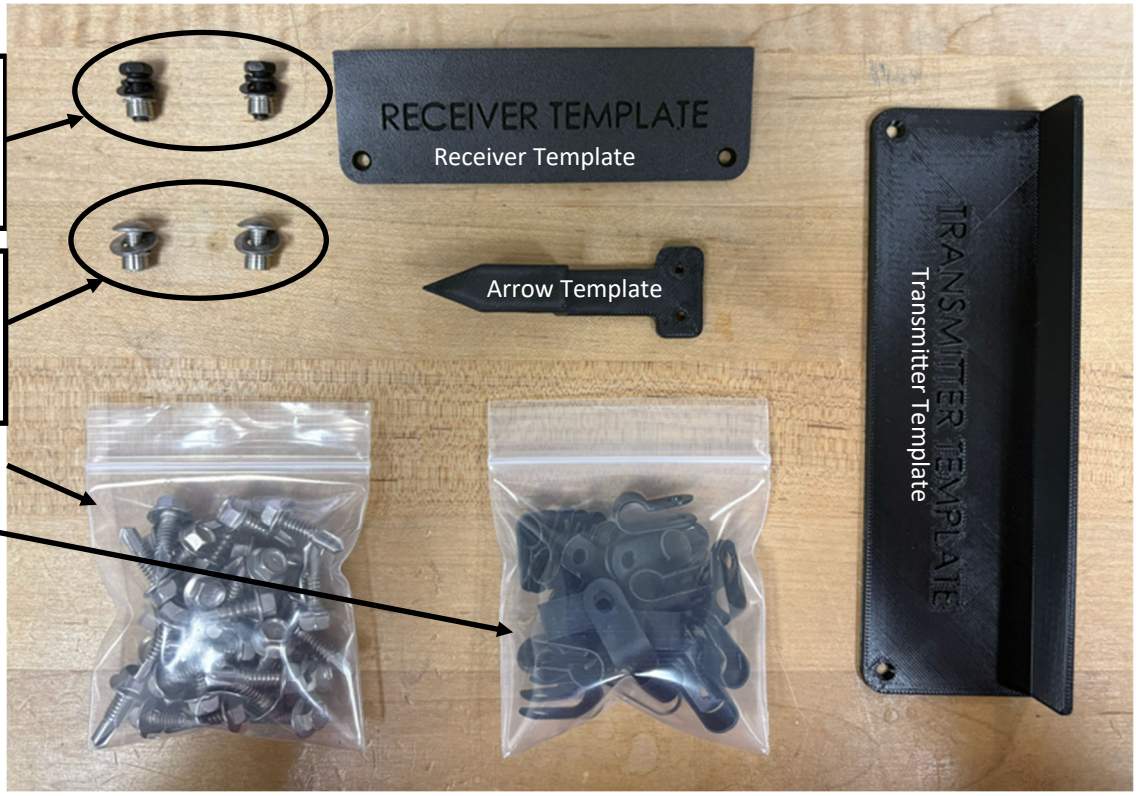
(2) Hex screws 10-32 x 5/8”
(2) Lock washers #10
(2) Flat washers 10-32
(2) Nut inserts

(2) Pan head screws 10-32 x 3/4”
(2) Lock washers #10
(2) Flat washers 10-32
(2) Nut inserts

(35) Self drilling screws#12 x 3/4”
(25) Cable clips


or


Red thread setter 271
(Brands may vary)



REQUIRED TOOLS


Safety goggles


Pencil


Tape measure


5/16” Socket Driver


Hammer

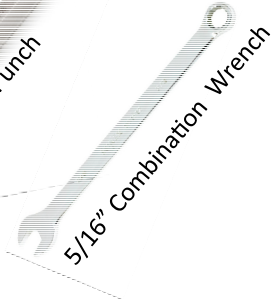

#2 Philips Screwdriver


#2 Stubby Phillips Screwdriver


Wire cutter / stripper


Center Punch


5/16” Pin Punch


5/16” Combination Wrench

Drill

<u>Drill Bits</u>

9/32”

1/8” (for pilot holes)

V Stop Position

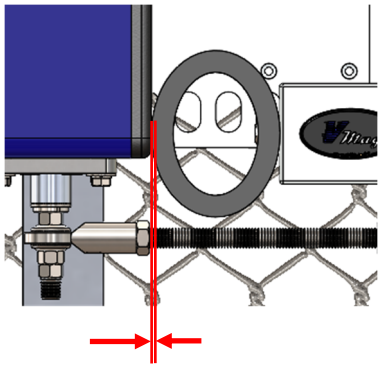
The location of the V Stops are important for proper Vlite operation.

STEP 1. Hold the lock handle down while manually pushing the gate to the close position until the stop bumper makes contact with the motor end caps.

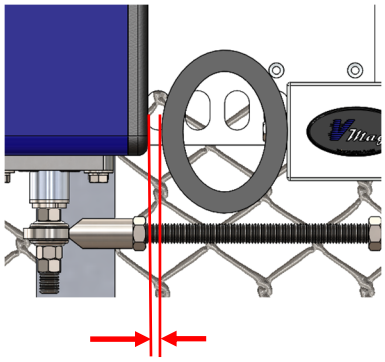
STEP 2. Release the lock pin while keeping the stop bumper in contact with the motor end caps.
Slowly push the gate towards the open position until the lock pin falls and is engaged.

STEP 3. Setting the gap distance.

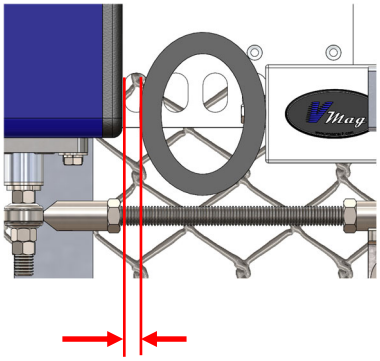
Note: *You can use the 1/4" and 3/8" spacers to measure the gap distance.*



If the 1/4" spacer cannot slide between the bumper and end cap, then no spacer is required.



If the gap is over 1/4" to less than 3/8",
Use 1/4" spacer with 1/4"-28 x 1" hex bolts

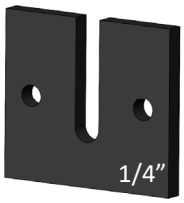


If the gap is 3/8" to less than 1/2",
Use 3/8" spacer with 1/4"-28 x 1-1/8" hex bolts

If the gap is over 1/2", refer to the Vmag operator manual to move the Vstop 1/2" closer.

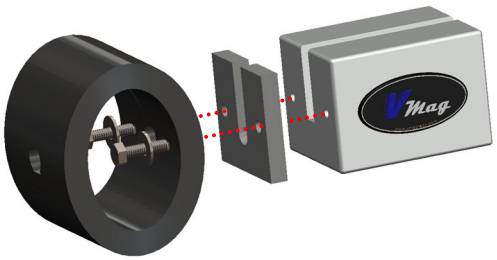
STEP 4. Installing the spacers.

7/16" wrench required.
1/4" and 3/8" spacers and 1/4" hex bolts are provided for final adjustment.



Use two
1/4"-24 x 1"
Hex Bolts

Use two
1/4"-24 x $1^{1}/_{8}$"
Hex Bolts



Transmitter Mounting Hole Locations

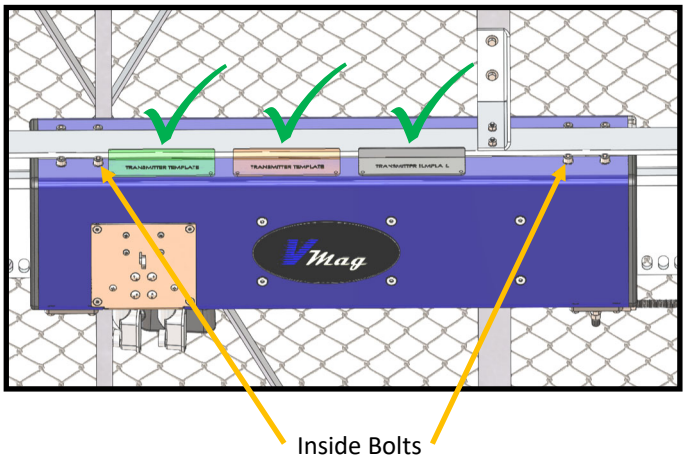
Example: Gate is in the **CLOSED** position

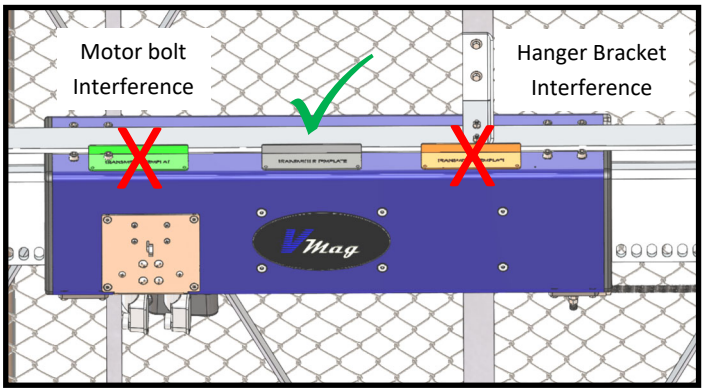
← *(gate closes to the left)*

(Stop bumper is touching the motor end cap)

Locate and mark all mounting holes first. Do not drill any holes until confirmation that there is no interference with any hanger brackets for the OPEN and CLOSE mounting locations.

With the gate still in the closed position, place the Transmitter Template on top of the motor housing with the back against the reaction fin.

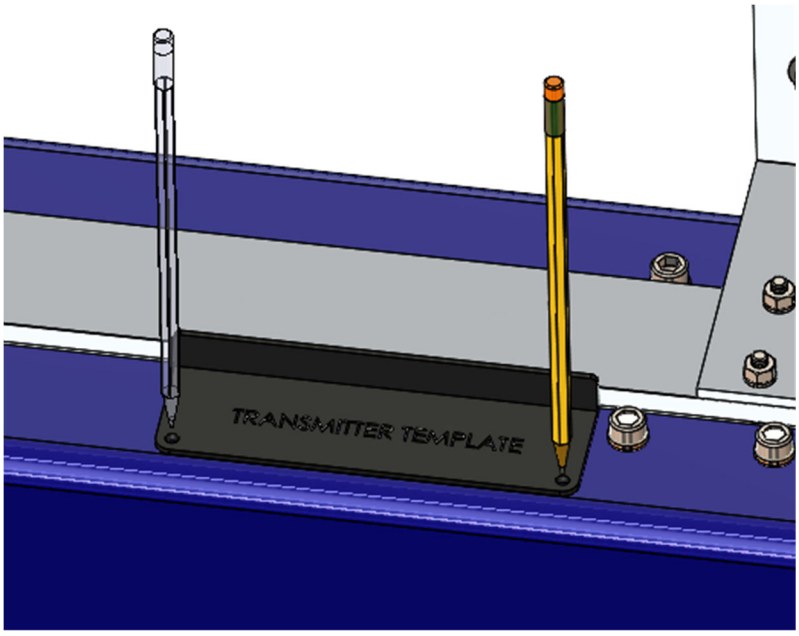




The template can be located on any horizontal position between the inside bolts as shown.

Determine the closest location to the controller without interference with a hanger bracket and within the inside of the motor bolts.

Push the back of the template against the inside edge of the reaction fin.



Once the transmitter location is determined, mark the two hole locations.

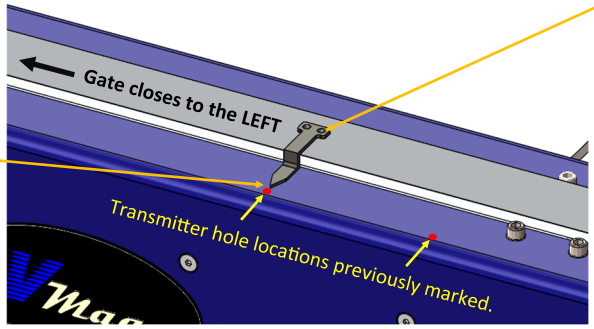
Do not drill holes yet.

Receiver Mounting Hole Locations

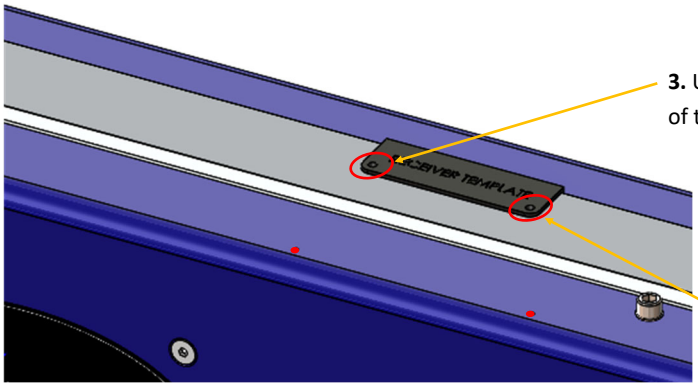
LEFT CLOSE

Place the gate in the closed position.

1. Align the arrow template with the transmitter left mark.



2. Using the **right** hole of the template, mark the hole location on the top of the reaction fin.



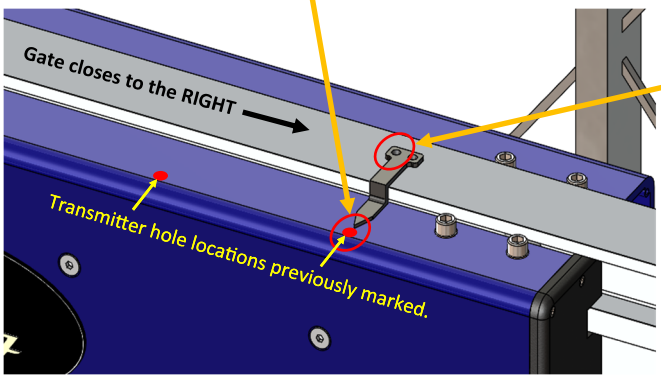
3. Using the receiver template, align the left hole of the template with the mark previously made.

4. Now, mark the right hole.

RIGHT CLOSE

Place the gate in the closed position.

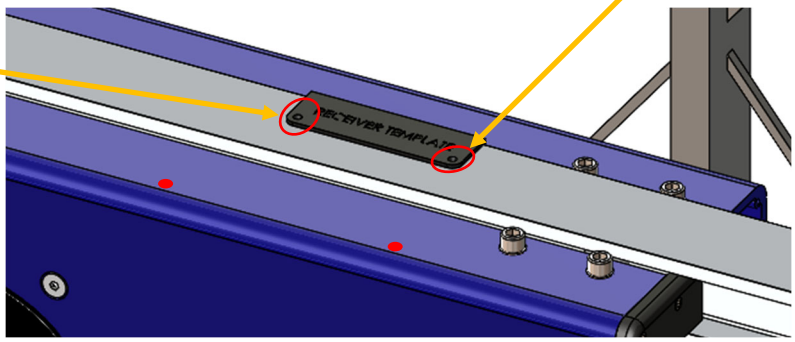
1. Align the arrow template with the right transmitter mark.



2. Use the **left** hole of the template to mark the hole location on the top of the reaction fin.

3. Align the right hole of the receiver template with the mark previously made.

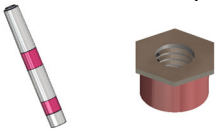
4. Now, mark the left hole.



TRANSMITTER INSTALLATION

1. Mark the centers on top of the motor housing with a hand punch, then drill both holes through the top with a 9/32” bit

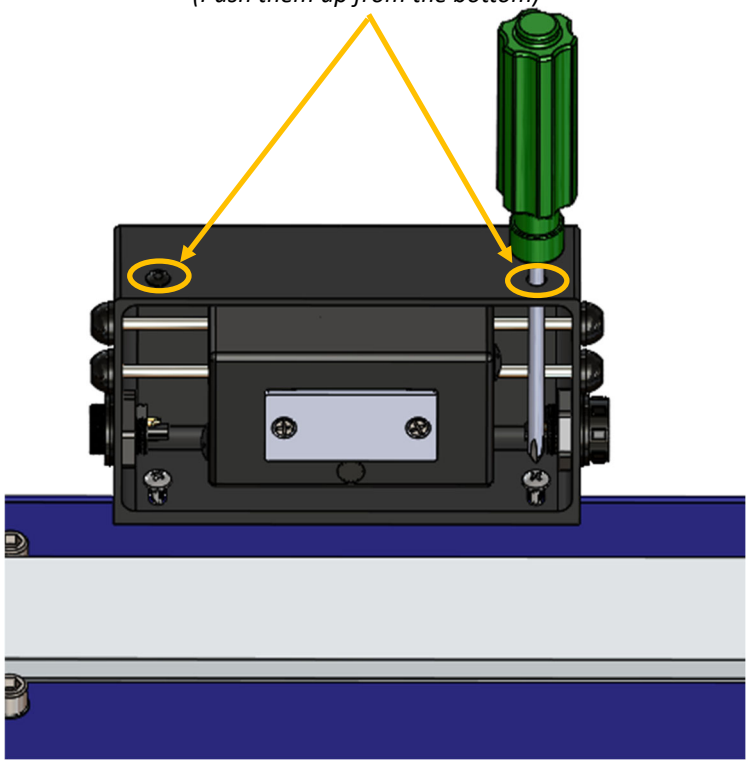
2. Apply red thread locker to the body of the nut inserts.

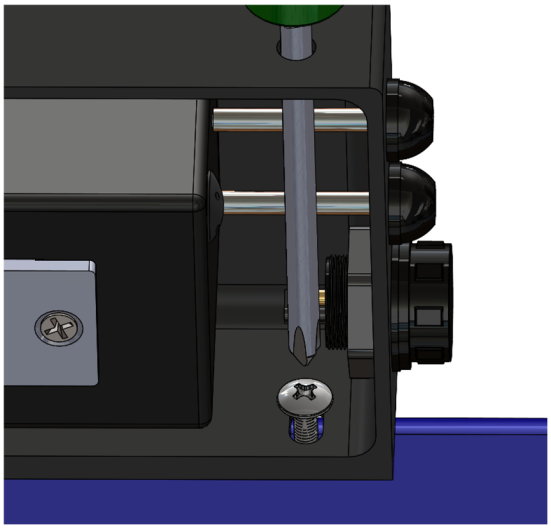


Place a nut insert into each hole. Seat each nut insert with a 5/16” pin punch & hammer until the top face is flush *(or close to flush)* with the reaction fin.

3. Remove the two hole caps for screwdriver access.

(Push them up from the bottom)





4. Mount the transmitter assembly using:

(2) Truss head screws 10-32 x 7/16”

Before tightening the screws, pull the assembly away from the reaction fin until it stops.

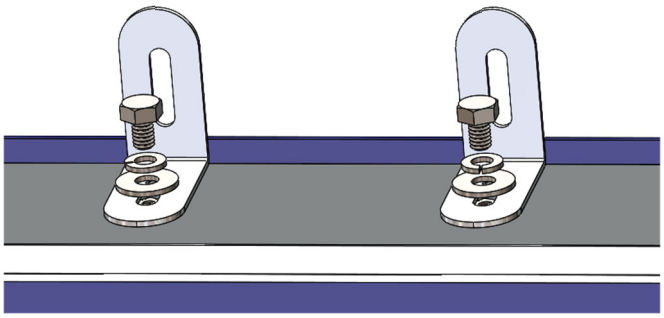
Secure both screws and replace the hole caps.

RECEIVER INSTALLATION

1. Remove the L brackets from the receiver assy. Install the L brackets with the #10 flat washers, lock washers and 10-32” hex bolts using a 5/16” wrench.

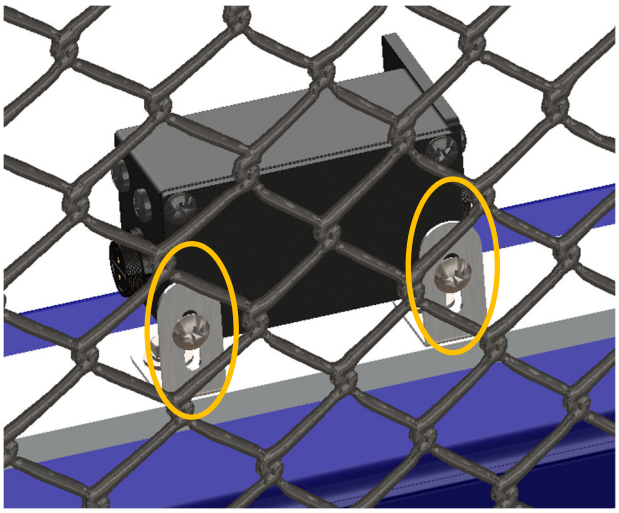
Align the back of brackets with the back edge of the reaction fin.

Snug bolts but don’t tighten yet.



2. Install the back of the receiver to the L brackets with the Phillips 1/4” truss screws. 

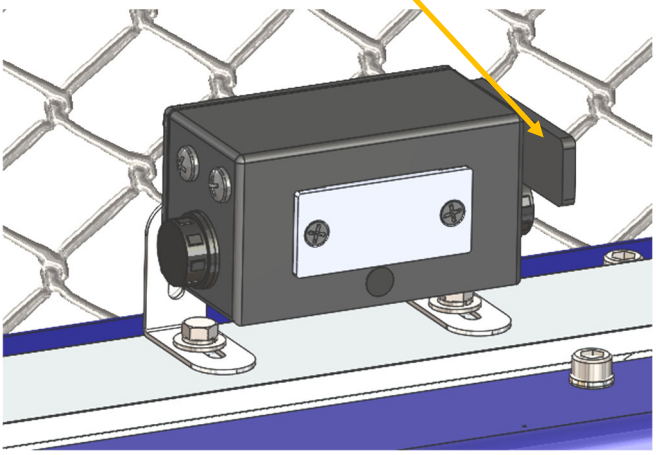
(this is where the stubby Phillips screwdriver comes in handy)



3. Verify the stop bar is installed on the correct side. The stop bar should be on the opposite side of the gate closing direction. Left & right are determined from the secured side of the gate looking out.
To switch sides, remove the four *(two on each side)* 1/4” pan head screws, then relocate to the opposite side.

LEFT CLOSE

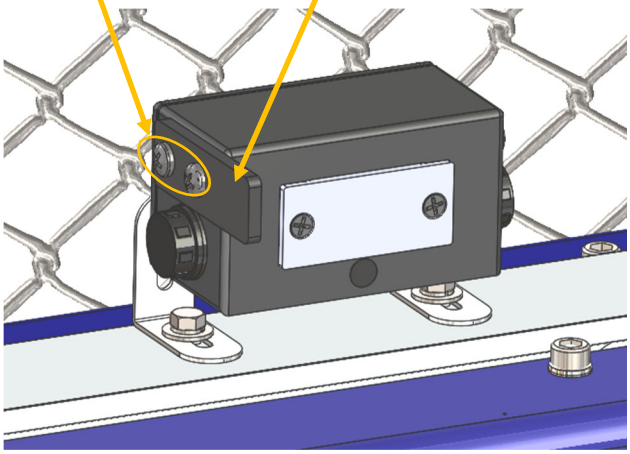
Stop Bar on Right Side



RIGHT CLOSE

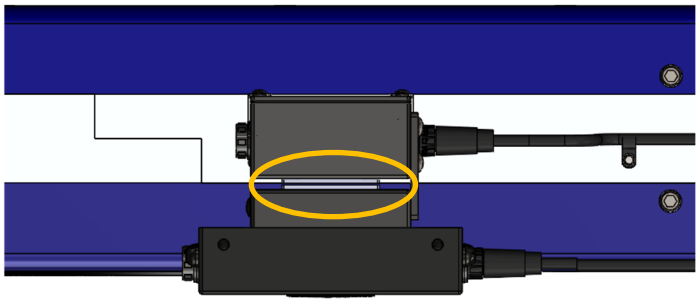
Stop Bar on Left Side

Pan Head Screws

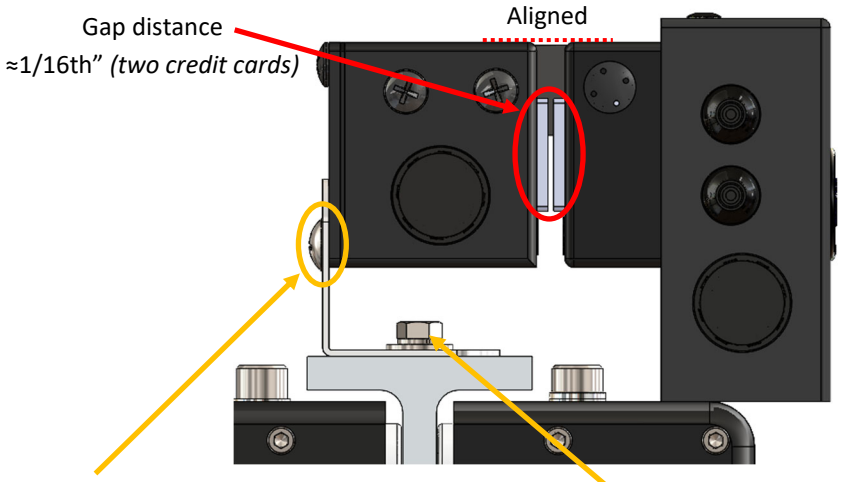


RECEIVER / TRANSMITTER ALIGNMENT

Alignment of the transmitter and receiver is important for proper operation.



1. Position the gate in the close position and verify the receiver is lined up horizontally with the transmitter.



2. On the back side of the receiver, loosen the two lower 1/4" truss head screws.

Slide the receiver up or down until receiver and transmitter units are aligned vertically.

Secure both screws.

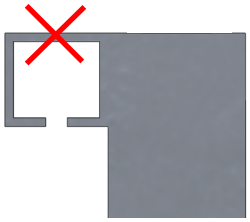
3. Loosen the two 10-32 hex screws and slide the receiver assembly to achieve a gap distance of ≈ 1/16th".

Secure both screws.

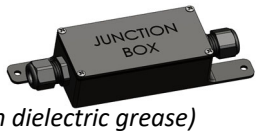
CABLE CONNECTIONS GATE CLOSES TO LEFT

Start with step 1 *(at the bottom)* and follow the sequence moving up.

Do not mount arrays on the truck *(trolley)* track!



Three **JUNCTION** boxes are provided For splicing the cable if required.



(Each box contains two wire nuts with dielectric grease)

Three **COUPLER** boxes are also provided for connecting two cables with the connectors if required.

SECOND ARRAY
Front View

FIRST ARRAY
Front View

STEP 6 Install the second array with two of the self drilling screws.

Junction Box or Coupler *(If required)*

STEP 4 Install the first array with two of the self drilling screws.

STEP 5 Connect the fourth cable *(7' 0r 10')* from the first array to the second array.

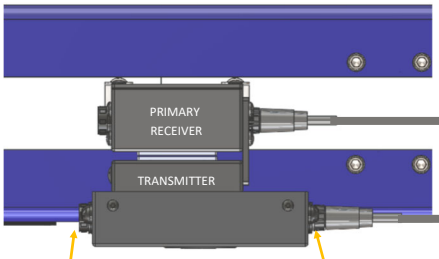
Junction Box or Coupler *(If required)*

STEP 3 Connect the 3rd cable *(7' 0r 10')* from the Flasher to the first array.

STEP 2 Connect the 1' cable from the power receiver to the Flasher.

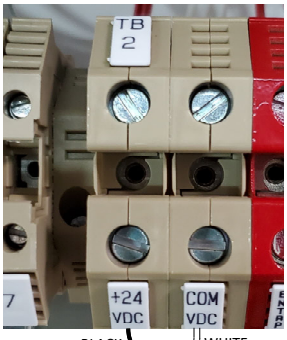
Junction Box or Coupler *(If required)*

12VDC can go out on either side.
*(normally closest to the operator con*trol box



12VDC

24VDC



24VDC can come in on either side.
*(normally closest to the operator con*trol box

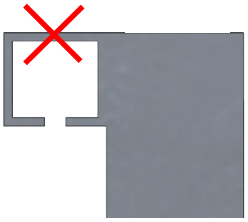
STEP 1 Run the 7' primary cable from the power transmitter to TB2 +24VDC *(black wire)* & COM VDC *(white wire)* cut & strip cable to required length and install.

7' Primary cable

CABLE CONNECTIONS GATE CLOSES TO RIGHT

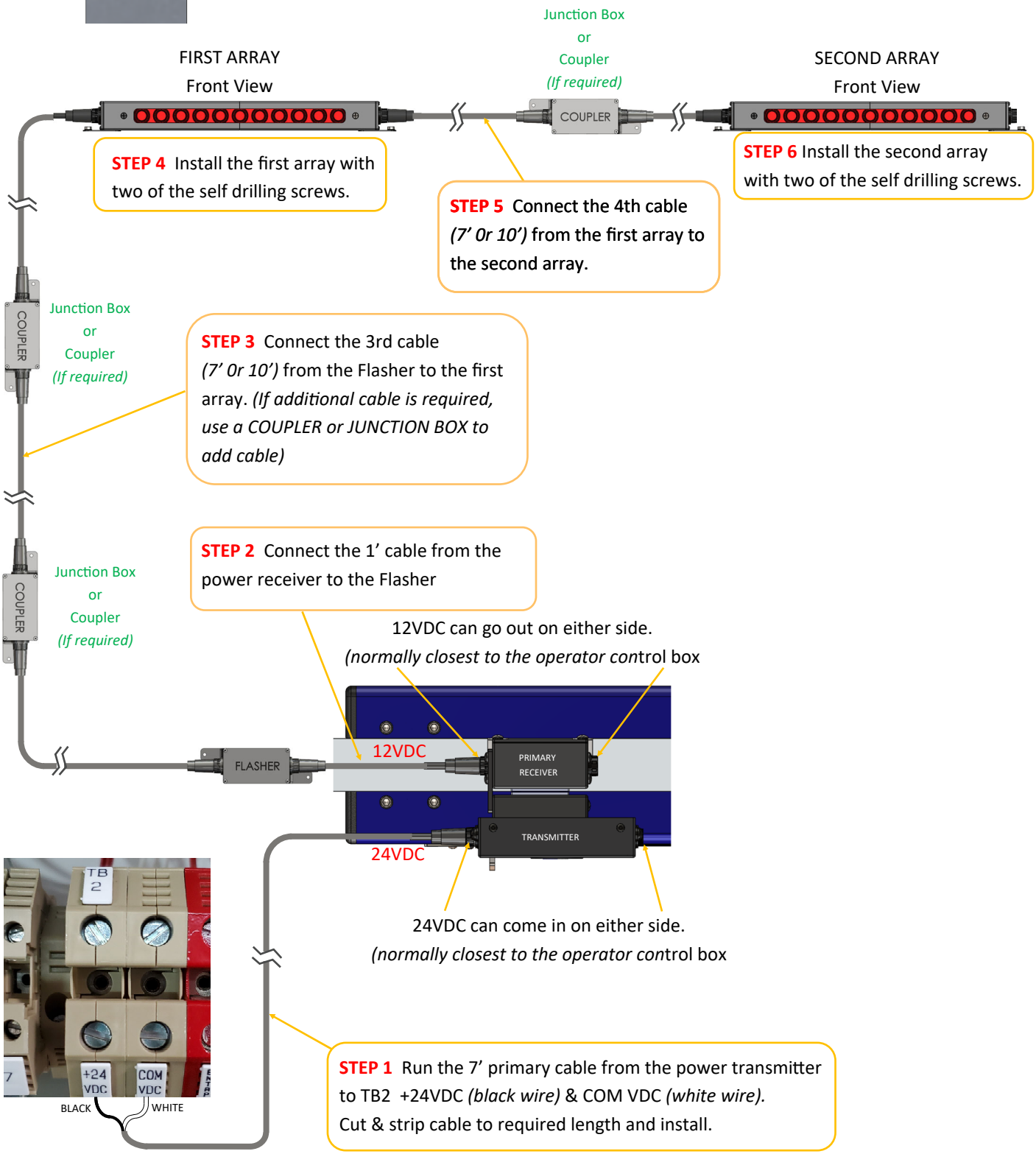
Start with step 1 *(at the bottom)* and follow the sequence moving up.

Do not mount arrays on the truck *(trolley)* track!



Three **JUNCTION** boxes are provided
For splicing the cable if required.
(Each box contains two wire nuts with dielectric grease)

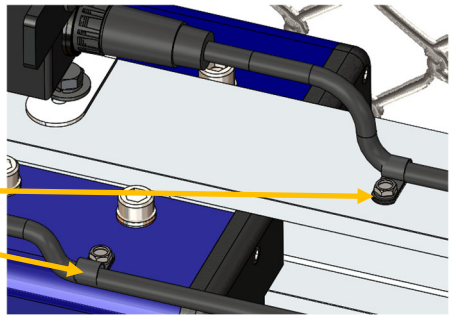
Three **COUPLER** boxes are also provided for connecting two cables with the connectors if required.



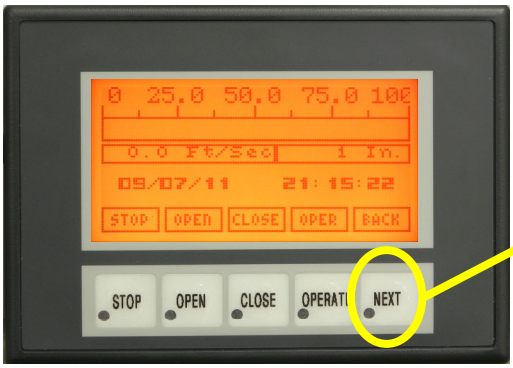
INSTALLING CABLE CLIPS

Secure the cables with the cable clips where needed using #12 x $^{3}/_{4}$" self drilling screws with the $^{5}/_{16}$" drill socket

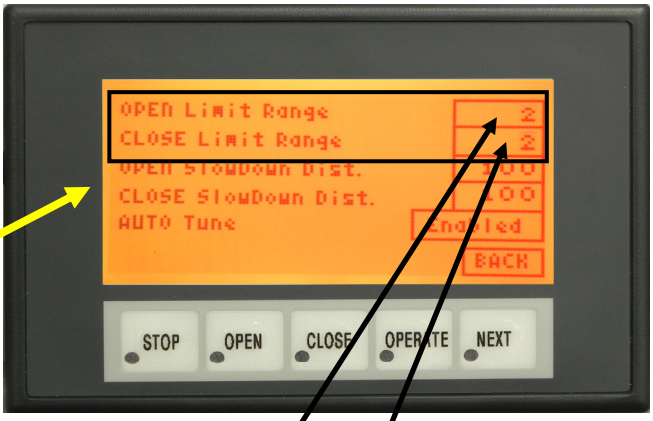
(drilling a 1/8" pilot hole will allow the self drilling screw to go in easier.)



PROGRAMMER SETTINGS



From the programmer home screen, tap **'NEXT'**.



Tap the **'OPEN Limit Range'** box.
Tap **'CL'**
Change value to 2
Tap **'ENTER'**

tap the **'CLOSE Limit Range'** box.
Tap **'CL'**
Change value to 2
Tap **'ENTER'**

OPERATION

1. Turn power on to the gate operator.
2. Run the operator for two complete cycles *(learn mode)*.
3. With the gate in the close position, the LED arrays should start illuminating within 6 minutes and reach peak brightness within 15 minutes *(The three middle LEDs on each array will illuminate first)*.

The standard Vlite will activate the lights only when the gate is closed.
If there is no illumination after ten minutes, check all connections. Verify transmitter and receiver alignment.
On initial power up if the lights illuminate immediately and go out when opening, check the 2 amp fuse in the control unit.
All units are tested for proper operation prior to shipping.
All units are warranted for five years from time of installation.
No maintenance is required.