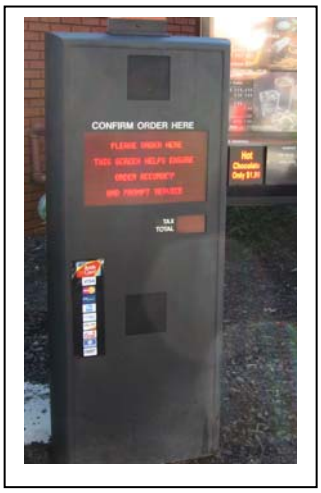
FLASHRIGHT
SUGGESTIVE SELL DISPLAYS

Metal COD Installations (MCOD)



Everbright

Texas Digital
(Key Needed)

Delphi
(Key Needed)

Canopy COD Installations (CCOD)

FlashRight Displays
6210 Browns Bridge Rd.
Cumming, GA 30041
Tel. 678-455-9121
www.FlashRightDisplays.com

- **PLEASE READ WARNING STATEMENTS ON THE NEXT PAGE**
- **PLEASE REVIEW ADDENDUM PAGES A - C *BEFORE* INSTALLATION**

Warning Statements

- A qualified person should perform the installation procedure. Injury and/or damage can result from dropping or mishandling the display.

- Standard safety measures must be practiced at all times during the installation of this product. Use proper safety gear and tools for the installation procedure to prevent personal injury.

- Prior to installation of this product, the installation instructions should be read and completely understood. The installation instructions must be read to prevent personal injury and property damage. Keep these installation instructions in an easily accessible location for future reference.

- When working around an electrical source **make sure the electrical source has been shut off** and confirm with the appropriate testing device.

- **The FlashRight Display is a 12 Volt DC system** and must be used with the **plug-in 120 VAC to 12 VDC** power transformer supplied.
  (Do not connect the 2 conductor Display wiring directly to 120 VAC)

- All wiring should meet or exceed **National Electric Codes (NEC)**

- **1 Year Warranty** on all FlashRight Display Components

For Technical Assistance call 678-455-9121
Mon - Fri 9 am-5 pm
(Eastern Standard Time)

Keys can be purchased through the COD Manufacture or Assembly Fasteners

- Assembly Fasteners Tel #: 407-880-4777 or 800-488-4777
- Part Number: E3-5-15 (Key, Metric Steel)
- Approximate Cost $3.00 each

PLEASE READ *Addendum Pages "A" thru "C"* ON THE FOLLOWING PAGES *BEFORE* INSTALLATION

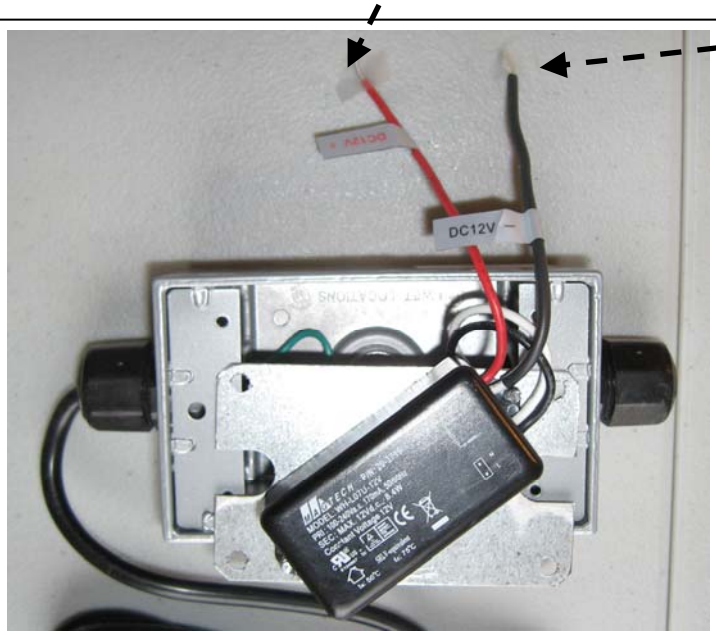
Display Connection to Power Supply

AC to DC
Power Transformer
12 VDC

Connect BLACK wire (-) to BLACK wire on Display

Connect RED wire (+) to RED wire on Display

AC to DC
Power Transformer
12 VDC



Connect BLACK wire (-) to BLACK wire on Display

Note:

If you have to extend the wire run, make sure you use the same round type of 18 gauge wire with **RED** and **BLACK** conductors.

Make connections with the supplied Gel Filled wire connectors.

Brackets and Hardware Description

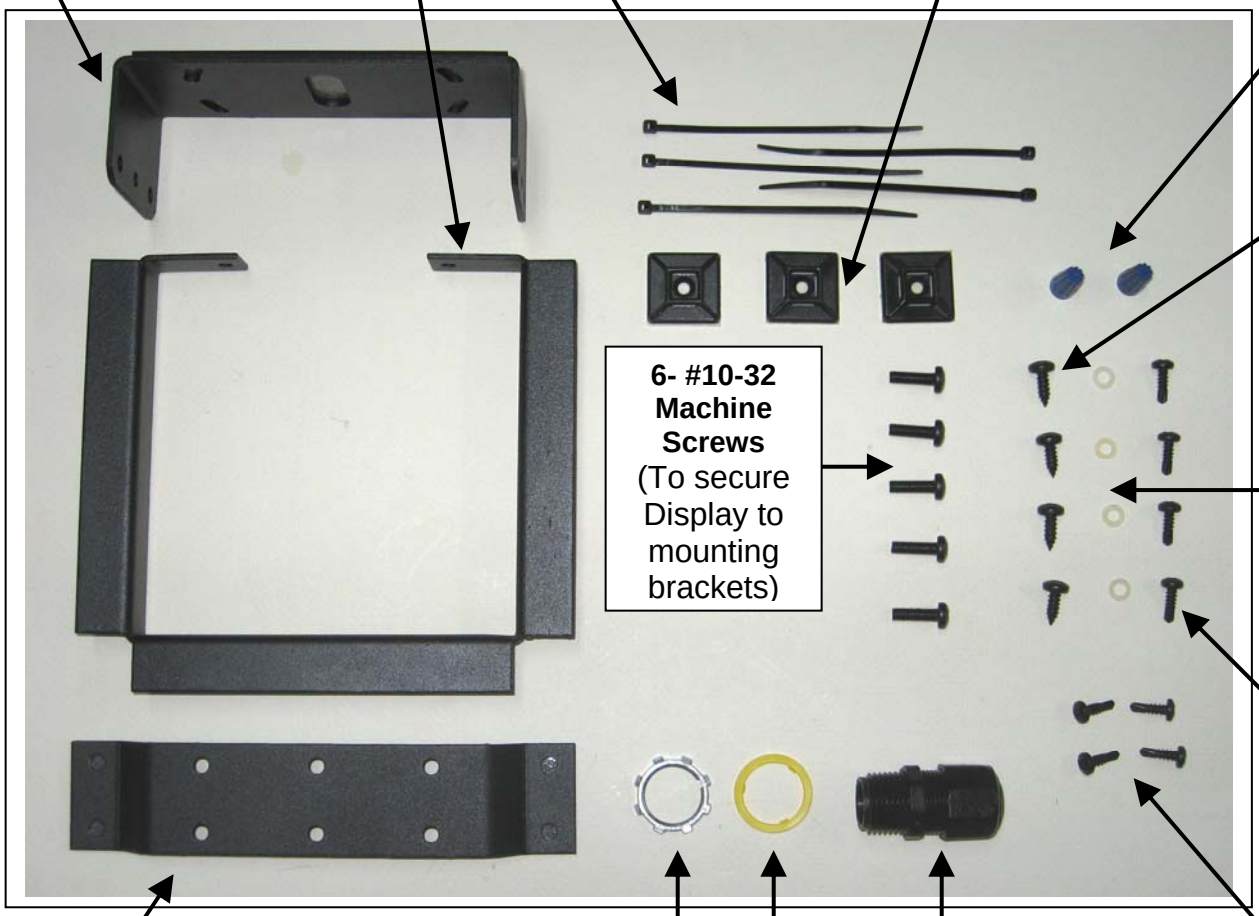
1- POP Ring Bracket
(Use this when using the POP Panel)

1- U Bracket
(For Top, Bottom & Back Mounting)

5- Tie Wraps
(For securing wire to Wire Blocks & in COD)

3- Wire Blocks
(For securing wire from the back of Display until it goes into the COD)

2- Gel filled Wire Nuts
(For connecting Display wires to the Transformer wires)



4- #10 x ½ Screws (black)
(Use to mount Brackets to Plastic COD & Canopy COD)

6- #10-32 Machine Screws
(To secure Display to mounting brackets)

4- #8 Nylon Seals
(Use with Self-tap screws when mounting to side of Metal COD)

4- #8 Self-Tap (black)
(Use for mounting Display to side of Metal COD)

1- Offset Bracket
(For side mounting Display to COD)

1-Watertight Connector w/ Nylon Seal & 1/2" Lock Nut
(Use to run wire thru enclosure on Metal & Canopy COD)

4- # 8 Self-Tap (black)
(To secure Wire Blocks to COD cabinet, (if needed)
Extra included

1- Pigtail Plug Connector 12 gauge
(For connecting to existing Electrical Junction when needed)
Supplied

PLEASE REVIEW *"MOUNTING BRACKET OPTIONS"* ON NEXT PAGE BEFORE INSTALLATION

Addendum Pg. "B"

Display Set-Up Guide

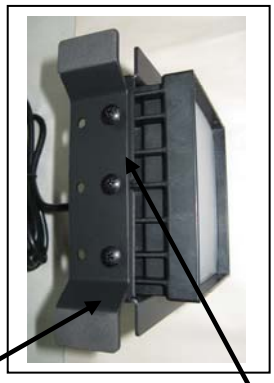
➢ **Use this type of mounting if securing to the Canopy COD (CCOD) or to a Metal COD (MCOD)**

1-Place the POP Bracket over the Display so holes are aligned.

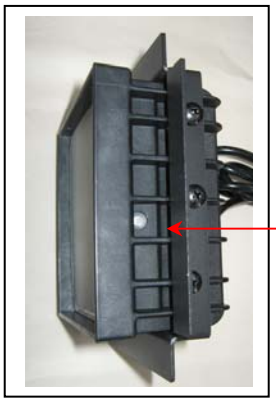
2-Secure the POP & Offset Brackets w/ 3 machine screws

3-Align the 3 holes on the Right side. Use the 3 supplied machine screws to secure.

Left Side



Left Side



Right Side

Note: **Make sure you use the holes on the front side of the Offset Bracket when putting together. The Offset Bracket sure not go past the front of the bent part of the POP Ring Bracket. >Make sure the POP Ring Bracket has the "fold" towards the front of the FlashRight Display (FRD).**

Note: **The Right Side of the (FRD) MUST stay clear to allow proper operation of the photocell.**
The photo cell is on the right side behind a clear round cover (see above).

Suggested Mounting Locations on COD's

>> Place the FlashRight Display (FRD) about center of COD Electronic Display <<

Note: In some cases the **COD** Electronic Displays are lower than normal. Depending on the **COD** installation height, a good center height of the **FRD** is 3 ft. 4 in. to the center of the **FRD**. This measurement is based from the ground height at the base of the **COD** and not from the Drive-thru lane surface.

Addendum Pg. "C"

Overview:

- The below instructions will give the general idea how to install the FlashRight Display. **(FRD)**
- There are 3 or more designs of Metal CODs **(MCOD)** & Canopy CODs **(CCOD)**
- Each installation is similar. The only differences are minor design changes in the housings of the COD's and minor details to keep in mind to make the different installation configurations go easier.
- General things to keep in mind are:
  > Height of the **FRD** to the existing LCD or LED Electronic display **(see addendum "C" pg.5)**
  > Make sure the **FRD** does not extend past the front of the existing **MCOD** or **CCOD**

Note: It is best for a Right Side installation of **FRD** on the **MCOD** for the photocell dimmer circuit will work properly. If you plan to install on the Left Side, turn the **FRD** upside down and make sure the photo cell is pointing out toward the left.

Suggested Tools & Materials Needed:

> Cordless Drill with Phillips Head Tip
> 4" Magnetic Bit Extension
> 7/8" Uni-Bit Drill
> Flat & Phillips Head Screwdrivers
> Wire Cutter/Strippers
> Standard Pliers
> Small Adjustable Wrench
> Black Elec. Tape
> RED Wire Nuts (rarely needed)
> Other electrical parts may be needed depending on each individual installation

Note: ***The Texas Digital & Delphi MCODs will need a KEY to get into the enclosure.*** **(see pg. 2 for info)**

****Turn OFF power to COD****

Steps:

1) Plug the center hole on the Left Side of the **FRD** with the supplied plastic plug. **(see addendum "C" pg. 5)**
2) Place the "POP Ring Bracket" over the **FRD** then place the "Offset" Bracket over the left side of the **FRD**. **(see addendum "C" pg. 5)**
3) Use the supplied #10 machine screws and secure brackets using the top and bottom holes.
4) On the other side, use the #10 machine screws and align the center hole on the "POP Ring Bracket". Insert the screw and finger tighten. Then align the top and bottom holes, use the #10 machine screws and secure all screws in place. **(see addendum "C" pg. 5)**

NOTE: All holes should have screw in them.

5) Remove the back cover of the **MCOD** or **CCOD**.
6) Place the **FRD** to the right side of the **MCOD** or **CCOD** and make sure it is lined up to the front edge or just behind the front edge of the **COD**. Center the height of the **FRD** to the **COD** Electronic Display.

Note: You can move the **FRD** up or down to get the best line of site. **(See addendum "C" pg. 5)**

Important Note

Installations on newer Delphi COD's

In some cases the self-tap screws touch the enclosure of the COD inside which can make it harder to remove.

Use the steps below if working with a newer Delphi Enclosure.

A >Make sure the front of the FlashRight Display is flush and aligns with the front of the Delphi enclosure.

B >Use the supplied #8 x 3/8" self-tap screws to temporarily mount and align the Display - DO NOT SCREW THEM IN ALL THE WAY AT THIS TIME.

You are using the #8 x 3/8" self-tap screws to drill the 4 holes and temporarily hold the Display in place.

C >Once you have the 4 screws in place and not screwed in all the way, remove one screw at a time and replace it with the supplied 4 Delphi screws that are in the marked bag.

In some of the newer Delphi enclosures the self tap screw may touch the inside COD/OCU case and make it harder to remove and replace the COD/OCU when needed.

- Never mount the FRD lower than the center of the COD Electronic Display.

7) Secure the **FRD** to the right side of the **CCOD** or **MCOD**.

Tip: When installing to the **MCODs** you will need to use the (4) Nylon Gasket Washers and the supplied (4) #8 self-tap screws. Place the washers on the screws ***first*** then secure with cordless drill and extension bit. Have the self-tap screws, drill and extension bit ready when positioning **FRD** in steps #7.

Tip: When installing to the **CCODs** you will not need to use the (4) Nylon Gasket Washers. Use the (4) #10 x ½" supplied. Have the #10 screws ready then secure with cordless drill and extension bit. Have the screws, drill and extension bit ready when positioning **FRD** in steps #7.

MCOD

MCOD

CCOD

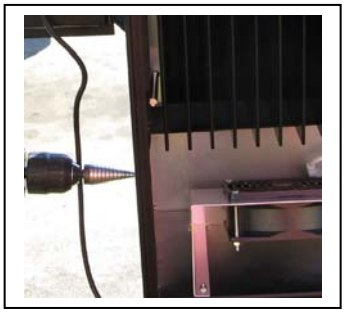
Tip: On the *Everbright MCOD* w/ the round sides, line up the back side of the **FRD** bracket just forward of center, about ½" on the **MCOD** enclosure. By moving just forward of center, will clear the bracket mounting holes away from a thick membrane that is in the center of this type of **MCOD**.

Note: DO NOT OVER TIGHTEN MOUNTING SCREWS AND STRIP OUT.
If you strip out a self-tap screw while mounting, replace it with a #10 x ½" screw that is supplied.

8) Install the Watertight Connector & run the **FRD** wire inside the **MCOD** or **CCOD** enclosure. Depending on which **MCOD** you are working on, will determine the place you drill the 7/8" hole to install the Watertight Connector. **See next page for CCOD connector installation.**

Note: Look inside the **MCOD** enclosure and make sure you have a clear area before you drill the 7/8" hole for the connector. You must be able to place the Lock Nut on the threaded side of the connector inside and tighten down.

Drill hole



Install connector

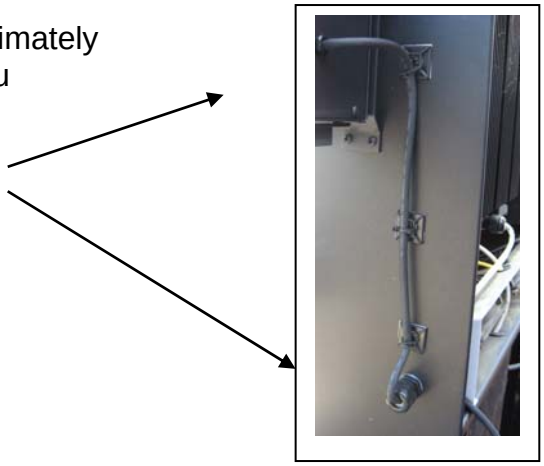
Run wire to bottom area of CODs

>> See next page for CCOD connector installation <<

Note: On some **MCODs** you will need to come down approximately 9 inches from where you mounted the **FRD** before you can drill the 7/8" hole and install the Watertight Connector.

In these cases, use the supplied wire blocks, screws and tie wraps to secure wire in place.

This applies mostly to the Texas Digital COD's



Important: For CCOD installations where you can not get to the back side of the wire hole.

You must use a Uni-Bit, do not drill out to the full 7/8" capacity of the Uni-Bit. **Only drill out to the 13/16" size.** Work the Uni-Bit to the 13/16" size. While the drill is running, move the drill handle side, up and down slightly to oval out the hole. This will allow the weather tight connector to be threaded in place and tightened without needing to get to the back side and screw on the Lock Nut.

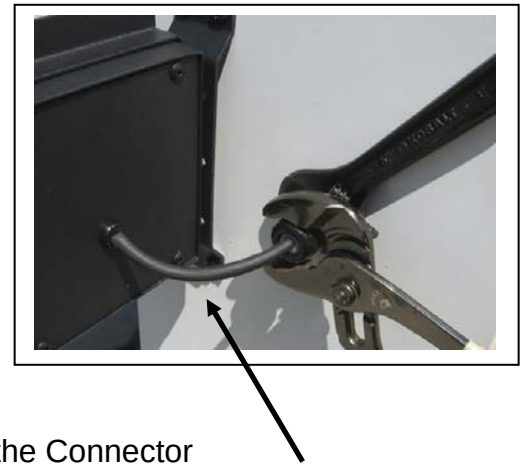
Running the wire inside for the **CCODs** with limited access. Slide the connector nut then the seal and finally the connector over the wire without the Lock Nut. Insert the wire through the hole and fish it down towards the bottom front of the **CCOD.** You will be able to reach the wire on the front side, of the **CCOD** toward the bottom.
(Follow the main support beam down toward the front side) - (Drive-thru lane side= front side)

In some cases, there will be a gap between the main support beam and the outside covering on the back side. In this case, you will be able to run the wire down that way also. However, you still will not be able to screw on the Lock Nut on the inside, so use the above method in this situation.

Run the wire through the connector nut, connector seal, then the connector itself.

Run the wire inside, screw in the watertight connector and hold it in place with a small adjustable wrench.

Slide on the connector seal & nut then tighten down.
(Do not over tighten connector nut)



9) **On all installations** leave some slack between the **FRD** to the Connector so there is a "Low Point" where excess water can drip away.

(Make a low point)

10) Make sure the wire is run through existing raceways and secure it so it will not interfere with other wiring and components inside the **CODs.**

Now the FRD is mounted and the wire is run through to the inside of the MCOD or CCOD.

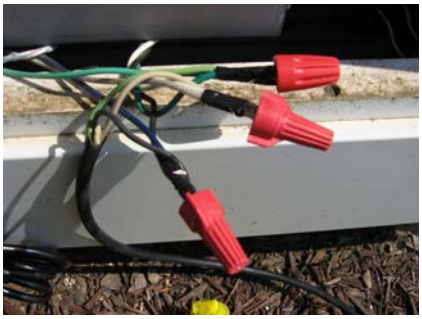
You are ready to wire in the power supply.

Wiring in the Power Supply

11) Connect the RED wires from the FRD to the RED wire from the Power Supply. Do the same with the BLACK wires.

12) Plug in power supply to existing outlet inside in **COD** or wire in the pig tail connector to the 120 VAC power source.

13) Tape wiring connections if connecting directly to other open wiring.



Note: Make sure you connect to the circuit that powers the COD and not to the circuit that powers the lighting in the Drive-thru area.

Note: All wiring should meet or exceed National Electric Codes (NEC)

19) ****Turn power breaker back ON****

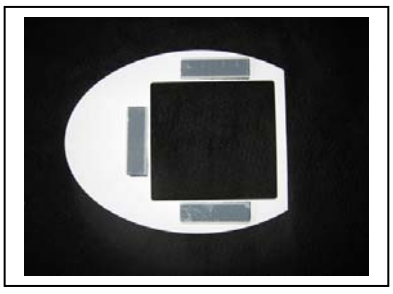
> Confirm unit is working. The **FRD** should be flashing at this time.

> Place power supply out of the way and tie wrap excess wiring as needed.

> Reassemble the **COD** and secure all screws or panels removed.

Attaching the POP Trim Panel

20) Separate the Velcro strips on the back of the POP Panel. Place the strips on the TOP, BOTTOM and RIGHT SIDE of the POP Ring Bracket. Slide the POP Trim Panel over the FRD and push against the areas where the Velcro strips are.



Photocell Test

1) Place a piece of black tape over the photocell on the Right Side of the **FRD**.
2) Wait approximately 45 seconds to 1 minute. The **FRD** will dim to about 50% brightness.
3) Remove tape and wait approximately 45 seconds and the **FRD** will come back to full brightness.

Note: If you are installing the **FRD** at dusk or during the night time the **FRD** may already be in the Dim Mode and it will NOT dim anymore.

To test during night time

Shine a flashlight over the photocell for approximately 45 seconds to 1 minute. The **FRD** will go to full brightness. Remove flashlight and wait, the **FRD** will go back to 50% brightness.

For Technical Assistance call 678-455-9121
Mon-Fri 9 am - 5 pm
(Eastern Standard Time)

FlashRight Displays – 6210 Browns Bridge Rd. - Ste. # 260 - Cumming, GA 30041
Tel. 678-455-9121 <<< >>> www.FlashRightDisplays.com

Flash Right Insert Panel Replacement

Installation Notes

1) Place panel removal key (or any key) in one of the bottom slots and pry open.

Do the same on the other side.

Note: **Use the same movement as if you would be opening a can of paint.**

Panel will drop out and down.

2) Take the new panel and slide it up behind the dimples on the top and "snap" the bottom in place.

Make sure it is behind the 2 dimples on the top.

3) Make sure the top and bottom is "snapped" in place.

If you have the POP Trim Panel it will be easier to place the top in first and then "snap" in the bottom.

Note: **It is recommended that you hold the back of the display when snapping the Insert Panel in place.**