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# **RE: FMCA 3000 Series Installation Instructions & Parts List**

### Important:

Mystery Electronics backboxes are UL listed and conform to all applicable N.E.M.A. Standards. While locally available boxes may seem acceptable as substitutes, there are differences in certain critical dimensions. For a fast and easy installation and to avoid costly onsite rework, the user is strongly cautioned to use only Mystery Electronics backboxes. They are proven to be the lowest cost alternative.

# General:

These instructions are provided to assist in the installation of all FMCA3000 series units, and are precise for most routine applications. Further technical support or application-specific instructions are available from our Technical Support Team. The FMCA series includes a variety of Insert Panel types to accommodate most applications with little or no modification. The purpose of this variety is to reduce installation labor and preparation work as much as possible.

Careful consideration and pre-planning should be given to both the immediate and long-term conditions of the proposed installation. FMCA units are typically located where they might be walked on, rolled over, and generally abused. Every effort should be made to keep the FMCA units out of the path of heavy traffic.

Satin black models (FMCA 3000, 3200, and 3400) are not recommended for unprotected outdoor or indoor wet, damp or severe weather locations. The FMCA3800 with stainless steel Door/Covers, along with our All Weather Enclosures (AW series) are recommended for outdoor applications.

# Backbox:

The backbox is an optional item and not furnished with the FMCA unit. Consult TechNote TN12 for backbox installation details. A backbox is required for all conduit system



installations. The backbox is optional when a conduit system is not installed but is recommended to maintain secure integrity and ease of the installation. For applications where moderate to heavy traffic or movement of equipment or materials (pianos, scenery, props, "road cases", etc.) is expected, a backbox is strongly recommended.

Run all wiring lines into the backbox before proceeding to mount the Basket. Connector Insert Panel openings in the Basket of all models are large enough to allow most connectors to be mounted on the panel, have connections wired and still be fed thru the Basket. This allows off-site prefabrication. It also effectively prevents inadvertently "getting ahead of oneself".

# **Dual Basket assembly:**

Assemble the Dual Basket by securing the Baskets (two each) to the Center Support Bracket. Align each Basket's mounting holes with those on the Center Support Bracket and attach using four (4) 8/32 x ½" flat Phillips machine screws. The Center Support Bracket <u>must</u> be installed as it provides support to the center of the FMCA Series 3000 unit.

# Dual Basket installation with backbox:

For backbox applications, align the countersunk holes in the flange of the Basket with the corresponding holes in the top flange of the backbox and install the 1½" flat Phillips head self-tapping screws. The self-tapping screws furnished with the FMCA are designed to thread these holes readily. Make major adjustments for variations in site conditions (i.e. backbox depth below floor, carpet thickness, hardwood floors routed to flush mount the Door/Cover, etc.) by raising or lowering the 1½" Basket mounting screws. Further adjustment may be required before attaching the Door/Cover to the Basket. **CAUTION:** *The self-tapping screws* 

furnished with the FMCA hardware kit may not provide secure mounting of the FMCA if a backbox other than the appropriate Mystery Electronics backbox is used.

# Dual Basket installation without backbox:

Use the Dual Basket as a template and cut the opening 1/8" larger than bottom of the FMCA Dual Basket. Substrate failure can occur in particleboard, plywood and even hardwood floors due to the location of the Basket mounting holes at the edge of the cut opening. To prevent this, solid wood blocking strips (1x2 is adequate) must be fastened beneath each side of the cut opening below each Basket mounting flange (two sides only). The wood backing strips should be cut 2" longer than the Basket flange. Place each strip thru the cut opening and pull it up against the underside of the floor. Center the strip along the edge of the opening and fasten it in place with long wood screws from above. TwinFast type screws, having aggressive threads, work very well here. This provides a ledger / backing strip for the Basket to be fastened to. Mount the Basket with four (4) wood screws (not furnished) thru the floor decking and into the backing strip. This effectively clamps the floor between the FMCA Dual Basket flange and the backing strip. On floors without carpet, notch the area below the Center Support Bracket until mounting flanges sit flat on the floor surface. Install wiring as required and route wiring lines thru the Insert Panel openings of the Dual Basket.

### Door/Cover:

Position Gaskets on top of Dual Basket with open sides of U-shaped Gaskets toward center of Dual Basket (directly under hinge) and line up notches on Gaskets with finger notches on Door/Cover. Secure the Door/Cover to the Dual Basket with four (4) flathead socket screws, passing thru holes in Gasket. When properly installed, the Door/Cover should compress the Gasket and "seat" directly onto the Basket without any gap between the Door/Cover and the Basket or the Door/Cover and the floor.

For carpet installations, further minor adjustment should be made by raising or lowering the Basket until Door/Cover "seats" properly as per above. The integral carpet trim flange should pull down into carpet snugly without causing any visible deflection of the Door/Cover. If the Door/Cover exhibits any deflection, raise the Basket until deflection no longer occurs with no gap showing and the edge of the integral Door/Cover carpet trim ring is pulled sufficiently far enough into the carpet so that the FMCA does not move when walked on. Patience in performing this step ensures that the installation will be able to withstand heavy traffic. Only with certain extremely thick carpet and pad combinations will cutting the pad or shaving the carpet be required.

On hard floor surfaces, the integral trim ring edge must be firmly in contact with the hard floor surface. The floor can be routed so that the Door/Cover provides an absolutely flush installation if this is desired (flush mount version required).

#### **Connector Insert Panel:**

Install the required number of connectors. Unused spaces may be filled with our HFPN connector position blanking plates. This allows future addition of connectors in these spaces while giving a professional, finished look to the installation. We recommend that the connectors be mounted to the Insert Panel with our TK11 connector mounting hardware (stainless steel screws and nylon lock nuts). Experience has shown that aluminum blind rivets often become loose after a short time, causing connectors to wiggle when connectors are inserted or removed.

Terminate all connections and secure the Insert Panels to the Basket with three (3) 8/32 button head Insert Panel mounting screws.

#### Parts List:

<u>Quantity</u>	Description
1ea	Door/Cover
2ea	Gasket - FMCA3000 series gasket is comprised of 2ea FMCA2000 series gaskets
2ea	Basket - FMCA3000 series basket is comprised of 2ea FMCA2000 series baskets
1ea	Center Support Bracket
4ea	Bracket Mounting Screws - 8/32 x 1/2" flat phillips machine screw
4ea	Basket Mounting Screws - 8/32 x 1-1/2" flat phillips type F (self tapping) machine screw
8ea	Door/Cover Mounting Screws - 8/32 x 1/2" flat socket cap screw or brass phillips machine screw
12ea	Insert Panel Mounting Screw - 8/32 x 1/2" button socket cap screw
1ea	Hex Key Wrench for socket screws

Note: The Door/Cover of satin black steel versions of Mystery Electronics products are supplied with an extended durability ceramic plastic coating. Areas subjected to heavy abrasion may show a slight change from satin black to a flat black over an extended period of time due to normal wear. This change is exhibited on the surface of the finish only, but not through it, and does not expose bare metal. This long-wearing finish is part of our continuing effort to provide you with the best possible products.

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