KNIGHT Electronics, Inc.

CUSTOM MANUFACTURING CAPABILITIES

Solutions & Examples Guide



BUTTON & SWITCH CAPABILITIES

FEATURES & CAPABILITIES:

- IP ratings
- Custom Etched Symbols
- Guards & Covers
- Attached Harnesses
- Custom Shapes & Sizes
- Tamper Resistance
- Illuminated or Non-illuminated
- High Temperature
- Custom Actuators

EXAMPLES:



Micro Switch



Micro Switch with Rollers

Micro switches are ideal for applications such as metal fabrication equipment, elevators & cranes, construction machinery & equipment, vehicles, and lift trucks/lift beds on trucks.



Illuminated button custom manufactured to feature thumbguards to prevent accidental actuation.



Buttons were designed for an operations panel for marine applications. It is IP57 and features custom laser-etched symbols on the face of each button.



This button was produced with screw terminals for easy install and silver plated contacts. It is IP67 and features a sealed, tamper proof design.



This button was designed for a speaker system. It features an illuminated, sealed, and tamper proof design that is IP65 rated.

WIRE HARNESS CAPABILITIES

CAPABILITIES:

- Cut to Length
- Splicing
- Spiral Wrapping
- Add Tubing
- Twisting or Braiding
- All Gauging & Types
- Different Jacketing Materials
- Labeling
- Terminate with Connectors
- High Temperature
- Custom Colors
- Full Harness
- Kitting
- Custom Number of Conductors

EXAMPLES:



Assembly features a panel-mount fuse holder with heat-shrink protected leads, terminated with a custom connector for easy installation.



Multi-conductor jumper cut to length and terminated with connectors on each end for a clean board-to-board connection.



Harness pairs a panel-mount connector with color-coded leads, terminated for quick, error-free assembly.



Multi-branch harness combines quick-disconnect, ring terminals, and inline connectors in a single assembly.

Cable glands
Available in plastic and metal in various sizes



INJECTION MOLDING CAPABILITIES

CAPABILITIES:

- Custom Mold Design
- Custom Colors
- Prototype Tooling
- Textured Finishes
- Production Tooling
- Tight Tolerances
- Multi-Cavity Molds
- Low to High Volume
- Insert Molding
- Pad Printing & Marking
- Over molding
- Secondary Assembly
- Wide Resin Selection
- Laser Marking
- Kitting

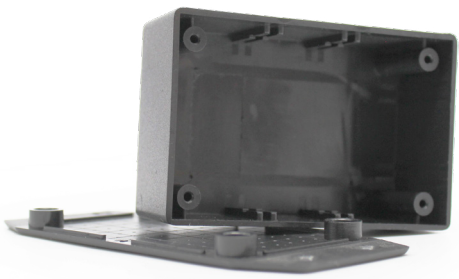
EXAMPLES:



Custom housings molded in durable black resin to protect and mount internal LED light assemblies.



Base custom molded in green resin, color matched with the customer's logo, and designed for a precise fit with the finished product.



Custom enclosure molded with mounting feet and guide tabs on the inside for easy component installation.



Connector housing was insert molded with gold plated contact pins, creating a durable, one-piece part with no secondary assembly.

POWER SUPPLY & TRANSFORMER CAPABILITIES

CAPABILITIES:

- AC/DC Power Supplies
- LED Drivers
- Custom Transformers
- Step-Up & Step-Down
- Custom Voltages
- Isolation Transformers
- Low to High Volume
- Custom Connectors
- Custom Cord Lengths
- Inline & Wall Mount
- Open-Frame Designs
- Class 2 Power
- Private Labeling
- Kitting

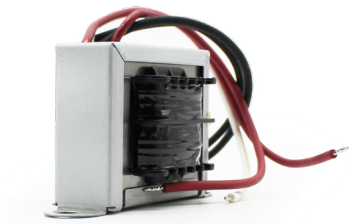
EXAMPLES:



Inline power supply built with a custom length and terminated with a custom output connector. Fully potted for outdoor use.



LED driver housed in a compact metal enclosure with color-coded leads for easy installation.



Compact transformer built with custom lead lengths for a low-voltage application.



Toroidal transformer custom wound and mounted on a PCB base for easy board-level installation.

ADDITIONAL CAPABILITIES

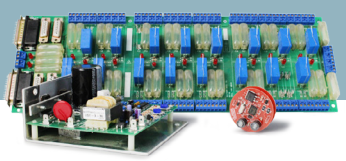
SUBASSEMBLIES

Cable Assemblies
Fan Assemblies
Switch Assemblies



BARE PC BOARDS

Single Sided
Thru 12 Layer





COMPONENTS & HARDWARE

Knobs & Dials
Connectors
Switches

KNIGHT IN ACTION



CUSTOMER'S PROBLEM

- Reduce PCB subassembly cost by 10%

OUR SOLUTION

- Fewer components
- 10% smaller board
- Updated BOM for new environmental regulations
- 2 weeks faster production

JIT Delivery FOB Dallas

EVERYTHING BUILT TO PRINT

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