

R. C. Tronics, Incorporated

Specializing In Electronic Controls

**2573 East Kercher Road
Goshen, Indiana 46526
Toll Free 1-866-457-7790**

**Phone 1-574-642-3857
Fax 1-574-642-3858
<http://www.rctronics.com>**

Ambulance Power Center Type 2



R.C. TRONICS, INC.
Specializing in Electronic Controls

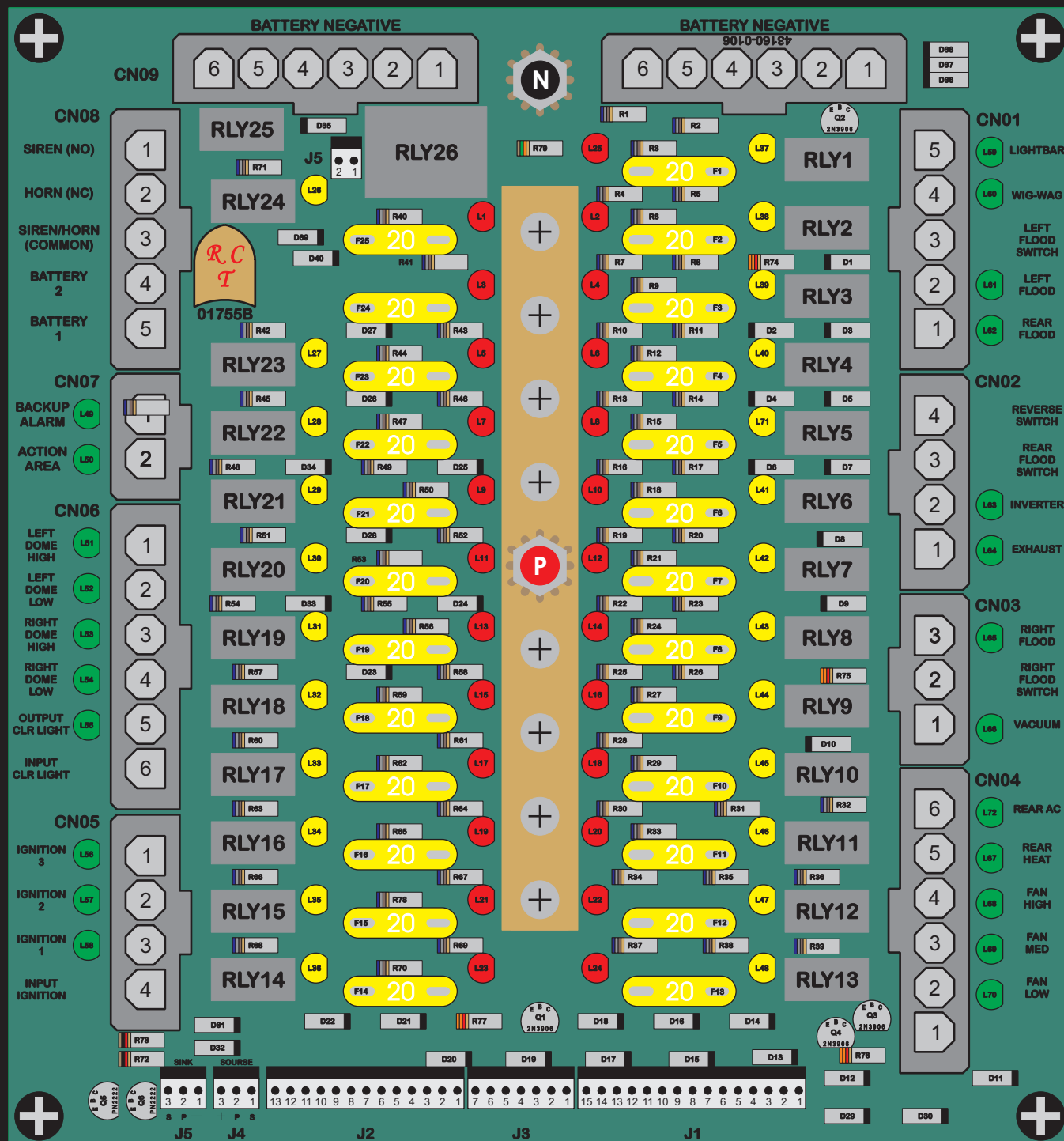
2573
E. Kercher Rd.

R. C. Tronics Incorporated

2573 East Kercher Road
Goshen, Indiana 46528
Toll Free 1-866-457-7790

Phone 1-574-642-3857
Fax 1-574-642-3858
<http://www.rctronics.com>

Power Center Assembly



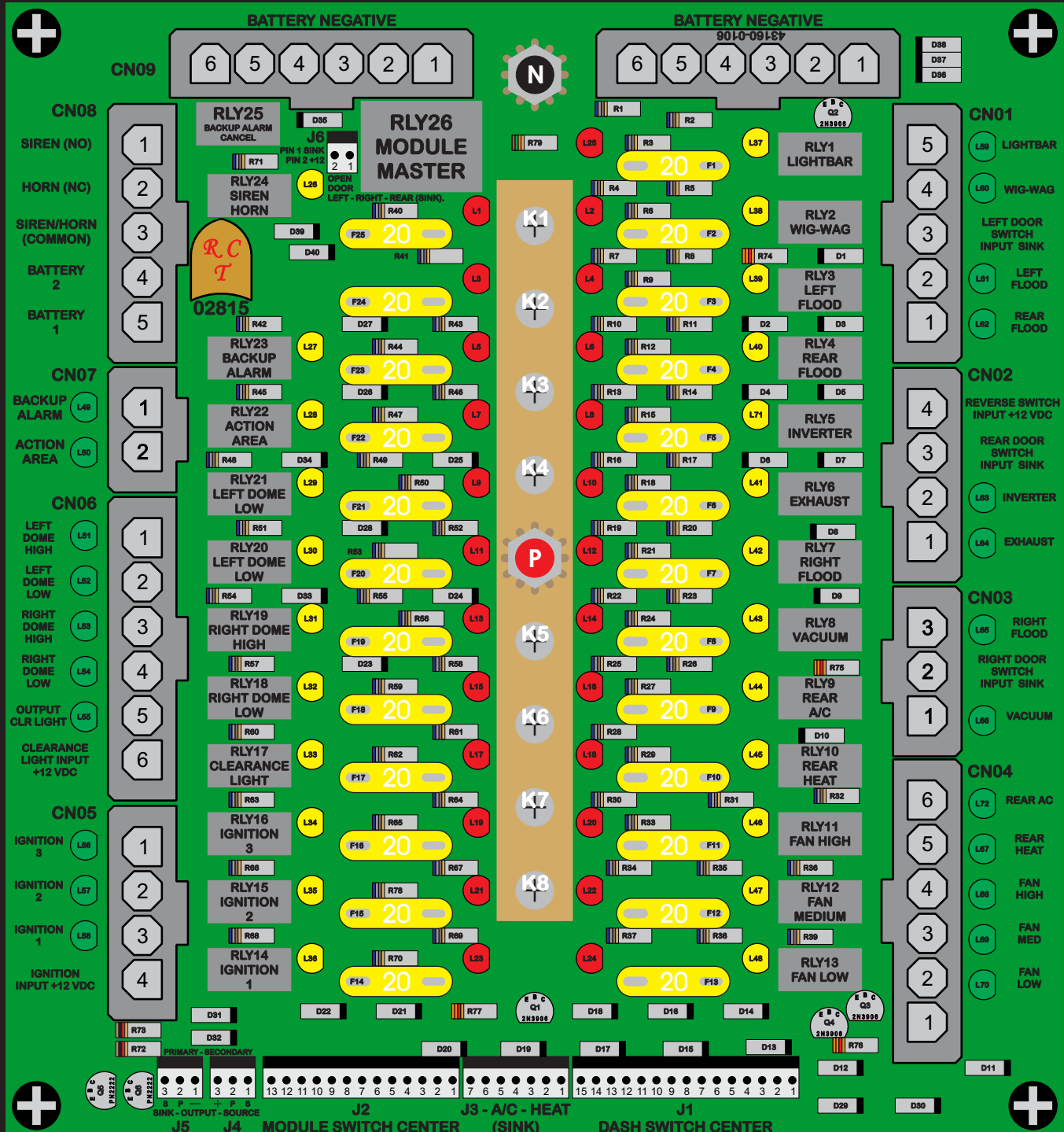
8 Inches(L-R) x 8-1/2 Inches(T-B) x 2 Inches(Deep)

R. C. Tronics Incorporated

2573 East Kercher Road
Goshen, Indiana 46528
Toll Free 1-866-457-7790

Phone 1-574-642-3857
Fax 1-574-642-3858
<http://www.rctronics.com>

RCT-02815 POWER CENTER / WITH SINKING A/C-HEAT INPUTS



8 INCHES (L-R) X 8-1/2 INCHES (T-B) X 2 INCHES (DEEP)

R. C. Tronics, Incorporated

2573 East Kercher Road
Phone 1-574-642-3857
Toll Free 1-866-457-7790

www.rctronics.com

Goshen, Indiana 46528
Fax 1-574-642-3858
Email: dchiddister@rctronics.com

PCB-01755B Ambulance Power Center Type 2 Dash Switch Assembly

1. **Emergency Master Switch.** (Enables primary/secondary, light-bar and wig-wag switches. Horn/siren switch operates independent of Emergency Master Switch, all operate with ignition.)
 2. **Primary-Secondary Switch.** (Provides sinking & sourcing signal with ignition)(PRI-SEC.)
 3. **Light-Bar Front Switch.** (Relay 1 output, 12 VDC @ 30 ampere)(LBAR)
 4. **Wig-Wag Switch.** (Relay 2 output, 12 VDC @ 30 ampere)(WAG.)
 5. **Siren Horn Switch.** (Relay 24 output 12 VDC form C contact)(H/R)
-
1. **Module Master Switch.** (May be enabled on module switch assembly)(M/ON-M/OFF)
 2. **Left Flood Switch.** (Relay 3 output, 12 VDC @ 30 ampere)(LFLD)
 3. **Right Flood Switch.** (Relay 7 output, 12 VDC @ 30 ampere)(RFLD)
 4. **Rear Flood Switch.** (Relay 4 output, 12 VDC @ 30 ampere)(BFLD)
 5. **Back-Up Alarm Cancel Switch.** (Relay 23 output, 12 VDC output @ 30 ampere)(B/UP-R/SW)

Note: Left-Right-Rear floods will have respective door inputs to operate the flood lights associated with the opened door. Right door open will operate right dome high, left, rear door open will operate left dome high, Additionally, rear floods will operate when vehicle is placed into reverse.

Module Switch Assembly

1. **Module Master Switch.** (Module may be enabled on dash switch 2)(M/ON-M/OFF)
 2. **Left Dome, High-Low Switch.** (Relays 20 & 21 output 12 VDC @ 30 Ampere)(L/LO-L/HI)
 3. **Right Dome, High-Low Switch.** (Relays 18 & 19 output 12 VDC @ 30 Ampere)(R/LO-R/HI)
 4. **Action Area Switch.** (Relay 22, output 12 VDC @ 30 ampere)(ACT.)
 5. **Vacuum (Suction) Switch.** (Relay 8 output, 12 VDC @ 30 ampere)(VAC.)
 6. **Inverter Switch.** (Relay 5 output, 12 VDC @ 30 ampere)(INV.)
 7. **Exhaust Fan Switch.** (Relay 6 output, 12 VDC @ 30 ampere)(EXH.)
-
1. **Rear Heat & A/C Switch.** (Relay's 9 & 10 output, 12 VDC @ 30 ampere)(HEAT-AC)
 2. **Fan, Low-Med-High Switch.** (Relays 11, 12 & 13 output 12 VDC @ 30 ampere)(F/LO-F/HI)

Note: Operating "Rear, Heat or A/C Switch will start fan at medium speed.

The fan may then be switched to high or low speeds.

You may also wire the thermostat direct for automatic control.

Heating and cooling control switches can be mounted separately from dash and module switch assemblies.

Door Open, J5, Shows Left, Right or Rear door is open.

*Clearance Light Relay Output. (Relay 17, 12 VDC @ 30 ampere.)
Three ignition relays, 14, 15 & 16 provide three separate circuits for a total of 90 amperes,
rated 12 VDC.*

Two battery circuits provide a total of 60 amperes.

All fuses are monitored with a red indicator to provide visual indication of open fuse.

All energized relays depicted with amber indicators.

All outputs show power output with green indicators.

System completely "Plug-In-Play". Provides rapid replacement of control.

All connections keyed, cannot interchange cabling.

All switches pad printed with staged lighting.

To order a complete system:

- 1. RCT-01755-00000, Power Center. (RCT can install special fuse arrangement specified by end user.)**
- 2. RCT-XXXXX-XXXXX, Front Switch Panel, to include all pad printed switches and rear PCB-01752.**
- 3. RCT-XXXXX-XXXXX, Rear Switch Panel, to include all pad printed switches and rear PCB-01753.**
- 4. RCT-XXXXX-XXXXX, Heat/AC Switch Panel, to include both pad printed switches and rear PCB-01754. (PCB-01754 with pad printed switches may be mounted into front or rear switch assemblies. Data cable DAT-01XXX-01000 may be wired to thermostat. If done, item #4 may be omitted.)**
- 5. DAT-01350-00XX0 Fifteen Conductors. (J1/RCT-01755 to J1/PCB-01752 to front switch.)**
- 6. DAT-01758-00XX0, Thirteen Conductors. (J2/RCT-01755 to J1/PCB-01753 to rear switch.)**
- 7. DAT-01757-00XX0, Seven Conductors. (J3/RCT-01755 to J1/PCB-01754 to Heat/AC switch.)**
- 8. DAT-01347-01XX0, Four Conductors. (J4/RCT-01755 to Body Flasher.) or use (DAT-01347-03XX0 for RCT-00772, body flasher.)**
- 9. DAT-01345-00XX0, Two Conductors. (J5/RCT-01755 to Door Open Indicator.)**

NOTE: Replace XX with desired cable length in feet.

MOLEX CONNECTOR KIT, RCT-MOLEX-00011

MOLEX CRIMPING TOOL, 63811-0400

MOLEX PIN EXTRACTOR TOOL, 63813-2700

MOLEX TERMINAL PIN, 43375-0001

R. C. Tonics, Incorporated

2573 East Kercher Road
Phone 1-574-642-3857
Toll Free 1-866-457-7790

www.rctronics.com

Goshen, Indiana 46528
Fax 1-574-642-3858
dchiddister@rctronics.com

RCT-01755 & RCT-02815 AMBULANCE POWER CENTER

CONNECTOR CN01

1. *Rear Flood Output. (+12 VDC).*
2. *Left Flood Output. (+12 VDC).*
3. *Left Door & Flood Switch Input. (Operates left flood & dome when taken to ground).*
4. *Wig-Wag Output. (+12 VDC).*
5. *Light-Bar Output. (+12 VDC).*

CONNECTOR CN02

1. *Exhaust Output. (+12 VDC).*
2. *Inverter Output. (+12 VDC).*
3. *Rear Door & Flood Switch Input. (Operates rear flood & dome when taken to ground.)*
4. *Reverse Switch Input +12 VDC. (Operates rear floods & back up alarm.)*

CONNECTOR CN03

1. *Vacuum Output. (+12 VDC).*
2. *Right Door & Flood Switch Input. (Operates right floods & dome when taken to ground).*
3. *Right Flood Output. (+12 VDC).*

CONNECTOR CN04

1. *Rear AC. (+12 VDC).*
2. *Fan Medium Output. (+12 VDC).*
3. *Fan High Output. (+12 VDC).*
4. *Fan High Output. (+12 VDC).*
5. *Rear Heat Output. (+12 VDC).*
6. *Fan Low Output.*

CONNECTOR CN05

1. *Ignition 3 Output. (+12 VDC).*
2. *Ignition 2 Output. (+12 VDC).*
3. *Ignition 1 Output. (+12 VDC).*
4. *Ignition Input. +12 VDC (Input from chassis).*

CONNECTOR CN06

1. *Left Dome High Output. (+12 VDC).*
2. *Left Dome Low Output. (+12 VDC).*
3. *Right Dome High Output. (+12 VDC).*
4. *Right Dome Low Output. (+12 VDC).*
5. *Clearance Light Output. (+12 VDC).*
6. *Clearance light Input. (+12 VDC input from chassis).*

CONNECTOR CN07

1. *Back-Up Alarm Output. (+12 VDC).*
2. *Action Area Output. (+12 VDC).*

CONNECTOR CN08

1. Siren (NO).
2. Horn (NC).
3. Horn/Siren (Common).
4. Battery 2
5. Battery 1

CONNECTOR CN09

1. Battery Negative.
2. Battery Negative.
3. Battery Negative.
4. Battery Negative.
5. Battery Negative.
6. Battery Negative.

CONNECTOR CN10

1. Battery Negative.
2. Battery Negative.
3. Battery Negative.
4. Battery Negative.
5. Battery Negative.
6. Battery Negative.

CONNECTOR J1, To Dash Switch PCB.

1. Right Flood Switch. (+12 VDC)
2. Rear Flood Switch. (+12 VDC)
3. Left Flood Switch. (+12 VDC)
4. Wig-Wag Switch. (+12 VDC)
5. Light-Bar Switch. (+12 VDC)
6. Reverse Switch. (+12 VDC chassis input). (From CN02-4, Reverse Switch).
7. Back-Up Alarm Cancel Switch. (+12 VDC)
8. Module Master Switch. (To J2-10) (Set to module ON). Battery Negative
9. Module Master Switch. (To J2-9) (Set to module Off). Battery Negative
10. Primary/Secondary Switch, to J4-2. (Provides J4-4 with sink signal) Primary (+12 VDC)
11. Primary/Secondary Switch, to J4-1. (Provides J4-3 with sink signal) Secondary (+12 VDC)
12. Horn/Siren (+12 VDC)
13. Ignition. (+12 VDC)
14. Battery Negative.
15. Module Master Enable with Ignition. (+12 VDC)

DATA CONNECTOR J2, To Module Switch PCB.

1. Vacuum (Suction) Switch. (+12 VDC)
2. Exhaust Switch. (+12 VDC)
3. Inverter Switch. (+12 VDC)
4. Right Dome Low Switch. (+12 VDC)
5. Right Dome High Switch. (+12 VDC)
6. Left Dome Low Switch. (+12 VDC)
7. Left Dome High Switch. (+12 VDC)
8. Fluorescent Light Switch. (+12 VDC)
9. Module Master Switch. (To J1-9) (Set to module OFF). Battery Negative
10. Module Master Switch. (To J1-8) (Set to module ON). Battery Negative.
11. Battery Negative.
12. Module Master Enable with Ignition. (+12 VDC)

13. Ignition +12VDC,

DATA CONNECTOR J3, AC-Heat PCB, for RCT-01755.

1. Fan Low Switch. (+12 VDC)
2. Fan High Switch. (+12 VDC)
3. Rear Heat Switch. (+12 VDC)
4. Rear AC Switch. (+12 VDC)
5. Battery Negative.
6. Ignition with Module Enable. (+12 VDC)
7. Ignition. (+12 VDC)

DATA CONNECTOR J3, AC-Heat PCB, for RCT-02815

NOTE: BELOW J3 INTERFACE ONLY TO CUSTOMER SUPPLIED THERMOSTAT.

NOTE: RCT-02815 SINKING INPUTS FOR AC - HEAT

1. Ignition Only with Dip Switch #1 "ON". (Dip Switch #1 "OFF" Module Enabled.
2. Open, not used.
3. Battery Negative.
4. Rear A/C Switch. Battery Negative.
5. Rear Heat Switch. Battery Negative.
6. Fan Low Switch. Battery Negative.
7. Fan Medium Switch. Battery Negative.
8. Fan High Switch. Battery Negative.

NOTE: ABOVE J3 INTERFACE ONLY TO CUSTOMER SUPPLIED THERMOSTAT.

DAT-01348-XXXXX – 8 Conductor Cable – To RCT-02815 (J3) Header.

1. Black
2. Red
3. Green
4. Brown
5. Blue
6. Orange
7. Yellow
8. White

DATA CONNECTOR J4, To Body Flasher or Strobe Packs.

1. Primary/Secondary Switch; Provides, "12 VDC", "SECONDARY" Signal. (black)
2. Primary/Secondary Switch; Provides, "12 VDC", "PRIMARY" Signal. (green)
3. Primary/Secondary Switch; Provides, "IGNITION (+12 VDC)" (red)

DATA CONNECTOR J5, To Body Flasher or Strobe Packs.

1. Primary/Secondary Switch; "NEGATIVE". (black)
2. Primary/Secondary Switch; Provides, "NEGATIVE", "PRIMARY" Signal. (green)
3. Primary/Secondary Switch; Provides, "NEGATIVE", "SECONDARY" Signal. (red)

DATA CONECTOR J6, To Door Open Indicator.

1. Door Open Signal, Left-Right-Rear Doors. (sink)
2. Ignition (+12 VDC)

R. C. Tronics Incorporated

2573 East Kercher Road
Goshen, Indiana 46528
Toll Free 1-866-457-7790

Dash Switch Assembly Stacked

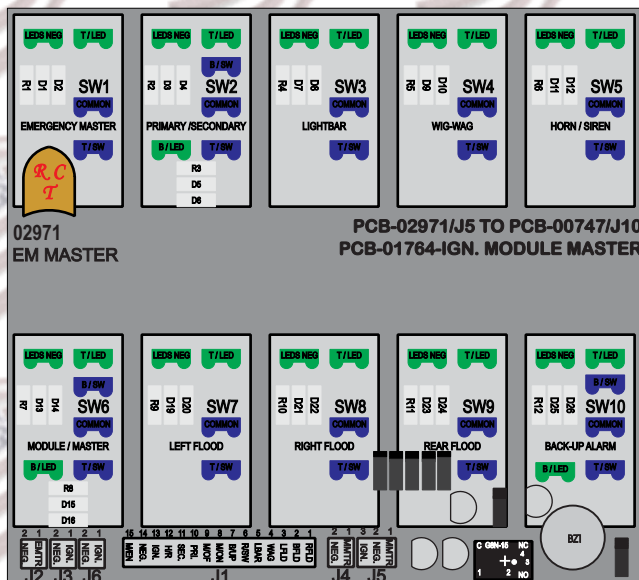
Phone 1-574-642-3857
Fax 1-574-642-3858
<http://www.rctronics.com>



Faceplate can be laser cut to your requirements.
Mounting area for additional switches, meter's or controls.

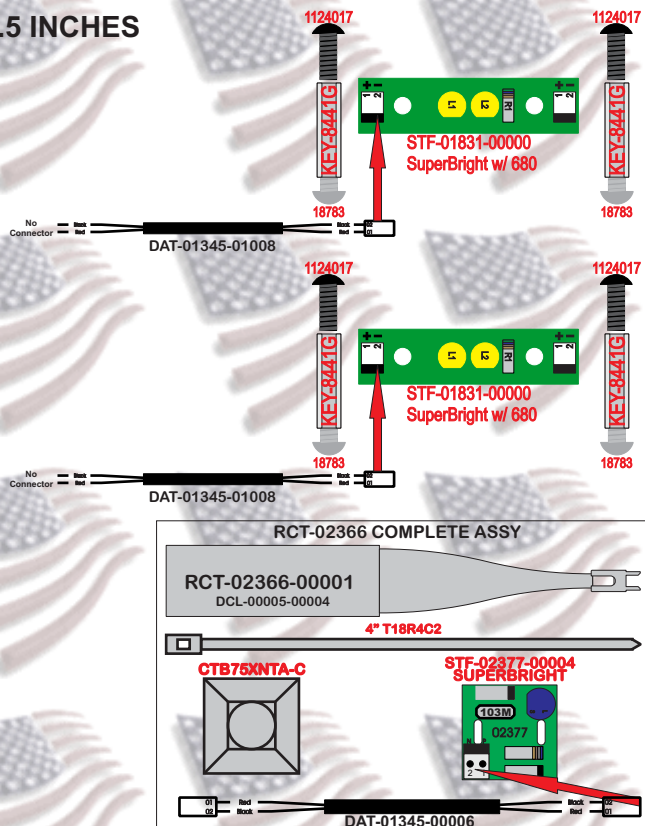
COMPANY LOGO

SIZE 8 X 7.5 INCHES



PCB-02971

Dash Switch Assembly Stacked



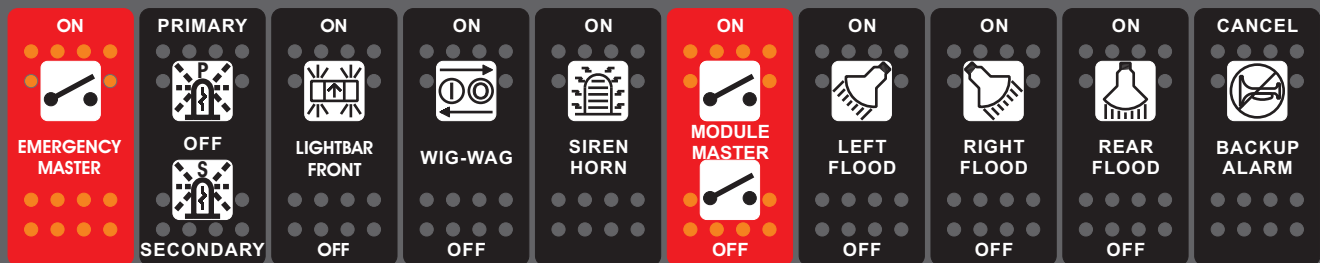
R. C. Tronics Incorporated

2573 East Kercher Road
Goshen, Indiana 46528
Toll Free 1-866-457-7790

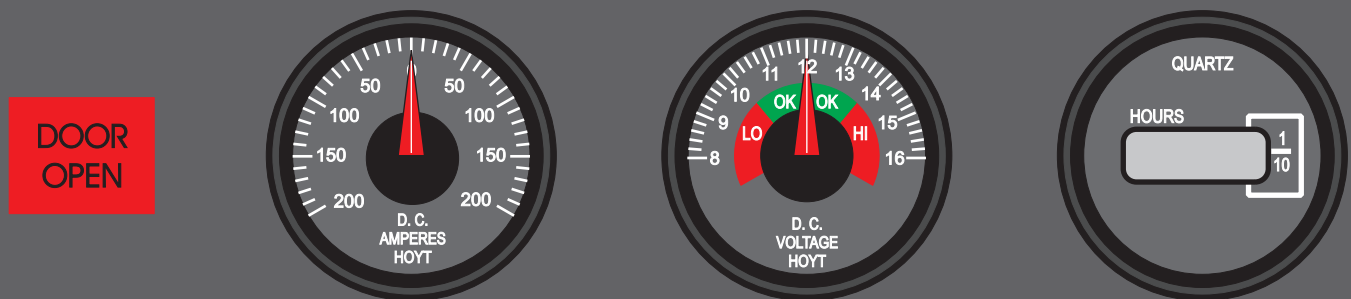
Phone 1-574-642-3857
Fax 1-574-642-3858
<http://www.rctronics.com>

Dash Switch Assembly

COMPANY LOGO



Faceplate can be laser cut to your requirements.
Mounting area for additional switches, meter's or controls.



METER'S SHOWN OPTIONAL

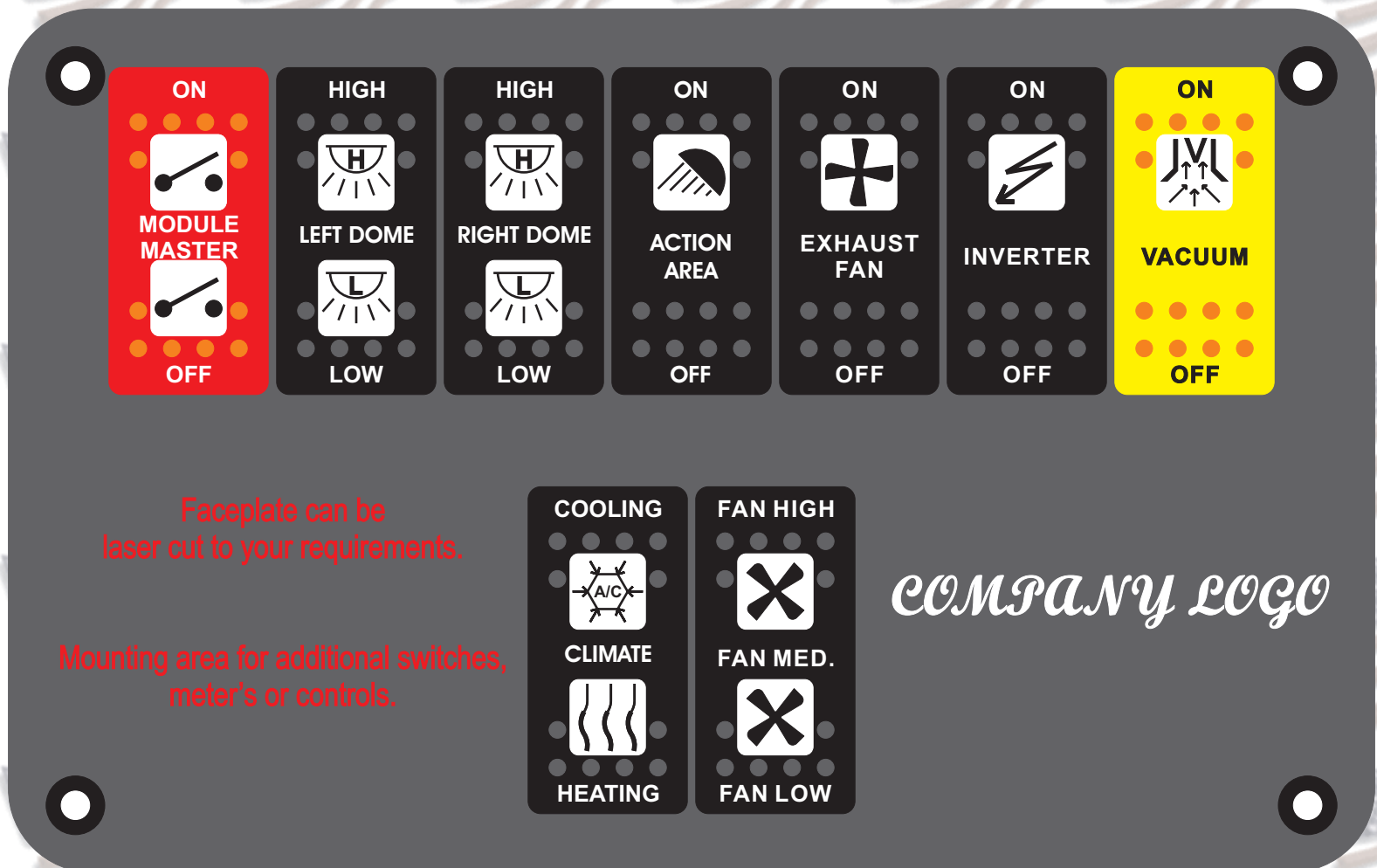
11.65 Inches(L-R) x 8.65 Inches(T-B) x 2 Inches(Deep)

R. C. Ironics Incorporated

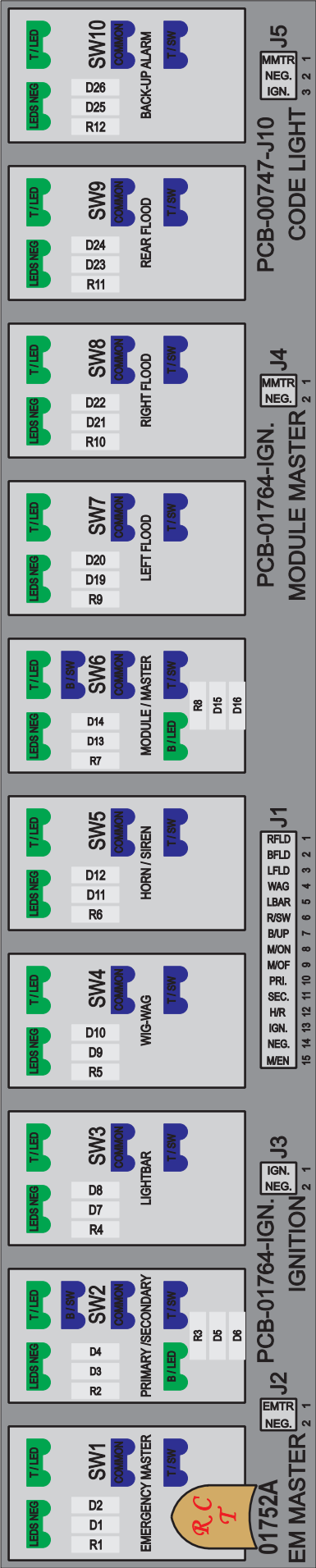
2573 East Kercher Road
Goshen, Indiana 46528
Toll Free 1-866-457-7790

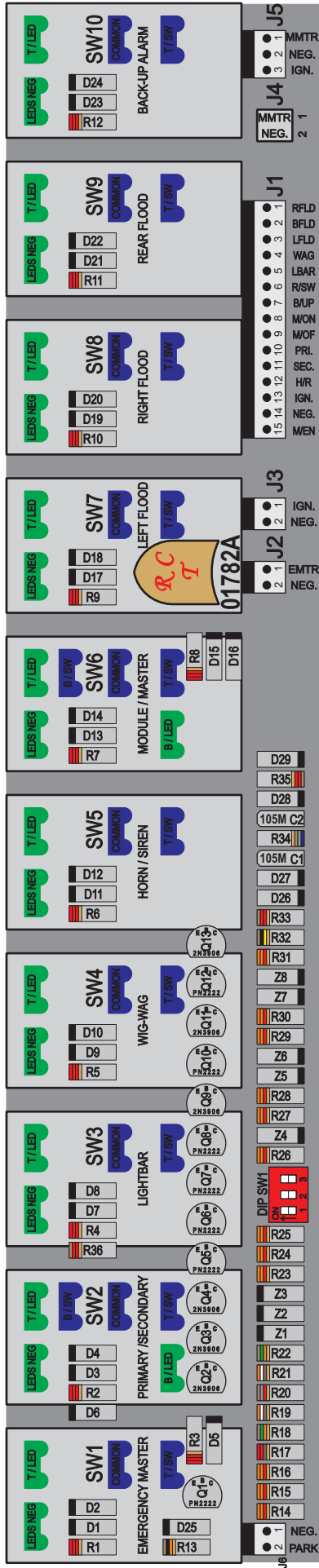
Phone 1-574-642-3857
Fax 1-574-642-3858
<http://www.rcironics.com>

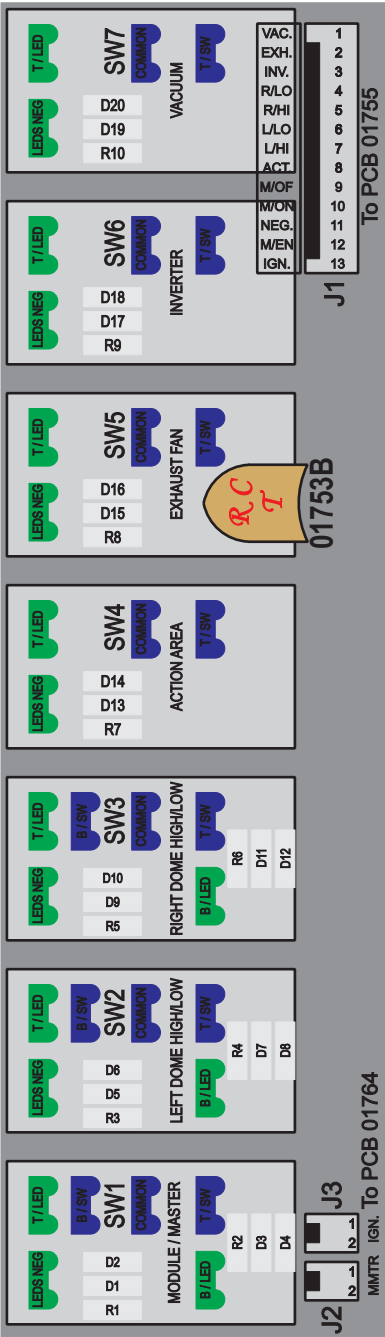
Module Switch Assembly

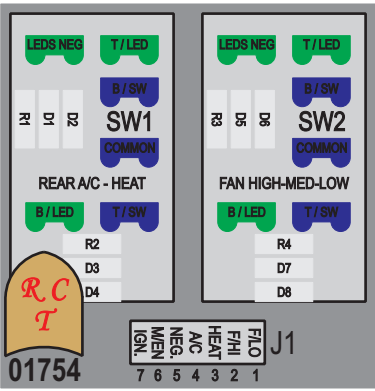


8.15 Inches(L-R) x 5.15 Inches(T-B) x 2 Inches(Deep)

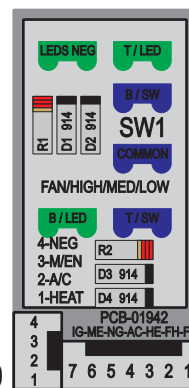




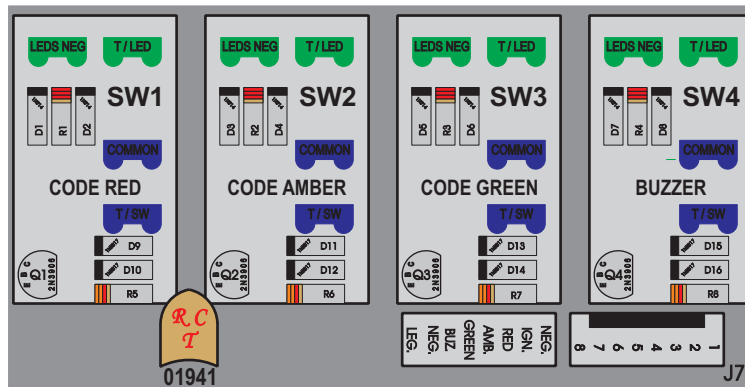




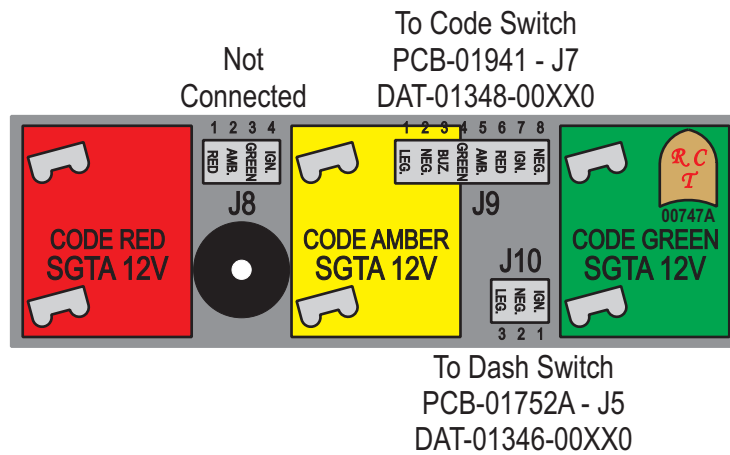
To User
Thermostat
DAT-01347-00XX0

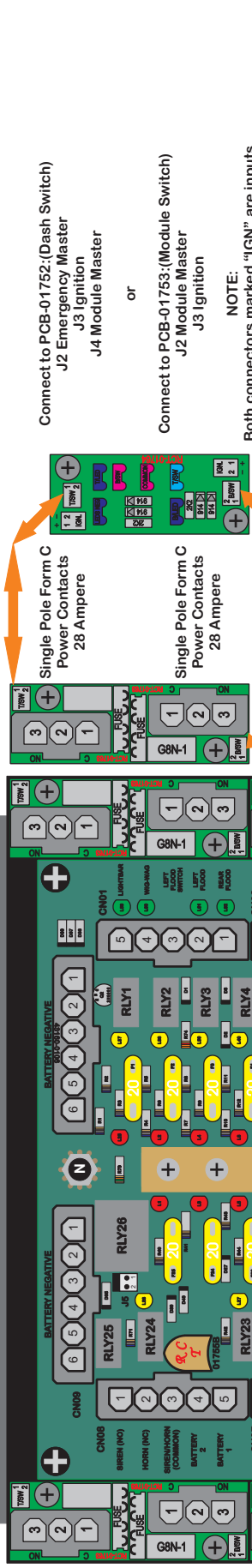


To Power Center
PCB-01755 - J3
DAT-0157-00XX0



To Code Light
PCB-0747A - J9
DAT-01348-00XX0





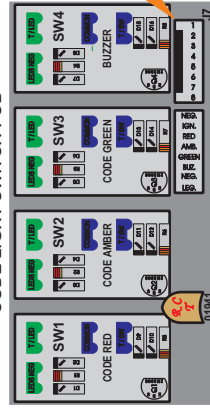
R. C. TRONICS, INCORPORATED AMBULANCE, TYPE TWO CONNECTION

REQUIRED DATA CABLES

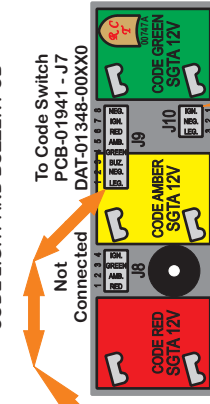
DAT-01 350-00000 (15 Conductor) (PCB-01755J1 to PCB-01752AUJ1)
 DAT-01 758-00000 (13 Conductor) (PCB-01755J2 to PCB-01753BUJ1)
 DAT-01 348-00000 (08 Conductor) (PCB-01941J7 to PCB-00747AJ9)
 DAT-01 757-00000 (07 Conductor) (PCB-01755J3 to PCB-01754J1)
 DAT-01 346-00000 (03 Conductor) (PCB-01752AUJ5 to PCB-00747AUJ10)
 DAT-01 345-00000 (02 Conductor) (PCB-01755J6 to "Door Open Indicator")

NOTE: "IGN" are inputs
 and identical which makes daisy-chaining possible.
 Carling switches are required. Both "ON/OFF" and "ON/OFF/ON".
 Up to six additional Carling switches may be added with mounting ring RCT-01936

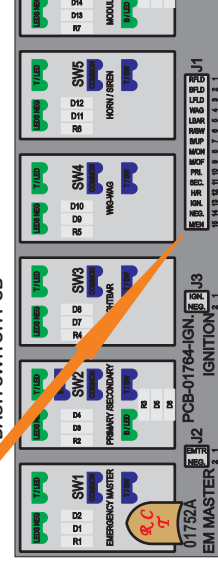
CODE LIGHT SWITCH PCB



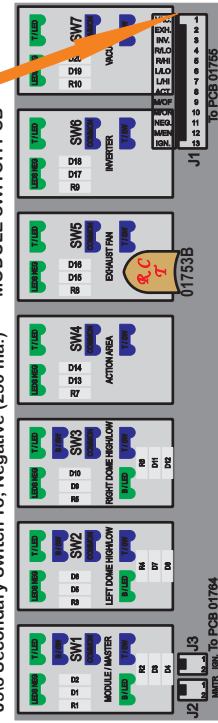
CODE LIGHT AND BUZZER PCB



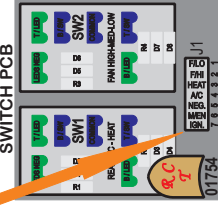
DASH SWITCH PCB



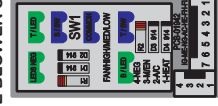
MODULE SWITCH PCB



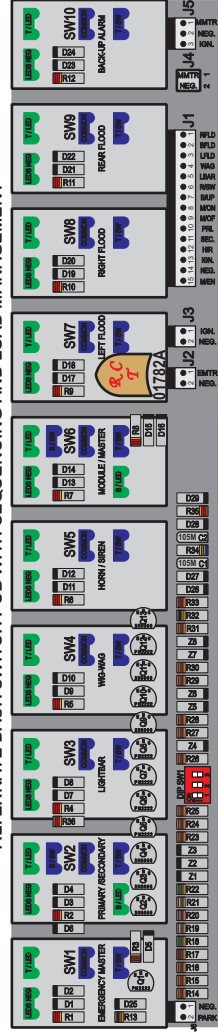
HEAT/COOL SWITCH PCB



ALTERNATE BLOWER SWITCH PCB



ALTERNATE DASH SWITCH PCB WITH SEQUENCING AND LOAD MANAGEMENT



J4 Pin 1 Secondary (+12 VDC @ 500 ma.)
 J4 Pin 2 Primary (+12 VDC @ 500 ma.)
 J4 Pin 3 Ignition (+12 VDC @ 1 ampere.)
 J51 Battery Negative (1 ampere)
 J52 Primary Switch To, Negative (250 ma.)
 J53 Secondary Switch To, Negative (250 ma.)

To User Thermostat
 DAT-01347-00XX0
 Pin 4 \ Negative
 Pin 3 \ Module Enable
 Pin 2 \ A / C
 Pin 1 \ Heat

To Power Center
 PCB-01755 - J3
 DAT-0157-00XX0

R.C. Electronics Incorporated

SPECIALIZING IN ELECTRONIC CONTROLS

2573 East Kercher Road
Phone 1-574-642-3857
Toll Free 1-866-457-7790

GOSHEN, IN 46528
Fax 1-574-642-3858
<http://www.rcetronics.com>



Custom Design of Electronic Controls

Speciality Vehicles

Fire Apparatus Systems
Police Vehicle Systems
Transit Bus Systems
Ambulance Systems

Printed Circuit Board Layout

Computer Generated Artwork
FR-4 PCB Material
Double-Sided Plated-Thru Hole

Complete Manufacturing Facility

New Era Wave Soldering Machine
Technical Devices PCB Cleaner
Automated PCB Insertion Equipment
Universal Laser System, Custom Faceplates
K .F. Hot Stamp Machine

Permit us to solve your Electrical / Electronic Control needs.