

# *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 Incorporated

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 Goshen, Indiana 46528  
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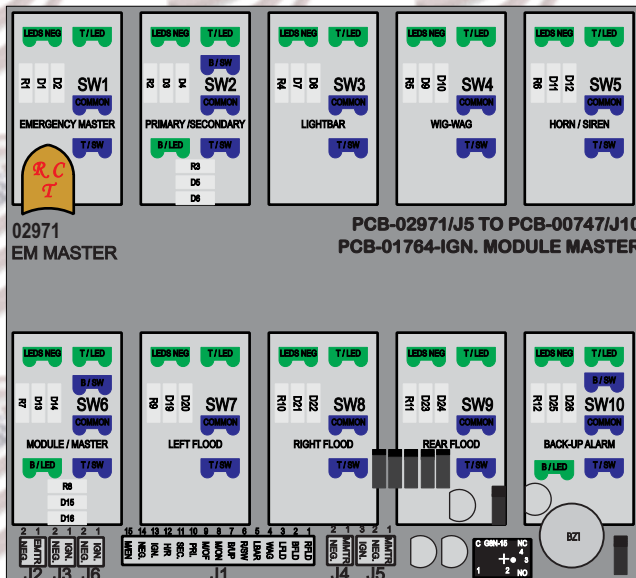
## Dash Switch Assembly Stacked



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

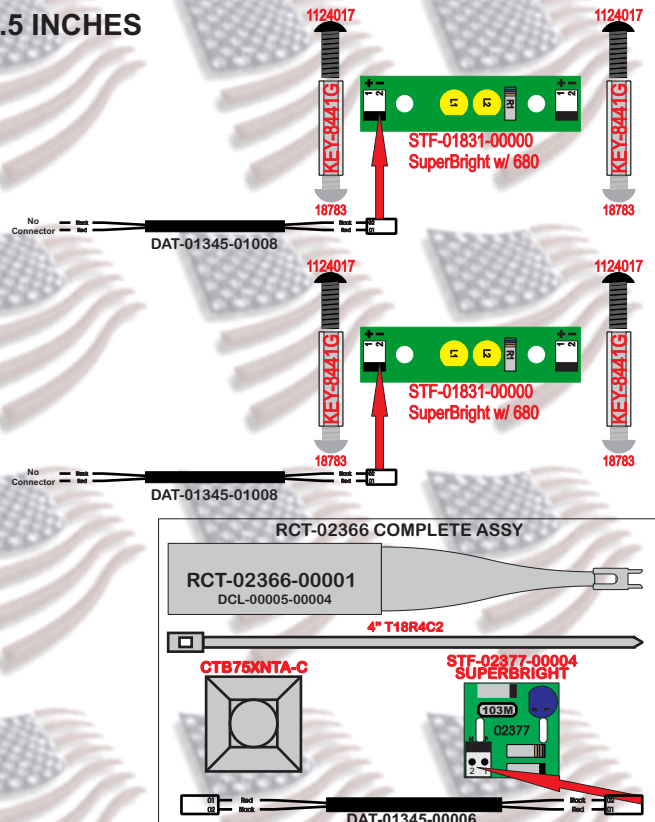
*COMPANY LOGO*

SIZE 8 X 7.5 INCHES



**PCB-02971**

**Dash Switch Assembly Stacked**



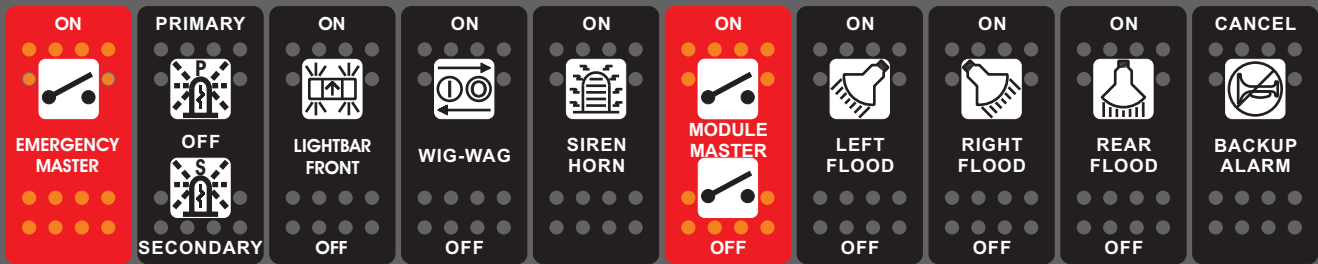
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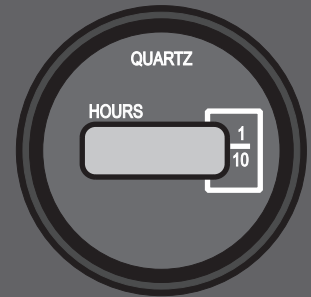
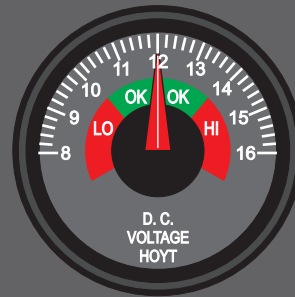
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## Dash Switch Assembly

COMPANY LOGO



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



METER'S SHOWN OPTIONAL

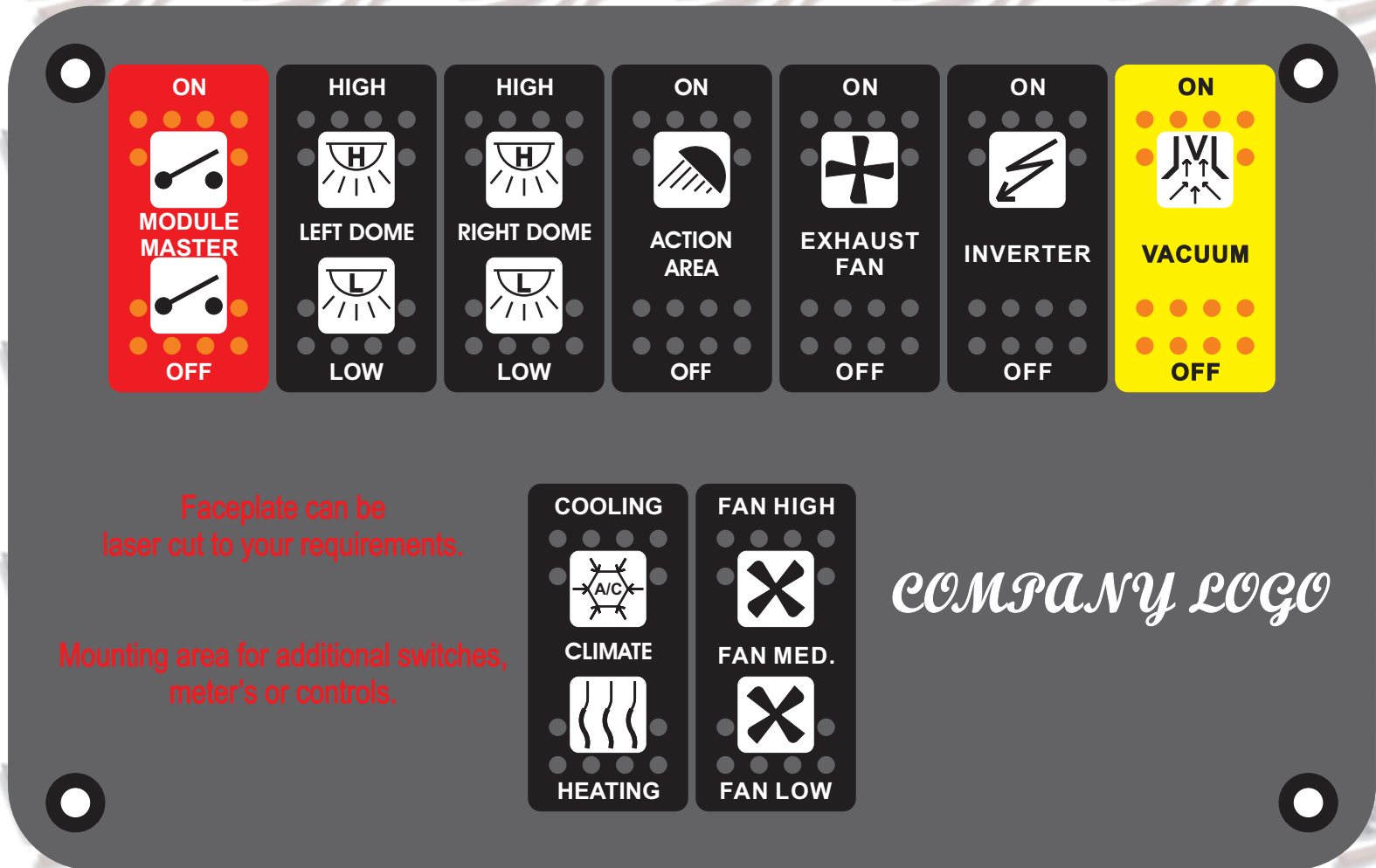
11.65 Inches(L-R) x 8.65 Inches(T-B) x 2 Inches(Deep)

# R. C. Ironics Incorporated

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<http://www.rcironics.com>

## Module Switch Assembly



Faceplate can be laser cut to your requirements.

Mounting area for additional switches, meter's or controls.

COMPANY LOGO

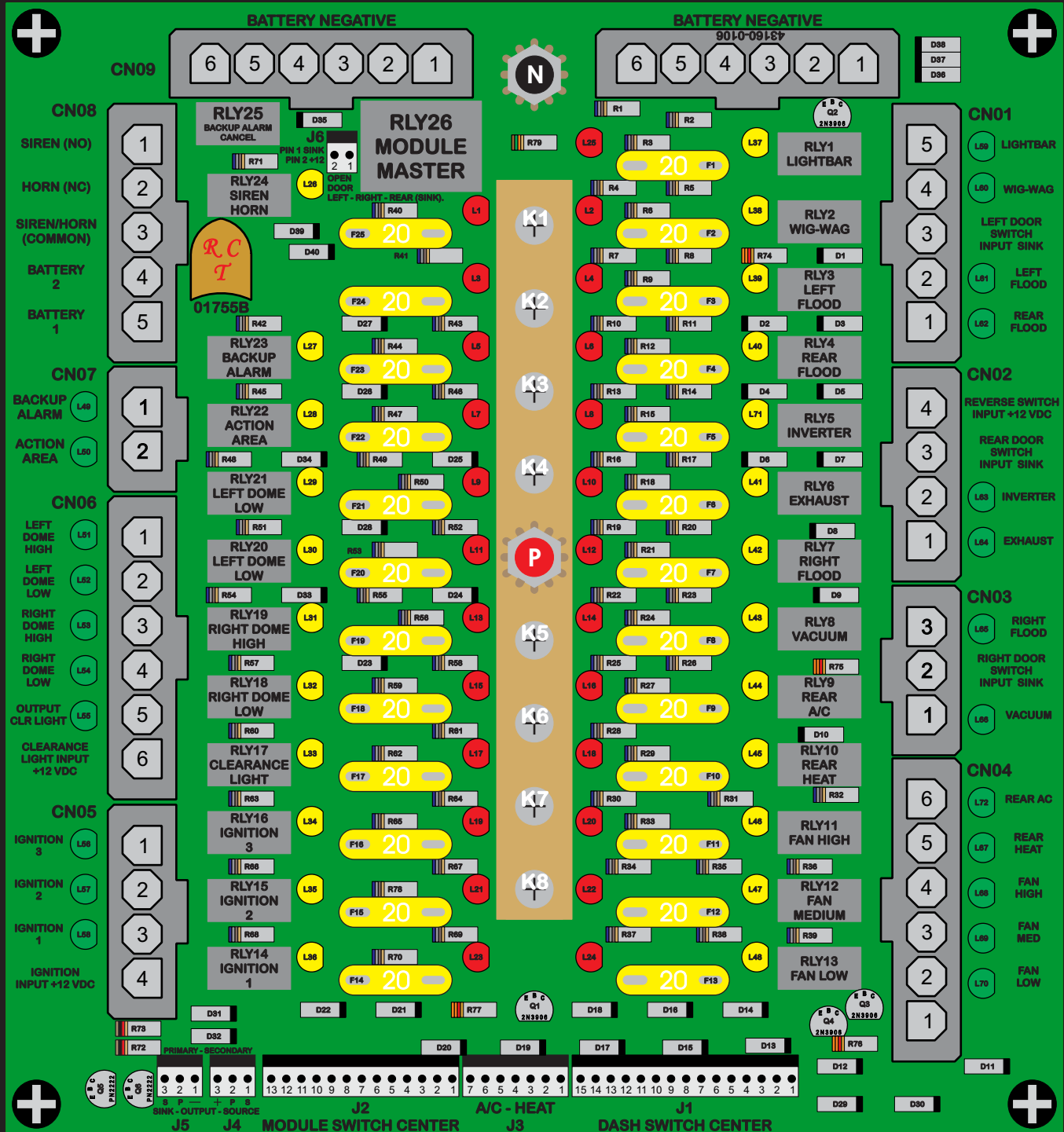
8.15 Inches(L-R) x 5.15 Inches(T-B) x 2 Inches(Deep)

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## RCT-01755 POWER CENTER ASSEMBLY



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

# ***R. C. Tonics, Incorporated***

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## ***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 @ 25 ampere) (LBAR)***
  - 4. Wig-Wag Switch. (Relay 2 output, 12 VDC @ 25 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 @ 25 ampere) (LFLD)***
  - 3. Right Flood Switch. (Relay 7 output, 12 VDC @ 25 ampere) (RFLD)***
  - 4. Rear Flood Switch. (Relay 4 output, 12 VDC @ 25 ampere) (BFLD)***
  - 5. Back-Up Alarm Cancel Switch. (Relay 23 output, 12 VDC output @ 25 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. The right door open will operate right dome high, left, and 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 @ 25 ampere) (L/LO-L/HI)***
  - 3. Right Dome, High-Low Switch. (Relays 18 & 19 output 12 VDC @ 25 ampere) (R/LO-R/HI)***
  - 4. Action Area Switch. (Relay 22, output 12 VDC @ 25 ampere) (ACT.)***
  - 5. Vacuum (Suction) Switch. (Relay 8 output, 12 VDC @ 30 ampere) (VAC.)***
  - 6. Inverter Switch. (Relay 5 output, 12 VDC @ 25 ampere) (INV.)***
  - 7. Exhaust Fan Switch. (Relay 6 output, 12 VDC @ 25 ampere) (EXH.)***
- 
- 1. Rear Heat & A/C Switch. (Relay's 9 & 10 output, 12 VDC @ 25 ampere) (HEAT-AC)***
  - 2. Fan, Low-Med-High Switch. (Relays 11, 12 & 13 output 12 VDC @ 25 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, J6, Shows Left, Right or Rear door is open.*

*Clearance Light Relay Output. (Relay 17, 12 VDC @ 30 amperes).*

*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**

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dchiddister@rctronics.com

## *PCB-01755 Ambulance Power Center*

### *CONNECTOR CN01*

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

### *CONNECTOR CN02*

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

### *CONNECTOR CN03*

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

### *CONNECTOR CN04*

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

### *CONNECTOR CN05*

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

### *CONNECTOR CN06*

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

### *CONNECTOR CN07*

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



#### CONNECTOR CN08

1. *Siren (NO).*
2. *Horn (NC).*
3. *Horn/Siren (Common).*
4. *Battery 2 (+12 VDC Output).*
5. *Battery 1 (+12 VDC Output).*

#### 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.*
2. *Rear Flood Switch.*
3. *Left Flood Switch.*
4. *Wig-Wag Switch.*
5. *Light-Bar Switch.*
6. *Reverse Switch. (+12 VDC chassis input.) (From CN02-4, Reverse Switch.)*
7. *Back-Up Alarm Cancel Switch.*
8. *Module Master Switch. (To J2-10) (Set to module ON.)*
9. *Module Master Switch. (To J2-9) (Set to module Off.)*
10. *Primary/Secondary Switch, (To J4-2) (Provides J4-4 with sink signal.)(Primary Signal)*
11. *Primary/Secondary Switch, (To J4-1) (Provides J4-3 with sink signal.)(Secondary Signal)*
12. *Not Used.*
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.*
2. *Exhaust Switch.*
3. *Inverter Switch.*
4. *Right Dome Low Switch.*
5. *Right Dome High Switch.*
6. *Left Dome Low Switch.*
7. *Left Dome High Switch.*
8. *Fluorescent Light Switch.*
9. *Module Master Switch. (To J1-9)(Set to module OFF.)*
10. *Module Master Switch. (To J1-8)(Set to module ON.)*
11. *Battery Negative.*
12. *Module Master Enable with Ignition.(+12 VDC)*

*DATA CONNECTOR J3, AC-Heat PCB.*

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

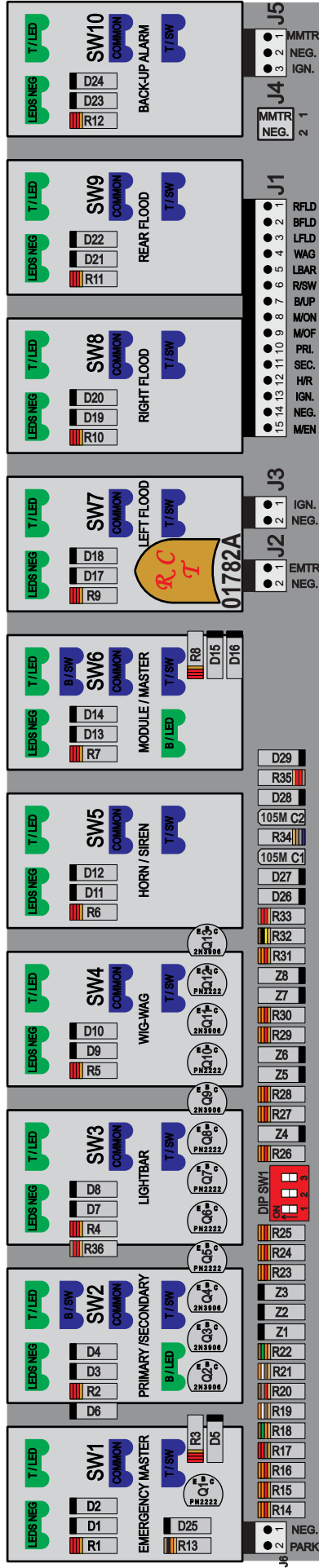
*DATA CONNECTOR J4, To Body Flasher or Strobe Packs.*

1. *Primary/Secondary Switch; Provides, "12 VDC", "SECONDARY" Signal.(black)*
2. *Primary/Secondary Switch; Provides, "12 VDC", "PRIMARY" Signal.(white)*
3. *Primary/Secondary Switch; Provides "BATTERY NEGATIVE", "SECONDARY" Signal.(red)*
4. *Primary/Secondary Switch; Provides "BATTERY NEGATIVE", "PRIMARY" Signal.(green)*

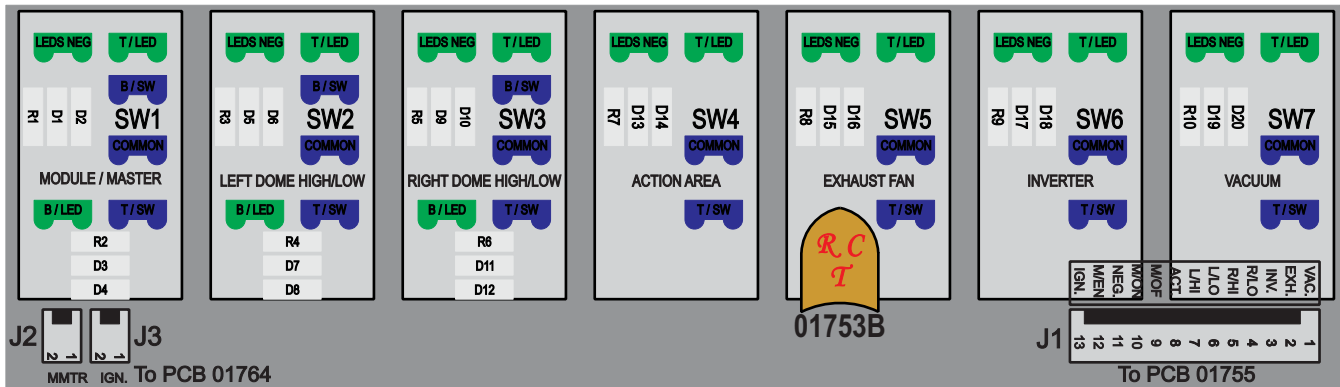
*DATA CONECTOR J6, To Door Open Indicator.*

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



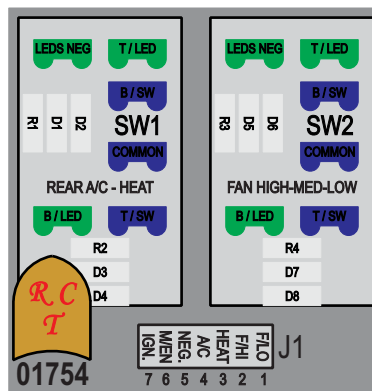


01. RIGHT FLOOD SWITCH.
02. REAR FLOOD SWITCH.
03. LEFT FLOOD SWITCH.
04. WIG-WAG SWITCH.
05. LIGHT-BAR SWITCH.
06. REVERSE SWITCH. (+12VDC CHASSI INPUT FROM CN02-4 REVERSE SWITCH).
07. BACK-UP ALARM CANCEL SWITCH.
08. MODULE MASTER SWITCH "ON". (TO J2-10)
09. MODULE MASTER SWITCH "OFF". (TO J2-09)
10. PRIMARY/SECONDARY SWITCH. (TO J4-2)
11. PRIMARY/SECONDARY SWITCH. (TO J4-1) (PROVIDES RCT-01755 @ J4-1, SINK).
12. PRIMARY/SECONDARY SWITCH. (TO J4-1) (PROVIDES RCT-01755 @ J4-3, SINK).
13. IGNITION +12VDC.
14. BATTERY NEGATIVE.
15. IGNITION WITH MODULE MASTER. +12VDC.



- J1-01. VACUUM SWITCH.
- J1-02. EXHAUST SWITCH.
- J1-03. INVERTER SWITCH.
- J1-04. RIGHT DOME LOW SWITCH.
- J1-05. RIGHT DOME HIGH SWITCH.
- J1-06. LEFT DOME LOW SWITCH.
- J1-07. LEFT DOME HIGH SWITCH.
- J1-08. FLUORESCENT LIGHT SWITCH.
- J1-09. MODULE MASTER SWITCH, "OFF". (TO J1-9)
- J1-10. MODULE MASTER SWITCH, "ON". (TO J1-8)
- J1-11. BATTERY NEGATIVE.
- J1-12. IGNITION WITH MODULE MASTER, +12VDC.
- J1-13. IGNITION +12VDC.

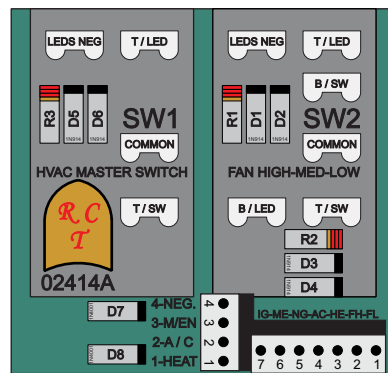
PCB-01754 PROVIDES POSITIVE OUTPUT TO RCT-01755 / J3 WHICH PROVIDE OUTPUTS FOR, HEAT OR A/C, WHEN SW1, IS SWITCHED TO HEAT OR A/C. THE LOW & HIGH FAN SPEEDS OUTPUTS BECOME ACTIVE WHEN SW2 IS SWITCHED TO HEAT OR A/C. (MEDIUM SPEED IS PROVIDED WHEN SW2 IS CENTERED).



TO RCT-01755 - J3

1. FAN LOW OUTPUT +12VDC
2. FAN HIGH OUTPUT +12VDC
3. REAR HEAT OUTPUT +12VDC
4. REAR A/C OUTPUT +12VDC
5. BATTERY NEGATIVE
6. IGNITION & MODULE ENABLE INPUT +12VDC
7. IGNITION +12VDC

PCB-02414-A PROVIDES POSITIVE OUTPUT TO RCT-01755 / J3 WHICH PROVIDE OUTPUTS FOR HEAT, A/C, LOW, MEDIUM, HIGH, FAN SPEEDS. THE OUTPUTS BECOME ACTIVE WHEN SW1 IS SWITCHED "ON" AND HEAT OR A/C ARE PROVIDED AT, PIN 2 OR 3, AT THE FOUR PIN CONNECTOR.



TO REMOTE THERMOSTAT

TO RCT-01755 - J3

1. HEAT OUTPUT +12VDC
2. A/C OUTPUT +12VDC
3. MODULE INPUT +12VDC
4. BATTERY NEGATIVE

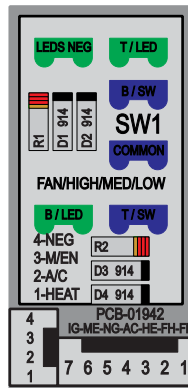
1. FAN LOW OUTPUT +12VDC
2. FAN HIGH OUTPUT +12VDC
3. REAR HEAT OUTPUT +12VDC
4. REAR A/C OUTPUT +12VDC
5. BATTERY NEGATIVE
6. IGNITION & MODULE ENABLE INPUT +12VDC
7. IGNITION +12VDC

PCB-01942-A PROVIDES POSITIVE OUTPUT TO RCT-01755 / J3 WHICH PROVIDE OUTPUTS FOR HEAT, A/C, LOW, MEDIUM, HIGH, FAN SPEEDS. THE OUTPUTS BECOME ACTIVE WHEN THERMOSTAT IS CALLING FOR HEAT OR A/C OUTPUTS ARE PROVIDED AT, PIN 1 OR 2, AT THE FOUR PIN CONNECTOR.

TO USER  
THERMOSTAT  
DAT-01347-00XX0

TO REMOTE THERMOSTAT

1. HEAT OUTPUT +12VDC
2. A/C OUTPUT +12VDC
3. MODULE INPUT +12VDC
4. BATTERY NEGATIVE

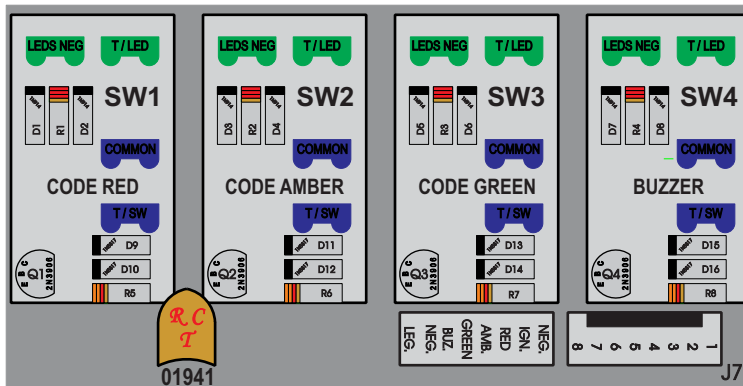


TO RCT-01755 - J3

1. FAN LOW OUTPUT +12VDC
2. FAN HIGH OUTPUT +12VDC
3. REAR HEAT OUTPUT +12VDC
4. REAR A/C OUTPUT +12VDC
5. BATTERY NEGATIVE
6. IGNITION & MODULE ENABLE INPUT +12VDC
7. IGNITION +12VDC

TO POWER CENTER  
PCB-01755 - J3  
DAT-0157-00XX0



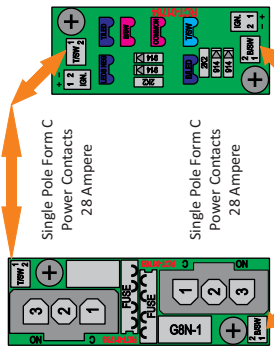


- J7-1. LEG.
- J7-2. BATTERY NEGATIVE.
- J7-3. BUZZER.
- J7-4. CODE GREEN.
- J7-5. CODE AMBER.
- J7-6. CODE RED.
- J7-7. IGNITION. +12VDC
- J7-8 BATTERY NEGATIVE.

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



Connect to PCB-01752:(Dash Switch)  
 J2 Emergency Master  
 J3 Ignition  
 J4 Module Master



Connect to PCB-01753:(Module Switch)  
 J2 Module Master  
 J3 Ignition

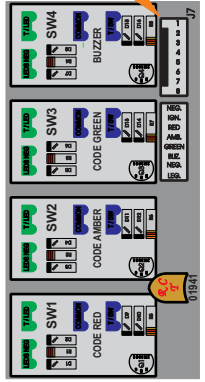
NOTE:  
 Both connectors marked "IGN" are inputs and identical which makes daisy-chaining possible. Carling switches are required. Both "ON/OFF" and "ON/OFF/ON". Up to six additional Carling switches may be added with mounting ring RCT-01936

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

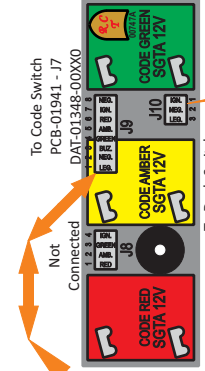
### REQUIRED DATA CABLES

- DAT-01350-00000 (15 Conductor)(PCB-01755V1 to PCB-01752A J1)
- DAT-01758-00000 (13 Conductor)(PCB-01755V2 to PCB-01753B J1)
- DAT-01348-00000 (08 Conductor)(PCB-01941V7 to PCB-00747A J9)
- DAT-01757-00000 (07 Conductor)(PCB-01755V3 to PCB-01754 J1)
- DAT-01346-00000 (03 Conductor)(PCB-01752A J5 to PCB-00747A J10)
- DAT-01345-00000 (02 Conductor)(PCB-01755V6 to "Door Open Indicator")

### CODE LIGHT SWITCH PCB



### CODE LIGHT AND BUZZER PCB



- J4 Pin 1 Secondary (+12 VDC @ 500 ma.)
- J4 Pin 2 Primary (+12 VDC @ 500 ma.)
- J4 Pin 3 Ignition (+12 VDC @ 1 ampere.)
- J5 J1 Battery Negative (1 ampere)
- J5 J2 Primary Switch To; Negative (250 ma.)
- J5 J3 Secondary Switch To; Negative (250 ma.)

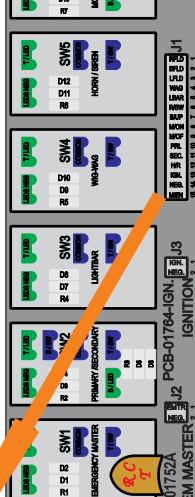
### MODULE SWITCH PCB



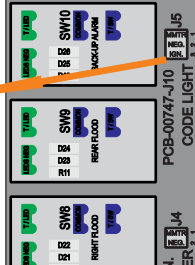
### HEAT/COOL SWITCH PCB



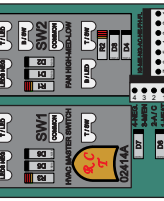
### DASH SWITCH PCB



### EM MASTER PCB

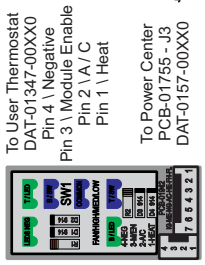


PCB-02414-A PROVIDES POSITIVE OUTPUT TO RCT-01755 / J3 WHICH PROVIDE OUTPUTS FOR HEAT, A/C, LOW, MEDIUM, HIGH, FAN SPEEDS. THE OUTPUTS BECOME ACTIVE WHEN SW1 IS SWITCHED "ON" AND HEAT OR A/C ARE PROVIDED AT PIN 1 OR 2. AT THE FOUR PIN CONNECTOR.

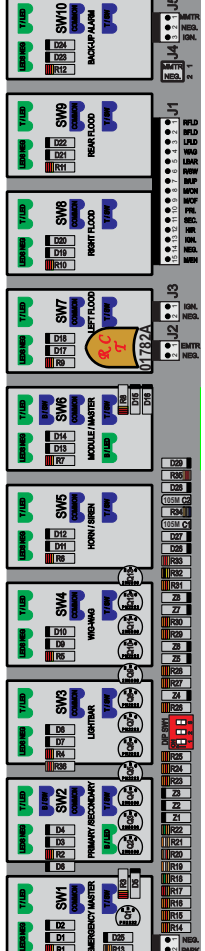


- TO REMOTE THERMOSTAT
1. HEAT OUTPUT +12VDC
  2. A/C OUTPUT +12VDC
  3. MODULE INPUT +12VDC
  4. BATTERY NEGATIVE

### ALTERNATE BLOWER SWITCH PCB-01942



### ALTERNATE DASH SWITCH PCB WITH SEQUENCING AND LOAD MANAGEMENT



1. FAN LOW OUTPUT +12VDC
2. FAN HIGH OUTPUT +12VDC
3. REAR HEAT OUTPUT +12VDC
4. REAR A/C OUTPUT +12VDC
5. BATTERY NEGATIVE
6. IGNITION +12VDC
7. IGNITION +12VDC INPUT +12VDC

# *R.C. Electronics Incorporated*

## **SPECIALIZING IN ELECTRONIC CONTROLS**

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

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