



*Keeping you moving since 1976*

*Company and Product Overview*



# *We are Intellitec*

*Established in 1976, we design and manufacture electronic and electromechanical systems for the special vehicle and marine markets, in the USA and throughout the world.*

Formerly owned by General Dynamics, Intellitec is now privately owned by the NSI Group of Michigan. NSI acquired Intellitec in 2004 and immediately invested in relocating the company to a purpose built 60,000 Sq FT manufacturing and global headquarters in Deland Florida.

Currently we employ 42 members of full time staff in Deland; we also have Sales Engineers based in the Mid West and in North Carolina.

- *Established in 1976*
- *60,000 Sq FT manufacturing facility*
- *Proud to be based in Deland, Florida*

Our satisfied customers include Winnebago, Damon Corporation, Forest River, Champion Bus, Horton Emergency Vehicles, Newmar, Sea Ray, Paccar, Ryder PLC, Waltco Truck Equipment, MCV Egypt, Alexander Dennis Ltd, Optare PLC, Comfort Delgro Singapore and the Australian Department of Defence.







# Contract Manufacturing

*Intellitec Products LLC is an OEM and contract electronics manufacturer (CEM).*

Your concept, your design, your label, manufactured by Intellitec Products LLC.

Offering a variety of services, including:

- *Board level manufacturing; Surface Mount, Through Hole, and/or Mixed Technology*
- *Manual Assembly and Touchup*
- *Wave Soldering*
- *Multiple Level Electronics Testing*
- *Conformal Coating*
- *Wire Harness Assemblies*
- *Potting, Clear and/or Black*
- *Pad Print*
- *Programming*
- *Complex System Assembly (box build)*
- *Packaging services*
- *JIT Services, Wholesale Level\**
- *Software/Firmware Development*
- *Intellitec Products is an extension of your business*

Contact Duncan Hughes:

 386-738-8131

 [dhughes@intellitec.com](mailto:dhughes@intellitec.com)

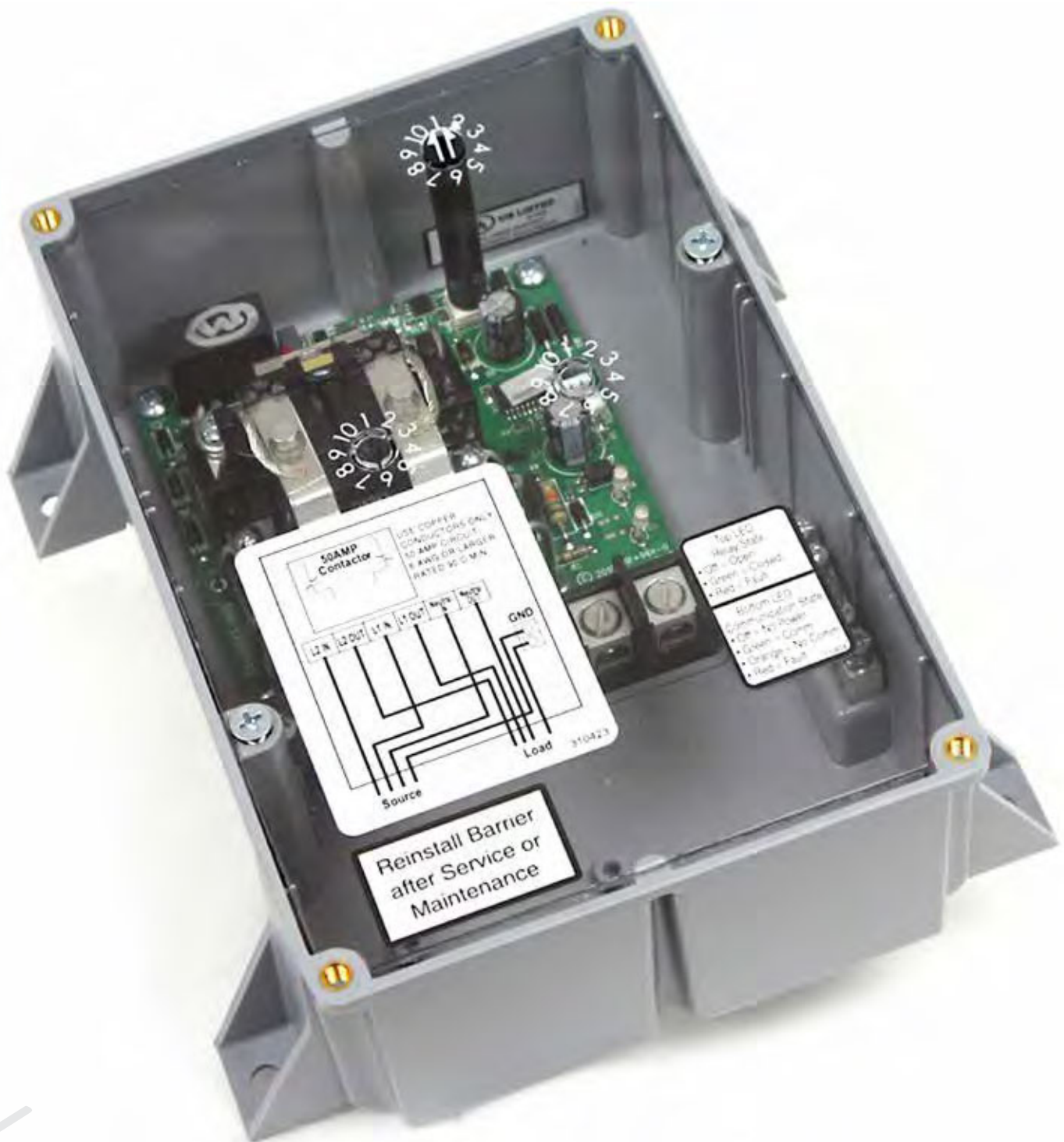
 [duncanhughes1962](#)

To supply your Bill of Material ( BOM), Intellitec will source your components in combination of in house builds to offer you best pricing, or will use customer directed Suppliers to provide you with price and lead time for approval. Off shore procurement is available.

Other services available - engineering services and global marketing.

\*JIT Services are available after first production run and are limited to minimum order quantities. All orders are subject to an initial lead time if no quarterly forecast is supplied.





# Manufacturing

*Currently our production line is producing approximately 4000 PCB per week alongside up to 600 electromechanical relays and harnesses.*

We have significant capacity for expansion in both our facility and production output. We currently conduct all our R&D projects in house with our own engineering team.

We have significant in house design capabilities including:

- *PCB design, surface mount and through hole*
- *Firmware design*
- *Software design*
- *Mechanical & electromechanical design and manufacture*
- *Harness design & manufacture*
- *Assembled solutions design & manufacture*

If required, we can turn concept to production prototype within 12 weeks, sometimes even quicker, depending on the complexity and size of the project.







# Team Intellitec

*We have opportunities for the best companies in North America, Canada, Europe and Asia to join our dealer/distributor network; Team Intellitec.*

Our partners are experienced companies with exceptional technical skills. Our dealers / distributor's will all have the ability to carry out auto electric installations to an exceptional standard and will also have a good standard of analytical and fault finding skills.

We have an extensive range of products that can be most efficiently sold through an approved channel of distribution.

- *Opportunities in North America, Canada, Europe and Asia*
- *Comprehensive product range*
- *Full marketing support*

We support all members of Team Intellitec with exceptional marketing materials, product demos, targeted sales leads, web links, national advertising campaigns, PR, product training and sales support.









## DC Power Management

*DC Power management and battery run down protection are probably more important to special vehicle builders and operators now than ever before. New anti idle laws and increasing vehicle electrical specifications dictate that very careful thought needs to be given to the systems that are used to manage DC power both in the manufacture and indeed the operation of special vehicles.*

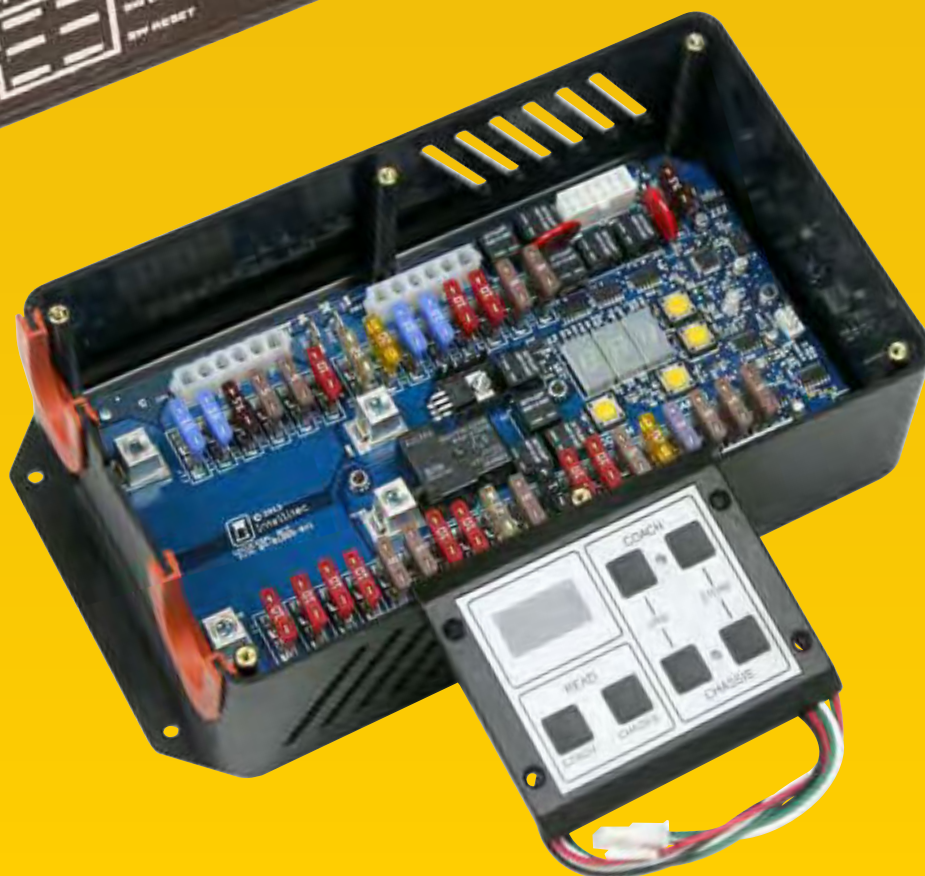
Intellitec were the first company in the world to design a battery run down protection system, that was nearly 23 years ago and since those early days we have sold many millions of such products and systems across the world. Intellitec took the decision long ago to design our own range of latching and non-latching relays and battery disconnects.

These rugged and extremely reliable battery disconnect relays and solenoids are at the heart of many of our products and systems. As well as numerous options on battery run down protection systems like our Battery Guard range which is used by many of the world's largest fleet operators such as Ryder, Lex, National Blood, National Grid Auto Truck, US Border Agency and 100% of the UK Fire & Rescue fleet and the National Guard, we also have various intelligent split charging systems to suit many applications.

If you do not see exactly what you are looking for do please contact us, we have not listed all our parts or systems in this catalogue, there is just too many. We are a manufacturer so even if we don't have it now, with a spec and an outline of operational requirement, we can certainly build it for you.

- *Made in the USA*
- *Complete design & manufacture service*
- *Assembled solutions service available*
- *Experienced in all aspects of power management*
- *Millions of parts in daily use across the world*
- *Extremely reliable systems*
- *Standard off the shelf ready to install kits available*
- *12V & 24V systems*









## Universal Battery Control Center

### Description:

The Universal Battery Control Center ( UBCC ) is a microprocessor controlled programmable battery control center with 34 fused outputs, the UBCC is the ideal battery management system for OEM's & upfitters.

### Low Battery Voltage Monitoring

The Universal BCC monitors both the chassis and auxiliary (coach) batteries continuously. If either drops below a threshold (12.6V for chassis or 12.0V for coach), a 2 minute timer begins. When the 2 minutes elapses, if the battery voltage continues to decline below the threshold, it will disconnect that battery from its loads to preserve battery life and maintain starting capability. An external alarm may be activated through an on-board relay. The Universal BCC will also indicate a problem by flashing the red status indicator LED.

If the problem battery begins charging (a threshold of 13.3V for chassis or auxiliary/coach), the Universal BCC will automatically reconnect the disconnected loads. If an ignition signal is present, the chassis battery will not disconnect as a safety interlock feature.

The disconnect and reconnect thresholds and timers are completely configurable through a Windows "Graphical User Interface" software package. The device itself also offers basic programmability of thresholds with no PC needed through a simple 4 button interface.

### Battery Voltage Display

By pressing either the "Chassis" or "Coach" button, the actual voltage of that battery is displayed on the 3 digit LED display in real time. The LED display will also flash the current status of the associated disconnect solenoid. "DIS" means that solenoid is currently disconnected and all loads are removed from that battery. "CON" means that solenoid is currently connected.

### Auxiliary Start Feature

An external auxiliary start switch may be connected to the Universal BCC through the aux start input. If the aux start input is switched high (+12V) the battery isolation relay will power ON, effectively connecting both chassis and auxiliary (coach) batteries together, providing extra starting power similar to a "jump start." If the chassis battery falls below 9.0 volts with the ignition signal input ON (typical for engine cranking), the isolation relay will automatically connect both batteries together. The voltage threshold is also user configurable.

### Automatic Split Charging

When either the chassis or auxiliary (coach) battery is above a 13.3V charging threshold, the isolation relay will power ON, connecting both batteries together for charging. If the ignition signal is present, and the auxiliary battery is above the charging threshold, the isolation relay will NOT connect the two batteries together. This is to prevent the auxiliary battery charger from fighting the vehicle's alternator.

### Part Number:



00-01088-000 - Control  
00-01090-000 - Switch Panel

### Key Features:

- Low Battery Voltage Monitoring
- Battery voltage display, chassis & auxiliary
- Auxiliary start feature
- Programmable automatic split charging
- Programmable low voltage disconnect on chassis & auxiliary batteries
- 34 fused outputs with diagnostic LED's
- Programmable alarm outputs
- Read voltage on chassis & auxiliary from switch panel
- Disconnect & reconnect of chassis & auxiliary batteries from switch panel
- Free of charge OEM GUI tool
- Can be supplied pre programmed if required



**Part Number:**



00-01087-100

**Key Features:**

- Remote disconnect for auxiliary Battery
- Aux start function
- Charges both batteries from either alternator or shore power
- Protects against battery discharge

## Single Disconnect Battery Control Center

**Description:**

Intellitecs single disconnect battery control center offers battery control, charging and fusing for the special vehicle market.

The system includes a remote disconnect for the auxiliary battery, a bi directional isolator, auxiliary start function and nine fuse to supply protected power from the auxiliary battery and ignition switched sources.



**BATTERY GUARD 2K**  
STARTING POWER GUARANTEED



## Battery Guard 2000

### Description:

Intellitec's Battery Guard 2000 offers the fleet operator the assurance that their vehicles will start first time, every time. With millions of systems sold around the world to organizations such as Ryder PLC, MOD UK, US Border Control, Australian DOD, National Guard, Battery Guard 2000 set the standard for low voltage disconnect systems globally.

Battery Guard 2000 operates by constantly monitoring the available battery power when the engine is not running. If the voltage drops below 12.1V or 24.1V respectively for a uniform period of four minutes, Battery Guard 2000 disconnects the batteries to guarantee starting power is preserved. To reset power to ignition, the operator simply presses the flashing reset switch and the vehicle can be started.

Battery Guard 2000 also acts as a manual battery disconnect system, press and hold the dash mounted reset switch for three seconds and the batteries will be disconnected.

### Part Number:



12V 100A 10-00660-100  
12V 200A 10-00660-200  
24V 100A 10-00660-300  
24V 200A 10-00660-400

### Key Features:

- Guarantees starting power
- Manual battery disconnect
- Ignition protection
- System test on start
- Delphi Packard connectors
- Waterproof ECU
- Reliable, proven rugged design





#### Part Number:

	12V 100A 10-01013-100
	12V 200A 10-01013-200
	24V 100A 10-01013-300
	24V 200A 10-01013-400

#### Key Features:

- Fully Programmable system
- Guarantees starting power
- Does not interfere with OE CANBUS system
- 2 X 10A programmable outputs
- Data logging capabilities
- Delphi Packard connectors
- Waterproof ECU
- Free GUI tool
- Reliable proven rugged design

## Battery Guard 3000

#### Description:

Battery Guard 3000 is the latest addition to our Battery Guard range. Battery Guard 3000 is a fully programmable power management system. The #1 purpose of the system is to prevent "dead" batteries but it does a whole lot more besides. Every aspect of the systems operation is programmable, this allows the OEM or Upfitter to tailor the system to operate exactly how they wish. We have 2 X 10A programmable alarm outputs on the ECU, these can be used to drive audible or visual alarms. For example, a truck with a lift gate, you can put a buzzer out by the liftgate and program this to sound say 2 minutes prior to disconnecting the battery, you can even have it speed the sounder up as the disconnect level gets closer, the applications are endless.

As well as manual disconnect and programmable low voltage battery disconnect, we have also designed in the ability to split charge across chassis and auxiliary batteries, again this is programmable so if your considering different battery chemistries then Battery Guard 3000 allows you to tailor the alternator charging regime correctly.

Battery Guard 3000 is specified and installed to every single Fire & Rescue vehicle in the UK, there is no better recommendation than this.



**LIFT GATE BATTERY GUARD**  
STARTING POWER GUARANTEED



## Lift Gate Battery Guard

### Description:

Lift Gate Battery Guard is a simple rugged system that is installed within the power pack of any Lift Gate. Lift Gate Battery Guard constantly monitors the available battery power, if the battery voltage drops below 12.1V or 24.1V uniformly for 2 minutes, the Lift Gate Battery Guard sounds an audible alarm and lights the LED visual warning to alert the operator of low voltage condition.

If the operator ignores this and the battery voltage drops below 12.1V uniformly for four minutes, the Lift Gate Battery Guard disconnects the lift gate motor to ensure sufficient power for engine starting is preserved. To restore power to the lift gate, the operator needs to start the engine and put some charge back in the battery, power to the lift gate will then be restored.

Lift Gate Battery Guard is available in 12V & 24V and is supplied in a ready to install system.

12V Lift Gate Battery Guard part No 10-00698-012

24V Lift Gate Battery Guard part No 10-00698-024

### Part Number:

 10-00698-012  
10-00698-024

### Key Features:

- OEM or Aftermarket install
- Visual & Audible warning of low battery voltage
- Fully waterproof with Delphi Packard connectors
- Night silent input via side light feed (lights on audible alarm mute)
- Reliable proven rugged design

## Battery Disconnects

### Description:

The Intellitec Battery Disconnects provide a simple, safe and reliable means of remotely disconnecting 12V or 24V battery systems. These unique latching disconnects designed and manufactured by Intellitec are capable of carrying heavy currents. They require no power to stay open or closed, the Intellitec battery disconnects only draw power during activation. The disconnects are sealed against the environments and are designed to withstand the shock and vibration experienced within commercial vehicles, trailers, coaches bus or boat applications.

Currently available in 100A or 200A versions and in 12V & 24V options, the Intellitec range of disconnects are sold globally, to date well over two million of our disconnects are in use world wide.

### Part Number:



100A 12V - 01-00055-002  
200A 12V - 00-00507-512  
100A 24V - 01-00055-242  
200A 24V - 00-00507-524

### Key Features:

- Latching mechanism
- Draws ZERO power open or closed
- Specifically designed for Automotive & Marine environment
- Reliable rugged and cost effective
- Millions of the Intellitec disconnects in use world wide



## Continuous Duty Solenoids

### Description:

The Intellitec range continuous duty solenoids are designed for use on special vehicles equipped with a main (chassis) and coach (auxiliary) battery. These continuous duty solenoids were designed to operate with very low voltage across the contacts and are capable of carrying a wide range of currents.

Available in 100A or 200A versions & in 12V & 24V options, the Intellitec continuous duty solenoids are sold globally with hundreds of thousands in use globally.

### Part Number:



100A 12V - 77-90000-100  
200A 12V - 77-90006-120  
100A 24V - 77-90000-240  
200A 24V - 77-90006-240

### Key Features:

- 100A & 200A, 12V / 24V options
- Rugged, reliable design







## Battery Isolator Controller (BIC)

### Description:

Intellitec's Battery Isolator Control ( BIC ) is a low cost simple to install intelligent alternator driven split charging system. Priority charging is given to the chassis or engine starting battery, the BIC allows the engine to briefly "warm up" and to recharge the chassis battery before placing the heavy load of a discharged coach or auxiliary battery on the alternator. The BIC has a unique feature designed into the system that effectively boost starts the vehicle in a low voltage condition, If when starting the engine the chassis battery voltage falls below 9.0V for 0.5 of a second and the coach (auxiliary) battery is above 9.0 V the BIC relay is closed and held until the starter switch is released.

The BIC is the perfect product for RV`'s or utility vehicles that use dual batteries, BIC is supplied as a complete kit ready to install.

### Part Number:

 10-00131-500

### Key Features:

- Intelligent and prioritized dual battery system charging
- Boost start feature if low voltage condition is experienced on chassis battery
- Easy to install

## Isolator Relay Delay (IRD)

### Description:

Intellitec's Isolator relay Delay (IRD) is a low cost, simple to install, intelligent alternator driven split charging system. Priority charging is given to the chassis or engine starting battery, the IRD allows the engine to briefly "warm up" and to recharge the chassis battery before placing the heavy load of a discharged coach or auxiliary battery on the alternator.

The IRD is supplied as a kit ready to install.

### Part Number:

 00-00629-512 12V  
00-00629-524 24V

### Key Features:

- Intelligent and prioritized dual battery system charging
- Potted, waterproof ECU
- Simple to install and cost effective
- 12V & 24V models



## Bi Directional Isolator Relay Delay – GAS

### Description:

Intellitec's Bi Directional Isolator Relay Delay (BIRD) offers a unique approach to the charging of dual vehicle battery systems. The BIRD charges both batteries when either one is being charged. When the vehicle is being driven, the batteries will be charged by the engines alternator. If the vehicle is plugged into shore power, both batteries will be charged from the converter. If neither battery is being charged, the batteries are fully isolated. The controller also senses heavy loads on either battery to prevent the wrong battery from being inadvertently discharged.

Also the part numbers that I've deleted, do they need putting in on this product?

### Part Number:

 10-00362-120

### Key Features:

- Charges both batteries when either one is being charged
- Batteries fully isolated if charging is not taking place
- Monitors both battery's to prevent inadvertent discharge through heavy loads on either
- Operates in conjunction with the Intellitec continuous duty solenoid.
- Various options available, contact Intellitec for details.





## Power Distribution

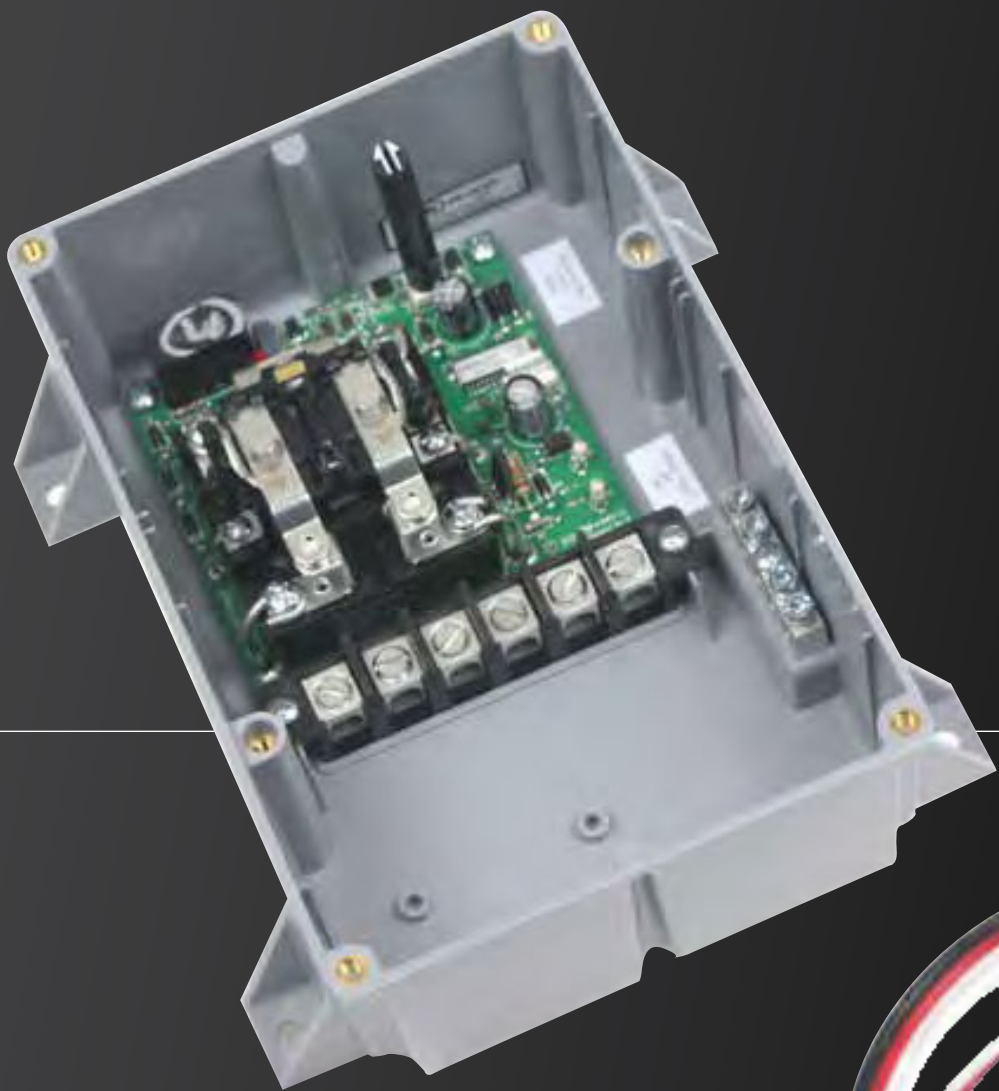
*Intellitec have been designing and manufacturing Power Distribution systems for over thirty years, our systems range from simple but very reliable fuse blocks through to complete Battery Control Centre assemblies used on high end Recreational Vehicles, Boats & Ambulances.*

Our experience with Power Distribution is not limited to the Special Vehicle market, we have been working with a major household name on emergency home energy systems for some years now, these systems sense that the electric grid has been lost and switch over to Generator supply seamlessly. These systems are available at Home Depot across much of the country.

Through our Partners at Intellitec MV Ltd in England, we have also built some complex Power Distribution systems for the Ambulance market, these are generally part of a larger system that communicate over one of the Intellitec communication Protocols or indeed CAN.

- *Made in the USA*
- *Complete design & manufacture service*
- *Assembled solutions service available*
- *Experienced in all aspects of power distribution*
- *Millions of parts in daily use across the world*
- *Extremely reliable systems*
- *Standard off the shelf ready to install kits available*
- *12V 24V systems*







## Flush Mount Fuse Block Dual Screw Term

### Description:

Intellitec's Flush Mount Fuse Block is the ideal answer to the problem of installing a fused distribution panel in a vehicle where a "finished" look is demanded.

The block provides spaces for up to 12 ATO fuses. The flush mount fuse block provides a single power input. The fuses are divided into two groups of six & comes with a snap on cover that hides the fuses, fuse puller & mounting screws.

### Part Number:



00-00884-000

### Key Features:

- 100A Max total carry current
- Flush mount
- AMP mate & lok connectors
- Single Input



## Single and Dual Input Flush Mount Fuse Block 12V & 24V

### Description:

Intellitec's Flush Mount Fuse Block is the ideal answer to the problem of installing a fused distribution panel in a vehicle where a "finished" look is demanded.

The Block provides spaces for up to twelve automotive type, ATO fuses. There are two versions, one with a single power input and the other with two separate power inputs. In the dual input version, the fuses are divided into two groups of six fuses and four, each fed from its own power input. There is also a single, isolated fuse that can be fed from a third source. The unit comes with a snap-on cover that, when in place, hides the fuses, fuse puller, and mounting screws.

### Part Number:



00-00585-000 Single input  
00-00628-000 Dual input

### Key Features:

- Surface mount
- AMP mate & lok connectors
- 100A Max total carry current
- Flush mount
- AMP mate & lok connectors
- Single and Dual inputs



## Single and Dual Input Surface Mount Fuse Block 12V & 24V

### Description:

Intellitec's surface Mount Fuse Block is the ideal answer to the problem of installing a fused distribution panel in a vehicle where surface mounting is required. The fuse block provides spaces for up to twelve automotive type, ATO fuses. There are two versions, one with a single power input and the other with two separate power inputs. In the dual input version, the fuses are divided into two groups of six fuses and four, each fed from its own power input. There is also a single, isolated fuse that can be fed from a third source.

### Part Number:



00-00585-100 Single input  
00-00628-100 Dual input

### Key Features:

- Surface mount
- AMP mate & lok connectors
- Single and Dual input
- 100A Max total carry current



**Part Number:**

 00-00659-000

**Key Features:**

- 5 Outputs
- Up to 50A total current capacity
- Max 20A on a single fuse
- Mate N Lok connectors
- Rugged construction

## Five Relay / Fuse Module 12V

**Description:**

Intellitec's Five Relay/Fuse Module is a building block that can be used to control various loads in a bus or limousine electrical system. This unit can provide up to 50 Amps of combined current to the five outputs. Each of the fuses can be up to 20Amps.

One end of each of the relay coils is tied together in the module and the other end is brought out to a Mate-N-Lok connector to make installation and service a simple matter of plugging. This common connection can be connected to ground for "high side" switching, or fed from a 12 volt power source to allow for low side switching.





## Energy Management

*Intellitec were the first company in the world to design an energy management system for recreational vehicles.*

The Intellitec SMART Energy Management Systems ( EMS ) are self-contained 120VAC power distribution and energy management systems installed in recreational vehicles or boats. The EMS consists of an EMS board located in the distribution box and a remote EMS display panel.

The purpose of the Energy Management System is to monitor and control the amount of current drawn by the electrical appliances, 'loads', that operate within the coach or boat to prevent overloading or tripping circuit breakers.

The SMART EMS provides a means to limit the amount of current being drawn by devices inside the recreational vehicle by constantly monitoring the amount of current being drawn from either the shore power cord connection to the public utility pole or the on-board generator installed in the motor coach or boat.

- *Made in the USA*
- *Complete design & manufacture service*
- *Many variations available*
- *Experienced in all aspects of Energy Management*
- *Tens of thousands of parts in daily use across the world*
- *Extremely reliable*



Automatic Energy Select Switch 00-00714-000  
Load Rating: 20A 120VAC 60Hz

by Intellitec

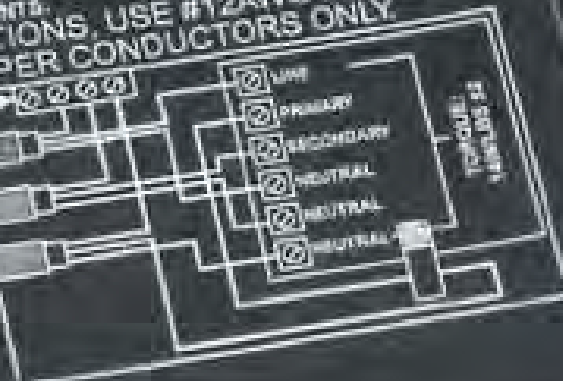
**CAUTION:** HAZARD OF ELECTRICAL SHOCK OR BURN. TURN OFF POWER SUPPLY ON THIS EQUIPMENT BEFORE WORKING INSIDE.  
**ATTENTION:** RISQUE DE CHOC ÉLECTRIQUE OU DE BRÛLURE. COUPER LA SOURCE D'ALIMENTATION DE CET ÉQUIPEMENT AVANT D'EXÉCUTER TOUT TRAVAIL.

**WARNING:** REFER SERVICE TO QUALIFIED PERSONNEL. TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, INSTALL IN A CONTROLLED ENVIRONMENT RELATIVELY FREE OF CONTAMINANTS.  
**FOR SUPPLY CONNECTIONS, USE #12AWG RATED AT LEAST 75°C. USE COPPER CONDUCTORS ONLY.**

CHO BAR TORQUE  
20N·LB 22



LISTED  
ENCLOSED ENERGY  
MANAGEMENT  
EQUIPMENT





## Automatic Energy Selector Switch

### Description:

The Intellitec Automatic energy select switch (AESS) is designed to be used in RV's to share the power available from a single circuit breaker between two large loads (up to 20Amps.)

The AESS applies power to both the appliances until the primary load draws current. It then removes power from the secondary load to prevent the circuit breaker from being overloaded. This function is particularly useful for sharing power between the microwave oven and another sheddable or postpone-able appliances, such as the washer / dryer or water heater. Typically, this function was performed with selector switches, forcing the owner to manually switch between the two appliances.

### Part Number:

 00-00714-000

### Key Features:

- Allows two 20 Amp loads to operate from a single 20 Amp breaker
- Automatically switches between the two loads as the demand requires
- Minimizes circuit breaker tripping
- Eliminates manual appliance select switches



## 50A Smart Energy Management System

### Description:

The 50 Amp Smart EMS consists of two elements, the display panel and the distribution panel. The display panel is wall mounted or on any suitable surface remotely from the distribution panel and convenient for the user. The distribution panel is a completely self contained 120/240 volt power distribution and energy management system and is intended to be used in recreational vehicles.

The distribution panel is housed in a sheet metal enclosure with removable front panel. It provides circuit protection for all the 120VAC loads in an RV and system of energy management to minimize the over loading and tripping of circuit breakers.

### Part Number:

 00-00894-000 EMS Control (Not shown)  
00-00903-150 EMS Display

### Key Features:

- Monitor onboard AC power status
- Prevents circuit breaker overloads and subsequent tripping
- Automatically senses input voltage (120V or 240V)
- Controls six shed able loads



## 30A Smart Energy Management System

### Description:

The 30 Amp Smart EMS consists of two elements, the display panel and the distribution panel. The display panel is wall mounted or on any suitable surface remotely from the distribution panel and convenient for the user.

The distribution panel is a completely self contained 120 volt power distribution and energy management system and is intended to be used in recreational vehicles. The distribution panel is housed in a sheet metal enclosure with removable front panel. It provides circuit protection for all the 120VAC loads in an RV and a system of energy management to minimize the over loading and tripping of circuit breakers.

### Part Number:

 00-00912-000  
 00-00903-030 (Not shown)



## Transfer Relay Delay 30 AMP

### Description:

Intellitec's Transfer Relay Delays are designed to automatically transfer a 120 VAC load, between two power sources, such as generator and shore power. The units are responsive to one of its inputs. If power is applied to that input, after a 15 second delay, the load will be switched to that input.

This input is typically fed from the generator of an RV, to transfer the load to the generator from shore power, when the generator is running.

### Part Number:

 00-00638-000

### Key Features:

- 30 Amps Max Carry Current
- Designed for RV's
- Transfers 120 VAC between 2 sources
- UL & CSA approved





## Multiplex Systems

*Intellitec have been designing and manufacturing multiplexed solutions for the special vehicle market since 1987, these products and systems range from simple multi point switching controllers used in the RV sector, through to complete vehicle systems used in Buses, Coaches and Emergency Service vehicles worldwide.*

Programmable Multiplex Control ( PMC ) has 320 channels of I/O across a very significant family of I/O hardware architecture to suit the majority of applications. PMC operates with one master module ( CPU ) with various I/O. Each I/O module has ten channels, you can have as little as 1 I/O module in a system, or as many as 32. The Intellitec Windows based PMC software suite WIN PMC is used to configure the system, only the master or CPU requires programming. Win PMC is a series of AND, NOT & OR commands, coupled with timers and 160 virtual channels make this an extremely powerful tool. For full and detailed technical data, please download our PMC Catalogue.

The Intellitec Programmable Logic Control ( IPLC ) is the latest release in the Intellitec family of multiplex systems, IPLC offers the vehicle builder a new and powerful option for the special vehicle builder. IPLC is master / slave all in one module, it has 28 outputs and ten inputs all of which are configurable in software. As well as that, we have 2 analog inputs, temperature input, lux input, data logging and counters all in the one hardware module. IPLC is also expandable and will communicate with all PMC modules. IPLC has two CANBUS lines for future expansion and OE integration.

Intellitec can also provide the vehicle OEM with a complete solution if required, with all harnessing, pre-programmed modules and ready to install, we have built tens of thousands of plug and play electrical systems, please feel free to discuss this with us.







## Trio

### Description:

Trio is our entry level programmable control system.

The Trio system consists of a control module, two switch panels and connecting harness. The Trio is used to control and switch the 12V DC loads in speciality vehicle applications. Trio has seven channels of switching, all of the output channels are self protecting FETS.

The Trio Control module is capable of providing dimming on four channels and then ON/OFF logic control for the remaining three output channels.

### Part Number:



10-01070-120

### Key Features:

- Cost effective programmable control
- 7 FET outputs with dimming
- Supplied as a complete kit with harness and two switch panels
- Free GUI tool



## Intellitec Programmable Logic Control

### Description:

The Intellitec Programmable Logic Controller (IPLC) is an all in one expandable simple to integrate programmable control system that operates with either the Intellitec PMC protocol or CAN, it's the OEM's or integrators choice, IPLC puts the control of the electrical system design in the hands of the vehicle manufacturer.

The IPLC has its own GUI configuration tool, this is issued free of charge to the vehicle manufacturer.

IPLC is the perfect control system for Ambulances, Police vehicles, Utility vehicles, Fighting vehicles, Buses, or RV's.

### Part Number:



00-01066-000

### Key Features:

- Dual voltage 12V & 24V
- 23 programmable outputs
- 10 inputs
- 1 temperature sense input
- 2 CAN networks
- Various keypad / HMO options
- Ambient light sensing options within keypads
- Diagnostic LCD display



## Central Processing Unit 12V & 24V

### Description:

The CPU has 320 channels that control as many as 32 remote input/output modules through Intellitec's multiplex communications system (Pat No 4907222 and 6011997).

This multiplex system allows the CPU, I-O modules and switch panels to be wired together with just three standard automotive cables. Multiple modules can be wired to a single connector. All input or switch information is gathered through the remote modules and directly communicated to the CPU.

### Part Number:



00-01015-120 12V  
00-01015-240 24V

### Key Features:

- PMC system CPU
- Simple to program
- Standard automotive cable
- 12V & 24V versions



## Mega Module

### Description:

Intellitec's Mega Module (00-01039-000) provides power switching with electronic overload protection & distribution. The module works on both 12 & 24 Volt Systems and is compatible with the PMC suite of modules.

A number of parameters of the module are programmable, to provide flexibility in its application. With 24 Channels able to handle low current loads (below 3A), 12 Channels designed for medium loads (between 3 & 10 A) & 2 Channels allocated for high current applications (between 10 & 20A).

A key feature of the Mega Module is its in built load level detection & protection system. Underload & Overload information can be communicated to the user through an additional display panel.

### Part Number:



00-01039-000

### Key Features:

- 38 FET Output Channels
- 24 Input Channels
- LED Diagnostics
- GUI Programmable
- Sealed Module - Waterproof

**Part Number:**
 00-00934-000

**Key Features:**

- Dual Voltage (12 & 24V)
- IP68 Rated
- 6 outputs, 4 inputs
- LED Diagnostics
- GUI Programmable

## Sealed Dual Voltage 4 Input/6 Output Module

**Description:**

Designed for use with the PMC System. Featuring FET power switching with electronic overload protection & distribution. The 934 module can be programmed via a GUI on a PC using an adapter harness (11-00934-000).

The module includes electronic overload protection, with each channel allowing a surge current of 80 Amps for 0.25 seconds. If the current surge exceeds this level, the output will shut down. The 934 module features 11 LED diagnostic indicators, designed to show activity on each of the inputs, outputs and activity on the PMC signal line.


**Part Number:**
 00-00935-000

**Key Features:**

- Dual Voltage (12 & 24V)
- Compatible with PMC System
- IP65 Rated
- Provides 10 Digital Inputs
- LED Diagnostics

## Sealed Dual Voltage 10 Input Module

**Description:**

The 00-00935-000 waterproof module is a member of Intellitec's PMC family. Working in combination with the PMC CPU or the IPX master and other modules. Suitable for use on either 12 or 24 Volt systems.

The module provides ten digital inputs to the Intellitec multiplex systems. Each of these input channels is programmable to transmit to any of the 160 channels on a PMC loop. They can be programmed to be either high side or low side input to provide greater flexibility.



## 12 & 24V 4 Input / 6 Relay Output

**Description:**

The 953 Series module provides power fusing, switching, and distribution in one module. It has two, 20 Amp SPST relays and four, 10 Amp SPST relays for switching loads from the battery. Each fuse position can be filled with a fuse or circuit breaker. The total module current should not exceed 50 Amps.

With four input connections for rocker, limit, or sensor switches. Each individual input can be configured as either a low side switch to ground, or as high side switch to battery.

**Part Number:**
 00-00953-416 12V  
00-00953-406 24V

**Key Features:**

- 16 Address settings through 4 jumper switches
- 2 X 20A SPST Relay Outputs
- 4 X 10A SPST Relay Outputs





## 12V & 24V Input / 6 FET Output

### Description:

The PMC I/O Module 846-516 is a member of Intellitec's Programmable Multiplex Control family. It works in combination with the PMC CPU and other standard, semi-custom, or custom I/O modules. The 506/516 provides power-fusing, switching, and distribution in one module.

With its six, solid-state, highside outputs it is capable of controlling a total of 37 Amps. The outputs are controlled by field effect transistors and are ideal for high use applications, such as flashing warning lights, turn signals and brake lights.

### Part Number:

 00-00846-506 12v  
00-00846-516 24v

### Key Features:

- 6 Outputs, 4 Inputs
- Delivers power fusing, switching & distribution in one module
- Part of the PMC Suite of Modules
- Inbuilt LED Diagnostics
- Automatic over temp shutdown & logging feature



## 12V & 24V 10DC Input Module

### Description:

The 00-00622-100 & 00-00622-110 are member of the PMC family of modules, they provide ten input connections for rocker, limit or sensor switches.

Each input can be either configured as a switch to ground or a switch to battery. All input information is communicated back to the CPU or controller.

### Part Number:

 00-00622-100 12v  
00-00622-110 24v

### Key Features:

- Ten input module
- Cost effective
- 12V & 24V options



**Part Number:**

00-00809-120 12v  
00-00809-240 24v

**Key Features:**

- Only 3 connections to the battery are required
- Battery Positive
- PMC Communications Bus
- PMC Earth

## 12v & 24v Voltage Monitor

**Description:**

The 00-00809-120 & 00-00809-240 are voltage sensing modules that provide 4 inputs in to the PMC system, using these inputs we can carry out complex load shedding on vehicles or indeed trigger high idle on the alternator.

The voltage monitors are fully potted and can be mounted out near the batteries.


**Part Number:**

00-00916-120 12v  
00-00916-240 24v

**Key Features:**

- The module can be set for 1 of 16 addresses A-P, using 4 dip switches.

## 12v & 24v Quad H Bridge Module

**Description:**

The 00-00916-120 & 00-00916-240 Quad H bridge modules provide power fusing, switching and distribution all in one module. These modules would typically be used to operate reversible motor loads.

The H bridge modules have eight ten Amp SPDT relays connected in four H bridge configurations.

Each of the H bridges is fed from a fuse position that can be filled with a fuse, or a circuit breaker.


**Part Number:**

00-00923-000

**Key Features:**

- 10 Low wattage outputs
- LED Diagnostics
- Over current auto reset feature
- Negative Low Side Loads

## Dual Voltage 12v & 24v Low Wattage Output Module

**Description:**

The Low wattage output module provides ten outputs for low wattage loads, such as dash warning lights, beepers, or any other low wattage load that require negative (low side) switching.

All of the outputs have LED indicators, the module also has overload indicators on all outputs.


**Part Number:**

00-00838-000 Latching  
00-00838-410 Non Latching

**Key Features:**

- Latching/Non-Latching Module
- Handles up to 70A total
- Diagnostic LED next to each output
- LED to indicate comms signal present
- Use's AMP Mate-N-Lok Connectors

## 12V Latching/Non-Latching Relay Module

**Description:**

The 00-00838-000 is a latching module, this means that a relay output will turn on and latch on when its channel has been turned on momentarily, this output will only turn off when it sees its channel turn on momentarily again.

The 00-008380410 is non latching module, this means the output will only turn on when it sees its corresponding input pressed and held.



Shown without cover.



## 10 button dimmable switch panel with bright yellow, bright green LED.

### Description:

Intellitec's multipoint switching LED panels are designed for use in the RV Market.

The 00-00869 series switch panel allows each individual push button to be programmed for any one of 160 channels.

LED Intensity can be set with GUI software.

### Part Number:

 00-00869-010

### Key Features:

- 10 Button Keypad
- Green / Yellow Backlight
- Dimmable

Shown without cover.





## 6 & 10 Button Programmable Key Pads

### Description:

The six & ten button programmable key pads allow each individual button to be programmed to any one of the 320 channels in the Intellitec PMC system.

Legends can be produced on a PC and slide into the switch panel. Each switch can be programmed to function as any kind of switch, IE momentary, Latch etc.

### Part Number:

 12v	# of buttons	Back/Indicator Light
00-00870-010	10	Bright Green/Amber
00-00870-210	10	Bright Green/Red
00-00874-006	6	Bright Green/Amber
00-00874-206	6	Bright Green/Red
00-00870-006	6	Bright Green/Amber
00-00870-206	6	Bright Green/Red
64-00274-000	6	Cover Plate (specific)
 24v		
00-00879-010	10	Bright Green/Amber
00-00879-210	10	Bright Green/Red
00-00880-006	6	Bright Green/Amber
00-00880-206	6	Bright Green/Red

### Key Features:

- Available in 6 and 10 button versions
- Available with Green backlighting and Red Indicators, or Green backlighting and Amber indicators
- Units have extra bright LEDs that can be dimmed via PMC programming or software
- Push button legends are easily created and applied by the installer programmable via a Windows GUI provided by Intellitec
- Each button, indicator and backlighting can be easily programmed by the installer to communicate on any PMC System
- Wall cover plates are available in white or black
- Keypads can be mounted behind a panel with cut-outs, or on the surface with wall cover plates

## 12v & 24v 6 Way Rocker Switch With Adapter Panel

### Description:

SWF, Britax, or Sprague switches plug directly into the adaptor panels, eliminating the need for often cumbersome and time consuming wiring to each switch. All switch information is communicated on a data line via a two cable communication link. The switch indicator lamps are controlled directly on the adapter panel.

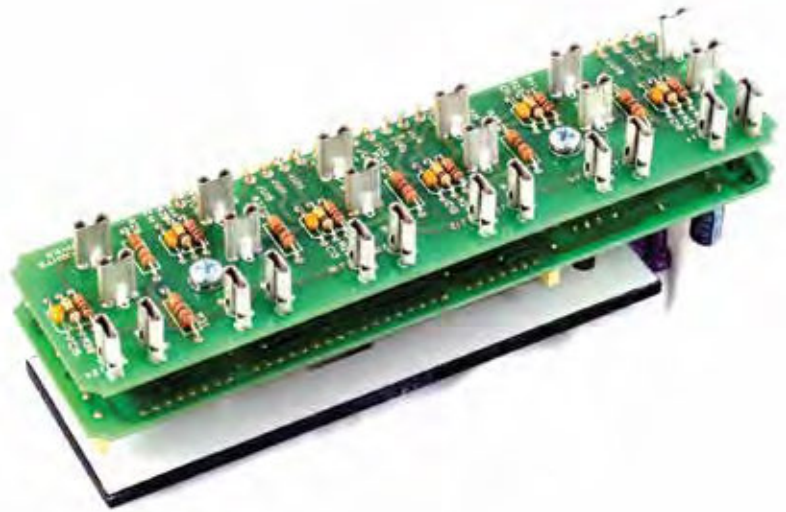
When the switches are off, half of the battery voltage is supplied to the lamp for backlighting, when the switch is turned on full battery voltage is applied to the lamps. Cable connections to the panels are by Mate N LOK connector so installation time is reduced dramatically.

### Part Number:

 00-00643-916 12v  
00-00643-906 24v

### Key Features:

- 6 Way PMC Adapter for ITT Switches
- 12V & 24V Operation
- Controls light level on switch lamp: Switch Off = 50% Light, Switch On = 100% Light
- Compatible with other PMC Modules



## 12v & 24v 9 Way Rocker Switch With Adapter Panel

### Description:

SWF, Britax, or Sprague switches plug directly into the adaptor panels, eliminating the need for often cumbersome and time consuming wiring to each switch. All switch information is communicated on a data line via a two cable communication link. The switch indicator lamps are controlled directly on the adapter panel.

When the switches are off, half of the battery voltage is supplied to the lamp for backlighting, when the switch is turned on full battery voltage is applied to the lamps. Cable connections to the panels are by Mate N LOK connector so installation time is reduced dramatically.

### Part Number:

 00-00656-919 12v  
00-00656-909 24v





## Motor Controls

*Intellitec have been building DC Motor controls and pump controls for over 25 years.*

We are probably best known for the controls used in the North American RV industry where we control room slide outs and water pump controls, indeed all the N American RV builders use or have used our Motor & Pump controllers at some point.

We have also designed and manufactured controllers to control power sofas in the conversion van and limousines markets, we have designed controls for a wheel chair retaining arm in the UK Transit bus market and various lift gate controls for both the UK & North American market.

It may surprise some of our customers to know that a large percentage of the buses in London have their doors and disabled access ramps controlled by an Intellitec motor control system, as they are in Singapore, Hong Kong, New Zealand, France and Egypt.

- *Made in the USA*
- *Complete design & manufacture service*
- *Experienced in all aspects of Motor Control*
- *Hundreds of thousands of parts in daily use across the world*
- *Extremely reliable systems*
- *12V & 24V systems*







## 10A Water Pump Control

### Description:

The 10A Water pump controller is designed to operate as a low side remote switch in 12V DC systems. As its name implies, it was designed to control the domestic water pump in RV or Marine applications.

The unit is packaged in a plastic enclosure for mounting near the water pump with two flathead screws.

It is capable of operating multiple switch points and up to two LED power indicators that can be utilized all on the same single wire. Power can be supplied from either the battery or converter.

### Part Number:



00-00145-100

### Key Features:

- Minimizes use of heavy gauge wiring in vehicle
- Negligible stand by current
- Scalable multipoint switching



## 15 Amp Water Pump Controller

### Description:

Intellitec's 15 Amp Water Pump Control is one of our Monoplex family of devices. It offers many following benefits to water pump switching.

The unit is assigned to operate as a "low side" remote switch in 12 volt DC systems. As it's name implies, it was designed to control the domestic water pump. This unit will only work with loads greater than 5 amps but less than 15 Amps

The unit is packaged in a plastic enclosure suitable for mounting in a wet environment, such as near the water pump. It is capable of operating from multiple switch points (as many as desired) and up to 100 milliamps of power indicators. Power can be supplied either from a battery or a converter.

### Part Number:



00-00776-200

### Key Features:

- Minimizes the use of heavy gauge wire
- Multipoint switching can be added
- Negligible standby current.
- Low installation costs
- Potted assembly resists water damage

## Combination Slide Out Control With Voice Warning

### Description:

The Combination Slide-out Controller functions as three controllers. It independently controls two lock arm motors and a slide-out motor.

The controller depends on several inputs: Lock Arm 1 Switch, Lock Arm 2 Switch, Slide-out Switch, MPX Switch, and an Ignition Input Signal, which is used to lock out control module. The MPX Switch is a momentary rocker switch used to allow the user to select a run/stop mode of the Controller.

### Part Number:



00-00719-000

### Key Features:

- Ignition Interlock
- Press and hold operation
- With or without audible announcement in combination with or without delay of slide-out motion



## Motor Control With Voice Output

### Description:

The Motor control with voice output was designed to control the slide out rooms in recreational vehicles. The module has ignition interlock, press and hold operation of slide out and current adjust.

To operate the room, the owner would simply press and hold the button in the desired direction(In or Out). With the jumper in the default setting, there is delay in operation of the slide-out to allow for a voice announcement that the slide-out is in motion. The motion of the slide-out may be stopped at any time by releasing the button. When the slide out reaches it's outer most limit, the unit will sense the rise in current and switch off the power to the slide out motor. To move the room back in again, the owner will press and hold the button in the desired direction.

Again, there is a short delay in operation of the slide- out to allow for a voice announcement that the slide- out is in motion. When the slide out reaches it's inner most position, the controller will sense the rise in current and will shut off power to the motor.

### Part Number:



00-00971-000/-100/-200/-300

### Key Features:

- Ignition Interlock
- Press and hold operation
- With or without audible announcement in combination with or without delay of slide-out motion





## Light Controls

### *Designers & Manufacturers of lighting control solutions for 30 years*

Intellitec have been designing and manufacturing light controls for the special vehicle sector for some 30 years, our lighting controls include dimmer switch systems for the RV and Marine sector, day time running light controllers for the transit bus sector and Cargo Light or Trailer light control systems for the heavy truck market. Some of our lighting controls are multi point switching with built in battery rundown protection.

- *Made in USA*
- *Complete design & manufacture service*
- *Experienced in all aspects of lighting controls*
- *Hundreds of thousands of systems in use across the world*
- *Extremely reliable*
- *12V & 24V systems*







## Superswitch

### Description:

The Intellitec Super Switch is an extremely rugged, cost effective ground connected momentary switch that can be used with a variety of Intellitec parts, including our range of Battery Disconnects and Cargo Light Controls. The Super switch can be supplied in a wide range of configurations and printed for your application if required.

The Super Switch can be mounted on the outside of the vehicle and will live with most weather and operational conditions.

Intellitec can configure a switch system solution dedicated to your application and supply the whole system to you ready to install.

### Part Number:

 00-00754-000

### Key Features:

- Rugged weatherproof construction
- Easy to install
- Can be used in conjunction with multiple switches



## Super Switch Battery Disconnect

### Description:

Intellitec's "Superswitch" is a ground connected momentary switch designed for external mounting and can be used in conjunction with a number of our systems.

### Part Number:

 00-01010-000

### Key Features:

- Rugged weatherproof construction
- Easy to install
- Can be used in conjunction with multiple switches

## 12V & 24V Daytime Running Lights

### Description:

The Intellitec's day time running light control (DRL) is a cost effective solution for the provision of reduced headlights during daylight hours. The DRL uses pulse width modulation the DRL operates the head lights at 50% duty cycle, to achieve this three conditions must be met

1. Engine must be running
2. The hand brake is released
3. The headlights are switch off

If the driver switches the head lights on manually the DRL is isolated and the headlights return to full brightness. The DRL is suitable as an OEM or aftermarket installation.

### Part Number:

 00-00926-120 12V  
00-00926-240 24V

### Key Features:

- A diagnostic LED is provided on the ECU to provide indication and status of operation
- Easy OEM or Aftermarket Installation
- A diagnostic LED is provided on the ECU to provide indication and status of operation



## 12V & 24V Cargo Light Control

### Description:

The Intellitec cargo light control (CLC) was designed to control the cargo or body lights on any type of truck trailer but with the health and safety of the operators in mind.

The CLC has built in battery run down protection, if the body lights are left on for more than 20 minutes the module will blink the lights at a rate of eight times a minute to alert the operator of impending light s off. After the eight blink the lights will be automatically switched off to prevent further current draw from the battery. If the battery voltage drops below 12.0V or 24.0V the 20 minute timer is reduced to two minutes and then flashes the lights to alert the operator, if ignored the lights will be switched off to protect the battery. The cargo light controller is fully waterproof and can be mounted outside if necessary.

### Part Number:

 00-00712-120 12V  
00-00712-240 24V

### Key Features:

- Rugged weatherproof construction
- Easy to install
- Can be used in conjunction with multiple switches





## Display Systems

*Intellitec Design and manufacture a wide variety of display systems for the special vehicle and marine sector.*

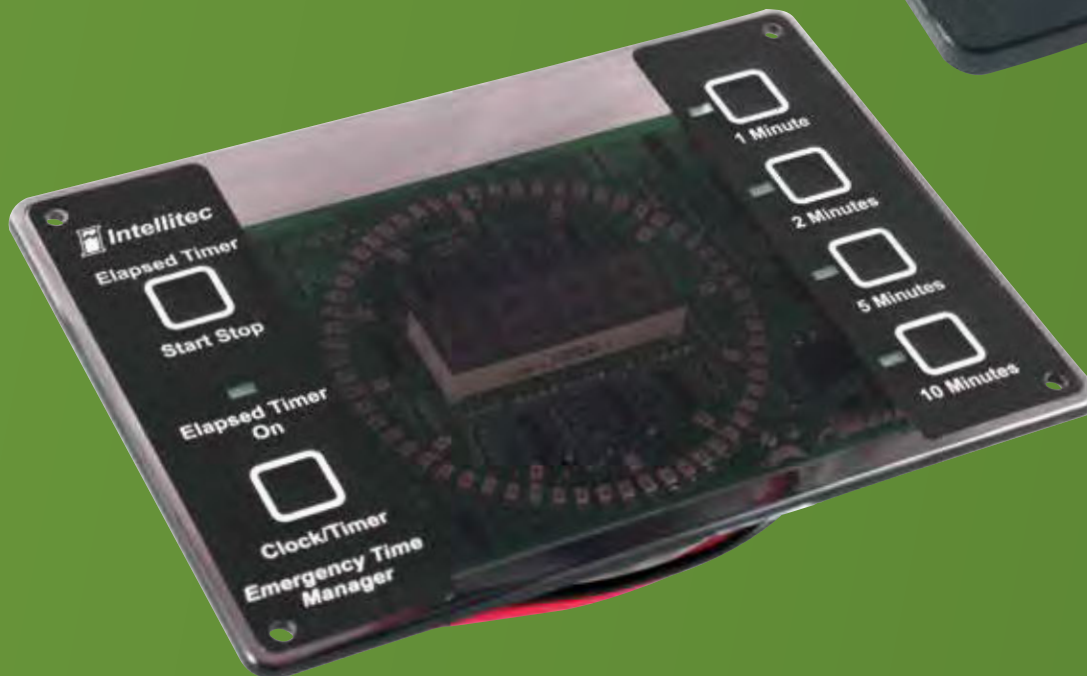
Our display products range from simple battery voltage with disconnect displays used by various RV OEMS, to system indicators for well know boat manufacturers, special purpose time managers for the paramedic market and LCD displays used in the bus & coach market.

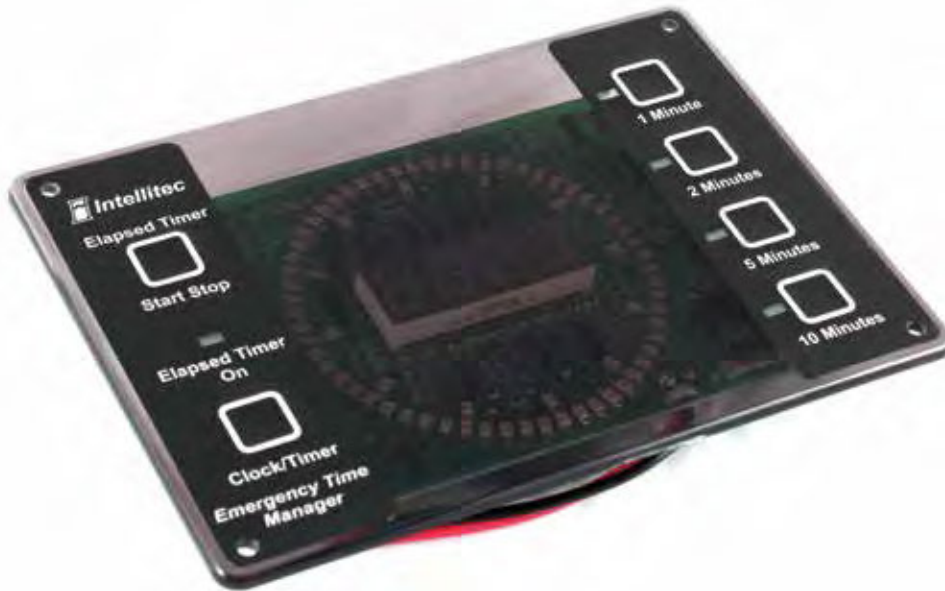
Due for launch in Q4 of 2013 is Road Commander a new control system with a 7 inch touch screen that can be dash mounted, wall mounted or used like a tablet computer. As well as the touch screen, there will be a family of wireless I/O modules and a suite of APPS that will function on most smart phones and tablets.

Road Commander will have full wireless operation and will allow two way remote communications. We will have video feed options built in so security monitoring and complete on board system control will all be available in the one system.

- *Made in the USA*
- *Complete design & manufacture service*
- *Experienced in all aspects of Display design*
- *Extremely reliable systems*
- *12V & 24V systems*







## Emergency Time Manager - Modified

### Description:

The Emergency Time Manager is a clock & timer specifically designed to assist medical personnel with time critical operations such as drug infusions within a difficult and testing environment such as an ambulance or an emergency response vehicle.

The unit is designed to be mounted within the interior of the vehicle & directly connected to the electrical system.

Its circuitry is protected against electrical surge and transient voltage conditions common in automotive applications.

### Part Number:



00-00775-100

### Key Features:

- Time of day in Hours & Minutes with sweep second hand
- Elapsed time in Hours & Minutes
- 4 timer buttons set alarm timer from 1 to 90 Minuets
- Splash proof Design, easily wipe able

## Notes



*Intellitec*

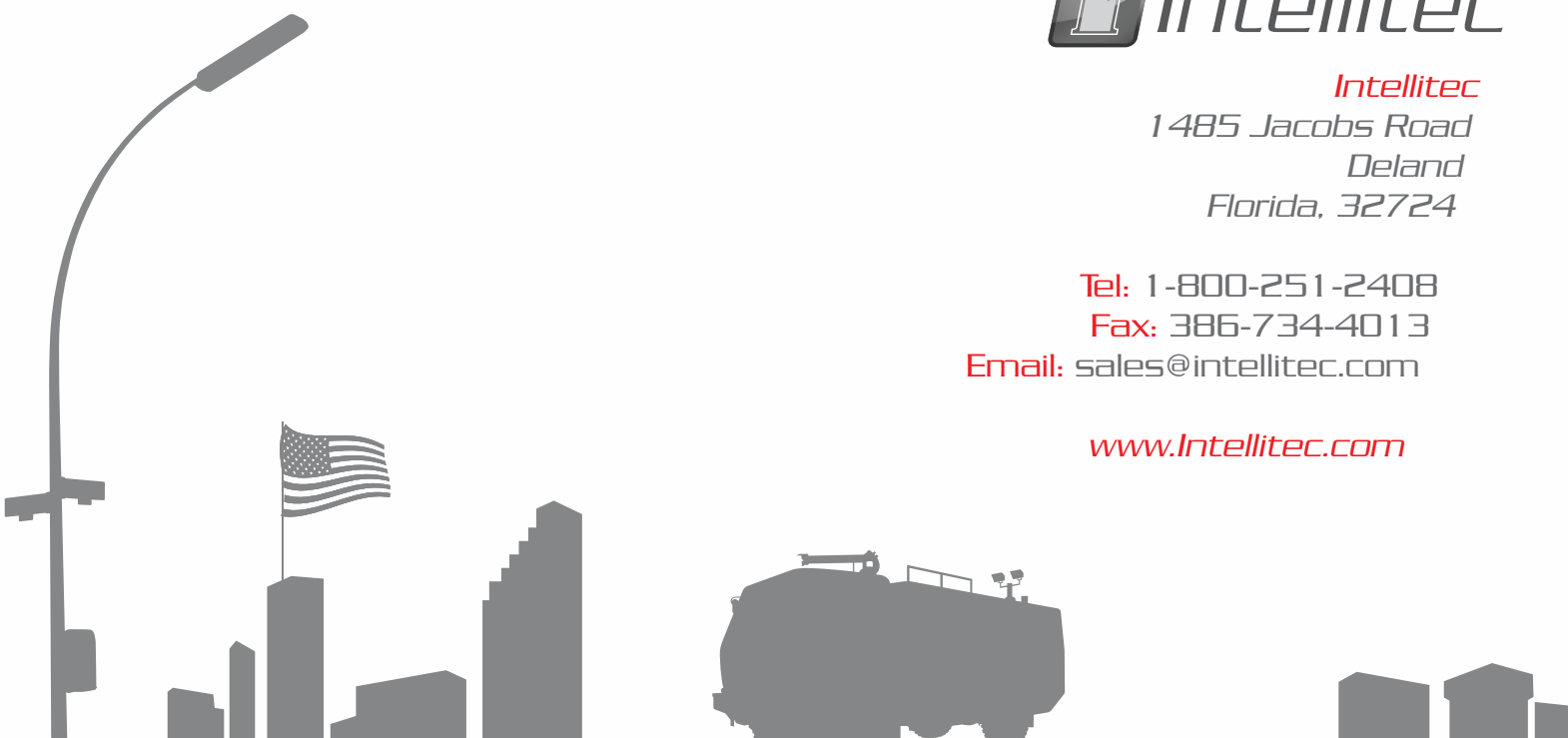
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Over the years of running a mobile RV repair service, having a dedicated place to access service manuals for all the different appliances and components found on RVs was something that I always had a desire to create.

I hope this resource makes your RV repairs easier, as it has mine, but please be careful and follow proper safety practices when attempting to repair your own RV.

If in doubt, please consult with a professional RV technician!



DARREN KOEPP - OWNER, MY RV WORKS, INC.

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