

## Features :

- A. Low power consumption due to our digital design which transfers up to 3 power circuits automatically.
- B. Switching time is 16-26msec, so most equipment will continue running without any apparent interruption of power.
- C. Each of the three incoming ac power sources have an associated lamp that is on when that power source is being output.
- D. A Lamp will indicate which of the 3 incoming powers is currently selected to the output.
- E. Designed to allow 110/115/120/220/230/240Vac pass through
- F. Frequency may be 50 or 60Hz on any incoming power line. It will not be modified internally.
- G. Input power supply voltage may be 12 or 24Vdc.

## Cautions :

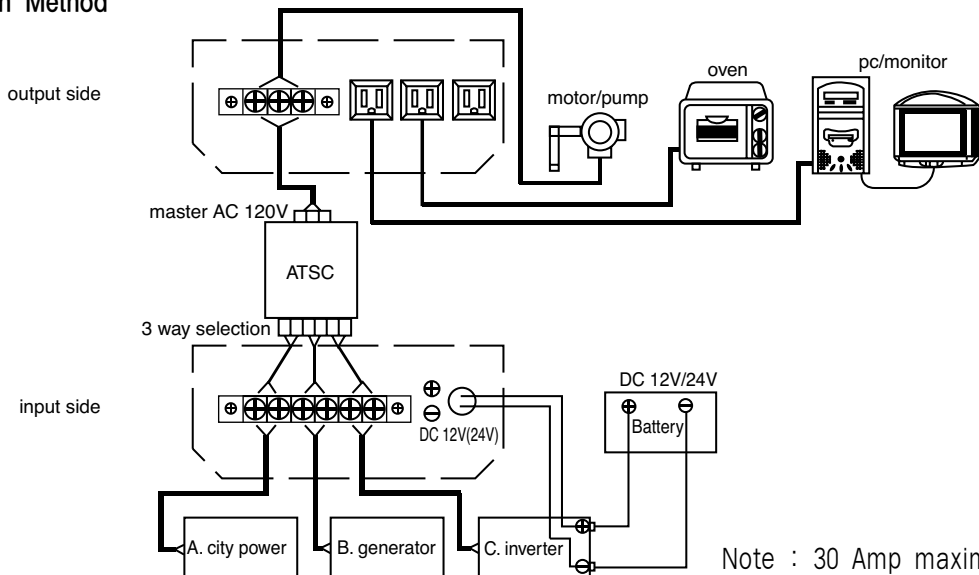
- Prior to connecting any input power lines, ensure you connect hot and neutral/common correctly.
- Never connect the Earth Ground (usually green) to either of the input terminals.
- Inverter must have an isolated input and output design so that the neutral from inverter may be grounded. If not the inverter and ATSF may become permanently damaged and warranty voided.
- If at all possible have an Electrician or specialist install the ATSC.
- Never connect "Live" or "Hot" wires to the ATSC.
- Do not attempt to wire direct connect terminals unless all incoming power sources are off.

- Tips :**
- Turn protect switch off when connecting power anywhere on the "Input side" of ATSC.
  - It is ok to use a battery charger to charge inverter batteries, but only when city power or generator power is available. A net power loss occurs when inverter power is used.
  - It is ok to connect a pure sine or modified sine wave inverter to the input of the ATSC.

**Instructions for use (numbers reference diagram on following page):**

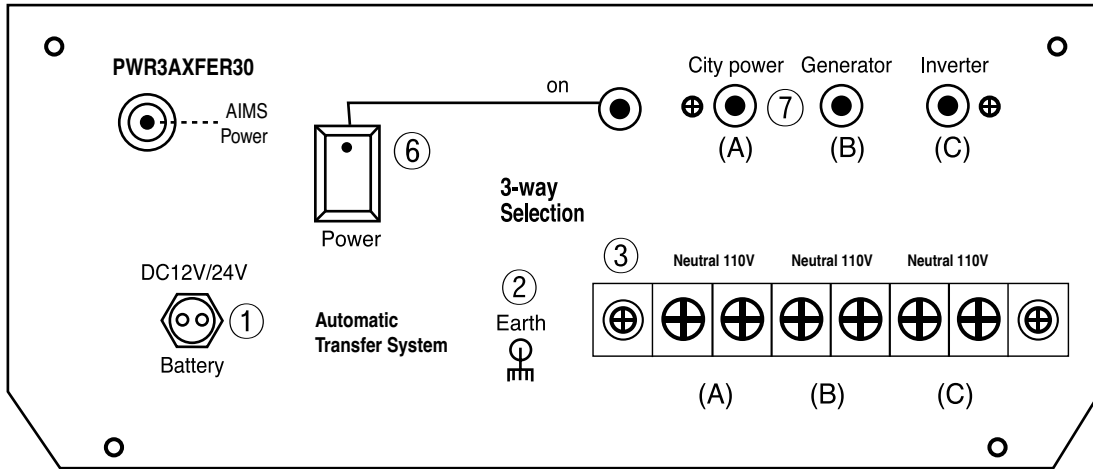
- Note :**
- Ensure main power switch ⑥ and protect switch ⑧ are off.
  - 12Vdc or 24Vdc may be used as a power source. ATSC will detect automatically.

**Connection Method**

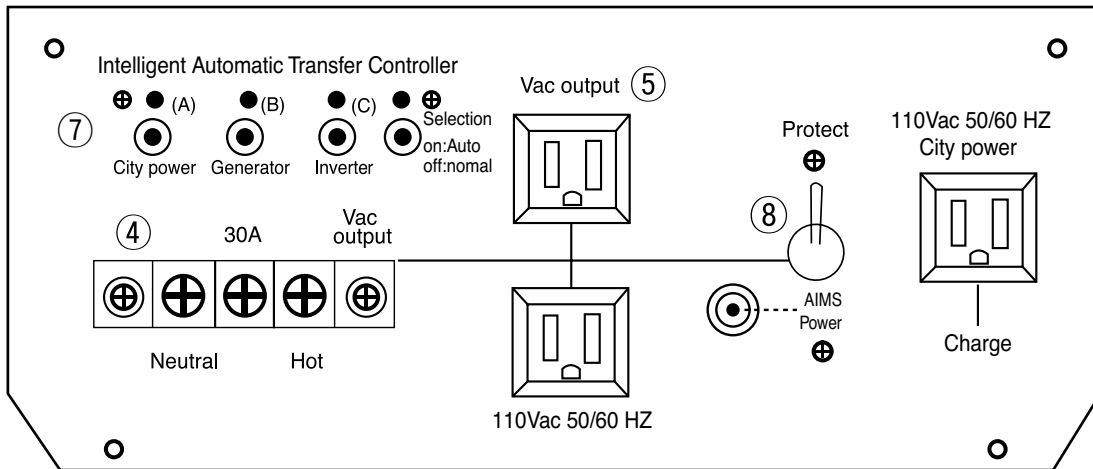


Note : 30 Amp maximum draw through ATSC.

## Input Side



## Output Side



1. Connect either a 12Vdc or 24Vdc power source to the ATSC using provided cable. Red (+) and Black(-). Connect to battery (bank) first, then plug into ①. It is ok to use your vehicle or inverter batteries. You may extend the cable as needed.

## 2. Earth Ground

Connect the case to Earth Ground or vehicle chassis

## 3. Connecting Input Power Lines

Make sure the incoming power lines are disconnected or not hot before connecting to the terminal blocks on the ATSC. Connect City Power, then Generator Power, and lastly connect the Inverter Power lines. **The default priority sequence is 1. City, 2. Generator, 3. Inverter. The sequence can only be changed by rewiring the input power sources.**

**Example: the inverter output may be wired to the 1. City input on ATSC. Then the City could be wired to either the 2. Generator or 3. Inverter input on ATSC. If wired to 3. Inverter the order would be reversed. The Inverter would be primary and City would have the least priority.**

## 4. 30Amp AC Terminal pre-caution

The terminal block is recommended when you need over 15Amps. Make sure you use 30Amp rated wiring and lugs when connecting to it. Ensure you connect Hot and Neutral/Common lines according to labels

### 4+5. Connecting Output Power / Your Equipment

Now you can connect your equipment to the output of the ATSC. You can use the convenient direct connects, or the ac plug, or both. The outputs are protected by built-in fuses.

## 5. AC Outlet precaution

Outlets are rated at 15Amps maximum recommended output. Please do not attempt to use more than 15Amps or 1500W or the outlets may heat up. This is no different than is recommended for your home outlets.

If using just the outlets you may connect the 2 outlets into a 30Amp rated plug.

We would prefer you use our 30Amp rated direct connect terminal block.

6. You should now have all wiring completed and may turn on the main power switch.

## 7. Input and Output lamps

There are a total of 8 Lights (4 on the input and 4 on the output panels of the ATSC).

Input Only Light: ON is Blue - ON indicates that the dc input power to ATSC is valid and Main Power is ON.

Input and Output Lights:

A is Green - 1st priority power sent to output (most commonly City Power)

B is Yellow - 2nd priority power sent to output (most commonly Generator Power)

C is Red - 3rd priority power sent to output (most commonly Inverter Power)

Output Light: Selection Auto Blue - this light defaults ON and is Blue indicating ATSC is in Auto Selection Mode.

When this light is off (clear) then you may press A B or C to manually select an output.

Selection will not automatically change if power is lost.

8. You may now turn on the protect switch. This is a reset-able breaker that will automatically turn off if an excess of 30 Amps ac is drawn.

## Specification per model

MODEL	Output power (Continous)	Input DC	Output AC	Dimensions (Inch)	Dimensions (m/m)	Wight(lb)	Wight(kg)
PWR3AXFER30	30A/3600W	12V / 24V (10V-34V)	110V/120V (220V/240V)	9.29 × 3.39 × 7.01	236 × 86 × 178	5.51 lb	2.5kg
PWR3AXFER50	50A/6000W		50Hz~60Hz	9.29 × 3.39 × 8.66	236 × 86 × 229	7.72 lb	3.5kg

Way of AC switching	Max Current(DC12V/24V)	Switching time
Program (Software)	0.034A(34mA)	16-26m/sec

## **AIMS Power™ Warranty Instructions:**

This product is designed using the most modern digital technology and under very strict quality control and testing guidelines. If however you feel this product is not performing as it should, please contact us at:

Techsupport @ (775)762-5400 or e-mail: techsupport@aimscorp.net

We will do our best to resolve your concerns. If the product needs repair or replacement, make sure to keep your receipt/invoice, as that will need to be sent back along with the ups prepaid package to AIMS. You have a full 1 year from date of purchase warranty.

This warranty is valid world wide with the exception that freight and duty charges incurred outside the contiguous 48 United States will be paid for by customer.

For additional products such as

- Modified sine wave inverters
- Digital pure sine wave inverters
- Power controllers
- Automatic transfer switch controllers
- Power supplies
- Custom cut cables

Please visit our web page: [www.aimscorp.net](http://www.aimscorp.net).

To find out where to buy any of our products, you can e-mail : [sales@aimscorp.net](mailto:sales@aimscorp.net) or call (775)359-6703



# **Automatic Transfer Switch Controller (ATSC)**

# Operation Manual

## Automatic Transfer Switch Controller (ATSC)



3-Way Selected by Digital Program

It is very important that you read and understand this instruction manual completely prior to use. Contained are important connection tips, safety issues, and warranty information.