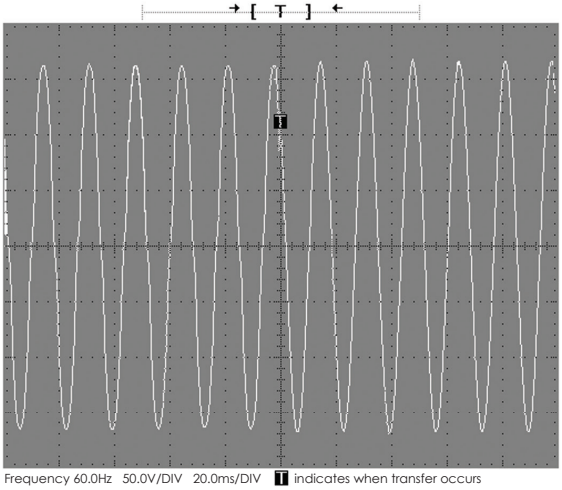
22P / 22S Static Switch

1MS Electronic Transfer Switch



Frequency 60.0Hz 50.0V/DIV 20.0ms/DIV T indicates when transfer occurs

Scope photo shown above of typical Static Switch Transfer from Inverter Prime Source to Alternate Source upon loss of Inverter Output

Fast Electronic Static Switch for La Marche A31 DC to AC Inverter

The La Marche Electronic Static Switch is an automatic device that will transfer an AC load to and from the Prime Source to an Alternate Source, if the Prime Source fails, in less than 4 millisecond. The Static Transfer Switch is intended for use on the La Marche A31 DC to AC Inverters ranging from 1kVA to 15kVA models (consult factory for other applications). A customer calibration mode is incorporated into the Static Switch Menu to allow for on site settings that are best suited for the intended application.

A Digital Display Panel, which replaces the unit's AC analog meters, is also offered as an option. The Digital Display will allow the operator to view Load Voltage, Load Current, VA (Volt-Amps), Utility Voltage, Utility Frequency, Inverter Voltage and Inverter Frequency readings.

Status Display

A Status Display panel consisting of (5) LED indicator lights and (2) switches are provided on the front of the unit.

⌘ Phase Lock	▶▶ Indicates when the Prime and Alternate sources are in synchronization
⌘ Utility Available	▶▶ Indicates the Alternate source is connected and operating within its proper range
⌘ Inverter Available	▶▶ Indicates the Inverter is operating within its proper range
⌘ Load on Preferred Source	▶▶ Indicates the AC load is operating on the Prime source
⌘ Load on Alternate Source	▶▶ Indicates the AC load is operating on the Secondary source
▶ Auto/Manual Switch	▶▶ Allows for an Automatic or Manual Transfer
▶ Test Transfer Pushbutton	▶▶ Allows an active check of the Static Switch operation

Customer Calibration Mode

The customer calibration mode allows the user to select the available parameters and to set per preferences.

SELECTIONS	▶▶ SETTINGS
1. Preferred Source	▶▶ May be selected to either Utility or Inverter
2. Load Voltage Window Upper Limit	▶▶ Maximum voltage allowed on the Load
3. Load Voltage Window Lower Limit	▶▶ Minimum voltage allowed on the Load
4. Utility Voltage Upper Limit	▶▶ Maximum voltage allowed for Utility to be considered good
5. Utility Voltage Lower Limit	▶▶ Minimum voltage allowed for Utility to be considered good
6. Inverter Voltage Upper Limit	▶▶ Maximum voltage allowed for Inverter to be considered good
7. Inverter Voltage Lower Limit	▶▶ Minimum voltage allowed for Inverter to be considered good
8. Inverter Sense Delay	▶▶ The amount of time the Inverter must be within the upper and lower limits before the Inverter is considered within tolerance
9. Utility Sense Delay	▶▶ The amount of time the Utility must be within the upper and lower limits before the Utility is considered within tolerance
10. Retransfer Delay	▶▶ Used to set the time the Static Switch will attempt retransfer from the Alternate Source to the Primary Source
11. Hit Counter	▶▶ Used to determine the maximum allowable load voltage deviations outside of the pre-defined envelope that will trigger a transfer

Static Switch Options

Option #22A Alarm Relay Board consisting of (2) sets of Form "C" Contacts for each of the following:

- Phase Lock
- Utility Available
- Inverter Available
- Load on Prime Source
- Load on Alternate Source

Option #22D Digital Display (replacing AC analog meters on unit) to indicate the following:

- Load Voltage
- Load Current
- VA (Volt -Amps)
- Utility Voltage
- Utility Frequency
- Inverter Voltage
- Inverter Frequency