Specifications

The Red/Green Signal Light Trailer ST-100 is self contained and includes one Signal Trailer, with Red/Green Lens Signal Light, and Wireless Remote Pendant.

Specification for Red/Green Signal Light Trailer
Model: ST-100

Controller:

*The main microcontroller controls the signal lights, system for power issues, and Signal Lamp failures.

*The Controller features a 4 line LCD which displays:
  Signal Trailer Voltage
  Instructions for changing Programs
  Program in use
  Signal Light Status for each trailer
  Lamp failure
  Signal Conflict
  Radio Signal Channel

*The Controller features a program mode for
  Single Operator for one Signal Light Trailer.
  Single Operator for two Signal Light Trailers

*The Controller features metal "Vandal Proof Switches" for all control functions.

*The Controller is housed in a lock-able all metal sealed NEMA rated cabinet.

*The Controller wiring meets applicable SAE, UL and ITE standards.

*The Controller contains no screw type terminal connections or other open connections with are subject to failure in harsh environments conditions and/or vibration.

*The Controller features a single Amphonel multipin connector for all electronic connection to the Controller. This feature simplifies replacement of Controller in the field without special tools or training.

*The Controller features a "Sequence" switch that can control the operation from the panel, in the event that a Wireless Radio Pendant is unavailable.

Power Supply:

*Each Signal Trailer feature 3 - 12 volt Deep Cycle 140 amp hour Batteries.

*Each Signal Trailer features an SP-80 solar Panel and Charge Controller

*Each Signal Trailer features a 110 VAC - 10 amp battery charger with 110 VAC connector accessible from the outside of the Battery Cabinet.

*Each Signal Trailer features a lockable, plastic composite Battery Cabinet.

LED Signal Lights:

*The Signal Housing of the Signal Trailer includes a 12" Red and a 12" Yellow (Amber) Signal Light

*Signal Lights are 12 Volt, ITE standard compliant, Light Emitting Diodes (LED)

*The Signal Housing are MUTCD compliant with aluminum construction.

*The Signal Housing includes a compliant backplate.

* A 5 inch amber LED is mounted on the back side of the Signal Housing and indicates the status of the Amber Signal Light to an operator within the work zone.

Radio System:

*All radio are high performance, frequency hopping spread spectrum transceivers operating under FCC part 15.247 regulations for the 900 MHZ band.

*Qualified for operation in a temperature range of -40C to +80C.

*Features FHSS technology with Data-Encryption Standards and proprietary software synchronization.

Trailer Frame:

*The Signal Trailer frame features a 2"' X 4" welded tubing frame with dimension of 48" long and 52" wide.

*The Signal Trailer features a 2" X 4" X 42" (length) steel tubing tongue with 2" X 2" steel tubing braces and 4"
  riser for 2" Ball Hitch Coupler.

*Each trailer features a telescoping Signal Light Mast constructed of 2" X 1 ½" square steel tubing with braking winch

*Each Signal Trailer features a 12 volt trailer lighting system complying with Federal Motor Carrier Safety Regulations
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*Each Signal Trailer will be primed with Epoxy Primer and painted with Marine Grade Federal Standard 595a
  "Highway Orange" polyurethane paint.

*Each Signal Trailer features a 3500 lbs rated axle and 13" tires.

*Each Signal Trailer features (4) swivel screw style jacks to level the trailer.

Wireless Radio Pendent (One for each trailer):

*The Wireless Radio Pendent is housed is an all aluminum sealed housing

*The Wireless Radio Pendent features stainless steel "Vandal Proof Switches"

*The Wireless Radio Pendent features switches for Signal Sequence and Emergency Horn.

*External Antenna for extended operational distance.

*The Wireless Radio Pendent features a 18,400 mAh, Ni-MH battery pack for 2-4 year operation

*A battery pack charger with 110VAC and 12 VDC connections is provided.

(*In addition each controller features a manual backup switch to operate the Signal Trailer and/or System in the event
 of a Wireless Radio Pendent Failure.

Operation Manual:

Each Signal Trailer and/or System will come with a complete operation manual

Warranty:

Each Signal Trailer and/or System come with a one year limited manufacturer warranty.

ST-100 Optional Equipment:

Part Number	Description
EJ	Extended heavy duty jack with drop down extension for faster set up and extended length, (for applications with severe shoulder drop offs)
EH	120 dB Emergency Horn, for signal change notification and warning to workers in the work zone.
LBS.	Lock Bar System. An integrated system consisting of two lock bars, 2" ball hitch and 48" Remote Signal Trailer Tongue extension that allows the two Signal Trailers in a System to be towed (and backed) as one unit.
HDM	Heavy Duty Signal Light Mast. 4" square tubing base with 3" mast extension.
TRH	Telescoping Remote Trailer Hitch. Allows the Ball Hitch on the Remote Trailer to be extended for single trailer transport. Also allows hitch to be transferred to the rear of the trailer for slow moving applications.
HDWA	Heavy duty 14" wheels and tires (ST205/75D-14) / Heavy Duty 3500 LB Axle
GASS	Gate Arm Slip System. Mechanism that allows the Gate Arm to slip and not damage a vehicle if the arm is lowered onto the vehicle. Also pivots if Gate Arm is hit.