# *LUEISITI* 160pi























PROCESS:TIG, STICK, PLASMA

DIMENSIONS: 21.5" L x 8 3/4"W x 15.25" H

INPUT: 220/230/240V VAC 1 Phase, 50/60Hz

DUTY CYCLE TIG: 60%@160A,

WEIGHT: 68 lbs., unit only

TIG OUPUT: 5-160A,

DUTY CYCLE STICK: 60%@130A,

PROTECTION CLASS: IP21S

STICK OUTPUT: 5-160A, 20.2-26.4V

INVERTER TYPE: IGBT construction

**INSULATION GRADE: F** 

# Introduction

The LONGEVITY WeldAll 160pi is a first to market multi-process welder that allows the user to ACDC TIG/STICK and Plasma Cut all from one portable machine. The WeldAll 160pi combines 4 processes into one with a 160amp AC and DC TIG Welder, a 140amp STICK Welder, and 40amp Pilot Arc Plasma Cutter with the flip of a switch. It also offers advanced pulse controls for TIG welding – making it the perfect model for the fabricator!

# A. Efficient IGBT Inverter Technology

IGBT technology has taken the welding industry to new levels. It gives us the ability to offer smaller units that weigh less while increasing efficiency. The WeldAll 160pi is the ultimate example and the perfect welder for DIY and production applications.

## B. Advanced Pulse TIG Function

LONGEVITY has added pulse capabilities to the WeldAll 160pi for convenience of the user. Pulse welding helps with thin gauge metals along with heat sensitive metals. Pulse welding lowers average temperatures allowing to weld thin material focusing the arc and allowing for proper distribution of the heat. This feature also limits the arc cone diameter to a precise area which provides control of the arc.



# C. Digital Meter Display

The WeldAll 160pi features digital meters displaying your amperage to allow customers to adjust the unit to any amperage quickly, accurately, and easily for TIG, STICK, and Plasma Cutter functions.

#### **Specifications and Ratings**

5-160AMP AC/DC TIG Features: Up Slope, Down Slop Control: 0-10 Seconds Post Flow Control: 0-25 Seconds Base Current Control: 5-160 Amps Peak Pulse Current Control: 5- 160 Amps Pulse Frequency Control: .5-25 Hz

AC Frequency Control: 20-100 Hz AC Balance Control: 30-70% (for Aluminum) Aluminum Weld Up to 1/4" 20-160AMP Stick Features:

Arc Force Controls the amperage from 20-160AMP

20-40AMP Plasma Cutting Specifications @ 65psi:

3" Per minute @ 1/2 " Steel (Severance Cut )

7" Per minute @ 3/8" Thick Steel

17" Per minute @ 1/4 Thick Steel Minimum requirement for air compressor: (4.0 CFM)

Aluminum Cut Up to 3/8" on AC plasma cutting!

General Specifications:

Genuine Infineon IGBT based electronics

Operating Voltage: 220/230/240 VAC 50/60Hz Input

Open Circuit Voltage: 60-80V

60% Duty Cycle @ Rated Amperages

Weight: 68 lbs

Thermal Overload Protection with Large Size Cooling Fan Size: 21.5" L x 8 3/4"W x 15.25" H (with handles )inches



Pulse Width Control: 10%-90%



# Weld All

























### 160 AMP TIG/STICK WELDER and 40 AMP PLASMA CUTTER



## D. Squarewave AC Control

Minimizes problems with ACTIG welding that are occur during transition between the positive and negative electrode. Squarewave technology shortens switching between the Negative and Positive so the machine has sufficient push to drive the arc.

#### E. Stick Welder

You are able to easily switch to stick mode with the flip of a switch. With Arc Force, you are able to adjust the Inductance of the arc for either a crisp arc or soft arc with a fluid puddle. This will allow for greater control of your welding parameters.

# F. Industrial Duty Cycle

The WeldAll 160pi features an industry competitive duty cycle of 60% at 40 degrees Celsius. This duty cycle puts the WeldAll 160pi among the best industrial welders on the market allows machine to run hotter than most brands while you work for longer periods of time.

## G. Pilot Arc Plasma Cutter

On out-of-date plasma cutters, when the arc is interrupted the trigger must be disengaged to restart the arc. With the WeldAll 160pi, the plasma cutter features Pilot Arc system automatically senses loss of voltage, and re-ignites the Pilot Arc allowing for the torch head to maintain an arc when cutting. This is effective allowing you to not worry about the cutting height, cut speed, and it allows you to cut expanded metal. Pilot Arc technology allows for you to always have power to the arc which increases your cutting speed and assists with uneven cutting surfaces.

# H. High Frequency or Lift Arc start

The WeldAll 160pi is safe to operate near hospitals or any other area where high frequency interference may cause issues. The WeldAll 160pi offers the ability to start the arc with lift start which is also ideal to use around electronic devices which may be sensitive to high frequency interference.

#### I. Panel or Foot Pedal Control

The control panel gives the operator the power to change the welding parameters at his fingertips. LONGEVITY understands that the foot pedal may be inconvenient to use sometimes which is why it allows the user to control welding parameters with its easy to uses control panel. If you do like to have two free hands, the foot pedal will be a great addition to the welding experience.

#### J. Thermal Overload Protection

LONGEVITY has included thermal overload protection which informs the user when the duty cycle has been exceeded shutting down the unit in a safe matter until it has been cooled to adequate temperatures to proceed cutting.





