

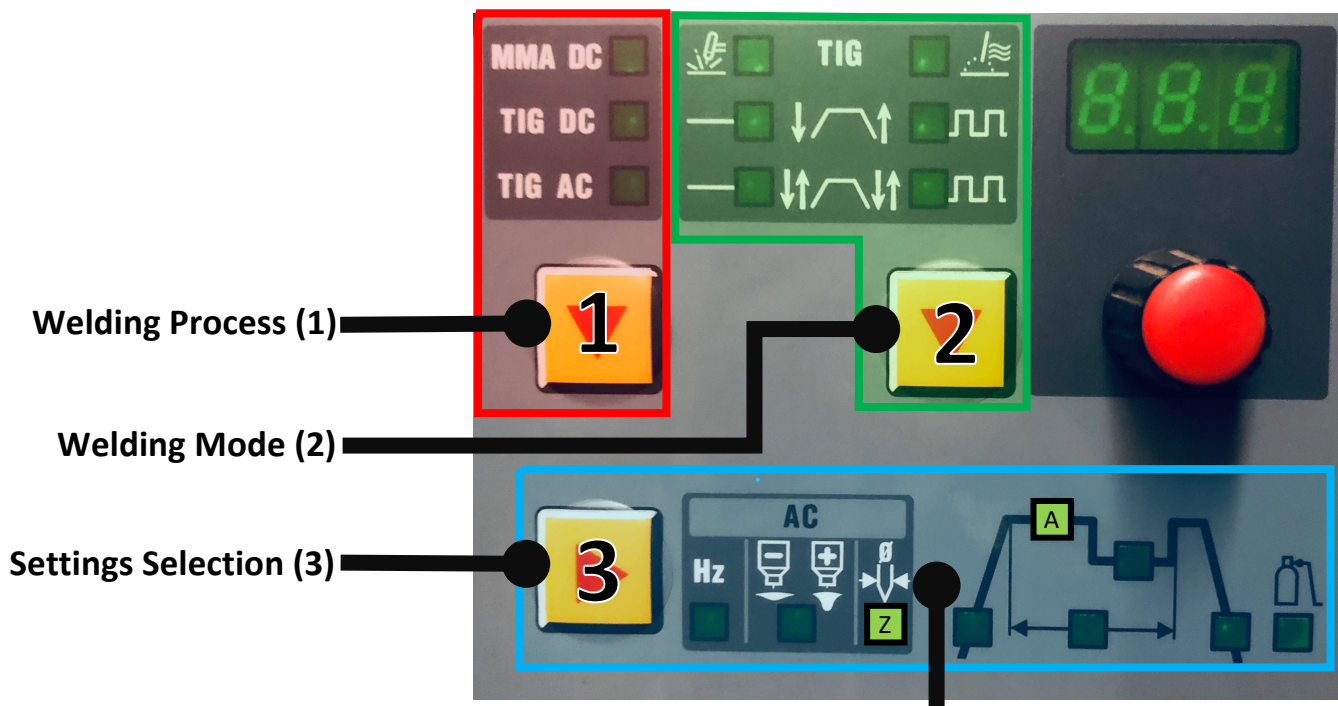
# Quick Start Guide – TIG150i and TIG255i

The Snap on TIG series welders are extremely versatile machines with nearly endless user adjustability. The following is a quick guide to help you get started.

Please note: The TIG machines advanced settings are intended for experienced welders

## QUICK SET-UP

1. *Install* a 220v electrical plug
  - The **Green/yellow** wire is the **Ground**
  - The Blue wire and the Brown wire are hot wires
2. *Install* the foot switch or pedal and torch assembly
  - follow the instructions in your owner's manual.
  - If you are using the variable foot pedal, **ALWAYS** set the control mode to 2 stage
3. *Power on* using the **on/off Switch** on the back
4. *Set up* Gas Bottles with a **Regulator** and *Adjust Gas Flow* (recommended 30 CFM) (see below)
5. For the TIG255i – The water-cooling system **MUST** be installed, or you will damage your welder

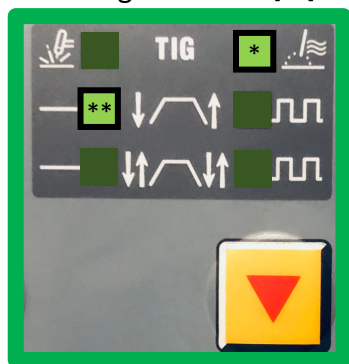


### Quick Start Mode Settings

High Frequency Start [\*]

Continuous Current [\*\*]

2 Stage Controls [\*\*]



### Heat Setting

Adjust the temperature to your metal thickness

Click the Settings Selection Button (3) until **light (A)** is illuminated. Then turn the Red Knob to change the Amperage

12 gauge metal ≈ **110 Amps**

### Tungsten Rod Size (AC only)

Select setting [Z] and use the red knob to adjust

A medium size rod is 3/32"

**The TIG255i Setting is labeled START**

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## Welding Process

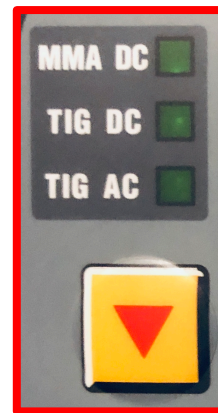
There are 3 welding processes.

Press the Process selection button (1) to cycle between options.

**TIG DC** – Steel TIG Welding

**TIG AC** – Aluminum TIG Welding

**MMA DC** – Manual Metal Arc / Stick Welding



## Mode Selection

Press the **mode selection button (2)** to cycles between each combination of mode variables.

**There are 3 mode variables: Start Mode, Welding Mode and Control Mode.**

These options are not available when using MMA DC.

There will always be two lights illuminated: Start mode and a combination Welding/Control mode

## **Mode- Start**



### **Scratch Start**

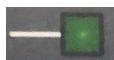
*To light the arc, press the torch trigger and touch the tungsten electrode to the work piece, then lift it. This move must be quick and decisive (0.3 sec.)*



### **High Frequency Start**

*To light the arc, hold the torch tip slightly above the work piece and press the torch trigger: a pilot spark will light the arc without the need to touch the work piece.*

## **Mode- Welding**



### **Continuous Welding**

*The welding current stays constant while welding.  
Recommended for Steel*



### **Pulsed Welding**

*The current quickly switches between high and low levels.  
Recommended to reduce warping on thin material*



# Quick Start Guide – TIG150i and TIG255i

## Mode Selection (Continued)

### Mode- Control



#### 2 stage

Press and hold the trigger to weld, release the pedal to stop.

**If you are using the optional variable foot pedal always use 2 stage welding**



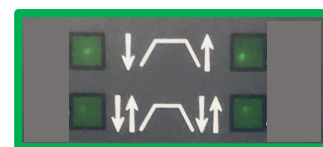
#### 4 stage

Press and Release the trigger to begin welding. The current will continue until you press and release the trigger to stop welding



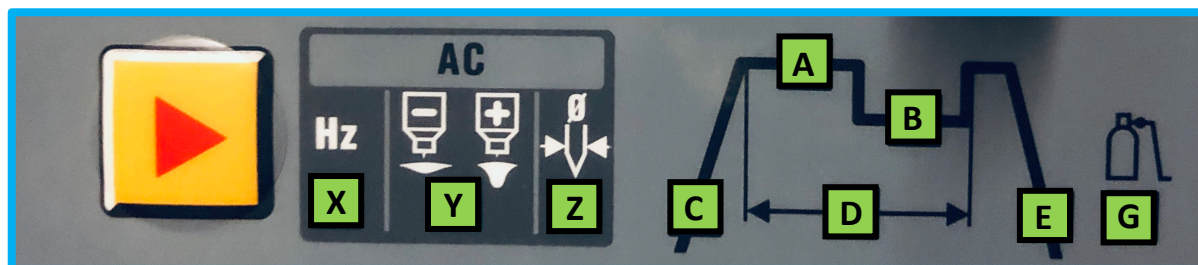
#### 4 stage double level – TIG255i Only

The same as 4 stage with a second heat setting. Quickly press and release (< 0.7s) the trigger to toggle between heat settings. A longer press and release (>1s) will stop all current.



## Adjustable Settings

Click the **Setting Selection Button (3)** to cycle between each adjustable welding parameter. Use the **Red knob** to change the value of the highlighted setting.



**[A] Main Heat** - Primary welding amperage (12 Ga  $\approx$  110 Amps)

**[B] Secondary Heat** - Low amperage during pulse mode (1/2 of [A])

**[C] Slope Up** - At start: Time from no power to Main Heat (0.0s)

**[D] Interval Time** - During Pulse Mode: Time between High and Low Heat (0.25s)

**[E] Slope Down** - At end: Time from Main Heat to no power (0.0s)

**[G] Post Gas** - At end: Gas flow period after welding (0.5s)

\*The Tig255i also has a Pre Gas setting located on the left of the arc diagram

**[X] AC Frequency** - Fine Tuning: Changes the frequency of the current (90Hz)

**[Y] AC Penetration** - Adjusts the depth of the Weld (dependent on metal thickness)

**[Z] AC Tungsten Rod Diameter** - Set the Diameter of the Torch Rod (3/32"  $\approx$  0.093)