Quick Start Guide – MIG185i

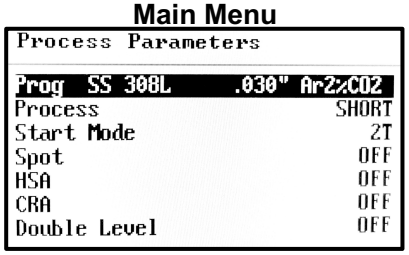
QUICK SET-UP

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* welding wire and torch assembly
   - follow the instructions in your owner's manual.
3. *Power on* using the **on/off Switch** on the back
   - A boot up display will appear, then the Home Screen
4. *Set Up* Gas Bottles with a **Regulator** and *Adjust* **Gas Flow** (see Pg. 3)

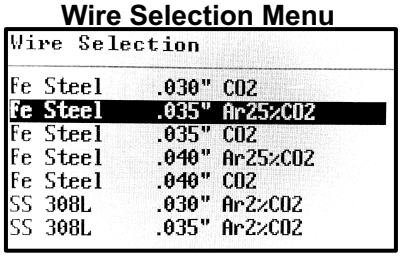
   You will use the Red Knob for all menu and settings selections

5. *Press and Hold* until you see the **Main Menu** (Process Parameters)
6. *Click* to open the **Wire Selection** Menu
7. *Turn to scroll* and highlight the kind of wire and gas you are using
8. *Click* to select your wire and gas
9. You will be at the **Main Menu** (Process Parameters) screen again.
   - The Settings you selected should be at the top of the menu
10. *Press and Hold* to return to the **Home Screen**.
11. *Turn* to Set the **Thickness** of your material
    - Shown in the lower right corner of the display.
12. **YOU ARE NOW READY TO WELD**

Main Menu



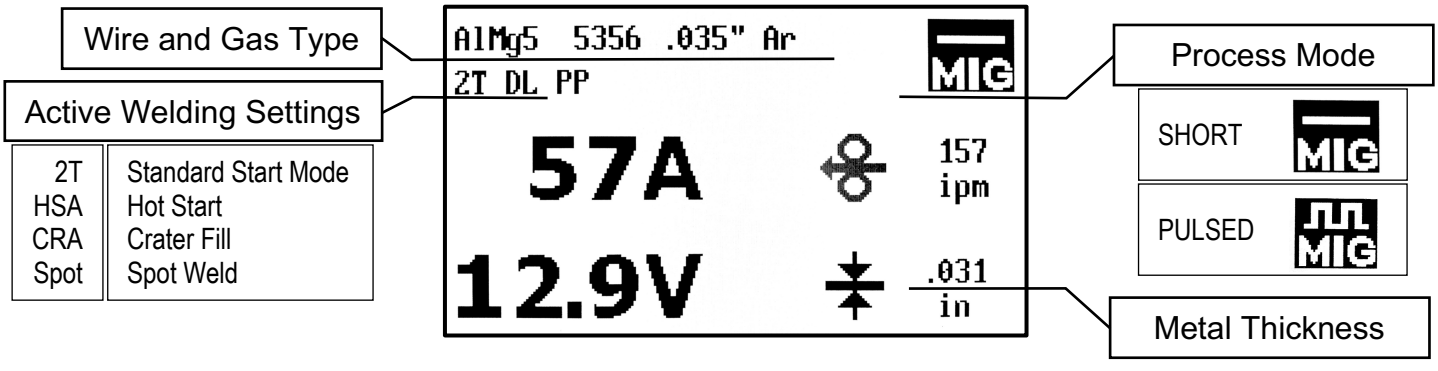
Wire Selection Menu



This welder uses a Synergic Curve Principle

* The wire speed is preset to the thickness
* The welding amps and welding voltage change as you weld
* Simply set the metal **Thickness** adjust the **Welding Gas Flow** (see Pg. 3)

Home Screen



QUICK START GUIDE SYNERGIC CURVE (WIRE SELECTION)

Setting	Wire	Composition	Shielding Gas	Material Thickness MIN/MAX inch SHORT	PULSED	Application
Fe	.023"	Steel	75% Argon 25% CO2	.024"-.118" 0.6 - 3mm	.028"-.138" 0.7 – 3.5mm	All-purpose steel welding from thin sheet to structural
Fe	.023"	Steel	100% CO2	.024"-.157" 0.6 - 4mm	---	All-purpose steel welding from thin sheet to structural
Fe	.030"	Steel	75% Argon 25% CO2	.024"-.197" 0.6 - 5mm	.031"-.158" 0.8 - 4mm	All-purpose steel welding from thin sheet to structural
Fe	.030"	Steel	100% CO2	.024"-.197" 0.6 - 5mm	---	All-purpose steel welding from thin sheet to structural
Fe	.035"	Steel	75% Argon 25% CO2	.031"-.197" 0.8 - 5mm	.031"-.197" 0.8 - 5mm	All-purpose steel welding from thin sheet to structural
Fe	.035"	Steel	100% CO2	.031"-.165" 0.8 – 4.2mm	---	All-purpose steel welding from thin sheet to structural
Fe	.040"	Steel	75% Argon 25% CO2	.031"-.150" 0.8 – 3.8mm	.031"-.197" 0.8 - 5mm	All-purpose steel welding from thin sheet to structural
Fe	.040"	Steel	100% CO2	.031"-.268" 0.8 – 6.8mm	---	All-purpose steel welding from thin sheet to structural
308L	.030"	Stainless-Steel	98% Argon 2% CO2	.031"-.157" 0.8 - 4mm	.024"-.181" 0.6 – 4.6mm	301, 302, 304 and 305 Stainless-Steels
308L	.035"	Stainless-Steel	98% Argon 2% CO2	.039"-.263" 1.0 – 6.7mm	.031"-.209" 0.8 – 5.3mm	301, 302, 304 and 305 Stainless-Steels
308L	.040"	Stainless-Steel	98% Argon 2% CO2	.035"-.276" 0.9 – 6.7mm	.031"-.197" 0.8 – 5mm	301, 302, 304 and 305 Stainless-Steels
AlMgMn2.7 5554	.040"	Aluminum Magnesium 2.7%	100% Argon	.039"-.236" 1.0 – 6mm	.031"-.197" 0.8 – 5mm	Panel and structural repair as required by OE manufacturers
AlMgMn2.7 5554	.045"	Aluminum Magnesium 2.7%	100% Argon	.047"-.157" 1.2 – 4mm	.039"-.217" 1 – 5.5mm	Panel and structural repair as required by OE manufacturers
AlMg5 5356	.030"	Aluminum Magnesium 5%	100% Argon	.031"-.197" 0.8 - 5mm	.031"-.236" 0.8 - 6mm	All-purpose, automotive body panel and structural repair, pressure vessels boats and truck bodies
AlMg5 5356	.035"	Aluminum Magnesium 5%	100% Argon	.031"-.236" 0.8 - 6mm	.031"-.236" 0.8 - 6mm	All-purpose, automotive body panel and structural repair, pressure vessels boats and truck bodies
AlMg5 5356	.040"	Aluminum Magnesium 5%	100% Argon	.035"-.315" 0.9 - 8mm	.031"-.217" 0.8 – 5.5mm	All-purpose, automotive body panel and structural repair, pressure vessels boats and truck bodies
AlSi12 4047	.023"	Aluminum Silicon 12%	100% Argon	.024"-.098" 0.6 – 2.5mm	.031"-.157" 0.8 - 4mm	Welding forged and cast aluminum parts
AlSi12 4047	.030"	Aluminum Silicon 12%	100% Argon	.031"-.197" 0.8 - 5mm	.024"-.236" 0.6 - 6mm	Welding forged and cast aluminum parts
AlSi12 4047	.035"	Aluminum Silicon 12%	100% Argon	.039"-.315" 1.0 - 8mm	.024"-.236" 0.6 - 6mm	Welding forged and cast aluminum parts
AlSi12 4047	.040"	Aluminum Silicon 12%	100% Argon	.039"-.236" 1.0 - 6mm	.031"-.236" 0.8 - 6mm	Welding forged and cast aluminum parts
CuSi3 6560	.030"	Copper Silicon 3%	100% Argon	.024"-.118" 0.6 - 3mm	.031"-.142" 0.8 – 3.6mm	MIG brazing, automotive body panel and structural repair with high strength, Boron and galvanized steels
CuSi3 6560	.035"	Copper Silicon 3%	100% Argon	.024"-.157" 0.6 - 4mm	.031"-.197" 0.8 – 5mm	MIG brazing, automotive body panel and structural repair with high strength, Boron and galvanized steels
CuSi3 6560	.040"	Copper Silicon 3%	100% Argon	.028"-.197" 0.7 - 5mm	.039"-.157" 1 – 4mm	MIG brazing, automotive body panel and structural repair with high strength, Boron and galvanized steels
Union x 96	.030"	Steel	Argon + CO_2 18%	.024"-.197" 0.7 - 5mm	.031"-.157" 1 – 4mm	Welding specific Honda applications.
Union x 96	.030"	Steel	Argon + CO 25%	.024"-.197" 0.7 - 5mm	.031"-.157" 1 – 4mm	Welding specific Honda applications.

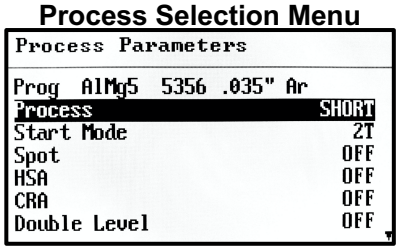
Advanced Settings – MIG185i

Welding Gas Set Up

1. *Open* the gas bottle.
2. *Press and Hold* the **Torch Trigger** to open the gas solenoid
   – You may release the wire feeder within the machine to stop the wire from feeding
3. *Turn* the **Regulator Flow Knob** to your desired amount while the gas is flowing
   – For Steel and Brazing set the gas flow to 30 CFH
   – For Aluminum set the gas flow to 40 CFH
4. After a few seconds the gas flow will shut off and the wire speed increases
   – This allows you to quickly feed wire without wasting gas.

Short and Pulse Arc Welding

Process Selection Menu

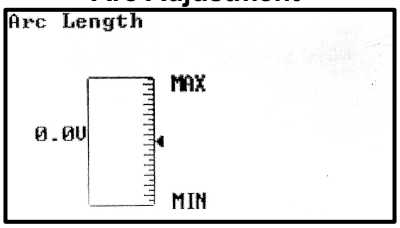


* **Short** arc welding is the default setting for steel and aluminum
* **Pulse** arc welding is recommended for thin metal and **Aluminum**

1. *Press and Hold* to enter the **Main Menu** (Process Parameters)
2. *Turn* to highlight **Process** and *Click* to select
3. *Turn* to highlight your desired **Mode** (Short or Pulse) and *Click* to select
4. *Press and Hold* to Exit to the **Home Screen**
5. Your Selected **Process** should be displayed in the top right corner
6. Verify the **Metal Thickness** when switching modes

Arc Length Adjustment

Arc Adjustment



* The arc length is preset when you select your metal thickness

1. *Click* while on the **Home Screen**
2. The **Arc Length** adjustment menu will appear
3. *Turn* to highlight your desired Arc Adjustment
   – Positive voltage will increase heat
   – Negative voltage will decrease heat
4. *Click* to confirm change and exit to the **Home Screen**

Resetting to Factory Preset

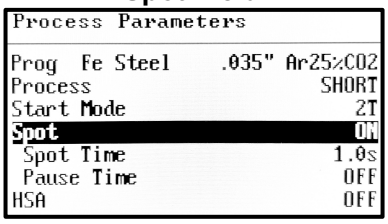
1. *Press and Hold* until you see the **Main Menu** (Process Parameters)
2. *Turn* to scroll down to **Factory** and *Click* to select
3. *Turn* to highlight **Reset** and *Click* to confirm selection
4. *Click* to OK then *Press and Hold* to exit to the **Home Screen**

Please read the Owner's Manual for more detailed instructions and advanced welding options.

Advanced Settings – MIG185i

Spot Welding Mode

Spot Weld



1. *Press and Hold* until you see the **Main Menu** (Process Parameters)
2. *Turn* to scroll down to **Spot** and *Click* to select
3. *Turn* to highlight **On** or **Off** and *Click* to confirm selection

Spot Time

* The **Length of Time** for the spot weld
  - Factory Preset at **1.0s**

Pause Time

* The **Off Time** between each Spot Weld period when trigger is held down
  - Factory Preset at **OFF (0.0s)**

Hot Start Assist (HSA)

* Start welding at a higher voltage to establish a strong initial bead on cold metal
* When Hot Start Assist is set to On, there will be **Three Adjustable Parameters**

S.C. Time (Start Current Time)

* The **Length of Time** welding at the Start Current percentage
  - Factory Preset at **0.5s**

Start Current

* The **Percentage of the Welding Voltage** the weld will begin at
  - Factory Preset at **135%**

Slope Time

* The **Time of Change** from the **Start Current** to 100% Voltage
  - Factory Preset at **0.5s**

Final Crater Filling (CRA)

* Fills the crater at the end of a weld by running at a lower voltage for a short time
* Final Crater Filling will occur **after you release the torch trigger**
* When Final Crater Filling is set to On, there will be **Three Adjustable Parameters**

Slope Time

* The **Time of Change** from 100% Voltage to **Crater Current**
  - Factory Preset at **0.5s**

Crater Current

* The **Percentage of the Welding Voltage** used to fill the crater
  - Factory Preset at **60%**

C.C. Time (Crater Current Time)

* The **Length of Time** welding at the Crater Current percentage
  - Factory Preset at **0.5s**

Please read the Owner's Manual for more detailed instructions and advanced welding options.