# JM-250P Basic Set-Up Guide - Synergic Pulse MIG/MAG

For Synergic Pulse MIG/MAG welding, set up as below and ensure you have 'Synergic' mode selected. 2T/4T trigger modes can be selected dependant on user requirements.



The parameter selection button (H) allows you to scroll through the adjustable parameters for Synergic Pulse MIG/MAG as follows:

A. P-1: Gas pre-flow time (2T/4T)

B. P-2: Initial parameters (4T only)

C. P-3: Upslope time (4T only)

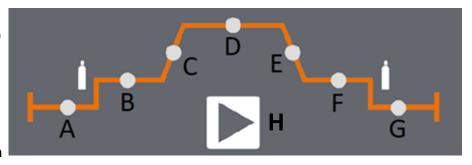
D. - Peak welding parameter

E. P-4: Downslope time (4T only)

F. P-5: Final parameter (4T only)

G. P-6: Post-flow time (2T/4T)

H. - Parameter selection button



The corresponding indicators will be lit according to selected parameters, the variable setting is noted in the left display and the adjustable values are shown on the right displays which are adjusted using the right control dial.

#### **Material Thickness Adjustment**

In synergic mode "D. - Peak welding parameters" can be adjusted based on material thickness, this is done by;



- 1. Press and holding in the right hand dial until the display changes to material thickness (as above).
- 2. You can then release the dial and select the thickness of material you are welding by rotating the same dial.
- 3. To exit this mode simply press and hold the dial in again to revert back to the original display.

**Please Note:** The synergic settings are a guide only and dependent on your application adjustments may be required to achieve the desired welding characteristics.

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### **Voltage Trim Adjustment**

Trim adjustment should be set to 0.0 to start with and adjusted based on user requirements, this is done by rotating the right hand dial when the machine is not in material thickness selection;



- Adjusting the trim up from 0.0 to 30 will increase the heat input into the material and give you the effect of having less wire and a longer welding arc.
- Adjusting the trim down from 0.0 to -30 will reduce the heat input into the material and give you the effect of having more wire and a shorter welding arc.

#### **Quick set up parameters**

Use the below guide setting parameter chart to help set up your machine

Parameter	Units	Adjustable Range	Guide Setting	Notes
Job/Material		Fe, St, AlSi, AlMg	User defined *	Set to the type of material you are welding
A. PRE-GAS TIME	Seconds	0.1 ~ 10	0.5	
<b>B.</b> INITIAL Parameter	WFS V	3-15m/min	Match PEAK setting	Adjustment only available in "4T" mode
C. UP-SLOPE TIME	Seconds	0.1~5	0.1	Adjustment only available in "4T" mode
<b>D.</b> PEAK Parameter	WFS V	0.5-10mm	User defined *	Set to thickness of material you are welding (thickness in "mm")
<b>E.</b> DOWN-SLOPE TIME	Seconds	0.1~5	0.1	Adjustment only available in "4T" mode
F. FINAL Parameter	WFS V	3-15m/min 9.0-36.0V	Match PEAK setting	Adjustment only available in "4T" mode
<b>G.</b> POST-GAS TIME	Seconds	0.1~ 10	2.0	