

5.8 Pulsed TIG LIFT process main screen



Welding process selection

1. Select the desired process by pressing the button.
2. Process selected (Green).
3. Function symbol
 - Function enabled (White).
 - Active function (Green).
4. Allows selection of the available welding functions (press to scroll through and select the functions).
5. They allow adjustment of the welding parameters (press to scroll and select the parameters to change).
 - Allows the regulation of the welding current (turn to change the value).

Welding current

Minimum	Maximum	Default
5 A	I _{max}	100 A

Parameter setting

1. Pre-gas.

Minimum	Maximum	Default
0.0s	3.0s	0.2s

2. Start current.

Minimum	Maximum	Default
10%	200%	20%

3. Slope-up.

Minimum	Maximum	Default
0.0s	10.0s	0.5s

4. Peak welding current. I₁

Minimum	Maximum	Default
5A	I _{max}	100A

5. Duty cycle.

Minimum	Maximum	Default
10%	90%	50%

6. Pulse frequency.

Minimum	Maximum	Default
0.2Hz	300Hz	1.0Hz

7. Base welding current. I₂

Minimum	Maximum	Default
10%	95%	20%

8. Slope-down.

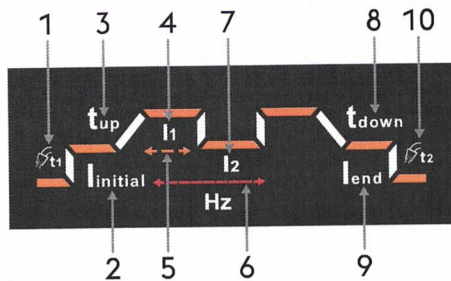
Minimum	Maximum	Default
0.0s	10.0s	0.5s

9. Final current.

Minimum	Maximum	Default
10%	200%	20%

10. Post-gas.

Minimum	Maximum	Default
0.5s	20.0s	0.6s



5.9 TIG LIFT spot welding process main screen



Welding process selection

1. Select the desired process by pressing the button.
2. Process selected (Green).
3. Function symbol
 - Function enabled (White).
 - Active function (Green).
4. Allows selection of the available welding functions (press to scroll through and select the functions).
5. They allow adjustment of the welding parameters (press to scroll and select the parameters to change).
 - Allows the regulation of the welding current (turn to change the value).

Welding current

Minimum	Maximum	Default
5 A	Imax	100 A

Parameter setting

Welding parameters

1. Pre-gas.

Minimum	Maximum	Default
0.0s	3.0s	0.2s

2. Start current.

Minimum	Maximum	Default
10%	200%	20%

3. Welding current. I1

Minimum	Maximum	Default
5A	Imax	100A

4. Welding time.

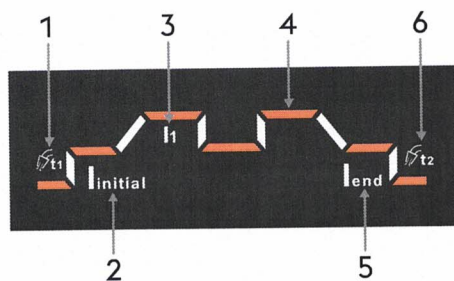
Minimum	Maximum	Default
0.0s	20.0s	0.5s

5. Final current.

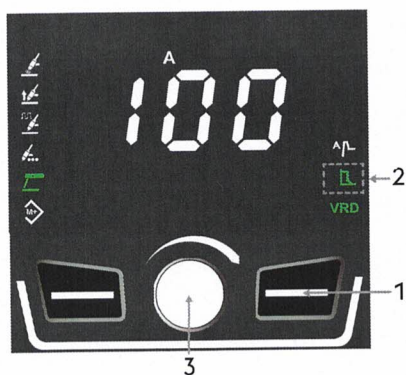
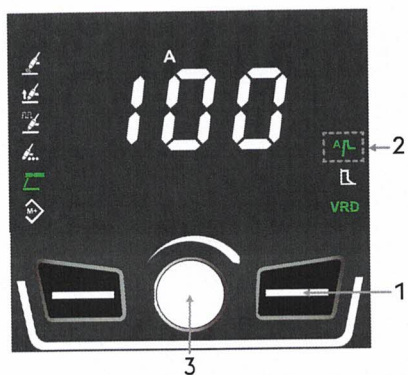
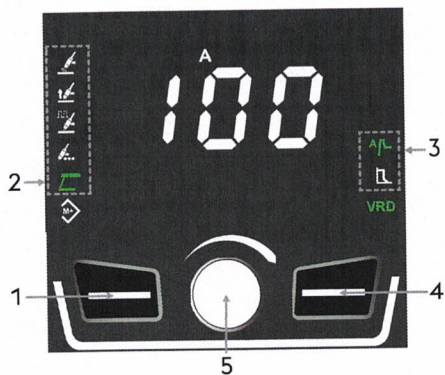
Minimum	Maximum	Default
10%	200%	20%

6. Post-gas.

Minimum	Maximum	Default
0.5s	20.0s	0.6s



5.10 MMA process main screen



Welding process selection

1. Select the desired process by pressing the button.
2. Process selected (Green).
3. Function symbol
 - Function enabled (White).
 - Active function (Green).
4. They enable welding parameter selection.
5. They allow adjustment of the welding parameters (press to scroll and select the parameters to change).
 - Allows the regulation of the welding current (turn to change the value).

Welding current

Minimum	Maximum	Default
20 A	Imax	100 A

Parameter setting: Hot start

1. Select the required parameter by pressing the encoder button.
2. Selected function for parameter adjustment (Green).
3. Adjust the value of the selected parameter by rotating the encoder.

Welding parameters

Start current

Minimum	Maximum	Default
50%	200%	120%

Start time

Minimum	Maximum	Default
0s	3s	0.5s

Parameter setting: Arc force

1. Select the required parameter by pressing the encoder button.
2. Selected function for parameter adjustment (Green).
3. Adjust the value of the selected parameter by rotating the encoder.

Welding parameters

Arc force

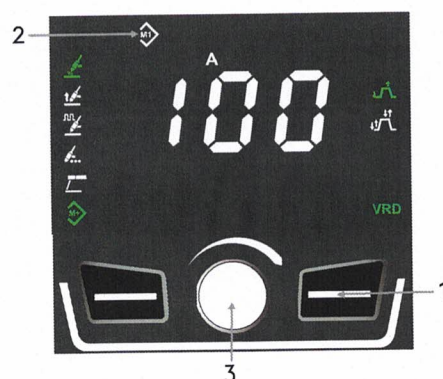
Minimum	Maximum	Default
-10	+10	0

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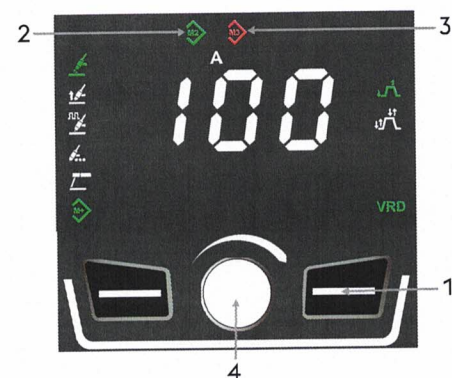
5.11 Programs screen (JOB POINT)

**Main Screen**

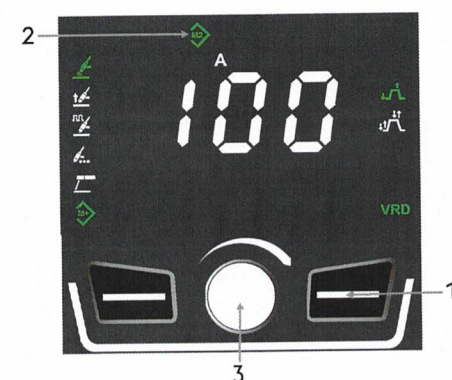
1. Press and hold the button for 3 seconds.
2. Function enabled (Green).
3. Memory empty (White).
4. Program stored (Green).

**Program storage**

1. Press the button to select the desired memory slot.
2. Memory empty (White).
3. Press the encoder button to store the welding parameters (3 seconds). The colour of the memory slot icon changes from white to green.

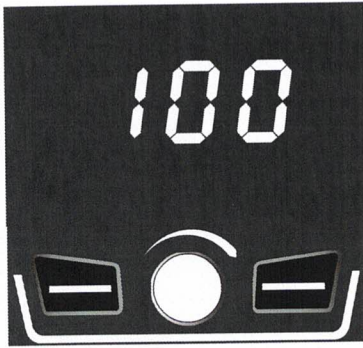
**Program retrieval**

1. Select the required program by pressing button..
2. Program stored (Green).
3. Changing the welding parameters or changing the welding process is signalled by the colour of the memory slot icon changing to red.
4. Press the encoder button until the slot icon turns green again to restore the initial stored parameters (3 seconds).

**Deleting a program**

1. Select the required program by pressing button..
2. Program stored (Green).
3. Press the encoder key until the slot icon turns white to delete the job (3 seconds).

5.12 LED bar



White light LED bar

- ▶ Indicates the presence of voltage at the system's output connectors.
- ▶ System ready to weld.



Green light LED bar

- ▶ Indicates that the system is working and the arc ignited.



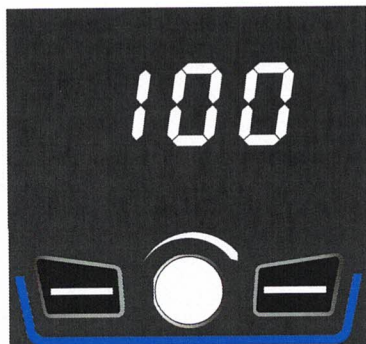
Red light LED bar

- ▶ Indicates the possible intervention of protection devices such as the temperature protection.



Orange light LED bar

- ▶ Indicates that during welding the system has reached 75% of its duty cycle.
- ☞ Momentarily stop welding to prevent the system triggering a thermal alarm.

**Blue light LED bar**

- ▶ Indicates that the system is connected to a wireless device.

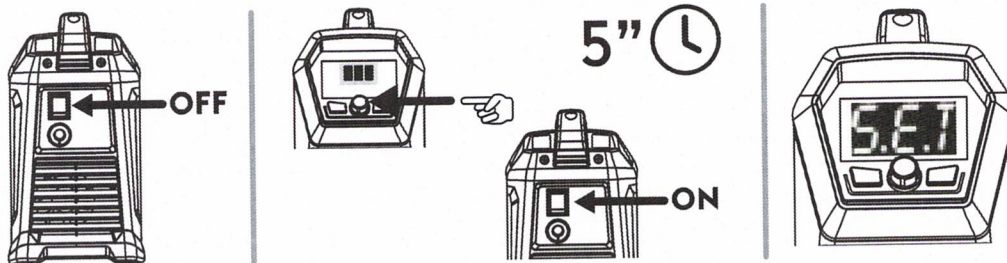
5.13 Adaptive maintenance**Adaptive maintenance**

- ▶ Indicates that the system has already worked with the arc ignited for the set number of hours.
- ▶ Perform ordinary maintenance.
Consult the "Set up" section in your generator manual.

6. SETUP

Permits set-up and adjustment of a series of additional parameters for improved and more accurate control of the welding system.

Entry to set up



- ▶ Set the switch lever to "0" to switch off the generator.
- ▶ Switch on the generator while holding down the encoder key.
- ▶ Press and hold the encoder button for 5 sec.
- ▶ The entry will be confirmed by the writing SEt on the display

Selection and adjustment of the required parameter

- ▶ Rotate the encoder until you display the numerical code for the required parameter.
- ▶ If the encoder key is pressed at this point, the value set for the parameter selected can be displayed and adjusted.

Exit from set up

- ▶ Press the encoder button for 5 seconds to exit setup.

6.13.1 List of set up parameters (TIG)

Hf High frequency

Allows high frequency discharge to be enabled or disabled for TIG welding arc ignition.

Value	Function	Default
OFF	Not active	
ON	Active	X

t1 Initial current time

Allows setting of the time for which the initial current is maintained.

Minimum	Maximum	Default
0.0 s	10.0 s	0.2 s

t2 Final current time

Makes it possible to set the time for which the final current is maintained.

Minimum	Maximum	Default
0.0 s	10.0 s	0.2 s

UA Type of measure

Allows the welding current or voltage reading to be set on the display.

Hod Hold Last Parameter

If active, the values of the last welding parameters will be shown on the display for five seconds after the arc is extinguished.

4 t **4-time welding mode configuration**

4Fs Fast stop

Arc ignition in Lift mode

- ▶ Touch the workpiece with the electrode.
- ▶ Press the torch button to start the pre-gas phase.
- ▶ Arc ignition in Lift mode. Lifting the torch off the workpiece ignites the arc with the pre-set dynamics. The arc remains ignited if the torch button is released.
- ▶ Releasing the button before completion of the dynamics extinguishes the arc immediately.
- ▶ Press the button again to extinguish the arc with the arc extinguishing dynamics. Gas continues to flow for the post-gas time.
- ▶ Releasing the button before the end of the shutdown sequences extinguishes the arc immediately.

Trigger of the arc in HF mode

- ▶ Position the electrode 2/3mm from the piece to be welded.
- ▶ Press the torch button to start the pre-gas phase.
- ▶ The discharge starts which helps the arc to be struck with the preset dynamics. The arc remains ignited if the torch button is released.
- ▶ Releasing the button before completion of the dynamics extinguishes the arc immediately.
- ▶ Press the button again to extinguish the arc with the arc extinguishing dynamics. Gas continues to flow for the post-gas time.
- ▶ Releasing the button before the end of the shutdown sequences extinguishes the arc immediately.

4bI Bilevel

- ▶ In bilevel mode, you can weld using the two current levels set previously.
- ▶ The first pressure on the button leads to the pre-gas time, the striking of the arc and welding with the initial current.
- ▶ The first release leads to the current slope-up "I1".
- ▶ If the welder presses and releases the button quickly, there is a change to "I2".
- ▶ Pressing and releasing the button quickly returns to "I1" and so on.
- ▶ If you press the button for a longer time, the lowering ramp for the current starts, thus reaching the final current.
- ▶ Releasing the button extinguishes the arc while the gas continues to flow for the post-gas time.

Fn **System configuration menu**

Allows access to the system configuration menu.

- ▶ Press the encoder button to access the submenu.
- ▶ Turn the encoder to select the desired configuration.
- ▶ Press the encoder button to confirm.
- ▶ The available configurations are as follows.

F1 **System configuration**

System configuration: F1

- TIG HF welding process
- TIG LIFT welding process
- Function enabled: 2 Step
- Function enabled: 4 Step
- MMA welding process
- Function enabled: Hot start
- Function enabled: Arc force

F2 System configuration

System configuration: F2

- TIG HF welding process
- Pulsed TIG HF welding process
- TIG LIFT welding process
- TIG LIFT spot welding process
- Function enabled: 2 Step
- Function enabled: 4 Step
- MMA welding process
- Function enabled: Hot start
- Function enabled: Arc force

F3 System configuration

System configuration: F3

- TIG HF welding process
- Pulsed TIG HF welding process
- TIG HF spot welding process
- TIG LIFT welding process
- Pulsed TIG LIFT welding process
- TIG LIFT spot welding process
- Function enabled: 2 Step
- Function enabled: 4 Step
- MMA welding process
- Function enabled: Hot start
- Function enabled: Arc force

F4 System configuration

System configuration: F4

- TIG HF welding process
- Pulsed TIG HF welding process
- TIG HF spot welding process
- TIG LIFT welding process
- Pulsed TIG LIFT welding process
- TIG LIFT spot welding process
- Function enabled: 2 Step
- Function enabled: 4 Step
- MMA welding process
- Function enabled: Hot start
- Function enabled: Arc force
- Function enabled: Programs (JOB POINT)

Set Adaptive maintenance

If active, illumination of the maintenance symbol on the display indicates that maintenance is recommended.

Consult the "Set up" section in your generator manual.

Value	Function	Default
OFF	Not active	X
ON	Active	
RST	Reset	

SLP Sleep

If active, the machine switches off after the selected seconds of inactivity.
Set a time value within the range

Value	Inactive time	Default
OFF	Not active	X
180	180s	
300	300s	
600	600s	
900	900s	

AbU Absolute value

Allows the absolute value of the relative currents $I_{initial}$, I_2 , I_{end} to be set as a percentage or in amps.

Value	Function	Default
Per	%	X
A	Amperes	

SEC Welding parameter sequence graphic

Enables or disables continuous display of the welding parameter sequence graphic.

Value	Default
OFF	X
YES	

rt Selection of welding current control mode available on the TIG torch

Allows the welding current control mode to be selected between:

- analog (by potentiometer)
- incremental (by buttons)

Select the mode to suit the remote control devices available on the TIG torch.

Value	Function	Default
Pot	Potentiometer	X
but	Push button	

rst Reset

Allows you to reset all the parameters to the default values.

- ▶ Press the encoder button to start the procedure.
- ▶ Turn the encoder to the value: ON
- ▶ Press the right function key for 5 seconds.

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