

### Starting

1. Review the Safety Precautions.
2. Perform Preoperational checks.
3. Make sure that all appliances and leads are disconnected from the sockets.
4. Turn the DC Selector switch to the On Position (where fitted)
5. For dual voltage select the output voltage required
6. Press the red Reset Button  on the Engine Control module.
7. Press the green START  button on the DSE3110 controller once. (The run/start indicator will illuminate).
8. Wait approximately 10 seconds while engine preheats.
9. Allow the engine to warm up for 1 minute before connecting any load to the generator output.
10. Connect the equipment to be powered (load) into the socket outlets on the generator control panel. Check that the total load from all equipment connected does not exceed the generator rating.




If the engine fails to start after 3 attempts then initiate fault finding to rectify the problem.

### Welding Operation

\* Welder-Generating Sets only

Only competent persons should use this equipment as it is not intended to be used as a D.I.Y or hobby welder.

On some models (SWD180D, SWD200D) the auxiliary generator switch should be set to OFF as the selected auxiliary voltage would still be present when welding but at a much reduced voltage which may damage other sensitive equipment plugged into it.

	<b>NOTICE</b>
During welding the generator sockets are live, but the voltage value is low and unstable. So, for safety reasons, it is recommended to disconnect the user loads during welding..	

Connect the welding equipment to the Welding Output panel:

- Insert the jack of the earth cable in the -ve weld socket (use the -ve to weld with inverse polarity).
- Connect the earth cable to the part that is to be welded.
- Insert the jack of the electrode holder cable into the other socket.
- Set the current range with the selector.
- Set the welding current with the selector black scale for the low range or red scale for the high range).
- Weld.

Both the positive and negative welding outputs should be used.

Only welding cables, clamps and electrode holders that comply with BS 638 should be used and these should be inspected to make sure they are in good condition and safe to use.

Recommended welding cable sizes are;


- 35 mm<sup>2</sup> for 5-10 metre run,
- 50 mm<sup>2</sup> for 10-20 metre run


The welding output circuit is protected by an internal thermal cut out which will trip if the duty cycle is exceeded or the current is too high.

The welder is suitable for all common types of consumable electrodes e.g. Rutile, Cellulose and Basic types. The welder is generally suitable for maximum electrode sizes up to 5mm.

The appropriate welding current for the electrode type and size will normally be specified by the electrode supplier and validated by the welder during some test runs.




This welder-generator is not suitable for use with automatic continuous wire feed welding systems.

	<b>CAUTION</b>
Care should be taken with hot welding electrodes. Some welder-generator's fuel tanks are made of plastic and a hot electrode should never be placed on it. An optional steel tool tray is available to cover the plastic fuel tank.	


	<b>NOTICE</b>
If the generator is not required switch it off and avoid running with light or no load wherever possible.	

### Starting and Stopping Remotely in AUTO


If supplied the remote start / stop controller can be used to start and stop the generator. To use the generator remotely:

1. Press the white Auto  button on the generators DSE3110 control module
2. To start, press the Green Run/Go button  on the remote control.
3. To stop press the Red Stop button  on the remote control.

If the timer has been programmed the generator will run for the preset time commencing once the Green button has been pressed. If you should require generator power after the time has elapsed then press the green button once more to restart the timer.

	<b>NOTICE</b>
Always remember to leave the set in AUTO mode if remote starting is required.	

### Stopping

1. Switch off the electrical output and disconnect the load and/or welding leads from the generator's output sockets.
2. Allow the generator to run off load for 2 minutes to cool down.
3. Press the red STOP  button.

### Emergency Stop

Pressing the emergency stop pushbutton will immediately stop the engine and prevent it from restarting. The emergency stop button must only be used to stop the machine in an emergency and not to stop the set during normal operation.

