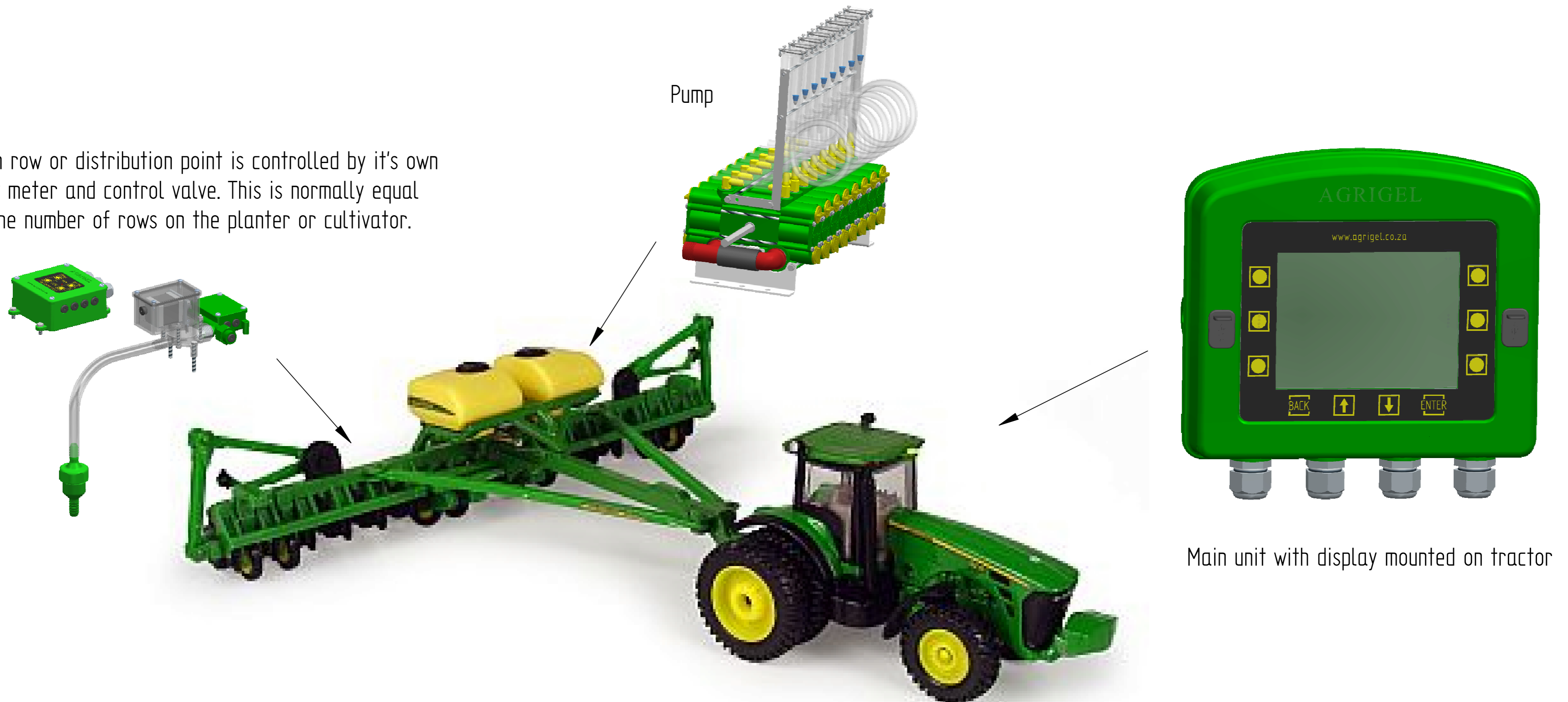


The AGRIGEL liquid fertilizer flow control, measurement and data storage system is used to apply and record liquid fertilizer and/or other chemicals or elements to a land or field from a planter, cultivator, spray or other agricultural implement by means of electronically controlling the flow rate of the liquid to each individual row or distribution point of the implement. The flow rate is determined by the amount of liquid required to be applied to the field and is set in the main unit which is usually mounted in the tractor. The applied liquid flow rate is achieved by measuring the flow of the liquid with a flow meter (oval gear, impellor or ultrasonic, etc.) and comparing that measurement to the required flow rate which is then electronically adjusted by the flow control valve so that the correct predetermined amount of liquid is applied as the implement traverses the field.

The main unit displays and stores individual and global information such as the amount of liquid applied, date and time of working, distance and area worked. This data can be transferred to a computer for further analysis. GPS data can also be saved on the main unit and used to set and adjust the required flow rate while working.

The liquid is supplied to the individual flow meter and control valves by means of positive displacement. This could be a pump (vane, peristaltic, piston, etc.) or even by pressurising the liquid tanks from a compressor.

Each row or distribution point is controlled by it's own flow meter and control valve. This is normally equal to the number of rows on the planter or cultivator.



Main unit with display mounted on tractor