

Nelson 8701 EZ Pro™ Xtra Moisture Sensor: Controller Specifications

The upgrade kit shall include 1 soil moisture controller, 1 soil moisture sensor, 3 grease caps (DBY connectors), 3 yellow 12 gage wire connectors, 2 blue 16 gage wire connectors, an installation guide with users manual, and a wiring schematic.

The soil moisture controller shall coordinate input for one digital Time Domain Transmissometry (TDT) soil moisture sensor with one standard 24 volt irrigation timer. The controller shall be installed indoors near an existing automatic standard timer. If the existing automatic standard timer is outside then the controller must be installed inside a separate weather proof enclosure. The controller shall include a cable for both power and timer connectivity on the bottom of the controller of no less than 18" length. The controller shall include two screw mounts; one on each side of the controller. The controller shall have an on/off moisture control switch as a method to bypass controller. Programming shall be accomplished through a three button interface labeled set, + and -, with a liquid crystal display and two indicator lights.

The controller shall be capable of reading measurements from a TDT soil moisture sensor and controlling an existing timer so watering cycles occur once moisture readings fall below a user set threshold. The threshold shall be displayed by pressing the set button. The threshold shall be increased or decreased by holding the set button and using the + and - buttons respectively. The controller shall automatically take soil moisture and temperature readings every 10 minutes. Readings may be taken manually by pressing the set button. Whenever the soil moisture reading exceeds the threshold setting the on hold indicator light shall illuminate, indicating watering will not be applied to the timer's next scheduled watering cycle. The power on indicator light illuminates when power is present to the controller.

The controller shall display the soil temperature at any time by depressing the + button. The temperature display shall be able to toggle between Celsius and Fahrenheit by pressing and holding the + button while pressing the - button.

The controller shall include non-volatile memory to restore system settings from power outages.

The controller shall utilize a 2-wire system for communication with and powering of the digital TDT soil moisture sensor. The digital TDT soil moisture sensor shall have a built in decoder for one valve.

The controller shall be as manufactured by Nelson Corporation, Peoria Illinois.