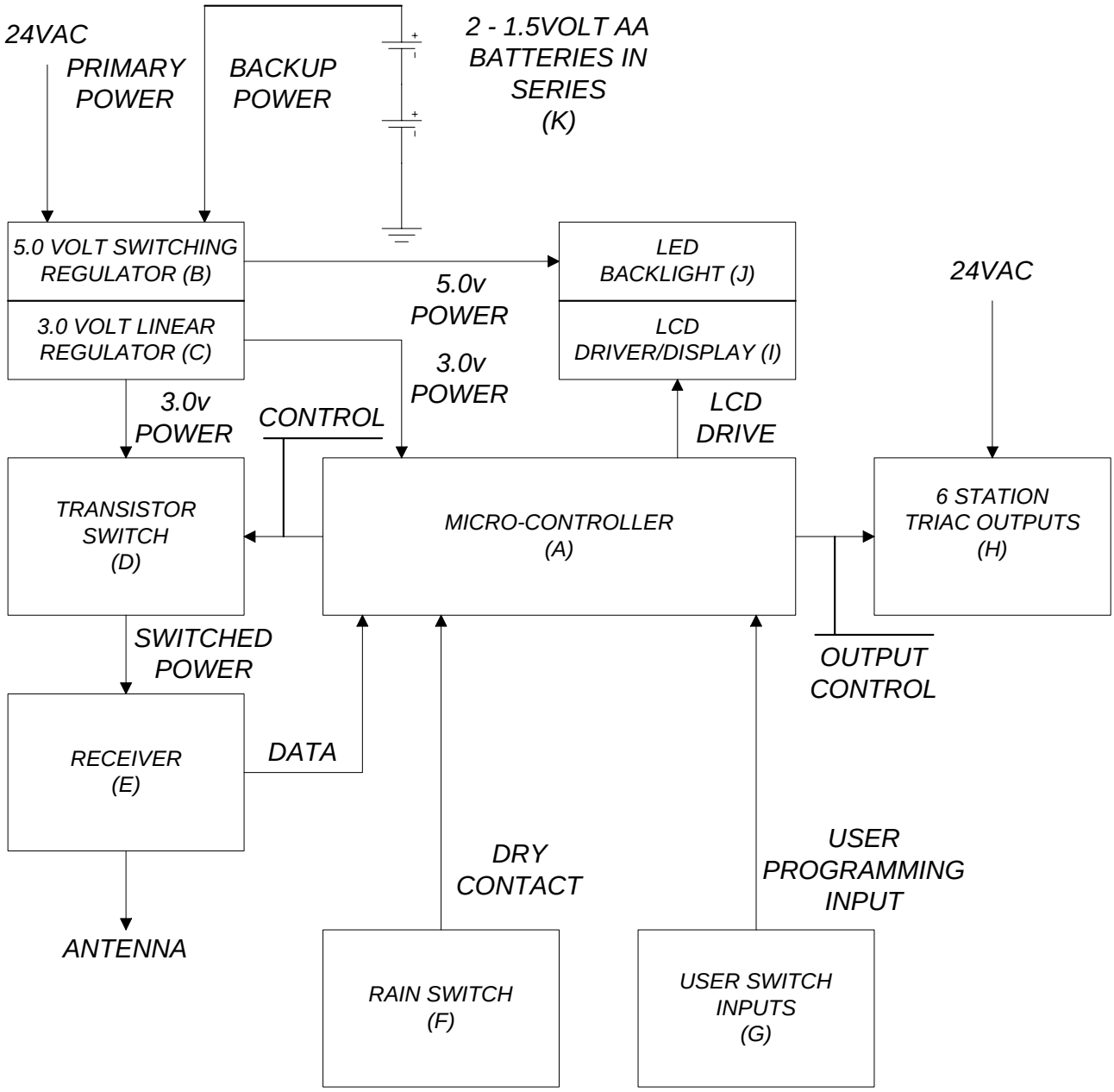
RSC600i CONTROLLER (C6V7)

BLOCK DIAGRAM 24SEP2009



C6V7 BLOCK DIAGRAM
1156 24SEP2009

NDS RSC600i CONTROLLER (C6V7)

BLOCK DIAGRAM DESCRIPTION 24SEP2009

The micro-controller (A) supplies all timing, control and algorithm functions within the Controller. The micro-controller processes inputs from the user switch inputs (G), the rain switch (H) and the receiver data input (E). The micro-controller outputs data to control the LCD driver/display (I) and the station triac outputs (H). Not shown is the control that allows the micro-controller to switch the LCD back light on and off. When the transistor switch (D) is turned on the data stream transmission from the RTS1 sensor may be received by the receiver (E) and sent to the micro-controller for decoding and processing. Power for the controller is supplied from two sources. Primary power (B) is supplied from a 24vac wall plug-in transformer. Secondary power (C) is supplied from 2 – AA 1.5 volt batteries (K). When primary power is available all functions of the controller are available. When only secondary power is available only the programming of the controller is available, all outputs are disabled, the back light is turned off and the receiver is disabled.

The transistor switch (D) is controlled by the micro-controller and supplies power to the receiver when switched on by the micro-controller.

The receiver (E) receives the data string transmission from the RTS1 sensor. (See the RTS1 block diagram and description for detailed information concerning the format and transmission of the data string.)

The rain switch (F) is a dry contact switch input to the micro-controller. It is closed when there is no rain detected and open when a significant amount of rain is detected. The rain switch may be used in lieu of the RTS1 sensor to detect rain fall.

The user input switches (G) are the switches by which the user can change and enter information to the micro-controller. This information may be start time, durations, real time and date, auto start, manual start, etc.

The C6V7 controls six station outputs (H). The outputs are triac type outputs. And are designed to operate 24vac solenoids at 0.25 A.

The LCD driver and separate display (I) provide a means of viewing information entered in the controller, viewing controller status and controller operation.

The display back light (J) is available when primary power is available. The back light may be tuned on and off form the micro-controller. Back light is not available when only secondary power is available.

Secondary power is supplied through 2 – AA 1.5volt batteries (K) connect in series. When running on secondary power only the programming of the unit is available. The output, receiver and back light are turned off.

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