

ABSTRACT

A plurality of control units are connected to each other through a communication line (20). Discharge resistors (R1, R2) are provided for discharging residual charges of the communication line (20). The control unit has a power superposition circuit (50) for applying a direct-current voltage and outputs an identification number signal from the power superposition circuit (50) to the communication line (20). The control unit further has a polarity select circuit (60) having a negative-polarity resistance characteristic that current increasingly flows as an applied voltage is lowered, and a voltage discriminating circuit (70) for detecting the terminal voltage of the polarity select circuit (60). When detecting the voltage of the communication line (20), the control unit determines whether its own control unit is a master unit or a slave unit according to output signals from the voltage discriminating circuit (70) and a polarity discriminating circuit (3C).