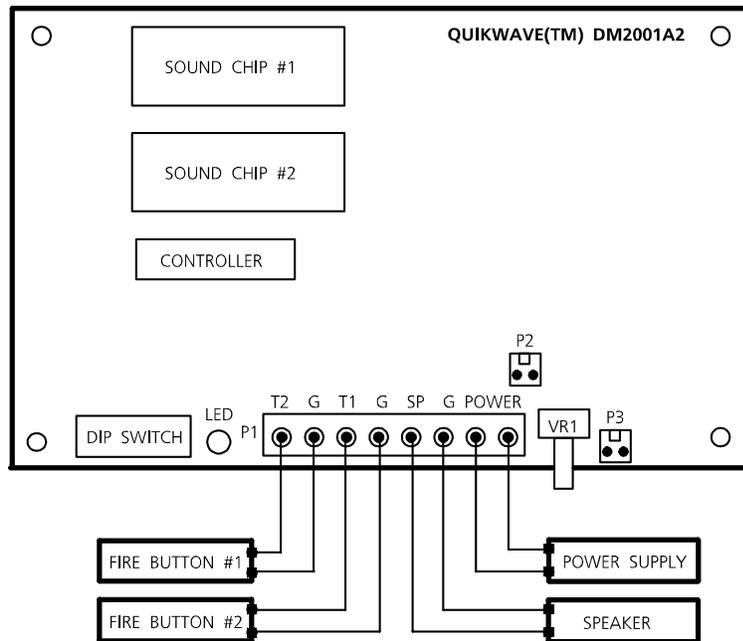


DM2001A/EM2001A INSTALLATION GUIDE



DM2001A/EM2001A is a simple, reliable digital sound system designed for use in coin operated kiddie rides. DM2001A is the model number for the circuit board, and EM2001A is the model number for the complete unit (with plastic enclosure and internal speaker.)

The system is usually powered by the same power source that runs the ride's motor. When the power is turned on, the system automatically starts to play the background sound/music repeatedly until the power is turned off.

If the ride has fire buttons, they can be connected to the system to activate special sound effects such as car horn sound for a car ride. The special sound effects are carefully chosen to match the background sound/music.

DIP SWITCH CONFIGURATION

Safety message:

If enabled, a brief safety message will be played once when the ride starts. The safety message basically asks the parent not to leave the child unattended while riding the ride.

Enable = #1 ON, Disable = #1 OFF

POWER LIGHT (LED)

The power light LED turns on when power is applied to the unit.

FIRE BUTTONS

Up to two fire buttons can be connected to the board via the T1 and T2 inputs. Each fire button activates a different sound effect for ride participation.

SPEAKER

Use an 8 Ohm speaker, 3 watt minimum. For DM2001A users, connect the speaker via the terminal block as shown in the diagram above. For EM2001A users, the internal speaker is connected to connector P2, but you can add an additional speaker via the terminal block.

POWER SUPPLY

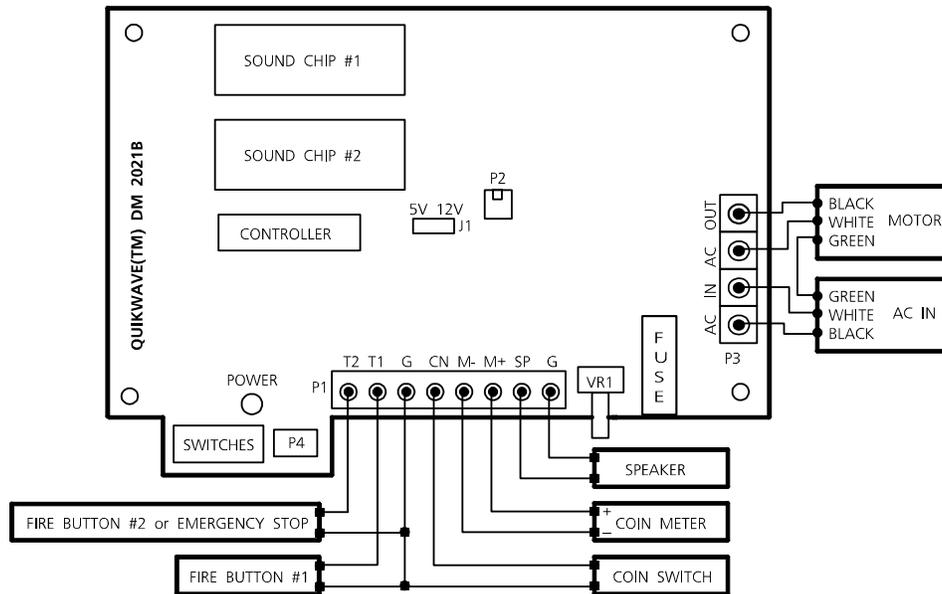
The power supply is usually obtained from the ride's timer output which is also used to run the motor. The sound will automatically loop for as long as the power is supplied.

The system can be ordered with different voltage options such as 110Vac (standard), 220Vac, 12Vac and 12Vdc. The power connections are polarity insensitive.

VOLUME CONTROL

Turn VR1 clockwise to increase the volume. An optional, remote volume pot can be added via the P3 connector. In this case, VR1 will set the maximum level for the remote volume pot.

DM2021B/EM2021B INSTALLATION GUIDE



DIP SWITCH SETTINGS

Number of coins per play:

- 1 coin = #1 ON, #2 OFF
- 2 coins = #1 OFF, #2 ON
- 3 coins = #1 ON, #2 ON
- 4 coins = #1 OFF, #2 OFF

Play time:

- 45 seconds = #3 OFF, #4 OFF
- 60 seconds = #3 ON, #4 OFF
- 90 seconds = #3 OFF, #4 ON
- 120 seconds = #3 ON, #4 ON

Safety mode:

If enabled, a brief safety message will be played before the ride starts. The safety message asks the parent not to leave the child unattended while riding the ride.

Enable = #5 ON, Disable = #5 OFF

Attract mode

If enabled, a short sound effect will automatically be played once every 4 minutes.

Enable = #6 ON, Disable = #6 OFF

FIRE BUTTONS

Two "normally open" fire buttons can be connected to the unit via the T1 and T2 inputs. Each fire button activates a different sound effect for ride participation.

EMERGENCY STOP BUTTON (firmware version 1.3 & up)

If a "normally close" push button is found to be connected to input T2 on powerup, it can be used as an emergency stop button. In this case, only one fire button (input T1) can be used.

MECHANICAL COIN METER

When using a mechanical coin meter, set jumper J1 to either "5V" or "12V" to match the meter's voltage rating. For 6V meters, set J1 to "5V".

DIGITAL COIN METER

DM2021B has a 4-digit non-resettable digital coin meter built inside the unit. To read its value, connect the optional meter display unit to connector P4. The internal meter has the following advantages over external mechanical meters:

- The internal meter is digital and much more reliable.
- The internal meter cannot be disconnected by cheating employees. Disconnecting the display unit does not affect the operation of the internal meter. When the display unit is re-connected, the correct count will be shown again.

SPEAKER

Use a 4 ~ 8 Ohm speaker, 3 watt minimum. The speaker can also be connected to connector P2. Maximum output power from the board is 2 watt.

VOLUME CONTROL

Turn VR1 clockwise to increase the volume.

FUSE

Use a 5mm x 20mm, 10A slow-blo (time delay) fuse. If the ride keeps blowing the fuse, lubricate the motor and/or adjust the belt. Do not replace the fuse with wires!

POWER LIGHT

The power light is located just above the DIP switches.