Classic Organ Works

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PDMB-2/PDB-6: High-Power Matrix Driver Mother Board



Description

The Classic Organ Works High-Power Driver Mother Board (PDMB-2) is used with a plug-on PDB-6 Pipe Driver Board. The combination can drive most kinds of low-resistance pipe magnets on Direct-Electric matrixed chests where the stop controls require heavy currents (each stop requiring the sum of all its active note-magnet currents).

The board can provide up to 64 high-current positive-drive outputs for the note pipe magnets (common 0V ground).

When used to drive matrixed chests, up to 16 more of the outputs (65-80) are used to drive up to 8 stop actions (common positive). These outputs are doubled up to handle several Amps of current.

Sixteen (16) additional outputs (81-96) are available if needed to drive an offset or extension chest, or swellengine.

The PDB-6 requires a single power source of +12V. The current drawn depends on the use, being the sum of all active outputs and can be considerable, depending on the resistance of the chest magnets and how many stops and notes are activated.

The board can be driven by Classic's RS-422 optically-isolated signals or by Classic's serial inputs.

The only power required is that for the PDB-6.

Features

- o 64 High-powered positive-drive pipe magnet drivers, 10 Amps maximum, 7 Amps nominal
- o 8 High-powered negative-drive magnet drivers, 20 Amps Maximum
- o Outputs overload and short-circuit protected
- All outputs have 0.156" pitch header pins
- o Unit can be mounted on a chest for short wiring
- o Signal Inputs can be:
 - Optically-isolated Serial RS-422 or
 - Serial Classic for Classic control systems
- o Single-voltage power input, +12V nominal
- o LEDs on all outputs
- o No power needed other than for the PDB-6
- o Approximate size: 16.7" x 13.6" x 1" (w x h x d) (42.4cm x 34.5cm x 2.5cm)

Applications

Single-board application for a matrixed directelectric pipe chest with up to 64 notes and 8 stop controls.

High-current pipe magnet drivers, 7 Amps nominal (for magnets less than 2 Ohms).

Controlled by Classic serial or optically-isolated RS422 serial inputs.