

# MD-1 Board D to Combination Button Cable C5

(This page last modified June 20, 2007)

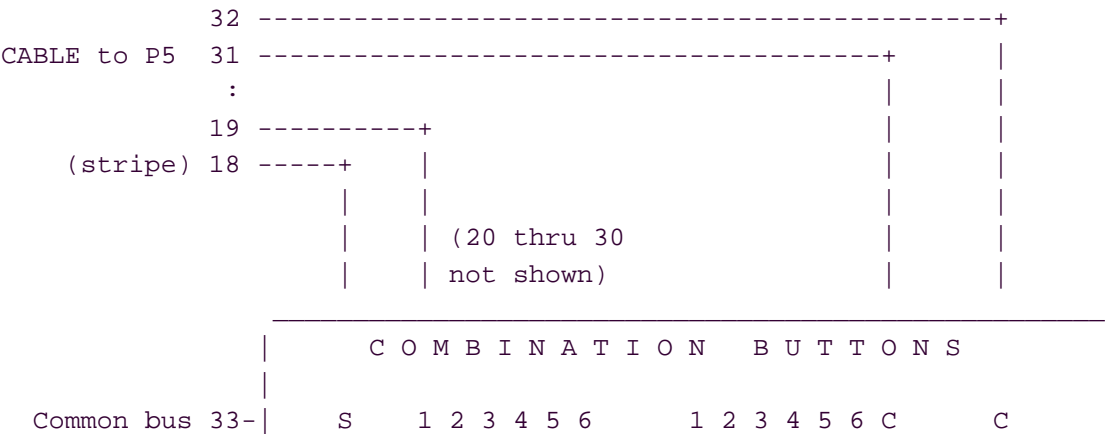
My organ has an extra set of combination buttons, mounted below the solo keyboard as shown below.

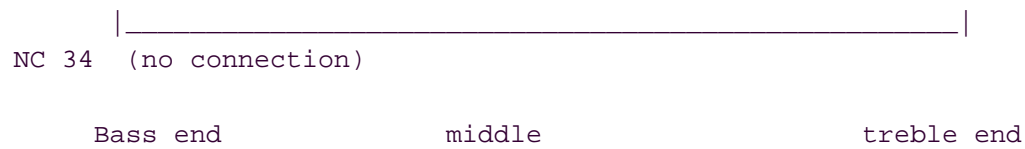


These buttons are wired to the same MD-1 as the pedals. An MD-1 has 64 inputs in the form of two 34-pin ribbon connectors. But organs have a maximum of 32 pedals (and my theatre organ only has 25). Thus one whole 34-pin connector (and a few pins on the other) are totally unused. This cable uses this second 34-pin connector (P4) to process inputs from these extra combination buttons. There are still unused inputs left over, and these may be used in the future for other applications.

**CAUTION:** Pin 34 of the cable is connected to +5 volts. DO NOT accidentally short it to ground or any other lead. It is there strictly as a convenience for those users who implement positive keying instead of ground keying.

The original Schober organ has 48 stop switches and 11 combination buttons. I have added a second set of 15 buttons, mounted between the two keyboards. They connect to MD-1 board D (the pedal board, connector P4) via a cable as follows. Note that this MD-1 card has special softare that allows the pedals to output on a different channel from these buttons.





The pin numbers shown above are the pins on the MD-1 card's connector P4. In reality, the cable has only 17 wires, and pin 18 on the connector is the red-striped wire on the cable (which would normally be called pin 1). Hence

connector pin	=	cable pin
18	=	1
19	=	2
	:	
34	=	17

Even though only 17 wires are used, they are attached to one end of a 34-pin IDC connector. The other end is left open for future expansion.

**Important Note:** When used with extra buttons, the MD-1 used for the pedals needs a modified version of software to prevent the extra buttons from outputting on the same channel as the pedals and thus playing notes. This software version is shown on the page which describes the pedal MD-1 card.