DCB

Digital Communications Bus

Prior to MIDI, this was implemented on the Roland Jupiter-8 (some units) and Roland Juno-60

From Hyperreal:

From tmoravan@netcom.comTue May 30 10:16:25 1995
Date: Tue, 30 May 1995 03:57:58 -0700 (PDT)
From: Tom Moravansky tmoravan@netcom.com
To: rbcIII robot@crl.com
Cc: analog analogue@hyperreal.com
Subject: Re: DCB cable pinouts

Some folks have asked about the Roland DCB pinouts. Here is what I have from the Jupiter-8 service manual:

DCB Pin Configurations

—————————–

| 07 06 05 04 03 02 01 |
| 14 13 12 11 10 09 08 |

—————————–

```
 (view from rear panel)
```

1 - Busy (receive)
2 - Data (receive)
3 - Clock (receive)
4 - Ground
5 - Busy (transmit)
6 - Data (transmit)
7 - Clock (transmit)
8 - unregistered
9 - VCA lower
10 - VCA upper
11 - VCF lower
12 - VCF upper
13 - VCO-2
14 - VCO-1

There were 2 different shapes of DCB cable and 2 different types. Early shape was a flat cable used to connect early OP-8 converters to the Jupiter-8's with the OC-8 interface installed. This was part # H146

Later cables used the D-sub shell.

Cable # H172 is a uni-directional cable with the signal flow indicated by the arrow on the connector. Cable # H172 is wired up like this:
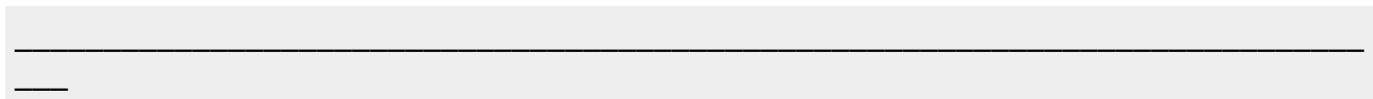
Receiver	Sender
1	5
2	6
3	7
4	4

Cable # H165 is bi-directional. The manual warns: "DCB Cable H165 is a bi-directional cable in which sent from the TX-terminal on a unit returns to the RX-terminal on the unit, causing regeneration." So, if you get regenerated don't say you weren't warned.

Receiver Sender

```
 1               5
 2               6
 3               7
 4               4
 5               1
 6               2
 7               3
 8               8
 9               9
10              10
11              11
12              12
13              13
14              14
```

Hope this helps.

_____
____

Tom Moravansky tmoravan@netcom.com

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                        quiet electronics \\
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From squishy@bga.comTue Jun 13 12:10:01 1995
Date: Tue, 13 Jun 1995 14:04:59 -0500
From: Drum Machine Wanker squishy@bga.com
To: analogue@hyperreal.com
Subject: Re: MD-8/DCB (pinout info)

I've done the unthinkable (for me), i've opened my DCB cable to finally find out the truth on the pinout. I tried building one awhile back without success, I now know why.

If you want to build your own, you'll need a piece of 15 conductor cable, 14 wires and 1 ground. The

ground is what I screwed up. You'll also need two Centronics 14 conductor connections.

The pinout...

The ground is connected to the front housing snap-in piece. Positions 8-14 are wired 1 to 1, that's the bottom row.

Below you'll see the pinout for the top row, positions 1-7.

p	p
o	o
s	s
i	i
t	t
i	i
o	o
n	n
1 wire 1	1 wire 5
2 wire 2	2 wire 6
3 wire 3	3 wire 7
4 wire 4	4 wire 4
5 wire 5	5 wire 1
6 wire 6	6 wire 2
7 wire 7	7 wire 3

Hope this helps.

Vince.
Squishy Records

From tmoravan@netcom.comWed Jun 14 11:49:55 1995
Date: Wed, 14 Jun 1995 04:34:38 -0700 (PDT)
From: Tom Moravansky tmoravan@netcom.com
To: MARSHALLR@opsusa.sms.siemens.com
Cc: analog analogue@hyperreal.com
Subject: Re: Jupiter8: DCB vs DCIB?

> Well, since there are a couple of open threads regarding Jupiter8/MD8
>
> questions, I might as well jump in with my own.....
>
>
> I have a Jupiter8 that has some sort of factory interface, but I don't think
>
> it is DCB, since it doesn't have the typical 14 pin 'D' connector up near the
>
> "Roland" logo. Rather it has a 20 pin IDC ribbon connector w/ a slide switch

> down low, near the serial plate. Could this be the earlier version of DCB,
>
> known as DCIB, and can I use the MD8 or PRO4 DCB interface with it?
>
> Any Roland/Jupiter experts have a clue?

Well - I can't find my original DCB post, so I hope someone archived it at the analogue site. Basically, it sounds like you have the Jupiter-8 version with the OC-8 DCB retrofit. The earliest versions used the flat cable scheme. The OP-8 (not OP-8M) cv→DCB converter has both types of DCB connections on it. After some time, Jupiter-8's were made with the DCB stuff built in and they switched to the 'classic' d-sub connector.

My post had the pinouts so you could make your own cables. There were 2 different kinds of cables - one that was only half-wired and provided one-way communication and the other was fully wired for 2-way traffic.

___
Tom Moravansky tmoravan@netcom.com

> quiet electronics \\

From fEEd@maroon.tc.umn.eduWed Jun 14 13:13:59 1995
Date: Wed, 14 Jun 95 14:58:32 CST
From: fEEd fEEd@maroon.tc.umn.edu
To: analogue@hyperreal.com
Subject: Re: More DCB/MSQ-700?

On Wed, 14 Jun 1995 08:42:46 -0700 (PDT), Michael Winton <mwinton@uclink.berkeley.edu > wrote:

> I know the 700 can send MIDI or DCB out. I know from reading in the
>
> archives that it cannot "convert" MIDI to DCB. Can I record a DCB
>
> sequence from my Juno 60 into the MSQ-700 and then play it back, WITH the
>
> 700 "synced" to the MIDI clock?

Sorry, but no. The bastards.

Rob

fEEd/>tEMpESt<http://www.umn.edu/nlhome/m211/feed/<\fEEd@maroon.tc.umn.edu/>

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"FILTER MAINTENANCE- After every 100 hours of operation apply a sine wave
to the output of the FILTER to back flush the trapped overtones to unclog
your filter."                                              - EML 101 Manual
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Links:

http://www.chd-el.cz/index.php?id=93&lngid=en

http://www.chd-el.cz/index.php?id=312&lngid=en

http://mkv.itm.miun.se/personal/per/diy/DCB/DCB.html

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