

TO: Distribution
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SUBJECT: 2 Channel Operation of the DSU-270

The DSU-270 controller contains two independent data channels. Normally, one of these channels is used for the Service Machine, and the other is reserved for Development Machine usage. During periods of peak machine usage, it is desirable to allow the Multics system to utilize both channels. This will permit a much greater amount of DSU-270 disk I/O to take place. This note describes how to configure the additional DSU-270 into and out of the Multics system configuration.

Note

The DSU-270 channel normally in use on the Service System will be called the "primary channel"; the other channel will be referred to as the "secondary channel". In the DSU-270 controller itself, the primary channel is now wired as channel B, the secondary channel as channel A.

Adding the Secondary Channel

The following steps must be performed in order to add the secondary channel:

1. At the peripheral switch, configure the secondary channel to GIOC A.
2. At the DSU-270 controller, set the DISP CHAN switch to the primary channel. The indicator lights now reflect the status of the primary DSU-270 channel.

3. Turn the RSVD DEVICE switches (for the primary channel) off (OFF is to the left) for each of the electronics units being used by the Service System. Wait until the DEV RSVD lights corresponding to these electronics units begin to blink or go out. (This will happen only if the system is not idle and DSU-270 I/O is occurring.)
4. Set the DISP CHAN switch to the secondary channel.
5. Turn off the RSVD DEVICE switches (for the secondary channel) for all electronics units.
6. Press the GEN CLR button for the secondary channel. All lights should now be out.
7. At the initializer console, issue the command "add270chan". An on-line comment will be printed indicating that the channel has been added. If the system load is moderate to heavy, the secondary channel will be in operation almost immediately.

Removing the Secondary Channel

The following steps must be performed in order to remove the secondary channel:

1. At the initializer console, issue the command "del270chan". An on-line message will be printed indicating that the secondary channel is no longer in use.

2. At the DSU-270 controller, set the DISP CHAN switch to the secondary channel.
3. Set the RSVD DEVICE switches (for the secondary channel) on (ON is to the right) for each of the electronics units being used by the Development System.
4. Press the GEN CLR button for the secondary channel. Only the DEV RSVD lights corresponding to the switches set should now be on.
5. Set the DISP CHAN switch to the primary channel.
6. Turn on the RSVD DEVICE switches (for the primary channel) electronics units being used by the Service System.
7. At the peripheral switch, configure the secondary channel to GIOC B. Now the Development System may be used without danger of clobbering the Multics DSU-270 units.