

Ready Flag associated with the register. When the register has been filled by the console the Ready Flag sets. A 60 or 70 instruction will clear it out. The flag also sets when a 61 or 71 instruction has been issued. The flag remains set until all the bytes in the console register have been outputted to the console.

Below is a list of the signals between the console and foreground and the sequences performed to transfer data.

#### Signals between the console and foreground

##### Console to foreground

8-data bits (IFA-IFH)  
1-data ready (IFI)  
1-data resume (IFJ)  
1-deadstart (IFK)  
1-mode selection (IFL)

##### Foreground to console

8-data bits (OFA-OFH)  
1-data ready (OFI)  
1-data resume (OFJ)  
1-KA module error (OFK)  
1-KB module error (OFL)

*master  
local*

#### Sequence to do a deadstart

*Deadstart enable must be on.*

1. Deadstart signal sent from the console to the foreground.
2. 8 bits of data sent from the console to the foreground with a data ready.
3. Foreground echoes the data bits back to the console with a resume.
4. Console compares the data bits and clears the data ready.
5. Foreground clears the resume.
6. Go to step 2 and repeat until all the bytes are transferred.
7. Clear deadstart.
8. Sequence complete.

#### Sequence to load the RA modules look up tables

Do the same sequence as in the deadstart sequence except in step 1 also set mode select and in step 7 clear mode select. This will steer the bytes of data to all four RA modules.

#### Sequence to output the KA's console register to the console

1. A 61 or 71 instruction is issued. The console register is loaded with the A or B register and the console register full flag sets.
2. Foreground outputs 8 bits of data with a data ready.
3. Console accepts the data and responds with a resume.
4. Foreground clears data ready.
5. Console clears resume.
6. Repeat steps 2-5 three more times.
7. Console register full flag clears.
8. Sequence complete.