

## 8.4 IRIS Input Setups

IRIS allows the user to configure up to 16 input devices. Each input is a separate process watching a special directory looking for files to arrive. When a file arrives, the process will invoke a conversion program, and insert the resulting data into the IRIS product inventory.

<i>Input Device Specifications</i>		<i>Help</i>
Number of input devices	<input type="text" value="2"/>	

- *Number of input devices* — Enter the number of inputs you wish to configure for your system. The maximum number supported is 16.

<i>Input Device #1</i>		<i>Help</i>
Menu alias	<input type="text" value="Picture"/>	
Pipe program name	<input type="text" value="PictureToIris"/>	
Source directory	<input type="text" value="/usr/iris_data/picture"/>	
Command line syntax	<input type="text" value="Pathnames"/>	
Notification scheme	<input type="text" value="Polling"/>	

- *Menu alias* — Enter a name to use to remember this input.
- *Pipe program name* — Enter the name of a conversion program to run when a file arrives. IRIS will look for this program in the `${IRIS_PIPES}` directory. If you enter a blank name here, then it is assumed files are in IRIS product format, and will be directly inserted into the inventory after byte swapping.
- *Source directory* — Enter the directory to monitor for files. Each input channel must have a separate directory. At startup, all files found in the directory are deleted. The input process then checks every few seconds for files. If it finds a file with the same size as last time, it runs the pipe conversion program and deletes the file.

All files starting with a “.” are ignored, so if you are copying between computers you should use what we call “rename notification”. In that scheme, the file is first copied to a temporary filename starting with at “.”. After the slow copy is

completed the file is renamed to the final name. This prevents the input from reading a partial file. If the filename ends with “.gz” then gunzip is applied before processing, similarly if it ends with a “.Z” then uncompress is applied.

Table 8–1 shows the input pipes currently supplied with the IRIS system, however it is expected that the customer will wish to write their own. For more details see Chapter 2 of the *IRIS Programmer’s Manual*.

**Table 8–1: Input Pipes Supplied with IRIS**

Name	Syntax	Purpose
<b>AsciiToGage</b>	Pipe	Converts file to IRIS GAGE product.
<b>AsciiToPlane</b>	Pipe	Converts file to IRIS WARN product.
<b>AsciiToSetup</b>	Pipe	Reads file into <b>setup_change</b> utility to change the active setup values.
<b>BMPSatToIris</b>	Pipe	Converts satellite image to IRIS USER product.
<b>BufrToIris</b>	Pathnames	Converts WMO BUFR format to IRIS Cartesian products using OPERA guidelines.
<b>ChangeTaskName</b>	Pipe	Changes task name of an IRIS RAW product.
<b>ChProductName</b>	Pipe	Changes product name of an IRIS product.
<b>HDF5ToIris</b>	Pathnames	Converts HDF5 file to an IRIS product.
<b>HDFSatToIris</b>	Pathnames	Converts HDF4 satellite image to an IRIS USER product.
<b>KmaRadToIris</b>	Pipe	Converts an array to an IRIS CAPPI product.
<b>KmaSatToIris</b>	Pipe	Converts satellite image to IRIS USER product.
<b>PBMSatToIris</b>	Pathnames	Converts a PBM, PGM, or PPM satellite image to an IRIS USER product.
<b>PictureToIris</b>	Pathnames	Converts TIFF, etc. to IRIS IMAGE product.
<b>RainbowToIris</b>	Pathnames	Converts Gematronik Rainbow format to an IRIS RAW product.
<b>UfToIris</b>	Pathnames	Converts UF format to IRIS RAW product.

- *Command line syntax*— There are two choices for how IRIS will run the pipe program:

1) Pipe:

***pipe-pathname input-filename <input-pathname >output-pathname***

2) Pathnames:

***pipe-pathname ip:input-pathname if:input-filename op:output-pathname***

- *Notification scheme* — There are two choices for how IRIS will detect that a new file has arrived:

- 1) Polling: IRIS checks every few seconds to see if a new file has arrived. If the file size is the same as last time it checked, then the file is processed.
- 2) TCP/IP Socket: IRIS expects to receive a socket message on the specified port number every time a file arrives. This allows immediate input without the delays due to a polling period. The socket message syntax is exactly the same as our normal IRIS network receiver, that is “FILE ” followed by the filename and a null.