USER TASK SAMPLE PROGRAM:

This directory contains a sample program, called AVERAGE, which uses some of the

functions in ORC\_USER.LIB to take two user analog channels, average them, and

output the result to a third user analog channel.

EXECUTABLE FILE:

The executable file for this sample program is AVERAGE.EXE and is distributed in

this directory, or can be rebuilt using the provided makefile.

To make this program run as an Orchestrator user task, simply put the example's

executable file into the <Orchestrator>\BIN directory and add the command line

for running the executable into the user tasks file.

Eg. Add the line:

AVERAGE P 1 2 3

to the file:

<Orchestrator>\CURRENT\_CONFIG\USRTASKS.TXT

This will make the channel P3, the average of P1 & P2.

SOURCE FILES:

The source file for this sample program is AVERAGE.C, and is distributed in this

directory.

MAKEFILE:

The file AVERAGE.MAK which is distributed in this directory, is a Visual C/C++

2.0 Makefile and will allow you to recompile and examine or trace the source

code for the AVERAGE sample program.

HEADER FILES:

Header files which should be included in your program are:

ORC\_SIGNAL.H

ORC\_COMMON.H

ORC\_USER.H

All header files specific to Orchestrator tasks are distributed in the

directory, "..\DEFS", relative to this directory.

LIBRARY FILES:

Libraries which should be linked with your program are:

ORC\_USER.LIB

All library files specific to Orchestrator tasks are distributed in the

directory, "..\LIB", relative to this directory.

ORCHESTRATOR USER TASKS:

Orchestrator user tasks are started whenever Orchestrator is enabled, and they

receive Orchestator QUIT signals whenever Orchstrator is disabled. For this

reason, the program will always be running when Orchestrator is enabled, and die

when Orchestrator is disabled. Note however that user tasks can be written to

persist when Orchestrator is disabled, but this may result in multiple instances

of the user task if Orchestrator is enabled and disabled multiple times, and the

user task does not check for existing instances on start-up.