Sumitomo Machine Interface (SUMI-LX, SUMI-LX/HS) for the RJG *eDART*® System

Description

The RJG Sumitomo Machine Interface (SUMI-LX, SUMI-LX/HS) provides an easy interface between Sumitomo molding machines and the RJG *eDART*® System.

Sumitomo molding machines are equipped with two interface connectors that allow users to monitor machine parameters and control using cavity pressure. They are called the Oscillograph output and Internal Die Pressure connectors. The RJG Sumitomo Machine Interface contains all of the RJG Din rail mount modules and wiring needed to take advantage of these signals (see table one for a list of modules the SUMI-LX and SUMI-LX/HS contain). The *eDART*® software can be set up to monitor these signals and with a sensor in the mold, can send a 0-10V analog signal to the machine controller for cavity pressure tranfer.

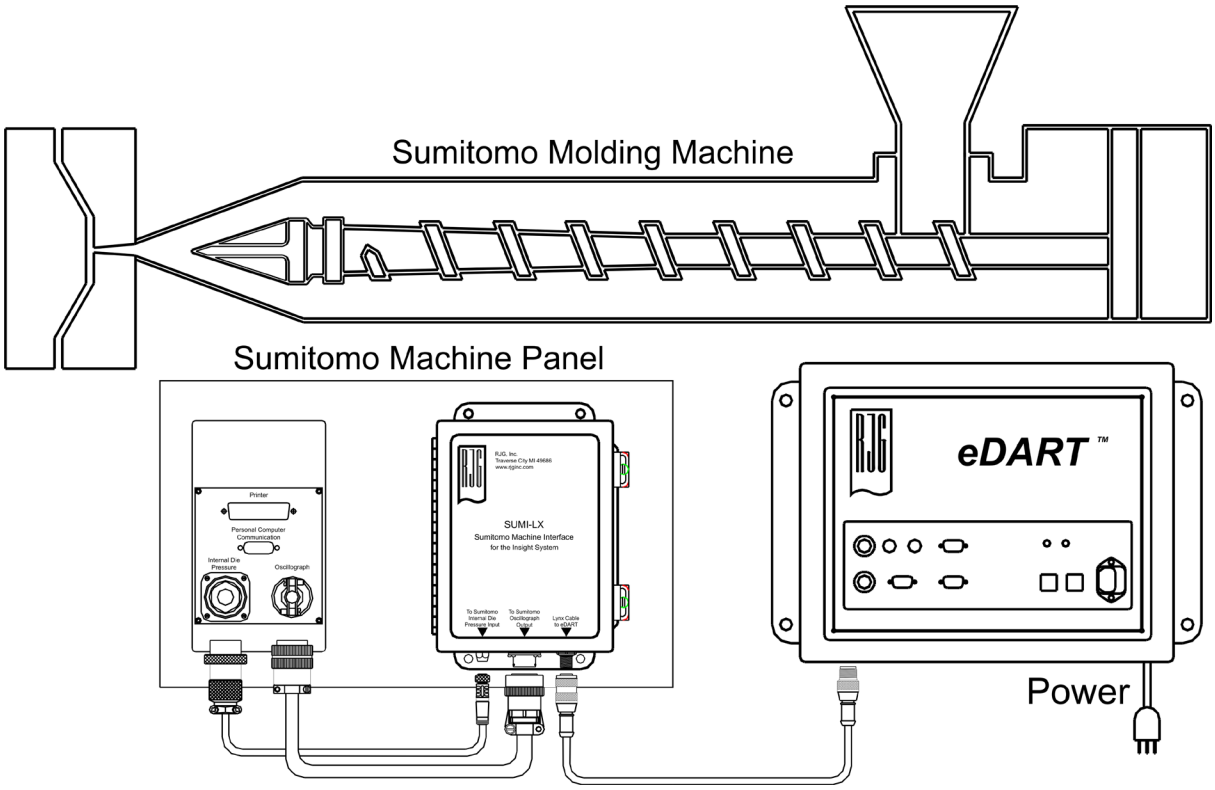


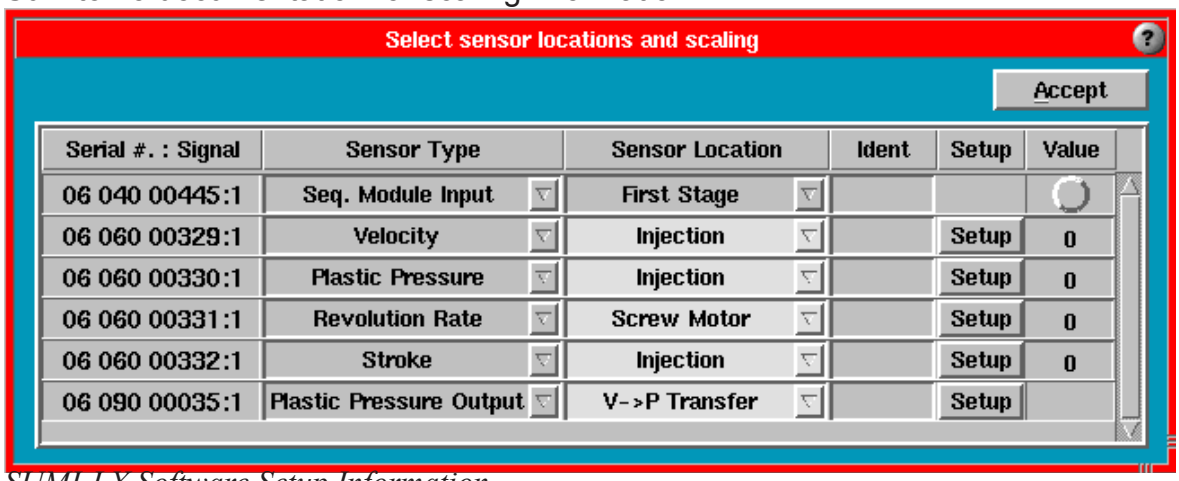
***Figure 1**: Sumitomo Interface Connections*

Installation

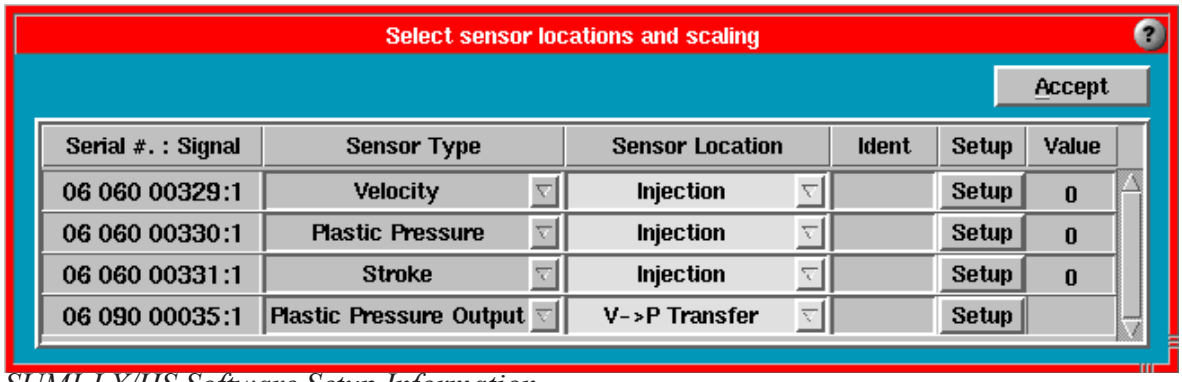
1. Mount the interface box.
2. Connect the Oscillograph output and Internal Die Pressure input to the interface box using the supplied C-SUMI-DP and C-SUMI-OG cables.
3. Connect Lynx cable between the interface box and the *eDART*®.

Software Setup

Once the *eDART*® software is started, the Sensor Locations tool will appear. On the side of the interface box (and inside the lid) is a listing of the modules and the signals they are connected to. Use this as a guide to assigning the sensor types and locations. Refer to Sumitomo documentation for scaling information.



SUMI-LX Software Setup Information



SUMI-LX/HS Software Setup Information

Sumitomo Connector	Sumitomo Signal Type	Sumitomo Signal Name	Signal Description	RJG Module (Sensor Type/Location)
Oscillograph Output ***-LX***	Contact Closure	Injection Start	Contacts close briefly at the start of Injection	Sequence Input Module (Seq. Module Input/First Stage)
Oscillograph Output ***-LX, -LX/HS***	0-10V Analog Output	Velocity Detection Value	Analog representation of the Injection Speed	Analog Input Module (Velocity/Injection)
Oscillograph Output ***-LX, -LX/HS***	0-10V Analog Output	Pressure Detection Value	Analog representation of the Injection Pressure	Analog Input Module (Plastic Pressure/Injection)
Oscillograph Output ***-LX***	0-10V Analog Output	Revolution Detection Value	Analog representation of the Screw Rotation Speed	Analog Input Module (Revolution Rate/Screw Motor)
Oscillograph Output ***-LX, -LX/HS***	0-10V Analog Output	Screw Position	Analog representation of the Screw position	Analog Input Module (Stroke/Injection)
Internal Die Pressure Input ***-LX, -LX/HS***	0-10V Analog Input	Internal Die Pressure Input	Analog input to machine controller	Analog Output Module (Plastic Pressure/'ap specific')

Sumitomo interface box, module and signal explaination

baf 2/3/09 revised