

ASCII WINDOWS VERSION 6.0 OPERATION INFORMATION

SERVO SENSOR™ VISUAL BASIC SETUP SOFTWARE VERSION 6.0

NEW FEATURES

- Monitor has a jog field added with selectable velocity entry.
- Can view the set point table before activating.
- Servo Sensor™ field shows how many Servo Sensors™ on active on the link.
- Status bar indicates loop communication status of the PC.
- Status field indicates Servo Sensor™ status.
- Improved communication routine between PC/Host device and the Servo Sensor™.
- Display feature that allows viewing target, actual position, and velocity in large format.
- Actual name of axis can be entered for monitoring use.
- 60 point set table displayed.
- Expanded Servo Dynamic Control.
- Jogging capability.
- 4 modes of operation control.
- Will display Servo Sensor™ resolutions in .0005", .001", and .002".

Minimum System Requirements ASCII Servo Sensor™ Program

- Windows 95 (OSR 2 only) and Windows 98
- Intel Pentium, 133 MHz processor
- Windows ME, Windows 2000 Professional, Windows NT 4.0
- Intel Pentium II, 350 MHz processor
- 64Mb Ram for all Windows platforms

- Five programs incorporated in the software package:
- InstMsiW
- InstMsiW
- Setup.exe
- Setup

ASCII Servo Sensor™ Configuration

Loading Considerations

Before loading the software all applications should be turned off.

Some notebook computers will have problems running this software due to shared IRQ and communications ports. To check if a conflict exists enter System info in the Accessories folder on your computer and check if IRQ'S are the same for communication port 1. If so, disable the program that is sharing the interrupt. SMC devices usually cause this problem.

Another way of determining if a program is running in the Windows background is using the Control, Alt, Delete method. Windows will display the programs that are running. Programs can be disabled from this screen.

Palm pilot software has caused problems with the software. It must be disabled for the communication port to operate.

If no results, call for technical assistance.

Running the program

The following information assumes that the user has a basic understanding of computers and software and has key boarding skills.

The laptop or desktop must be running before the power is applied to the communications converter. Generally, the Servo Sensor™ and converter have power applied at the same time. This will cause the Setup software to start properly.

Initial Launch of the software

A splash screen will appear showing a search for the Servo Sensors™. The screen shows the name and version of the software. When the splash screen is finished, the screen changes to a visual basic screen with the COMM tab displayed.

The title of the program is shown at the top of the screen. At the bottom of the Comm tab are fields that show status of the program.

Seven Tab labels are shown on the screen. They are:

Monitor
System
Dynamics
Limits
Set Points
Info
Comm

The menu bar above the tabs shows the following:

File
View
Utilities
Help

Comm Tab

The Comm Tab screen is divided into the following fields (Refer to Figure 1):

- Communications Status
- Select Comm Port and Speed
- Speed
- Packet Interval and Apply and Test Settings Bar
- Actions
- Servo Sensor™ Status column

Communications Status

This field monitors the communications between the PC and the Servo Sensor™/s. Red indicates a fault and green indicates okay. The labels are self-explanatory.

Select Comm Port and Speed

From this field, highlighted labels and option buttons show the Comm ports that are available. Comm port 1 is most often selected and is identified by a black dot.

Speed

The speed selection field identifies the baud rate at which the Comm port is operating. This is the baud speed that

the PC is communicating to the Servo Sensor™. The Servo Sensor™ baud rate must match this speed. If “Communications Error” and/or “Sensor Not Responding” are red, then the baud rate needs to be changed and the “Apply and Test Settings” activated to reinitialize the communications. This procedure is used to adapt the program for communications to Servo Sensors™ with different baud rates. It is possible to have Servo Sensors™ with different baud rates on the RS-485 link.

Packet Interval and Apply and Test Settings

The packet interval will be used with PC’s that have different operating speeds. A scroll down list is available with values that can be selected.

When a change is made in the Comm tab fields, the Apply and Test Settings command bar is used to change to the new settings.. Pointing the cursor to this bar and clicking the right mouse button activates this function to activate.

Initializing a change causes “Searching” to appear in the “On Line” box and a command code, such as “No Response from Sensor” will appear below the bar.

Actions

The Reset and Apply command buttons are not used.

Servo Sensor™ Status Column

Comm Ok, Online and Online Mode bars are active and all others are inactive in the Status Column screen.

Monitor Tab (Refer to Figure 2)

The Monitor Tab is divided into the following fields:

- Setpoint Information
- Immediate Setpoint Execute
- Servo Position
- Sensor Select
- Jog Controls
- Actions
- Servo Sensor™ Status Column

Setpoint Information

This field works in conjunction with the Immediate Setpoint Execute field. It displays the Target, Velocity and Dwell values stored in the Servo Sensor™ Setpoint Table. It will change when a set point is selected in the Immediate Setpoint Execute field.

Immediate Setpoint Execution

The Setpoint Table stored within the Servo Sensor™ is accessed through this field. The View Only box below the

sixty boxes allows the user to preview the set points, velocities, and dwells before sending the motion commands to the Servo Sensor™. The View Only box must be checked for the set points to be active.

When a set point is activated via the mouse, the program requests the values from that set point and then sends the values back to the Servo Sensor™.

Servo Position

Three labeled fields are shown. Position is the actual position of the magnet in relation to the Servo Sensor™ including offsets.

The Target is the selected set point position or jog position that the user requested.

The Velocity is the velocity value loaded in the set point table associated with the target set point.

The Target and Velocity fields are not active in all other modes of operation other than the serial mode.

Sensor Select

The Sensor Select field shows the Servo Sensor™ addresses that are actively responding. The pull down window will show the addresses. Highlighting the address will cause the program to scan for that Servo Sensor™ and load all values for view or change within the different tabs.

If a name was assigned to each address (using the Info tab) that assigned name will appear below in bold black letters.

Jog Controls

The ASCII Servo Sensor™ has provisions and code for jogging. This field is used to program locations established within the Servo Sensor™ for jogging.

The Maximum window equates to the maximum error allowed between the target and position value. This entry is limited to 2.000 inches and is most often set to .500.

The Increment window establishes the minimum start value for the error between the target and position value. As movement occurs, this value is doubled until the Maximum entered value is achieved. This feature gives more finite control of the position of the device under control. This entry is limited to half of the value entered in the Maximum window and is most often set to .060.

The Velocity is not associated with any values stored in the Servo Sensor™ and is an external value that is sent in

code with the jog commands to the Servo Sensor™. A typical entry will be 5.0.

Actions

The Reset and Apply bar are not used.

Servo Sensor™ Status Column

All status bars are active in this field. It is developed from the Status and Control bytes received from the Servo Sensor™. Green indicates okay or inputs on and outputs on. Red indicated problems or that inputs are not on.

System Tab (Refer to Figure 3)

The System Tab is divided into the following sub fields:

- Servo Sensor™ Configuration
 - Servo Number
 - Baud Rate
- Operational Configuration
 - Cylinder Type
 - Output Function
 - Enable Mode
 - Run Mode
- Actions
- Servo Sensor™ Status Column

Servo Sensor™ Configuration

All fields represent the values that are received from the Servo Sensor™. In essence, this tab is used to configure the Servo Sensor™ for system operation. Communications must be established before any configurations can be changed.

Servo Number

This field has a pull down column that shows all Servo Sensors™ communicating on the RS485 link. After a Servo Sensor is selected, the baud rate can be changed. The screen will immediately show a screen describing that power must be cycled for the new selection to take effect.

The Comm Tab must be selected and the baud rate changed for the program to match the baud rate of the Servo Sensor™. Apply and Test Settings bar is activated so the program will conduct a search for the Servo Sensor™.

Operational Configuration

The sub fields allow the user to program the special functions of the Servo Sensor™. As written at the bottom of the tab, labels shown in blue will require power to be recycled to the Servo Sensor™.

Also, a short help window will be shown when the cursor/pointer is placed on the sub field to be changed.

Actions

When a change is implemented the Apply bar will highlight. Activate using the mouse button. A screen will appear explaining that the power must be recycled for the changes to be entered.

The Reset is used to reset the System Tab screen.

Servo Sensor™ Status Column

All status bars are inactive in this tab.

Dynamics Tab (Refer to Figure 4)

This tab relates to the motion performance of the Servo Sensor™. It's divided into the following fields:

- Extend
 - Gain
 - Acceleration
 - Deceleration
 - Deceleration Window
 - Drive Limit
 - Dead Band
- Retract
 - Gain
 - Acceleration
 - Deceleration
 - Deceleration Window
 - Drive Limit
 - Dead Band
- AutoNull
- Enabled
- Window
- Velocity Loop Enable
- Reverse Drive Polarity
- Actions
- Servo Sensor™ Status Column

Extend

These sub fields show the present values stored in the Servo Sensor™ for extend dynamics. Refer to the Servo Sensor™ manual for detailed information. When the cursor/pointer is positioned on the field an information window will appear with the range values.

Retract

These sub fields follow the same format of the Extend field.

AutoNull

Auto Null is a modified integration algorithm used to keep the actual feedback and target positions equal. It over comes mechanical null errors in control valves.

As described in the writing below the Auto Null field, the Window is used only when with pneumatic cylinders. In the System tab, the cylinder type must have pneumatic enabled. This changes the over all motion algorithm for air control.

Velocity Loop Enable

Activating this field selects the velocity algorithm with the Servo Sensor™. This should be enabled for most cases. Large cylinder bores (10" and above) may required this feature be disabled.

Reverse Drive Polarity

This field will cause the command signal to a control valve to change polarity when activating or deactivating this field.

Actions

When a change is implemented the Apply bar will highlight. Activate using the mouse button. A screen will appear explaining that the power must be recycled for the changes to be entered.

The Reset is used to reset the System Tab screen.

Servo Sensor™ Status Column

All status bars are inactive in this tab.

Limits Tab (Refer to Figure 5)

The Limits Tab layout screen shows the following fields:

Feedback
Readout Direction
Travel Limits
In Position Window
Zero Offset Adjust
Probe Drawing
Actions
Servo Sensor™ Status Column

Feedback

This field is for display of the programmed values loaded in flash memory of the Servo Sensor™. They are set at the factory and cannot be changed. These values are specified at the time of order and they are read-only.

Readout Direction

The direction that the Servo Sensor™ will read the position data is changed from this field.

Travel Limits

These are user-defined values and must be within the reading range of the Servo Sensor™. The actual values will turn red if they exceed the stroke. The values might not exactly equal the stroke value. This is due to mathematical functions and should not be a cause for alarm.

In Position Window

This value determines whether the in motion bit changes and also is responsible for the signal from discrete output of the Servo Sensor™. If the actual position and target position are within this window the entry encompasses the plus and minus error of the actual and target position.

Zero Offset Adjust

For calibration purposes this sub field is used. The Servo Sensor™ readout range can be moved to accommodate mechanical installation errors. The allowable range is shown when the cursor is put on the field. An example would be if the readout exceeds 0 or the length of the probe. This is indicated by the readout reading 65000.

Probe Drawing

The probe drawing offers a visual display of the different value adjustments and their relationships. When changes are made in the sub fields above, the information boxes change so the user can visualize the change.

Actions

When a change is implemented the Apply command bar will highlight. Activate using the mouse button.

The Reset command bar is used to reset the Limits Tab screen.

Servo Sensor™ Status Column

All status bars are inactive in this tab.

Set Points Tab (Refer to Figure 6)

This tab is used for the cycle, pulse, and increment modes. Sixty set points are available with velocity and dwell entries attached to each point. The tab is divided into the following fields:

- Set Points
- Target
- Velocity
- Dwell
- Actions
- Servo Sensor™ Status Column

Set Points

The set points column is a label box for the actual values loaded. The positioning bars on the right and bottom side of the box can expand the window portion. Also, the field columns can be expanded or retracted by moving the cursor to the lines that separate the column labels. These features allow the user to accommodate the different screen resolutions that users may have.

Target

The target column displays target points loaded in the Servo Sensor™ and can be changed by highlighting the field and entering new values. The actual numbers will change to red if the values exceed the limits of the Servo Sensor™.

Velocity

The velocity values shown under the velocity column are values that are stored in the Servo Sensor™. Entries equate to units per sec. For 25"/sec would be entered as 25.00. These values will only be possible in the dynamics of movement if the controlled medium, such as hydraulics, has the ability to use the entered velocity.

Dwell

The dwell column shows values stored within the Servo Sensor™ memory. Entries are in tenths of seconds. These entries are used when the Servo Sensors™ modes are cycle and pulse modes.

Actions

When a change is implemented the Apply command bar will highlight. Activate using the mouse button.

The Reset command bar is used to reset the Limits Tab screen.

Servo Sensor™ Status Column

All status bars are inactive in this tab.

Info Tab (Refer to Figure 7)

The Info Tab is an informational screen that exhibits the Servo Sensor™ leading particulars and active status words breakdown. The Status and Control bytes are actually a 16 bit

word with the Status and Control as 8 bit nibbles. It is divided into the following fields:

- Servo Sensor™ Program Data
- Servo Sensor™ Status
- Servo Sensor™ Control
- Actions
- Servo Sensor™ Status Column

Servo Sensor™ Program Data

This field shows the probe characteristics and program loaded in the flash memory of the Servo Sensor™.

The last six digits of the serial number are displayed. All of the values and information shown are used to ID (identify) the probe.

A sub field for labeling the Servo Sensor™ is provided. It is only used by the Visual Basic software and is not an item that is loaded in the Servo Sensor™.

Servo Sensor™ Status and Servo Sensor™ Control

These fields provide a row of blocks that equate to each bit in the status word. Green indicates ok or enabled while red indicates bad or disabled. All of these bits are discussed in the Servo Sensor™ manual.

Actions

When a change is implemented the Apply command bar will highlight. Activate using the mouse button.

The Reset command bar is used to reset the Limits Tab screen.

Servo Sensor™ Status Column

All status bars are inactive in this tab.

Menu Bar

The menu bar has four supplements to the program. They are:

- File
- View
- Utilities
- Help

File

The file menu has four sub functions:

- Save Sensor Data
- Load Sensor Data
- Print Sensor Data
- Exit

Save Sensor Data

The User can save the programmed data stored in each Servo Sensor™ under different .dat labels. This is a useful function if different set point table and modes of operation are used for a Servo Sensor™.

Load Sensor Data

This function allows the user to change a configuration of a Servo Sensor™ by loading a previous data file.

Print Sensor Data

Data files can be printed for the Servo Sensor™ that is being looked at in the Monitor screen.

View

A large visual display is accessible from this menu function which shows actual position, target, and velocity. This is useful when cycle, pulse, or increment mode is used. Note that the target and velocity portions of the screen only work when serial mode is used.

Utilities

This function can be used to load a set of generic preprogrammed values to the Servo Sensor™. This function should be used as a last resort and if the Servo Sensor™ is not operating as desired. If used, all parameters and tabs must be reviewed and changed if necessary for operational functions to resume.

Help

The Help menu has three informational sub menus stated as follows:

- Contents
- Paw-Taw-John Homepage
- About

Contents

An informational manual in the form of a ServoSensor.HTM file is accessible via this function and Internet Explorer. The contents document explains how this program is organized and used. It also contains valuable information about the Servo Sensor™.

Paw-Taw-John Homepage

This is a hot key to Paw-Taw-John's homepage. Valuable information about the Servo Sensor™ is available through this page.

About

This is a page that shows the Version of this program and can access your computers system operating characteristics.

SERVO SENSOR™ OPERATION

SAFETY FEATURES

The Servo Sensor™ has two independent discrete control input lines that are used for motion control safety. They are Set Enable and Relay Enable. These inputs will **always** be active for motion to occur. When using the serial mode, the device provides a status word that can be used for fault identification and external control of motion. The following information relates to servo loop control for hydraulic and pneumatic cylinders.

Set Enable

The Set Enable is an external discrete input to the Servo Sensor™ provided by a host controller or other switched device that allows the Servo Sensor™ to accept target information and in turn will allow movement. When the Set Enable is low, the Servo Sensor™ will not accept target information and the cylinder will maintain its present position. When the Set Enable is high, the Servo Sensor™ will accept target information and immediately cause the cylinder to move to a new position designated by the host controller.

The Set Enable has two programmable modes:

- In the first mode - when the Set Enable (active high) is applied and a target is sent to the unit, the Set Enable can be removed (active low) and the cylinder will continue and finish its targeted movement. No target information will be accepted until an active high is applied.
- In the second mode - when the Set Enable (active high) is applied and a target is sent to the unit, the cylinder will move to its targeted position. If the Set Enable (active low) is removed at any point during movement, the cylinder will stop moving immediately. To start movement again, the Set Enable (active high) and a new target will be required. So the Set Enable must be active for the duration of movement in this mode.

The Set Enable input can be used in conjunction with external devices, such as a proximity switch, photo eye or limit switch. The user can position these devices in

such a way as to prevent movement in danger areas or create zones for movement.

Under all conditions with or without the Set Enable input, the servo controller will maintain or try to maintain its position target.

Relay Enable

The Relay Enable input controls a relay located in the end cap of the Servo Sensor™. A normally open contact controls the power to the servo device or the command lines to the servo device. These options are accomplished by installing pin jumpers within the J3 connector that attaches to P3 of the end cap. The control is designed for 24Vdc.

Generally, when 24Vdc power is removed from proportional valves, the spool inside assumes a "fourth position". This position blocks the pressure and tank ports, thus no pressured oil is applied to the cylinder. With proportional valves the relay contact could be used to power the valve.

All hydraulic systems using servo valves should have a hydraulic lock up valve installed for an external E-stop and should be external to the Servo Sensors™. The valve must be activated for applying hydraulics to the cylinders. When inactive, hydraulic pressure is removed from the cylinder/s.

Status/Fault Control

The Servo Sensor™ sends status bits to the host controller when used. Through software, this word can be used to control hydraulics, provide status of the hardware and fault information. Refer to Appendix B for more details.

Servo Drive Output

Prevention of motion is important when a fault might occur within the Servo Sensor™. The following faults will cause a zero output drive:

Temposonics® Feedback Bad
Bad Control Module

LED VISUAL FAULT INDICATIONS (LOCATED AT PROBE END CAP)

The green LED is pulsed to show the status of the Servo Sensor™. Status indications are described below.

- 1 sec ON, 1 sec OFF
- System OK and position is within IN Position window from target
- ½ sec ON, ½ sec OFF
- System OK, but not within IN Position window
- ½ sec On, 1 ½ sec OFF
Error – no position data
- Stays on = error, system not running
- Stays off = error, system not running

LED BLINK RATE	.5sec.	.5sec.	.5sec.	.5sec.
BAD SERVO SENSOR™	ON	ON	ON	ON
BAD SERVO SENSOR™	OFF	OFF	OFF	OFF
BAD TEMPO	OFF	OFF	OFF	ON
IN MOTION	OFF	ON	OFF	ON
UNIT OK	OFF	OFF	ON	ON

RUN MODES OVERVIEW

The servo control program located inside the Servo Sensor™ offers four modes of operation. The Cycle, Increment, and Pulse mode use a sixty point set table that is programmed within the Servo Sensor™.

- The first mode is the Serial Mode. Machine control programs are loaded into a host computer, micro controller, or PLC. These programs can access the Servo Sensor™ internal parameters and/or command externally. Communications between the Servo Sensor™ and host is accomplished via a two-wire RS-485 interface. Three discrete inputs and one output provide external control and status.
- The second mode is the Cycle Mode. A set table is stored within the Servo Sensor™. The set table has 60 possible set points, velocities and dwell times available that make an axis perform a motion profile. Discrete inputs called Set Enable and Trigger control the start and continuance of the motion profiles contained in the set table. A discrete output from the Servo Sensor™ is used to monitor the status of the motion profile. Once the axis starts its sequenced motion events, the motion can be reset to a home position or stopped by toggling the Trigger input. The Set Enable can also stop the motion events anytime.
- The third mode is the Incremental Mode. User enters values in the set table within the Servo Sensor™. Each time the Trigger input is enabled the Servo Sensor™ will position incrementally to the next target related to the set table. This is accomplished through the set cable. The Motion Enable Control input must be on before movement can begin.
- The fourth mode is the Pulse Mode. This mode is predominately used by PLC's. Set points loaded within the Servo Sensor™ are accessed by supplying pulses from an output of the PLC. The pulse frequency is ~500 Hertz.

OPERATING (RUN) MODES

The following table designates which controls are used in specific modes:

	Serial	Cycle	Incremental	Pulse
Set Enable	X	X	X	X
Relay Enable	X	X	X	X
Trigger	O	X	X	X
Output-INPOS	X	X	X	X
Output-Cycle Complete	X	X	X	X

X = Used

O = Not Used

MODE OPERATION EXAMPLES

The following sections discuss the three different modes of operation that use the internal Set table. By configuring value entries within the table, different motion profiles are obtainable. Use the Servo Sensor™ setup software for programming values in the set table.

The Serial mode is not discussed because it's use is for external controllers such as PC's, PLC's, and Stand alone controllers. All commands from the main controller are sent to the Servo Sensor™ over a serial link.

Rules

All motion starts at Set Point 1.

The Motion Enable input must be on at all times for movement.

The Trigger input starts cycles, is used for pulsing in the Pulse mode and increments through the Set Point table in the Increment Mode.

The set point values must be within the range of the stroke of the Servo Sensor™.

Set Point Column

- If Set point value equals 0 in any location of the desired movement, the end of cycle has been reached.
- If end of cycle is reached, the trigger input must be reset to start cycle again.
- Set point value equals 1-60 the motion will jump to that set point location and continue desired motion.

Velocity Column

- Up to three velocity changes are allowed in a motion direction.

Dwell Column

- If Dwell time = 0, the Set Point is not a set point but a point that the velocity changes in the desired motion.

Typical Cycle Mode Program

- a) Start at Set point #1
- b) Go to Set point #1 at Velocity #1
- c) After reaching Set point, remain there until Dwell time expires (timed in 100ths of seconds)
- d) Then go to next Set point.
- e) If Dwell time = 0, the Set point is not a Set point, but changes Velocity at the Set point. Only up to three (3) Velocity changes can be made to the final Set point.
- f) If Set point = 0, the end of the cycle has been reached. System stops until the Trigger Input is on to reset the cycle.
- g) If Set point = 1-60, the cycle will skip to Set point 1-60.
- h) The Motion Enable input must be on for the cycle to operate. The cycle will stop if Set Enable is turned off.
- i) Trigger Input will reset the cycle.
- j) The discrete output can be used to indicate "In Position" or Cycle complete. User selectable within the system parameters.

Figure 1 Communication Tab

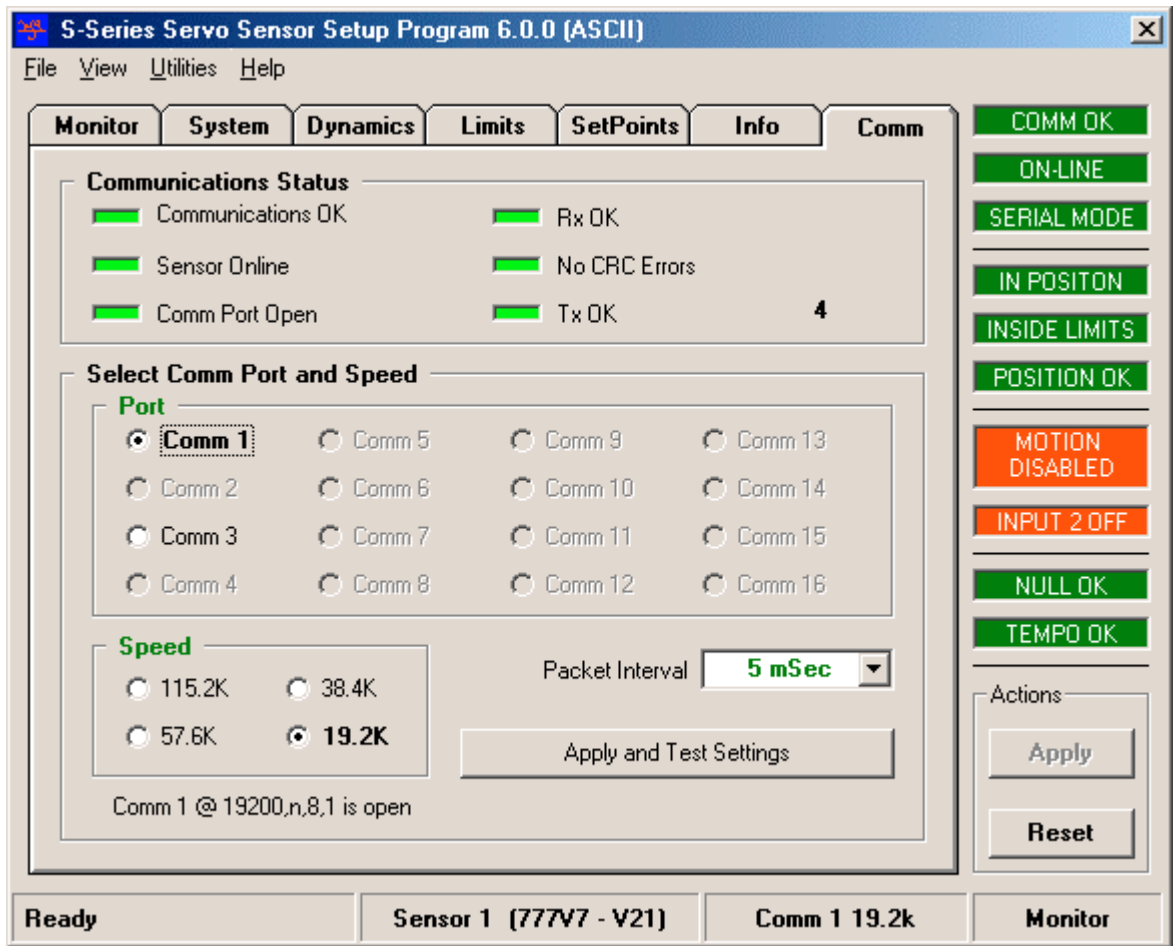


Figure 2 Monitor Tab

S-Series Servo Sensor Setup Program 6.0.0 (ASCII)

File View Utilities Help

Monitor System Dynamics Limits SetPoints Info Comm

Setpoint Information

	Target	Velocity	Dwell
60	27.500	5.0	0.01
1	1.000	5.0	0.01
2	1.500	5.0	0.01

Immediate Setpoint Execute

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54
55	56	57	58	59	60	<input checked="" type="checkbox"/>	View Only	

Servo Position

Position (in) **3.828**

Target (in) **3.872**

Velocity (in/sec) **10.0**

Sensor Select (1 Sensor)

Sensor 1

Jog Controls

Maximum Increment Velocity

18.0 ----- Extend ---->> 0.3

<< JOG JOG >>

Packet Time: 25 mSec Interval: 5 mSec Delay: 85 mSec

COMM OK
ON-LINE
SERIAL MODE
IN POSITION
INSIDE LIMITS
POSITION OK
MOTION DISABLED
INPUT 2 OFF
NULL OK
TEMPO OK

Actions

Apply

Reset

Ready Sensor 1 (777V7 - V21) Comm 1 19.2k Monitor

Figure 3 System Tab

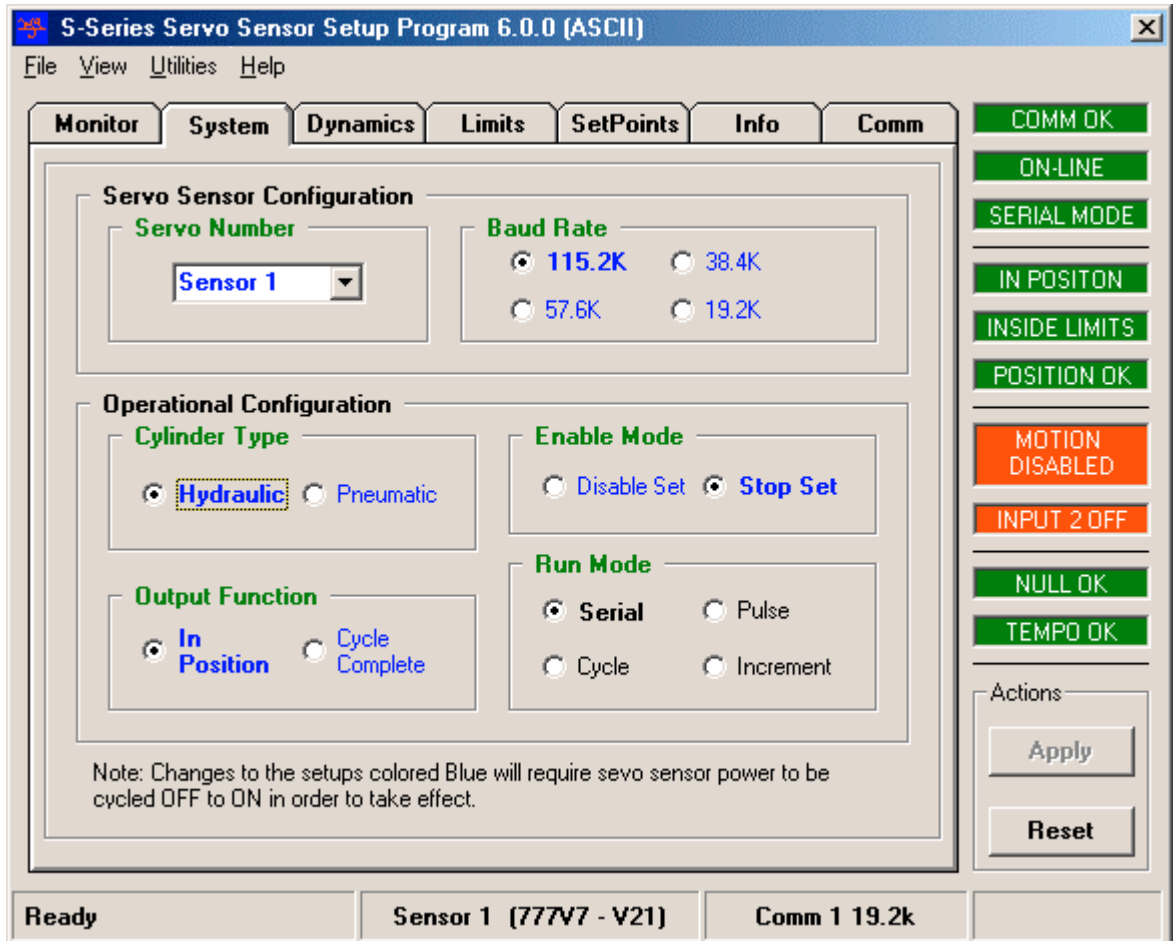


Figure 4 Dynamics Tab

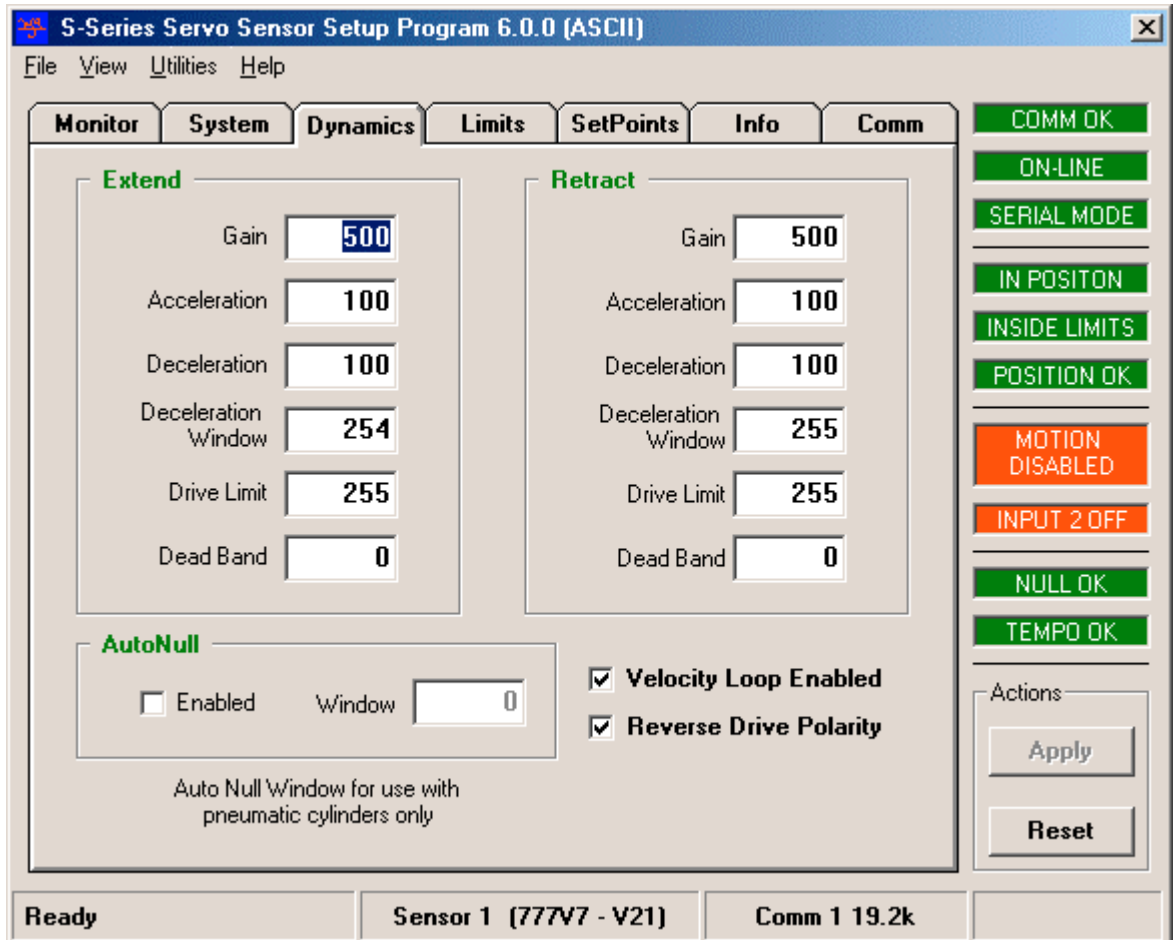


Figure 5 Limits Tab

S-Series Servo Sensor Setup Program 6.0.0 (ASCII)

File View Utilities Help

Monitor System Dynamics Limits SetPoints Info Comm

Feedback
Sensor Length **18.000 in**
Resolution **0.0010 in**

Readout Direction
 Retract To 0
 Extend to 0

Travel Limits
Minimum (in) **0.250** Maximum (in) **18.000**

In Position Window
In Position (in) **0.060**

Zero Offset Adjust
Zero Adjust (Counts) **-4284**

Min. Limit 0.250in **In Position Window 0.060in** **Max. Limit 18.000in**
Zero Adjust -4284 **Sensor Length 18.000in**

Ready **Sensor 1 (777V7 - V21)** **Comm 1 19.2k**

COMM OK
ON-LINE
SERIAL MODE
IN POSITION
INSIDE LIMITS
POSITION OK
MOTION DISABLED
INPUT 2 OFF
NULL OK
TEMPO OK

Apply
Reset

Figure 6 Set Points Tab

S-Series Servo Sensor Setup Program 6.0.0 (ASCII)

File View Utilities Help

Monitor System Dynamics Limits **SetPoints** Info Comm

Setpoint Configuration

Setpoints	Target	Velocity	Dwell
1	1.000	5.0	0.01
2	1.500	5.0	0.01
3	2.000	5.0	0.01
4	2.500	5.0	0.01
5	3.000	5.0	0.01
6	3.500	5.0	0.01
7	4.000	5.0	0.01
8	4.500	5.0	0.01
9	5.000	5.0	0.00
10	5.500	5.0	0.00
11	6.000	5.0	0.01
12	6.500	5.0	0.01

Press <Enter> or <Click> on cell to change data
 Target values in red are outside of 0.000 in or 18.000 in travel limits

Ready Sensor 1 (777V7 - V21) Comm 1 19.2k

COMM OK
 ON-LINE
 SERIAL MODE
 IN POSITION
 INSIDE LIMITS
 POSITION OK
 MOTION DISABLED
 INPUT 2 OFF
 NULL OK
 TEMPO OK

Actions
 Apply
 Reset

Figure 7 Info Tab

