

# DP-20 PLUS WEB GUIDE CONTROLLER QUICK START GUIDE





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### **DP-20 PLUS**

# Quick Start Guide

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# 1 Features

### 1.1 DP-20 Plus General Information

The instructions contained in this Quick Start Guide are written to support operation of the *DP-20 PLUS Web Guide Controller User Manual, Figure Sheet 2-320.* 

### 1.2 Display Overview

The DP-20 PLUS display is divided into 4 rows of information. A brief description is listed below.

Refer to Figure 1 (shown in operational mode) for the LCD display and keypad button locations.

- 1) The first line contains the Menu number **(1A)**. May also indicate password protection and Digital Input/Output (I/O).
- 2) The second line of the display shows the current Operation Mode (Automatic) or Setup Menu selected.
- 3) The third line indicates Edge Left **(shown)**, Edge Right, or Edge Center sensor mode; along with displaying a bargraph indicating the signal level of the currently selected sensor mode.
- 4) The fourth line can show the Guide Point value **(shown)**, ASC Control, and ASC Limits (dependent on menu selection).



Figure 1 - DP-20 PLUS Display



### 1.3 Function of the Operator Level Keys



**AUTOMATIC** - This key initiates the Automatic mode. Correction is applied to the web by moving the guide in response to the output of the sensor(s) selected.



**SERVO-CENTER -** This key initiates the Servo-Center mode. The guide is centered in its travel in response to the output of the Servo-Center transducer (if installed).



**MANUAL** - This key initiates the Manual mode. No correction is applied to the guide. This key is also used to abort changes made in the Setup Menus and to exit the Setup Menus.



**SENSOR -** This key is used to select the sensor(s) for monitoring the web position when the system is in Automatic mode. Sensor selection is allowed in Manual and Servo-Center modes only.



**SETUP** - This key is used to enter the Setup Menus to configure and adjust the guiding system.



- **ARROW** - This key is used to jog the guide. The direction of guide movement is configurable. This key is also used during setups to scroll through the setup menus and to adjust setup parameters.

**ENTER -** This key is not used at the Operator Level. It is used while in the Setup Menus to enter the selected menu and to store modified parameters.



**+ ARROW -** This key is used to jog the guide. The direction of guide movement is configurable. This key is also used during setup to scroll through the setup menus and to adjust setup parameters.



# 2 Operation

Connect the system according to the System Block Diagram (Figures 2 and 3) and DP-20 PLUS Installation Instructions, Figure Sheet 1-939 (included in package).

### 2.1 Initial System Setup

- 1) Apply the proper power to the system. See Installation Instructions Figure Sheet 1-939.
- 2) Verify the system is in Manual Mode by pressing the MANUAL key.

### NOTE: If Servo Center option is not available in the next step, go to step #6

3) Switch system to Servo Center Mode by pressing the SERVO-CENTER key.

# NOTE: If the guide moves to the center of its stroke press the MANUAL key to return system to Manual Mode and go to step #7

- 4) If the guide moves to one side, then change the Servo Center Polarity as follows:
  - Press the MANUAL key to change the system operating mode back to Manual Mode.
  - Press the SETUP key to enter the Setup menus.
  - Select "BASIC" Menu then press ENTER.
  - Use the ARROW keys to select "→← Polarity" then press ENTER.
  - The current polarity is listed. Press ENTER to allow adjustment of the polarity.
  - Use the ARROW keys to change the polarity.
  - Press ENTER to save.
- 5) Move the actuator to the center of its stroke by pressing the left and right arrows.
- 6) Thread the web/strip through the system and pull proper tension, if possible.

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- 7) Perform "Sensor Calibration" on the sensor(s) that will provide position feedback for this web/strip. If two sensors are being used in a center-guiding application they must be calibrated independently:
  - Press the SETUP key to enter the Setup menus.
  - Select "BASIC" Menu then press ENTER.
  - Use the ARROW keys to select "CALIBRATION" then press ENTER.
  - Select the sensor to be calibrated, then press ENTER.

# NOTE: Follow the instructions displayed on the LCD Display. Be sure to use the actual web to be guided (not a sample), to calibrate sensors.

### NOTE: If Manual Configuration is desired, go to section 2.3.

### 2.2 Auto Setup Configuration

- 1) Place the web/strip in the proper position and then position the sensor(s) to align the center of the sensor(s) bandwidth with the web/strip to be guided.
- 2) Perform "Auto Setup" to automatically determine the proper polarity and gain for the system:
  - Press the SETUP key to enter the Setup menus.
  - Select "BASIC" Menu then press ENTER.
  - Use the ARROW keys to select "AUTO SETUP" then press ENTER.
  - Press ENTER to begin the Auto Setup. Follow instructions displayed on the LCD Display.
- 3) Switch the system to Automatic Mode by pressing the AUTO key. This initiates the guiding function of the system.

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## 2.3 Manual Configuration (Optional)

- 1) To manually change the Polarity:
  - Press the SETUP key to enter the Setup menus.
  - Select "BASIC" Menu then press ENTER.
  - Use the ARROW keys to select "GUIDE POLARITY" then press ENTER.
  - The current polarity is listed. Press ENTER to allow adjustment of the polarity.
  - Use the ARROW keys to change the polarity.
  - Press ENTER to save.
- 2) To manually change the System Gain:
  - Press the SETUP key to enter the Setup menus.
  - Select "BASIC" Menu then press ENTER.
  - Use the ARROW keys to select "GAIN" then press ENTER.
  - Press ENTER to allow adjustment of the Gain.
  - The current gain is listed. Use the ARROW keys to change the Gain.
  - Press ENTER to save.
- 3) To manually change the Guidepoint:
  - Press the SETUP key to enter the Setup menus.
  - Select "BASIC" Menu then press ENTER.
  - Use the ARROW keys to select "GUIDEPOINT" then press ENTER.
  - Press ENTER to allow adjustment of the Guidepoint.
  - The current gain is listed. Use the ARROW keys to change the Gain.
  - Press ENTER to save.

### Caution

The DP-20 PLUS has two (2) sensor output voltages +12V/+15V 600 mA. The +15V setting is ONLY used for legacy FNA sensors (listed below.) For the FNA sensors, a special cable must be used that inserts an additional 50 ohms in the output signal line.

For ALL other sensors, use the +12V option to avoid possible damage to the sensor. The +12V setting is the system default. To select the +15V setting, perform step 4 below.

Sensor	Voltage	Sensor	Voltage
H3109	+15 Vdc	H3188	+15 Vdc
H3333	+15 Vdc	H3144	+15 Vdc
H3218	+15 Vdc	H3662	+15 Vdc
H3194	+15 Vdc	H3303	+15 Vdc
H3111	+15 Vdc		

### Figure 2 - Legacy FNA Sensor List

4) To select +15V sensor output, Go to page 6-20 (step 6) in the DP-20 PLUS Web Guide Controller User Manual, Figure Sheet 2-320.



# 3 Cable Connection Diagrams







Figure 4 – Center Guiding Setup

### NOTE

For Legacy FNA sensors listed in Figure 2 above, a special cable must be used that inserts an additional 50 ohms in the output signal line. If you have any questions, contact your Service provider (see section 4 of this document.)



## 4 Service

If you have any questions about one of our products or need to speak with a Customer Service representative, please use the contact information below.

