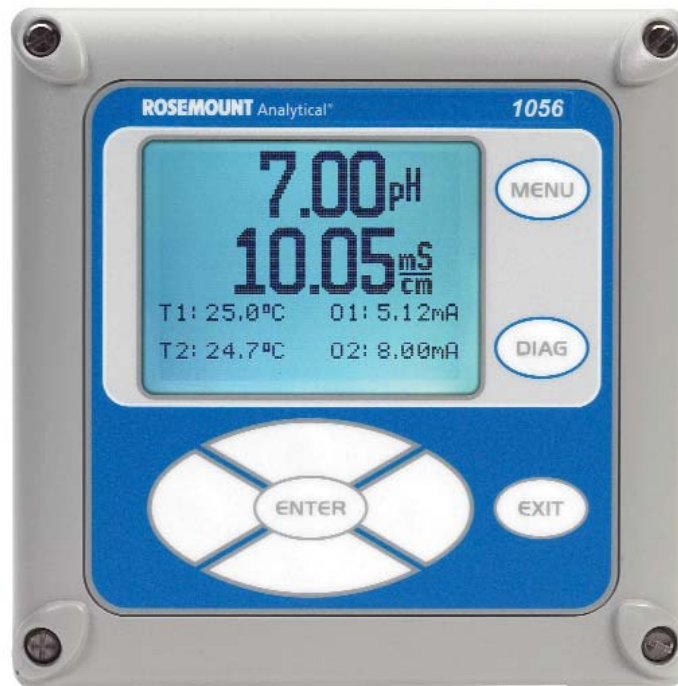


1056 HART ADDENDUM

For use with 1056 units installed with HART Digital Communications



ESSENTIAL INSTRUCTIONS

READ THIS PAGE BEFORE PROCEEDING!

Your instrument purchase from Rosemount Analytical, Inc. is one of the finest available for your particular application. These instruments have been designed, and tested to meet many national and international standards. Experience indicates that its performance is directly related to the quality of the installation and knowledge of the user in operating and maintaining the instrument. To ensure their continued operation to the design specifications, personnel should read this manual thoroughly before proceeding with installation, commissioning, operation, and maintenance of this instrument. If this equipment is used in a manner not specified by the manufacturer, the protection provided by it against hazards may be impaired.

- Failure to follow the proper instructions may cause any one of the following situations to occur: Loss of life; personal injury; property damage; damage to this instrument; and warranty invalidation.
- Ensure that you have received the correct model and options from your purchase order. Verify that this manual covers your model and options. If not, call 1-800-854-8257 or 949-757-8500 to request correct manual.
- For clarification of instructions, contact your Rosemount representative.
- Follow all warnings, cautions, and instructions marked on and supplied with the product.
- Use only qualified personnel to install, operate, update, program and maintain the product.
- Educate your personnel in the proper installation, operation, and maintenance of the product.
- Install equipment as specified in the Installation section of this manual. Follow appropriate local and national codes. Only connect the product to electrical and pressure sources specified in this manual.
- Use only factory documented components for repair. Tampering or unauthorized substitution of parts and procedures can affect the performance and cause unsafe operation of your process.
- All equipment doors must be closed and protective covers must be in place unless qualified personnel are performing maintenance.



WARNING

RISK OF ELECTRICAL SHOCK

- Equipment protected throughout by double insulation.
- Installation of cable connections and servicing of this product require access to shock hazard voltage levels.
- Main power and relay contacts wired to separate power source must be disconnected before servicing.
- Do not operate or energize instrument with case open!
- Signal wiring connected in this box must be rated at least 240 V.
- Non-metallic cable strain reliefs do not provide grounding between conduit connections! Use grounding type bushings and jumper wires.
- Unused cable conduit entries must be securely sealed by non-flammable closures to provide enclosure integrity in compliance with personal safety and environmental protection requirements. Unused conduit openings must be sealed with NEMA 4X or IP65 conduit plugs to maintain the ingress protection rating (NEMA 4X).
- Electrical installation must be in accordance with the National Electrical Code (ANSI/NFPA-70) and/or any other applicable national or local codes.
- Operate only with front and rear panels fastened and in place over terminal area.
- Safety and performance require that this instrument be connected and properly grounded through a three-wire power source.
- Proper relay use and configuration is the responsibility of the user.

CAUTION

This product generates, uses, and can radiate radio frequency energy and thus can cause radio communication interference. Improper installation, or operation, may increase such interference. As temporarily permitted by regulation, this unit has not been tested for compliance within the limits of Class A computing devices, pursuant to Subpart J of Part 15, of FCC Rules, which are designed to provide reasonable protection against such interference. Operation of this equipment in a residential area may cause interference, in which case the user at his own expense, will be required to take whatever measures may be required to correct the interference.

CAUTION

This product is not intended for use in the light industrial, residential or commercial environments per the instrument's certification to EN50081-2.

Emerson Process Management

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Irvine, CA 92606 USA
Tel: (949) 757-8500
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<http://www.rosemountanalytical.com>

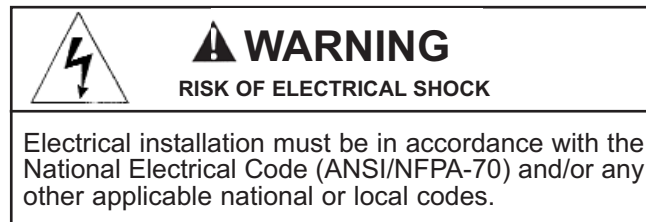
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QUICK START GUIDE

Model 1056 HART

1. Refer to Model 1056 Instruction Manual, PN 51-1056 for installation instructions.
2. Ensure that current output 1 4-20mA is properly wired to support superimposed HART digital communication with the host. See Section 3.0 for wiring instructions.
3. Make sensor, current output and power connections.
4. Once connections are secured and verified, apply power to the analyzer.



5. When the analyzer is powered up for the first time, Quick Start screens appear. Quick Start operating tips are as follows:
 - a. A backlit field shows the position of the cursor.
 - b. To move the cursor left or right, use the keys to the left or right of the ENTER key. To scroll up or down or to increase or decrease the value of a digit use the keys above and below the ENTER key. Use the left or right keys to move the decimal point.
 - c. Press ENTER to store a setting. Press EXIT to leave without storing changes. Pressing EXIT during Quick Start returns the display to the initial start-up screen (select language).
6. Complete the steps as shown in the Quick Start Guide flow diagram, Fig. A in the Model 1056 manual. After Quick Start is completed, HART device settings can be programmed under the Program menu. (Sec. 3.0)
 - Choose local language
 - Choose Measurement option
 - Choose Temperature units
 - AC line Power frequency (if applicable)
7. After the last step, the main display appears. The outputs are assigned to default values.
8. To change output, and temperature-related settings, go to the main menu and choose Program. Follow the prompts. For a general guide to the Program menu, see the Quick Reference Guide, Fig. B in the Model 1056 manual.
9. To return the analyzer to the default settings, choose Reset Analyzer under the Program menu.

About This Document

This addendum contains instructions for installation and operation of the Model 1056 Dual-Input Intelligent Analyzer with HART digital communications. This document is intended to accompany the Model 1056 Instruction manual for Model 1056 HART units. The following list provides notes concerning all revisions of this document.

<u>Rev. Level</u>	<u>Date</u>	<u>Notes</u>
A	5/08	This is the initial release of the product addendum. The manual has been reformatted to reflect the Emerson documentation style and updated to reflect any changes in the product offering and is an Addendum to the Model 1056 manual.
B	9/08	FM and CSA agency approval, Class 1, Div 2.
C	3/12	Update addresses - mail and website

1056 HART

Instruction Manual Addendum

For use with Model 1056 units installed with –HT Communications ordering option **1056-0X-2X-3X-HT**

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SECTION 1.0

DESCRIPTION AND SPECIFICATIONS

- **MULTI-PARAMETER INSTRUMENT** – single or dual input. Choose from any combination of pH/ORP/ISE, Resistivity/Conductivity, % Concentration, Chlorine, Oxygen, Ozone, Temperature, Turbidity, Flow, and 4-20mA Current Input.
- **LARGE DISPLAY** – large easy-to-read process measurements.
- **EASY TO INSTALL** – modular boards; removable connectors; easy to wire power, sensors, and outputs.
- **INTUITIVE MENU SCREENS** with advanced diagnostics and help screens.
- **SEVEN LOCAL LANGUAGES** are included with every analyzer.
- **HART®** and **PROFIBUS® DP** Digital Communications – available.

FEATURES AND APPLICATIONS

The 1056 dual-input analyzer offers single or dual sensor input with an unrestricted choice of dual measurements. This multi-parameter instrument offers a wide range of measurement choices, supporting most industrial, commercial, and municipal applications. The modular design of the instrument allows signal input boards to be field replaced making configuration changes easy. Conveniently, live process values are always displayed during programming and calibration routines. Standard features include isolated inputs, 7 embedded local languages, two 4-20mA current outputs, removable connectors for power and current outputs, four solid plugs to support NEMA closure of openings, and panel mount hardware.

QUICK START PROGRAMMING: Exclusive Quick Start screens appear the first time the 1056 is powered. The instrument auto-recognizes each measurement board and prompts the user to configure each sensor in a few quick steps for immediate deployment.

DIGITAL COMMUNICATIONS: HART and Profibus DP digital communications are available. The 1056 HART units communicate with the 375 and 475 HART® hand-held communicators and HART hosts, such as AMS Intelligent Device Manager. Model 1056 Profibus units are fully compatible with Profibus DP networks and Class 1 or Class 2 masters. HART and Profibus DP configured units will support any single or dual measurement configurations of the 1056.

MENUS: Menu screens for calibrating and programming are simple and intuitive. Plain language prompts and help screens guide the user through these procedures.

DUAL SENSOR INPUT AND OUTPUT: The 1056 accepts single or dual sensor input. Standard 0/4-20 mA current outputs can be programmed to correspond to any measurement or temperature.

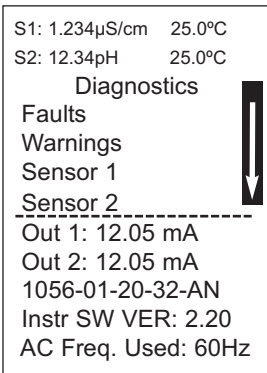
ENCLOSURE: The instrument fits standard ½ DIN panel cutouts. The versatile enclosure design supports panel-mount, pipe-mount, and surface/wall-mount installations.

ISOLATED INPUTS: Inputs are isolated from other signal sources and earth ground. This ensures clean signal inputs for single and dual input configurations. For dual input configurations, isolation allows any combination of measurements and signal inputs without cross-talk or signal interference.

TEMPERATURE: Most measurements require temperature compensation. The 1056 will automatically recognize Pt100, Pt1000 or 22k NTC RTDs built into the sensor.

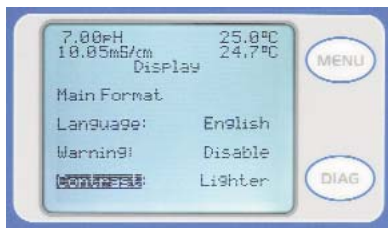
SECURITY ACCESS CODES: Two levels of security access are available. Program one access code for routine calibration and hold of current outputs; program another access code for all menus and functions.

DIAGNOSTICS: The analyzer continuously monitors itself and the sensor(s) for problematic conditions. The display flashes Fault and/or Warning when these conditions occur.



Information about each condition is quickly accessible by pressing the diagnostic button on the keypad. User help screens are displayed for most fault and warning conditions to assist in troubleshooting.

DISPLAY: The high-contrast LCD provides live measurement readouts in large digits and shows up to four additional process variables or diagnostic parameters. The display is back-lit and the format can be customized to meet user requirements.



LOCAL LANGUAGES :

Rosemount Analytical extends its worldwide reach by offering 7 local languages – English, French, German, Italian, Spanish, Portuguese, and Chinese (mainland China simplified character set). Every unit includes user programming menus; calibration routines; faults and warnings; and user help screens in all seven languages. The displayed language can be easily set and changed as needed in Quick Start or Display programming menus.



CURRENT OUTPUTS: Two 4-20 mA or 0-20 mA current outputs are electrically isolated. Outputs are fully scalable and can be programmed to linear or logarithmic modes. Output dampening can be enabled with time constants from 0 to 999 seconds. Output 1 includes digital signal 4-20 mA superimposed HART (option -HT only)

SPECIAL MEASUREMENTS: The 1056 offers measuring capabilities for many applications.

- **Single or Dual Turbidity:** Ideal in municipal applications for measurement of low-NTU filtered drinking water. Must be used with Clarity II sensor, sensor cable and debubbler.



T1056
Clarity® II
Turbidimeter
System

- **4-Electrode Conductivity:**

The Model 1056 is compatible with Rosemount Analytical 4-electrode Model 410 in the **PUR-SENSE™** family of conductivity sensors. This sensor supports a wide array of applications and is capable of measuring a large range of conductivity with one geometric configuration. Wired to the Model 1056, this sensor can measure 2µS/cm to 300mS/cm with an accuracy of 4% of reading throughout the entire range.

- **4-20mA Current Input:** Accepts any analog current input from an external device for temperature compensation of measurements and atmospheric pressure input for partial pressure correction of oxygen.

- **Selective Ions:** The analyzer is able to measure ammonia and fluoride using commercially available ion-selective electrodes. All analyzers with installed pH boards can be programmed to measure selective ions.

- **pH Independent Free Chlorine:** With Rosemount Analytical's 498CI-01 sensor, the analyzer is able to measure free chlorine with automatic correction for process pH without the need for a pH sensor.

- **Inferential pH:** The analyzer is able to derive and display inferred pH (pHCalc) using two contacting conductivity signal boards and the appropriate contacting conductivity sensors. This method will calculate the pH of condensate and boiler water from conductivity and cation conductivity measurements.

- **Differential Conductivity:** Dual input conductivity configurations can measure differential conductivity. The analyzer can be programmed to display dual conductivity as ratio, % rejection, or % passage.

SPECIFICATIONS - General

Enclosure: Polycarbonate. NEMA 4X/CSA 4 (IP65).
Dimensions: Overall 155 x 155 x 131mm (6.10 x 6.10 x 5.15 in.). Cutout: 1/2 DIN 139mm x 139mm (5.45 x 5.45 in.)



Conduit Openings: Accepts 1/2" or PG13.5 conduit fittings

Display: Monochromatic graphic liquid crystal display. 128 x 96 pixel display resolution. Backlit. Active display area: 58 x 78mm (2.3 x 3.0 in.).

Ambient Temperature and Humidity: 0 to 55°C (32 to 131°F). Turbidity only: 0 to 50°C (32 to 122°F), RH 5 to 95% (non-condensing)

Storage Temperature Effect: -20 to 60°C (-4 to 140°F)

Hazardous Location Approvals -

Options for CSA: -01, 02, 03, 20, 21, 22, 24, 25, 26, 27, 30, 31, 32, 34, 35, 36, 37, 38, AN, and HT.



Class I, Division 2, Groups A, B, C, & D
 Class II, Division 2, Groups E, F, & G
 Class III T4A Tamb= 50°C

Evaluated to the ANSI/UL Standards. The 'C' and 'US' indicators adjacent to the CSA Mark signify that the product has been evaluated to the applicable CSA and ANSI/UL Standards, for use in Canada and the U.S. respectively

Options for FM: -01, 02, 03, 20, 21, 22, 24, 25, 26, 30, 31, 32, 34, 35, 36, 38, AN, and HT.



Class I, Division 2, Groups A, B, C, & D
 Class II & III, Division 2, Groups E, F, & G
 T4A Tamb= 50°C Enclosure Type 4X

POLLUTION DEGREE 2: Normally only non-conductive pollution occurs. Occasionally, however, a temporary conductivity caused by condensation must be expected. Altitude: for use up to 2000 meter (6562 ft.)

Power: Code -01: 115/230 VAC ±15%, 50/60 Hz. 10W.
 Code -02: 20 to 30 VDC. 15 W.
 Code -03: 85 to 265 VAC, 47.5 to 65.0 Hz, switching. 15 W.

Note: Code -02 and -03 power supplies include 4 programmable relays

Equipment protected by double insulation

RFI/EMI: EN-61326

LVD: EN-61010-1



Alarms relays*: Four alarm relays for process measurement(s) or temperature. Any relay can be configured as a fault alarm instead of a process alarm. Each relay can be configured independently and each can be programmed with interval timer settings.

Relays: Form C, SPDT, epoxy sealed



Maximum Relay Current	
	Resistive
28 VDC	5.0 A
115 VAC	5.0 A
230 VAC	5.0 A

Inductive load: 1/8 HP motor (max.), 40 VAC

⚠ CAUTION

RISK OF ELECTRICAL SHOCK

*Relays only available with -02 power supply (20 - 30 VDC) or -03 switching power supply (85 - 265 VAC)

⚠ WARNING

Exposure to some chemicals may degrade the sealing properties used in the following devices:
 Zettler Relays (K1-K4) PN AZ8-1CH-12DSEA

Inputs: One or two isolated sensor inputs

Outputs: Two 4-20 mA or 0-20 mA isolated current outputs. Fully scalable. Max Load: 550 Ohm. Output 1 has superimposed HART signal (configurations 1056-0X-2X-3X-HT only)

Current Output Accuracy: ±0.05 mA @ 25 °C

Terminal Connections Rating: Power connector (3-leads): 24-12 AWG wire size. Signal board terminal blocks: 26-16 AWG wire size. Current output connectors (2-leads): 24-16 AWG wire size. Alarm relay terminal blocks: 24-12 AWG wire size (-02 24 VDC power supply and -03 85-265VAC power supply)

Weight/Shipping Weight: (rounded up to nearest lb or nearest 0.5 kg): 3 lbs/4 lbs (1.5 kg/2.0 kg)

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SECTION 2.0

INSTALLATION AND WIRING

2.1 GENERAL

2.2 HART DIGITAL COMMUNICATIONS

2.3 HART WIRING TO A HOST

2.4 HART WIRING TO A MODEL 375 HART® COMMUNICATOR

2.1 GENERAL

The Model 1056 is easy to wire. It includes removable connectors, easy to attach ribbon cables and removable signal boards with clearly labeled lead wiring.

Refer to Model 1056 Instruction Manual, PN 51-1056 for installation instructions regarding enclosure mounting, connection of signal input boards and wiring of power, alarm relays, sensors, and current outputs.

HART configured Model 1056 units do not include a separate digital communications board and no ribbon cable connection is required in the DIG I/O connector location on the main PCB. All HART circuitry is integrated on the main PCB. HART digital communication are enabled automatically upon wiring of current output 1 4-20mA to the HART host, PLC, DCS and powering the instrument.

2.2 HART DIGITAL COMMUNICATIONS

HART digital communications supports Bell 202 digital communications over an analog 4-20mA current output and communicate with the Model 375 HART® hand-held communicator and HART hosts, such as AMS Intelligent Device Manager.

HART configured units support any single or dual measurement configurations of Model 1056.

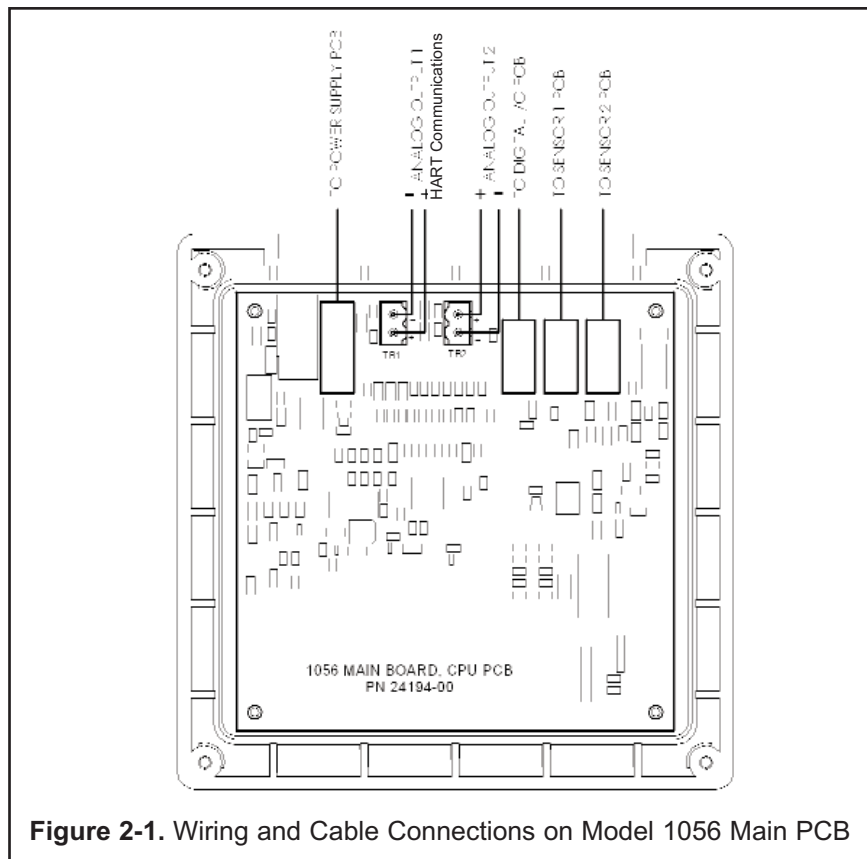


Figure 2-1. Wiring and Cable Connections on Model 1056 Main PCB

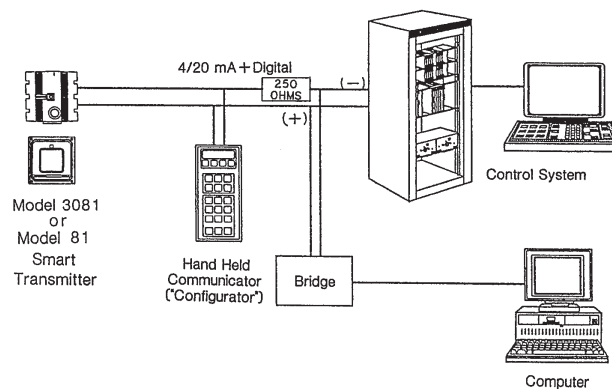
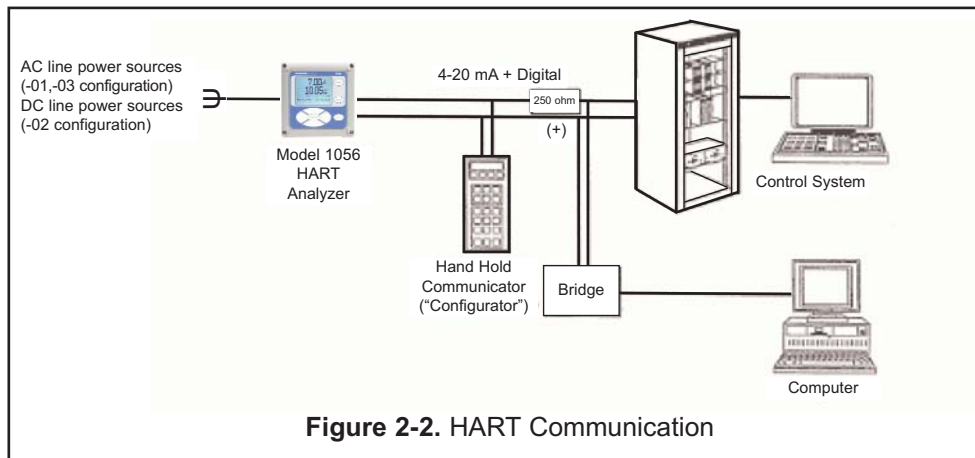
2.3 HART WIRING TO A HOST

All instruments are shipped with two 4-20mA current outputs. Current output 1 includes superimposed HART. Wiring locations for the outputs are on the Main board which is mounted on the hinged door of the instrument. Wire the output leads to the correct position on the Main board using the lead markings (+/positive, -/negative) on the board. Male mating connectors are provided with each unit.

IMPORTANT: The Model 1056 instrument uses internal power sources to power current output 1 and drive HART digital communications. **DO NOT POWER** current output 1 from the host or any other power source. Overloading of the current outputs will occur.

2.4 HART WIRING TO A MODEL 375 HART® COMMUNICATOR

The Model 375 HART Communicator is a hand-held device that provides a common link to all HART SMART instruments and allows access to AMS (Asset Management Solutions). Use the HART communicator to set up and control the 1056-HT and to read measured variables. Press ON to display the on-line menu. All setup menus are available through this menu.



SECTION 3.0 PROGRAMMING HART

3.1 GENERAL

3.2 CHANGING HART DEVICE SETTINGS

3.1 GENERAL

Section 3.0 describes the following HART programming functions:

- Entering an onscreen Tag identifier for the Model 1056 HART device
- Enter the HART device polling address.
- Set the Loop Current Mode to On or Off
- Enable Internal Power source for Single Loop or External for Multi-Drop
- Program the number of preambles sent in the HART response.
- Program the Burst Mode

3.2 CHANGING HART DEVICE SETTINGS

3.2.1 Purpose

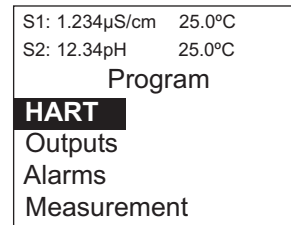
To change HART device settings using the menu screens.

Several HART device settings can be programmed at the device:

Sec.	Parameter	Default	Description
3.2.2	Tag	(blank)	Onscreen device tag
3.2.3	Polling Address	00	Device polling address
3.2.4	Loop Current Mode	On	HART communication powered by loop current.
3.2.5	Output 1 Power	Internal	Internally-sourced power is for single loop operation. Externally-sourced power is for multi-drop mode.
3.2.6	Response Preambles	07	Number of preambles sent in the HART response.
3.2.7	Burst Mode	Off	Optional digital communication mode to continuously broadcast a standard HART reply message to the host

To changes HART device settings:

1. Press MENU. Select Program. Press Enter. The following screen will appear.



2. Select HART. Press ENTER. The following screen will appear.

```

S1: 1.234µS/cm  25.0°C
S2: 12.34pH     25.0°C
                HART
Tag:             (blank)
Polling Address: 0
Loop Current Mode: On
Output 1 Pwr:   Internal
-----
Response Preambles: 7
Burst Mode:     Off
  
```

3.2.2 Onscreen HART Tag

1. To program a HART Tag, select Tag. Press Enter. The following screen will appear:
2. The default Tag screen will be blank. The cursor will appear as a reverse video blank in the first character space (left margin of text field).
3. Scroll up or down using the Up and Down keys on the navigation keypad to select any available alphanumeric character or symbol character.
4. When the desired character appears, press the Right key on the navigation keypad to display that character and advance the cursor position to the right.
5. Continue scrolling and advancing to the right using the navigation keypad to select additional tag characters. Tags up to 7 characters in length can be programmed.

```

S1: 1.234µS/cm  25.0°C
S2: 12.34pH     25.0°C
                Tag
█
  
```

3.2.3 Device polling address.

1. To program the Polling Address, select Polling Address from the HART menu screen and press ENTER. The following screen will appear:
2. The default value is 00. The cursor will appear as 0 (zero) digit displayed in reverse video.
3. Program the Polling Address by scrolling up or down using the Up and Down keys on the navigation keypad. When the desired digit appears, press the Right key on the navigation keypad to display that digit and advance the cursor position to the right.
4. You may program any address from 00 – 99. Press ENTER to select the desired 2-digit Polling Address.

```

S1: 1.234µS/cm  25.0°C
S2: 12.34pH     25.0°C
                Polling Address
█ 00
  
```

3.2.4 Loop Current Mode

1. To set Loop Current Mode to On or Off, select Loop Current Mode from the HART menu screen and press ENTER. The following screen will appear:
2. The default value is On. On will be displayed in reverse video to show the current selection.
3. Scrolling up or down to select On or Off. Press ENTER to set Loop Current Mode to On or Off.

Notes:

Loop Current Mode = On means current output 1 represents a process variable and device provides power to the current loop. This is the active mode.

Loop Current Mode = Off means current output 1 is fixed at 3mA and device turns off power to the current loop. This is the passive mode.

```
S1: 1.234µS/cm  25.0°C
S2: 12.34pH    25.0°C
Loop Current Mode
Off
On
```

3.2.5 Output 1 Power

In HART-enabled devices, Output 1 is designated as the communications port. Normally, this port also provides power for HART communications to the host.

1. To set internally sourced power or externally sourced power, select Output 1 Power and press ENTER. The following screen will appear:
2. The default value is Internal. Internal will be displayed in reverse video to show the current selection.
3. Scrolling up or down to select Internal or External. Press ENTER to set Output 1 Power to Internal or External.

Notes:

Internal power is for single loop operation.

External power is for multi-drop mode.

```
S1: 1.234µS/cm  25.0°C
S2: 12.34pH    25.0°C
Output 1 Power
Internal
External
```

3.2.6 Response Preambles

1. To set the number of preambles sent in the HART response, select Response Preambles from the HART menu screen and press ENTER. The following screen will appear:
2. The default value is 07. The cursor will appear on the 0 (zero) digit displayed in reverse video.
3. Program Response Preambles by scrolling up or down using the Up and Down keys on the navigation keypad. When the desired digit appears, press the Right key on the navigation keypad to display that digit and advance the cursor position to the right.
4. You may program any address from 00 – 99. Press ENTER to select the desired 2-digit number of response preambles.

```
S1: 1.234µS/cm  25.0°C
S2: 12.34pH    25.0°C
Response Preambles
07
```

NOTE: The number of preambles may need to be manually increased for some HART hosts. Some hosts automatically set this parameter.

3.2.7 Burst Mode

1. To program Burst Mode for the device, select Burst Mode from the HART menu screen and press ENTER. The following screen will appear:
2. The default value is Off. Off will be displayed in reverse video to show the current selection.
3. Scrolling up or down to select Off, Cmd 1, Cmd 2, or Cmd 3. Press ENTER to select the desired Burst Mode.

S1: 1.234 μ S/cm	25.0°C
S2: 12.34pH	25.0°C
HART Burst Mode	
Off	
Cmd 1	
Cmd 2	
Cmd 3	

SECTION 4.0

OPERATION WITH MODEL 375

4.1 NOTE ON MODEL 375 HART COMMUNICATOR

4.2 CONNECTING THE HART COMMUNICATOR

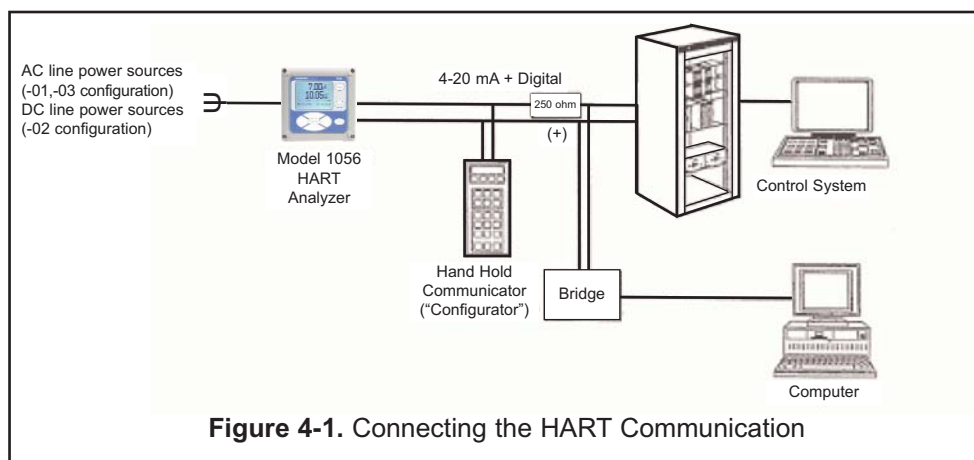
4.3 OPERATING THE HART COMMUNICATOR

4.1 NOTE ON MODEL 375 HART COMMUNICATOR

The Model 375 HART Communicator is a product of Rosemount Measurement. This section contains selected information on using the Model 375 with the Rosemount Analytical Model 1056-HT Analyzer. For complete information on the Model 375 Communicator, see the Model 375 instruction manual. For technical support on the Model 375 Communicator, call Rosemount Measurement at (800) 999-9307 within the United States. Support is available worldwide on the internet at <http://rosemount.com>.

4.2 Connecting the HART Communicator

Figure 4-1 shows how the Model 375 HART Communicator connects to the current output lines from the Model 1056-HT Analyzer.



4.3 Operating the HART Communicator

The Model 375 Communicator features off-line and on-line communications. On-line means the communicator is connected to the Analyzer in the usual fashion. While the communicator is on line, the operator can view measurement data, change program settings, and read diagnostic messages. Off-line means the communicator is not connected to the Analyzer. When the communicator is off line, the operator can still program settings into the communicator. Later, after the communicator has been connected to a Model 1056-HT analyzer, the operator can transfer the programmed settings to the 1056-HT analyzer. Off-line operation permits settings common to several analyzers to be easily stored in all of them.

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SECTION 5.0 HART DIAGNOSTICS

5.1 HART DIAGNOSTICS - GENERAL

5.2 HART DIAGNOSTICS – LOCAL ACCESS

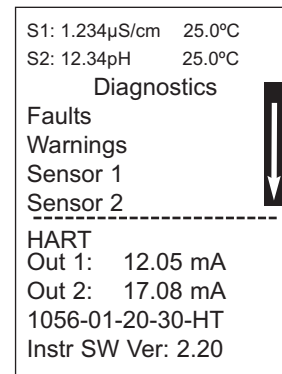
5.1 HART Diagnostics – General

A number of HART status messages and device commands are displayed locally. Press the DIAG key to display these HART diagnostic parameters:

5.2 HART Diagnostics – Local Access

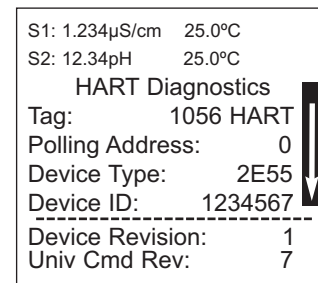
To access HART diagnostics,

1. Press DIAG. The following screen will appear.



2. Scroll down and select HART. Press ENTER. Based on the condition of the HART installation and network connection, a number of diagnostics may appear.

The following HART Diagnostic variables may be displayed:



HART Diagnostics are fixed values or status messages. They are displayed to support local troubleshooting and device condition related to a HART communications network.

A description of each HART Diagnostic appears in the table below:

Diagnostic	Setting	Description
Tag	(blank)	Onscreen HART device tag
Polling Address	00	Device polling address
Device Type	2E55	Identification of device type
Device ID	1234567	Unique device Identification number
Device Revision	1	Revision number of HART device
Univ Cmd Rev	5	HART software version
Loop Current Mode	On	HART communication powered by loop current

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SECTION 6.0 HART ACCESSORIES

6.1 HART ACCESSORIES

6.1 HART ACCESSORIES

Accessories are available to support device connection to a HART network and host applications such as AMS Intelligent Device Manager.

HART COMMUNICATOR: The Model 375 HART communicator allows the user to view measurement values as well as to program and configure the transmitter. The Model 375 attaches to any wiring terminal across the output loop. A minimum 250 Ω load must be between the power supply and transmitter. Order the Model 375 communicator from Rosemount Measurement. Call (800) 999-9307.



NOTES:

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