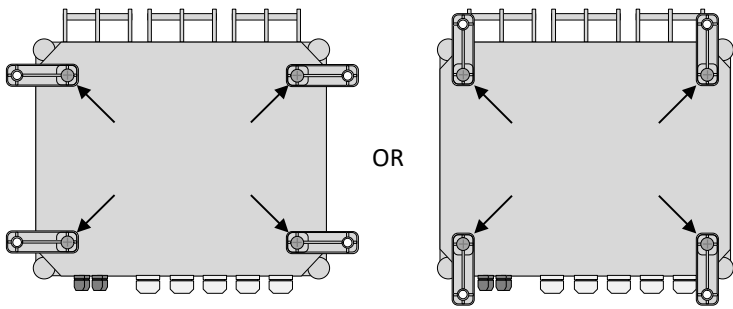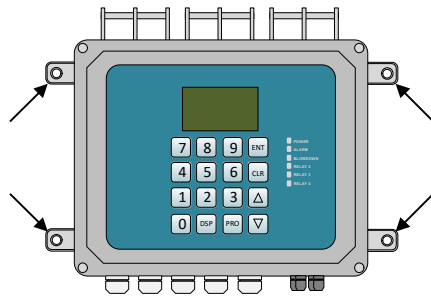# 1575e QUICK-START GUIDE – COOLING TOWER, STANDARD CONFIGURATION
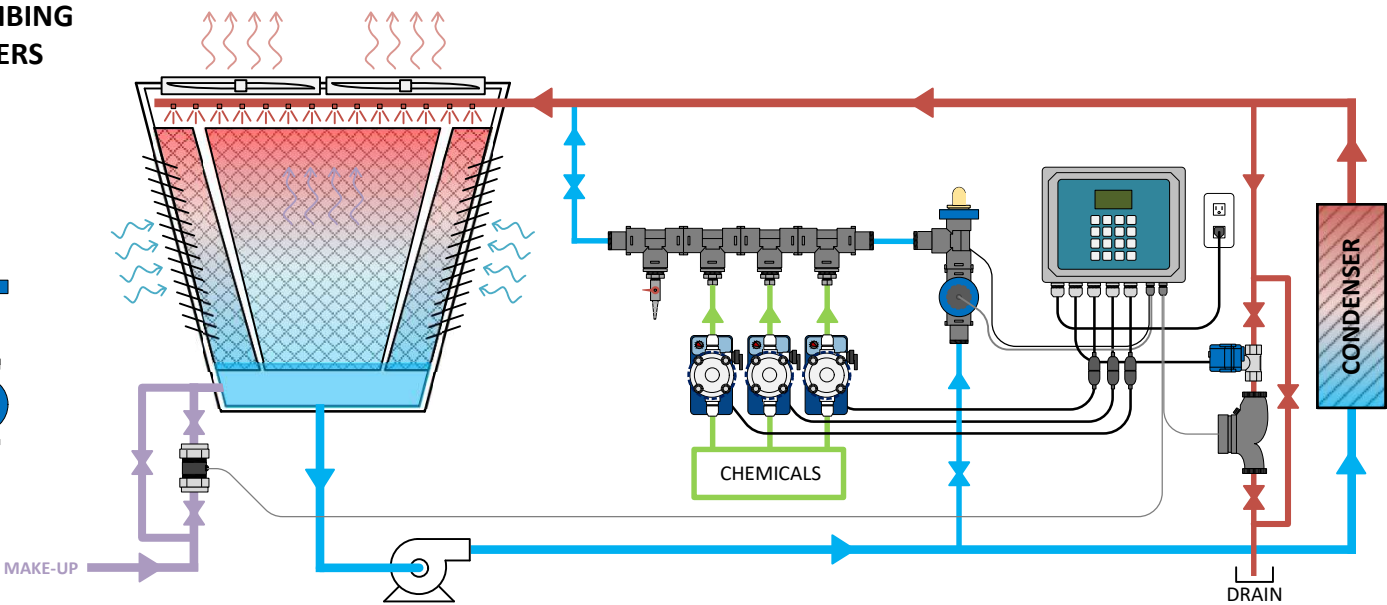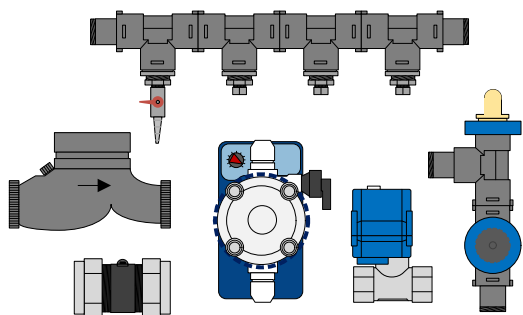
1 ATTACH THE FOUR MOUNTING FEET TO THE BACK OF THE CONTROLLER ENCLOSURE
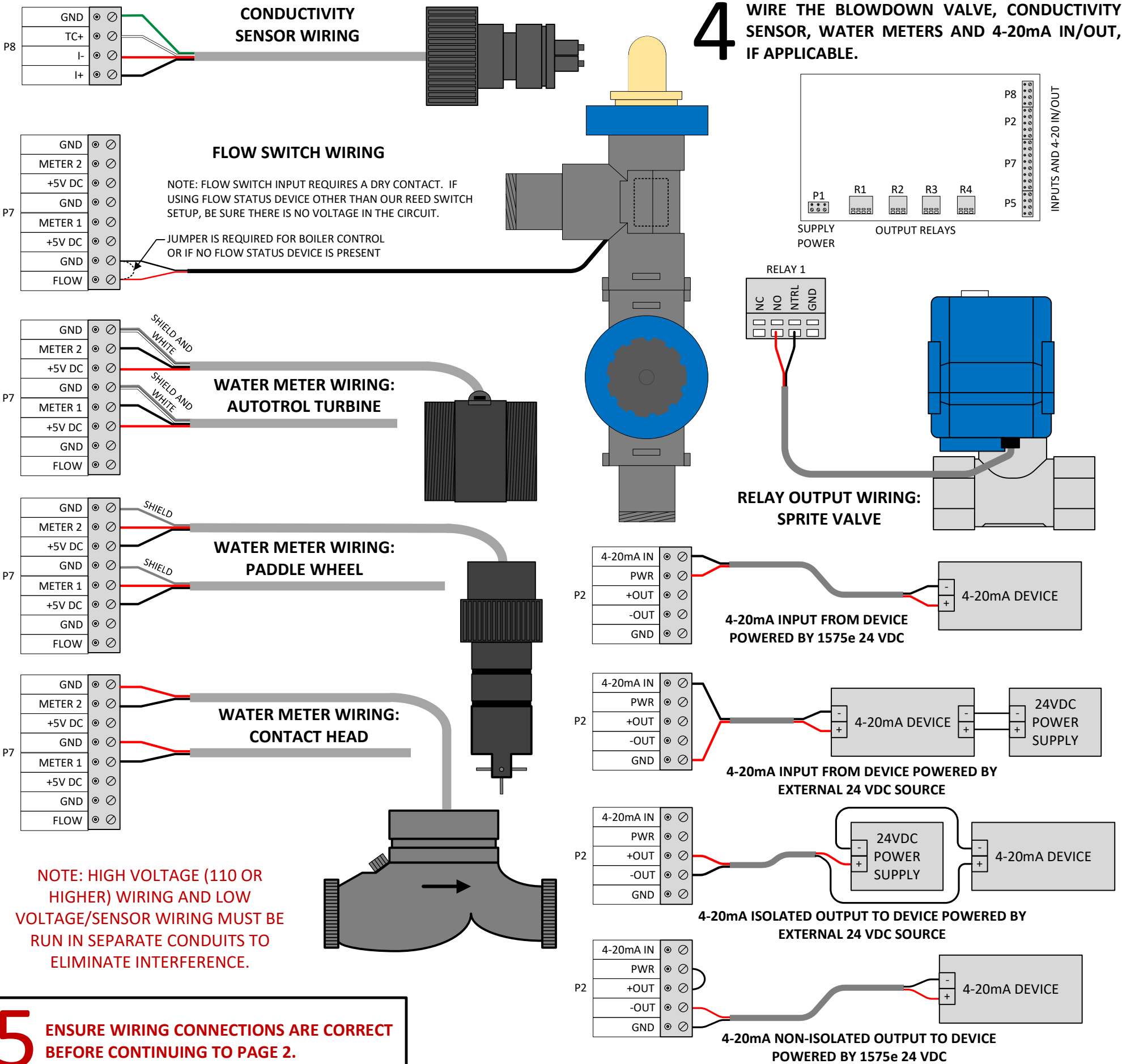
OR

2 FASTEN THE CONTROLLER TO A FLAT, NON-VIBRATING SURFACE. AVOID METAL SURFACES THAT EXPERIENCE LARGE TEMPERATURE SWINGS.

3 INSTALL BLOWDOWN VALVE, PLUMBING ASSEMBLIES, SENSOR, WATER METERS AND PUMPS, AS APPLICABLE.

CHEMICALS

MAKE-UP

DRAIN

CONDENSER

CONDUCTIVITY SENSOR WIRING

P8
- GND
- TC+
- I-
- I+

FLOW SWITCH WIRING

NOTE: FLOW SWITCH INPUT REQUIRES A DRY CONTACT. IF USING FLOW STATUS DEVICE OTHER THAN OUR REED SWITCH SETUP, BE SURE THERE IS NO VOLTAGE IN THE CIRCUIT.

JUMPER IS REQUIRED FOR BOILER CONTROL OR IF NO FLOW STATUS DEVICE IS PRESENT

P7
- GND
- METER 2
- +5V DC
- GND
- METER 1
- +5V DC
- GND
- FLOW

WATER METER WIRING: AUTOTROL TURBINE

SHIELD AND WHITE

SHIELD AND WHITE

P7
- GND
- METER 2
- +5V DC
- GND
- METER 1
- +5V DC
- GND
- FLOW

WATER METER WIRING: PADDLE WHEEL

SHIELD

SHIELD

P7
- GND
- METER 2
- +5V DC
- GND
- METER 1
- +5V DC
- GND
- FLOW

WATER METER WIRING: CONTACT HEAD

P7
- GND
- METER 2
- +5V DC
- GND
- METER 1
- +5V DC
- GND
- FLOW

NOTE: HIGH VOLTAGE (110 OR HIGHER) WIRING AND LOW VOLTAGE/SENSOR WIRING MUST BE RUN IN SEPARATE CONDUITS TO ELIMINATE INTERFERENCE.

4 WIRE THE BLOWDOWN VALVE, CONDUCTIVITY SENSOR, WATER METERS AND 4-20mA IN/OUT, IF APPLICABLE.

P8
P2
P7
P5

INPUTS AND 4-20 IN/OUT

P1
SUPPLY POWER

R1 R2 R3 R4
OUTPUT RELAYS

RELAY 1
- NC
- NO
- NTRL
- GND

RELAY OUTPUT WIRING: SPRITE VALVE

P2
- 4-20mA IN
- PWR
- +OUT
- -OUT
- GND

4-20mA DEVICE

4-20mA INPUT FROM DEVICE POWERED BY 1575e 24 VDC

P2
- 4-20mA IN
- PWR
- +OUT
- -OUT
- GND

4-20mA DEVICE   24VDC POWER SUPPLY

4-20mA INPUT FROM DEVICE POWERED BY EXTERNAL 24 VDC SOURCE

P2
- 4-20mA IN
- PWR
- +OUT
- -OUT
- GND

24VDC POWER SUPPLY   4-20mA DEVICE

4-20mA ISOLATED OUTPUT TO DEVICE POWERED BY EXTERNAL 24 VDC SOURCE

P2
- 4-20mA IN
- PWR
- +OUT
- -OUT
- GND

4-20mA DEVICE

4-20mA NON-ISOLATED OUTPUT TO DEVICE POWERED BY 1575e 24 VDC

5 ENSURE WIRING CONNECTIONS ARE CORRECT BEFORE CONTINUING TO PAGE 2.

1575e QUICK-START GUIDE – COOLING TOWER, STANDARD CONFIGURATION

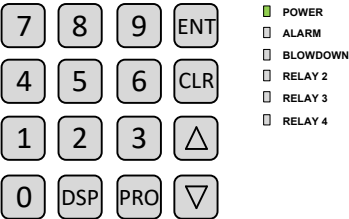## 6 APPLY POWER TO THE CONTROLLER ⚡

NOTE: ONLY PLUG INTO PROPERLY GROUNDED OUTLET—DO NOT MODIFY THE PLUG IN ANY WAY.

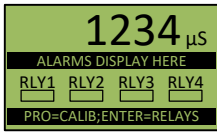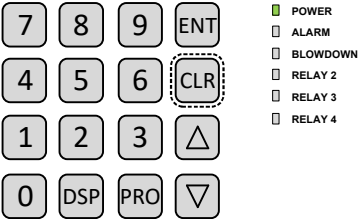NOTE: IF WIRING DIRECTLY TO CONTROLLER P1 TERMINALS, BE SURE SOURCE IS PROPERLY GROUNDED.
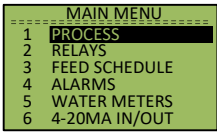
7 CONTROLLER INTERFACE

1575e CONTROLLER MUST BE PROGRAMMED TO OPERATE
PRESS ANY KEY

When the controller is first powered up, you should see this screen. Press any key to access the Process screen.

1234 μS
ALARMS DISPLAY HERE
RLY1 RLY2 RLY3 RLY4
PRO=CALIB;ENTER=RELAYS

This is the Process screen. It displays the current conductivity, relay status and any active alarms. The LED's also show relay status and if any alarms are active. Press "CLR" to access the Main Menu.

MAIN MENU
1 PROCESS
2 RELAYS
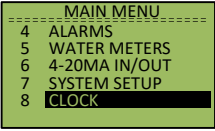3 FEED SCHEDULE
4 ALARMS
5 WATER METERS
6 4-20MA IN/OUT

This is the Main Menu. Menu items are accessed by either pressing the associated number keys or using up/down arrows to highlight the desired item and pressing "ENT" to select. Selecting #1 (PROCESS) returns you to the Process screen, shown to the left. Other menu items will be referred to in the following steps.

Note: There are two additional menu items that show up if the down arrow is pressed past #6. (#7-SYSTEM SETUP and #8-CLOCK).
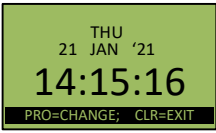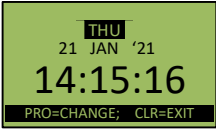
8 CHECK DATE/TIME

The controller date/time are set at the factory as part of pre-ship testing. The time is set to Central Standard Time (CST) and may require adjustment for your time zone.

MAIN MENU
4 ALARMS
5 WATER METERS
6 4-20MA IN/OUT
7 SYSTEM SETUP
8 CLOCK

From the Main Menu, press the "8" key or highlight #8 and press "ENT" to access the Clock screen.

THU
21 JAN '21
14:15:16
PRO=CHANGE; CLR=EXIT

Press the "PRO" key to change the date/time.

THU
21 JAN '21
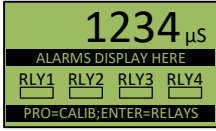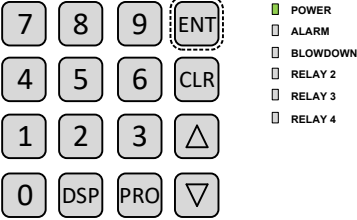**14:15:16**
PRO=CHANGE; CLR=EXIT

Use the up/down arrows to change day of week and month. Use number keys for date, year and time. Press the "ENT" key to move to the next field.

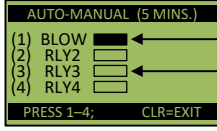Note: The "ENT" key must be pressed for all fields for any changes to be saved.
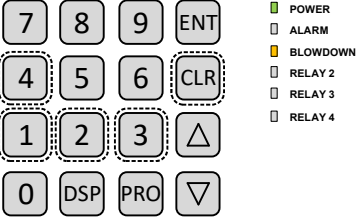
9 TEST RELAY OUTPUTS

1234 μS
ALARMS DISPLAY HERE
RLY1 RLY2 RLY3 RLY4
PRO=CALIB;ENTER=RELAYS

From the Process screen, press "ENT" to access the Relay Override screen.

AUTO-MANUAL (5 MINS.)
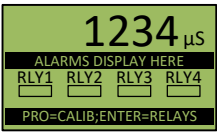(1) BLOW ■ ← Relay "ON"
(2) RLY2 □ ← Relay "OFF"
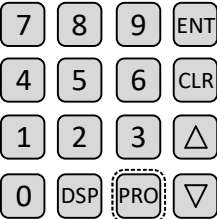(3) RLY3 □
(4) RLY4 □
PRESS 1–4; CLR=EXIT

This is the Manual Override screen. Press keys 1-4 to activate/de-activate the associated relays. Verify valve and/or pump operation. The override will automatically release after 5 minutes. Press "CLR" to return to the Process Screen.
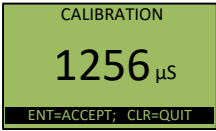
10 SENSOR CALIBRATION

1234 μS
ALARMS DISPLAY HERE
RLY1 RLY2 RLY3 RLY4
PRO=CALIB;ENTER=RELAYS

While on the Process screen, press "PRO" to access the Calibration screen.

CALIBRATION
1256 μS
ENT=ACCEPT; CLR=QUIT

This is the Calibration screen. Enter the value from your hand-held tester here.
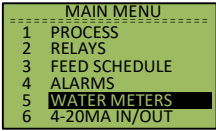
Refer to page 25 in the 1575e manual for more information.

11 CONFIGURE WATER METERS

IF NO WATER METERS ARE USED, SKIP TO STEP 12

You will need to correctly configure the water meter inputs to ensure accurate flow totals.

MAIN MENU
1 PROCESS
2 RELAYS
3 FEED SCHEDULE
4 ALARMS
5 WATER METERS
6 4-20MA IN/OUT

From the Main Menu, press the "5" key or highlight #5 and press "ENT" to access the Meter Configuration screen.
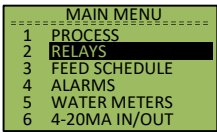
Refer to page 48 in the 1575e manual for more information.

12 CONFIGURE RELAYS

You will need to configure the blowdown relay and chemical relays.

MAIN MENU
1 PROCESS
2 RELAYS
3 FEED SCHEDULE
4 ALARMS
5 WATER METERS
6 4-20MA IN/OUT

On the main menu, press the "2" key or highlight #2 and press "ENT" to access the relay configuration screen.
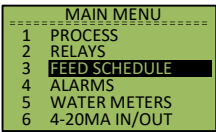
Refer to page 30 in the 1575e manual for more information.

13 SET UP FEED PUMP SCHEDULES

If any relays (2, 3 or 4) have been configured as "FEED SCHEDULE" you will need to set up one or more schedules to control them.

MAIN MENU
1 PROCESS
2 RELAYS
3 FEED SCHEDULE
4 ALARMS
5 WATER METERS
6 4-20MA IN/OUT

On the main menu, press the "3" key or highlight #3 and press "ENT" to access the Feed Schedule setup screens.

Refer to page 45 in the 1575e manual for more information.

Thank you for your purchase of this Lakewood Instruments controller.
We would like to know what features **YOU** would like to see in our next new product.

Please let us know!

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