WE / WEM Series Electric Actuator
(LCU-C) Local Control Unit - Digital Display
Discrete & Analog Inputs
Calibration Manual

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Introduction:
The Integral Control (Digital Display) LCU-C module provides local control to the WE or WEM Series electric actuators. The LCU-C module consists of two selector switches and 3 LED indicator lamps. The WE series is for two position control and the WEM series is for proportional control. The instruction manual covers both the discrete and analog input configurations.

Storage:
1. Keep conduit entries plugged
2. Store in a dry environment

Manual Operation:
Pull the lever towards the handwheel to engage the manual override. If the lever does not stay engaged, pull the lever again and rotate the handwheel at the same time. The direction of output is casted on the handwheel. The manual override will automatically disengage when the electric power is turned on and the motor starts to turn.

PLEASE DO NOT TRY TO PULL OR FORCE THE LEVER TO DISENGAGE THE MANUAL OVERRIDE.
THIS CAN DAMAGE THE LEVER SHEAR PIN.

Limit Switch Setting:
Closed Position
The limit switches can be set by rotating the actuator to the closed position with the manual handwheel and rotating the top two cams clockwise until the switch just trips. Make sure you tighten the 4mm Allen head screw that holds the cam after making the adjustments.
Open Position
To adjust the open position, manually rotate the actuator to the desired opened position with the manual handwheel and rotate the bottom two cams counterclockwise unti the switch just trips. Make sure you tighten the 4mm Allen head screw that holds the cam after making the adjustments.
Torque Switches:
The torque switches are set by the factory for the rated torque output. Adjustments to the torque switches can cause damage to the motor and gears.

Mechanical Stops:
The mechanical travel stops are for proper positioning during manual operation and provide protection for the valve/damper.
Loosen jam nuts for both the CW and CCW travel stops. Manually operate the actuator CW until the CW limit switch trips. Then turn the CW travel stop bolt (right) clockwise until the bolt touches the worm gear. Turn the travel stop bolt counter clockwise three turns and tighten the jam nut.

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Jamming:
If the actuator travels into a mechanical travel stop, the worm gear will jam. The actuator cannot be reversed electrically or manually unti the mechanical travel stop bolt is loosened. Loosen the jam nut on the mechanical travel stop bolt and then turn the bolt counter-clockwise three turns. The actuator can now operate manually once the pressure is off the worm gear. The mechanical travel stops should be recalibrated per the manual if jamming occurs.

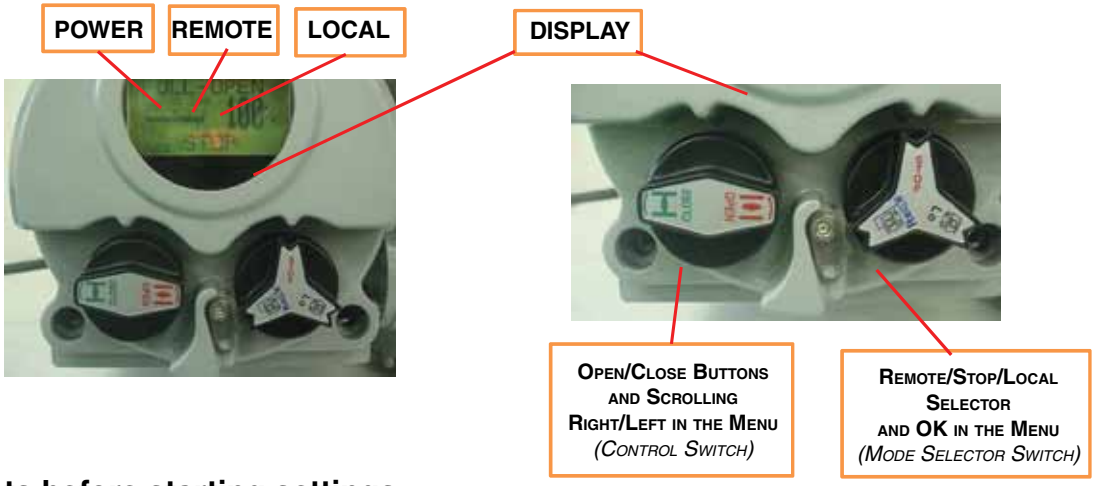
Wiring:
The wiring terminations are per the wiring diagram included with each package. The actuator should be wired and grounded in accordance with local and national electric codes. Conduit should be sealed at the actuator housing to keep water and moisture from entering the actuator. The compartment heater should be energized continuously to reduce moisture buildup.
The WE and WEM Series actuators with LCU-U module are provided with a STOP contact. The STOP contact must be closed by either a switch or jumper for the actuator to operate. The actuator will not move with a remote signal when this contact is open.
The WEM series actuators with LCU-C module are also provided with an AUTO contact. The AUTO contact must be closed by either a switch or jumper for the 4-20mA input to control the actuator. The actuator can be controlled with the open and close contact when the AUTO contact is open.

Local Control:
Local control consists of two magnetic selector switches and 3 LED indicators. Selector switches are non-intrusive and provide perfect sealing against water.
Mode Selector Switch
The selector switch on the right side of the local control decides the operating mode, and has three modes of Remote, Stop and Local. In the REMOTE mode, the actuator works according to the incoming control signal (discrete or analog) from the remote source. In the STOP mode, all command signals, regardless of local or remote are ignored and the only display status is being updated. In the LOCAL mode, the actuator works according to the signal generated by this local command of either close or open.

Command Switch
The command switch is a spring return type; it will automatically return to neutral position after generating either open or close command.

Integral Control Unit, LCU-C

I. Construction & Components of LCU-C, Integral Control Unit



Check Points before starting settings

- Confirm that the actuator is securely mounted on the valve.
- Confirm that the electric power to be supplied to the actuator is correct.
- Confirm that the calibrators are prepared and qualified for proper use.
- Confirm that all required wirings are well connected after installation.
- Confirm the DISPLAY window comes on correctly when the electric power is supplied.

A. When mechanical setting of actuator is completed, LCU-C SETTING can be started by using two switches.

B. Understanding the functions of switches

1) OPEN/CLOSE SELECTOR SWITCHES (Control Switch)

i. OPEN SWITCH is to move cursor down or right on the DISPLAY WINDOW.

ii. CLOSE SWITCH is to move cursor up or to add number value on the DISPLAY WINDOW.

2) REMOTE/STOP/LOCAL SWITCH (Mode Selector Switch)

i. REMOTE SWITCH is to begin the required setting or save the setting value on the DISPLAY WINDOW. After setting, Selector switch must be returned to a STOP position.

ii. LOCAL SWITCH is to cancel the setting or move to the menu. After using this switch, Selector switch must be back to the STOP position.

C. After learning the functions of the two selector switches of LCU-C, choose your setting.

Calibration

- The actuator will come calibrated from the factory. This procedure only needs to be performed if a change to the default settings is required. The digital display will provide critical information when electric is applied to the actuator. The display will show the actuator position, actuator state and control state.

II. How to set LCU-C

A. Please confirm the DISPLAY window first

Display upon connecting electricity

Display within 2-3 seconds of connecting electricity

1) When the electricity is connected, the initial screen shows up and then the standard screen appears in 2-3 seconds.

2) In the case of 3 Phase electricity, RV mark can be shown on the bottom left screen when R, S, T wires are connected in reverse.

3) LCU-C unit has an automatic phase correction function. Actuator will correct wrong wiring automatically, and will operate normally. But, two of three wires will be shifted after cutting the electricity to protect against any unexpected problems to other equipment. Check to see if the RV mark appears again.

When three wires are connected in reverse, **RV** *flashes*

B. Get to the SETTING MODE.

1) Place Mode selector switch at STOP

Display changes to STOP

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2) Turn the Control Switch up to OPEN and hold it for about 3 seconds. The display shows SET in 3 seconds (Switch comes back automatically)

Display changes from STOP to SET in 3 seconds

*NOTE: Control Switch must be turned up and held to OPEN and CLOSE direction without pause. Display may return to former display if there is a pause.

3) Turn the Control Switch up to the CLOSE position and hold it for 3 seconds. Display will show SETUP MODE. (Control switch comes back automatically).

While holding the control switch up at CLOSE for about 3 seconds, Display shows SETUP MODE

4) Place Mode Selector Switch at REMOTE, then ENTRY SET display appears.

5) Place Mode Selector Switch at STOP; Main Menu displays.

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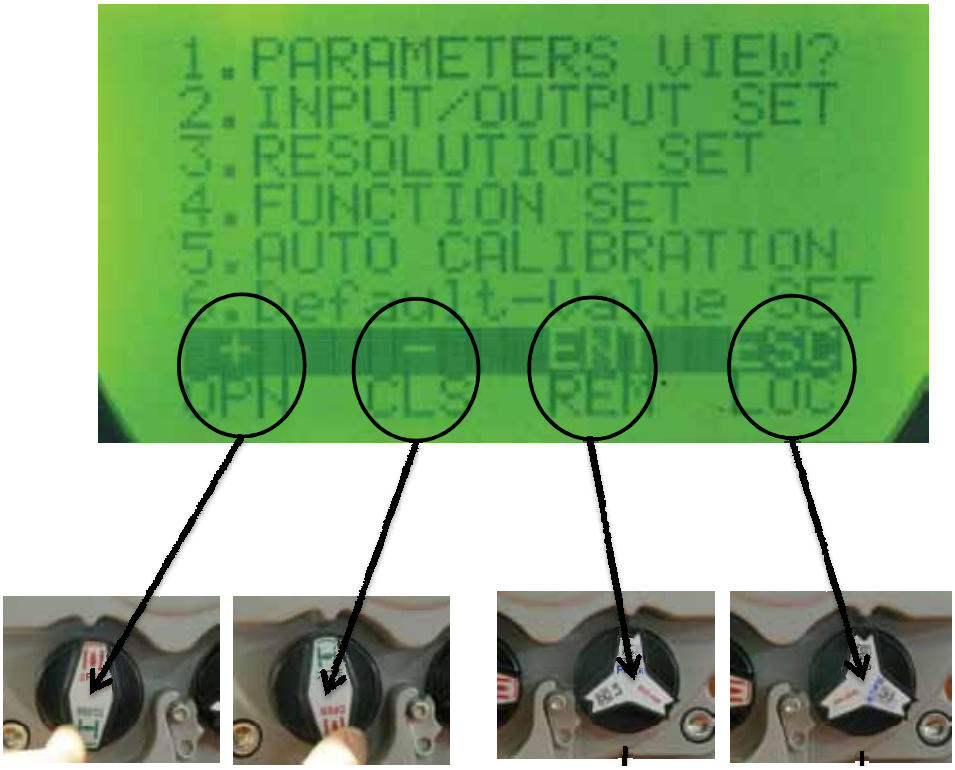
C. SETTING

SET (MAIN MENU) Screen

- Six setting modes are shown on the main menu screen



1) **PARAMETERS**

i. PARAMETERS mode shows the existing setting conditions of the actuator

ii. To select the PARAMETERS mode, place the cursor in front of 1. PARAMETERS VIEW and place Mode Selector Switch at REMOTE. SETUP MODE display appears. After checking the SETUP MODE screen, place Mode Selector Switch back to STOP to select.

iii. After selecting, you can check the current setting conditions, and then go back to the main menu by placing the Mode Selector Switch at LOCAL (SETUP MODE appears) and move Mode Selector Switch to STOP again.

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2) **INPUT/OUTPUT SET**

i. INPUT/OUTPUT SET is the mode to set FEEDBACK signal to the actuator.

ii. To select INPUT/OUTPUT SET, place the cursor in front of 2. INPUT/OUTPUT SET on the main menu using the Control S/W. Place the Mode Selector Switch at REMOTE and SETUP MODE display appears. After checking the SET STOP screen, replace the Mode Selector Switch back to STOP.

iii. When selecting INPUT/OUTPUT SET, you will see three sub menus as below.

1. ***INPUT TYPE SET***

a. First select INPUT/OUTPUT SET Mode

b. Place cursor in front of 1. INPUT TYPE SET on the display by CONTROL SWITCH. Place Mode Selector Switch to REMOTE then SETUP MODE display appears. After checking SET STOP screen, replace Mode Switch back to STOP to get to 1. INPUT TYPE SET mode.

c. Choose the required INPUT signal using the Control Switch.

d. Signal types available are as below.

- 4-20mA
- 0-5V
- 1-5V
- 0-10V
- 2-10V

e. 4-20mA signal is set in the control card as a standard signal at the factory. If different signals are wanted, users must change DIP SWITCH SETTING in the control card (refer to ***5) iv.***) IN/OUT CALIBRATION DIP S/W

f. Place cursor in front of desired signal type by Control Switch. Place the Mode Switch at REMOTE and SETUP MODE display appears. After checking the SETUP MODE screen, replace the Mode Switch back to STOP to go to INPUT/OUTPUT SET menu.

2. ***OUTPUT TYPE SET***

a. First select INPUT/OUTPUT SET Mode

b. Place cursor in front of 2. OUTPUT TYPE SET on the display by Control Switch. Place Mode Selector Switch to REMOTE then SETUP MODE display appears. After checking SET STOP screen, replace Mode Switch back to STOP to get to OUTPUT TYPE SET mode.

c. Choose the required output signal by Control Switch.

d. Output signals available are as below.

- 4-20mA
- 0-5V
- 1-5V
- 0-10V
- 2-10V

e. 4-20mA signal is set in the control card as a standard signal at the factory. If different signals are wanted, users must change DIP SWITCH SETTING in the control card (refer to ***5) iv.***) IN/OUT CALIBRATION DIP S/W SELECTION

f. Place cursor in front of desired signal type by Control Switch. Place the Mode Switch at REMOTE and SETUP MODE display appears. After checking the SETUP MODE screen, replace the Mode Switch back to STOP to go to INPUT/OUTPUT SET menu.

3. ***IN/OUT REV SET***

a. First select INPUT/OUTPUT SET Mode

b. Place cursor in front of 3. IN/OUT REV SET on the display by Control Switch. Place Mode Selector Switch to REMOTE then SETUP MODE display appears. After checking, replace Mode Switch back to STOP to get to IN/OUT REV SET mode.

c. IN/OUT REV SETTING MODE is to be used when you want to change FEEDBACK signal from normal to REVERSE.

- INPUT/OUTPUT SIGNAL in Normal mode.
  1. FULL CLOSE . . . . . 4 mA
  2. FULL OPEN . . . . . 20 mA
- INPUT/OUTPUT SIGNAL in Reverse mode.
  1. FULL CLOSE . . . . . 20 mA
  2. FULL OPEN . . . . . 4 mA

d. Place the cursor in front of the required mode by Control Switch. Place the Mode Switch at REMOTE and SETUP MODE display appears. After checking, replace the Mode Switch back to STOP to go to INPUT/OUTPUT SET menu.

4. If the required settings are complete, use the following procedure to go to the main menu.

5. Place Mode Switch at LOCAL, the SETP MODE display appears. Place Mode Switch back to STOP to get to the main menu.

****ATTENTION: If IN/OUT REV SET was changed, range calibration must be re-conducted as mentioned in section 5) CALIBRATION.**

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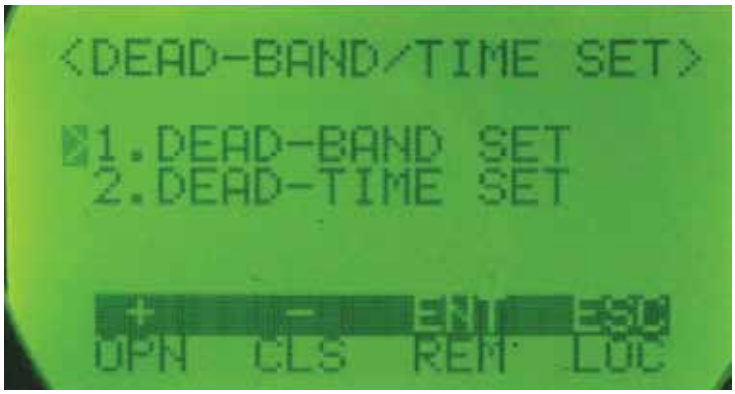
3) **RESOLUTION SET**



i. RESOLUTION SET MODE is to set DEAD BAND and DEAD TIME of the actuator

ii. To select DEAD BAND/TIME SET, place the cursor in from of 3. RESOLUTION SET on the main menu by operating Control Switch. Place Mode Switch at REMOTE and SETUP MODE display appears. After checking, place Mode Switch back to STOP and select RESOLUTION SET stage.

iii. ***DEAD BAND SET***

1. Select DEAD BAND/TIME SET mode
2. Place cursor in front of 1. DEAD BAND SET and place Mode Switch at REMOTE; then SETUP MODE display appears. After checking the display, replace Mode Switch at STOP to get to PRESET DEAD BAND mode.
3. OPEN(->) direction of Control Switch is to move a cipher, CLOSE(+) direction is to set the required value setting.

4. Resetting range is from 0.2%-7.5% (Factory setting: 1.5%)
5. After setting, place Mode Switch to REMOTE, then SETUP MODE displays
6. After checking, place Mode Switch back to STOP. Users can go back to DEAD BAND/TIME SET mode.

iv. ***DEAD TIME SET***

1. From DEAD BAND/TIME SET mode,
2. Place the cursor in front of 1. DEAD TIME SET. After checking the display, replace Mode Switch at STOP to get to PRESET DEAD TIME mode.
3. OPEN(->) direction of Control Switch is to move a cipher, CLOSE(+) direction is to set the required value setting.
4. Resetting range is from 0.5 sec-12.5 sec (Factory setting: 2.0 sec)
5. After setting, place Mode Switch to REMOTE, then SETUP MODE displays
6. After checking, place Mode Switch back to STOP. Users can go back to DEAD BAND/ TIME SET mode.

v. If the required settings are complete, use the following procedure to go to the main menu.

vi. Place Mode Switch at LOCAL, the SETUP MODE display appears. Place Mode Switch back to STOP to get to the main menu.

4) **FUNCTION SET**

i. FUNCTION SET MODE is to set various functions of actuators.

ii. Place the cursor in front of 4. FUNCTION SET on the main menu by operating Control Switch. Place Mode Switch at REMOTE and SETUP MODE display appears. After checking, place Mode Switch back to STOP , then FUNCTION SET is displayed as above.

iii. ***ESD SET***

1. From the FUNCTION SET mode screen
2. Place the cursor in front of 1. ESD SET. Place Mode Switch at REMOTE; then SETUP MODE display appears. After checking the display, replace Mode Switch to STOP to get to ESD TYPE SET mode.
3. ESD (Emergency Shut Down) TYPE SET is to set the direction of the actuator in case of emergency.

a. STOP . . . . .set actuator at current position in emergency
b. FULL CLOSE . . . . . set actuator to FULL CLOSE
c. FULL OPEN . . . . . set actuator to FULL OPEN
d. NOT USED . . . . . choose not to use ESD function

***When ESD function is set, ACTUATOR moves to set position during emergency when REMOTE mode is selected.*
NOTE: Actuator will stop when motor thermal, or torque switch is activated. If Mode Switch is located at STOP or LOCAL, ESD command will not be accepted.

4. Place cursor in front of one of the menus by operating Open/Close Control Switch and place Mode Selector Switch at REMOTE, then SETUP MODE display appears. (ESD set completed). Next, place Mode Switch back to STOP again, and then go back to FUNCTION SET MODE.

iv. ***HOLD/INCHING SET***

1. From FUNCTION SET mode,
2. Place the cursor in front of 2. HOLD/INCHING SET. Place Mode Switch at REMOTE and SETUP MODE appears. After checking the display, replace Mode Switch at STOP to get to HOLD/INCHING SET display.

3. To control the actuator locally, Operators can choose one of the local control modes, Holding or Inching, by Open/Close Control Switch.
   a. HOLD MODE – Actuator will move in the OPEN or CLOSE direction to the end of travel. (Momentary Mode)
   b. INCHING MODE – Actuator will move in the OPEN or CLOSE direction while Control Switch is being held. (Maintained Mode)
4. Place the cursor in front of the desired control mode by Open/Close Control Switch. Place Mode Switch at REMOTE, then SETUP MODE display appears. Check, then place Mode Selector Switch to STOP again, then FUNCTION SET display appears again.

v. ***SIG-FAIL TYPE SET***

1. From FUNCTION SET mode,

2. Place the cursor in front of 3. SIG-FAIL TYPE SET. Place Mode Switch at REMOTE and SETUP MODE appears. After checking the display, replace Mode Switch at STOP; IN-SIGNAL FAIL SET displays.
3. IN-SIGNAL FAIL SET is to customize how the actuator will operate when input signal is cut or if incorrect signal is supplied.
   a. STOP – to stop actuator movement when signal fails
   b. FULL OPEN – to move actuator in FULL OPEN position
   c. FULL CLOSE – to move actuator in FULL CLOSE position
4. Place the cursor in front of the desired control mode by Open/Close Control Switch. Place Mode Switch at REMOTE, then SETUP MODE display appears. Check, then place Mode Selector Switch to STOP again, then FUNCTION SET display appears again.

vi. ***RELAY CONTACT SET***

1. From FUNCTION SET mode,

2. Place the cursor in front of 4. RELAY CONTACT SET. Place Mode Switch at REMOTE and SETUP MODE appears. After checking the display, replace Mode Switch at STOP to go to OUT-RELAY SELECT mode.
3. OUT-RELAY SELECT Mode is to confirm the actuator conditions remotely through RELAY CONTACT.

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vii. ***SIG-FAIL RELAY***

1. SIG-FAIL RELAY Mode is to inform the failure of INPUT SIGNAL by using RELAY CONTACT
2. FROM the OUT-RELAY MODE, place the cursor in front of SIG-FAIL RELAY. Place Mode Switch at REMOTE, then SETUP MODE appears.
3. After checking, place Mode Switch at STOP, then SIG-FAIL CONTACT mode appears as shown.

   a. A Contact (NORMAL OPEN) – Contact is OFF normally.
   b. B Contact (NORMAL CLOSE) – Contact is ON normally.
   **When Signal is Failed, A contact is ON, B contact is OFF.
4. Place the cursor where desired, using the CONTROL SWITCH. Place Mode Switch at REMOTE, SETUP MODE appears. Check, then place Mode Switch at STOP again to get to OUT RELAY SELECT.

viii. ***FAULT RELAY***

1. FAULT RELAY Function is to activate CONTACTS when a fault such as over-torque, power fail, etc. occurs
2. From OUT RELAY SELECT Mode, place the cursor in front of 2. FAULT RELAY, and place Mode Switch at REMOTE until SETUP Mode appears.
3. After checking, Place Mode Switch to STOP again to enter FAULT-RLY CONTACT Mode.

   a. A Contact (NORMAL OPEN) – A contact is ON normally
   b. B Contact (NORMAL CLOSE) – B contact is ON normally
4. Place cursor where desired by Control Switch. Place Mode Switch at REMOTE until SETUP Mode appears. Check, then place Mode Switch to STOP again to get to OUT RELAY SELECT Mode.

ix. ***OPENING RELAY***

1. OPENING RELAY function is to give signals of Relay Contact constantly while Actuator is moving in direction of operation.
2. On the OUT RELAY SELECT menu place the cursor in front of 3. OPENING RELAY using the Control Switch until SETUP MODE appears.
3. After checking, place Mode Switch at STOP again, then OPEN-RLY CONTACT Mode comes on.

   a. A Contact (NORMAL OPEN) – A contact is OFF normally. A contact is ON when actuator is opening.
   b. B Contact (NORMAL CLOSE) – B contact is ON normally. B contact is OFF when actuator is opening.
4. Place the cursor where desired using Control Switch. Place Mode Switch to REMOTE, SETUP Mode appears, then switch back to STOP to go back to OUT-RELAY SELECT mode screen.

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x. ***CLOSING RELAY***

1. CLOSING RELAY function is to consistently give signals of Relay Contact while actuator is moving in direction of operation.
2. From the OUT-RELAY SELECT menu, place the cursor in front of 4. CLOSING RELAY using the Control Switch. SETUP MODE appears.
3. Place Mode Switch at STOP again, then CLOSE-RLY CONTACT mode appears.
   - A Contact (NORMAL OPEN) - - A contact is normally OFF; it is ON when actuator is closing.
   - B Contact (NORMAL CLOSE) - - B contact is normally ON; it is OFF when actuator is closing.
4. Place the cursor in front of Users' preference using the Control Switch. Place Mode Switch at REMOTE, then Setup Mode appears. Place Mode Switch at STOP again, then Users can return to OUT-RELAY SELECT mode.

xi. ***REMOTE-MODE RELAY***

1. REMOTE-MODE RELAY function is to activate Relay and inform Users the status of Relay Contact Signal when Mode Switch is placed at REMOTE.
2. From the OUT RELAY SELECT menu, place the cursor in front of 5. REMOTE-MODE RELAY. Place Mode Switch at REMOTE to get to Setup Mode.
3. Place Mode Switch back to STOP, then select REMOTE-RLY CONTACT.
   - A Contact (NORMAL OPEN) - - A contact is normally OFF and changes to ON when REMOTE is operating.
   - B Contact (NORMAL CLOSE) - - B contact is normally ON and changes to OFF when REMOTE is operating.
4. Place the cursor in front of Users' preference using the Control Switch. Place Mode Switch at REMOTE, then Setup Mode appears. Place Mode Switch at STOP again, then to OUT-RELAY SELECT mode.

**After all settings are complete, Users will return to the Main Menu. To return to the Main Menu, place Mode Switch at LOCAL, then Setup Mode appears. Place Mode Switch back to STOP again, then the main menu will appear again.*

5) CALIBRATION

i. The CALIBRATION function sets the range of the ACTUATOR movement, and INPUT/OUTPUT signal.

ii. To select CALIBRATION, place the cursor in front of 5. CALIBRATION on the main menu. Place Mode Switch at REMOTE, then Setup Mode appears. Place Mode Switch at STOP, then CALIBRATION menu appears.

iii. ***RANGE CALIBRATION***

1. From the CALIBRATION Mode
2. Place the cursor in front of 1. RANGE CALIBRATION. Place Mode Switch at REMOTE, then Setup Mode appears. Next, place Mode Switch at STOP, then RANGE CALI mode appears.

DISPLAY screen is changed as above by calibrating itself

3. When entering into CALIBRATION, the ACTUATOR itself automatically operates to FULL ACTUATOR
4. When setting is complete, “UPDATE OK” is displayed and Main Menu returns automatically.
5. In order to escape from this menu, place Mode Switch at LOCAL and then STOP.

*****Attention: RANGE CALIBRATION must be re-set when IN/OUT REV SET of “2) INPUT/OUTPUT SET” is changed.***

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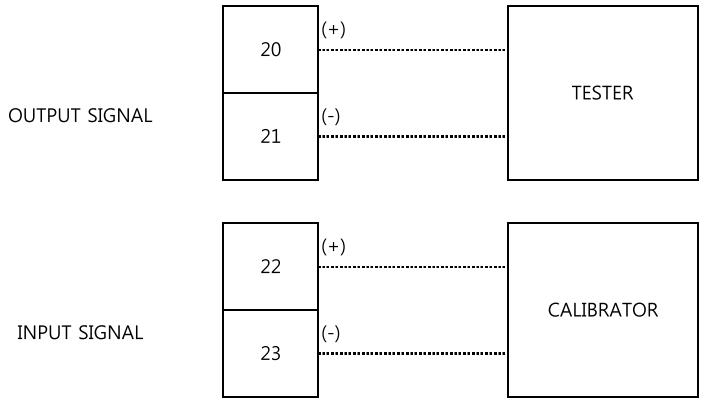
iv. ***INOUT CALIBRATION***

1. From the CALIBRATION Mode
2. Place the cursor in front of 2. IN/OUT CALIBRATION on the screen. Place Mode Switch at REMOTE, then Setup Mode is shown. Verify and place Mode Switch at STOP again to go to IN/OUT CALIBRATION.

3. IN/OUT CALIBRATION MODE is to set the value of the feedback signal, input and output by current or voltage.
4. After making sure all required wirings are well connected between the actuator & Panel (control room), begin the setting by making a good communication with the panel (control room).
5. If needed, you may set by measuring equipment without wirings between the actuators and panel. Make jumpers of #1, #2, and #4 on terminal chamber and start setting by using qualified measuring equipment.

Wiring Connection when using testing equipment for setting.



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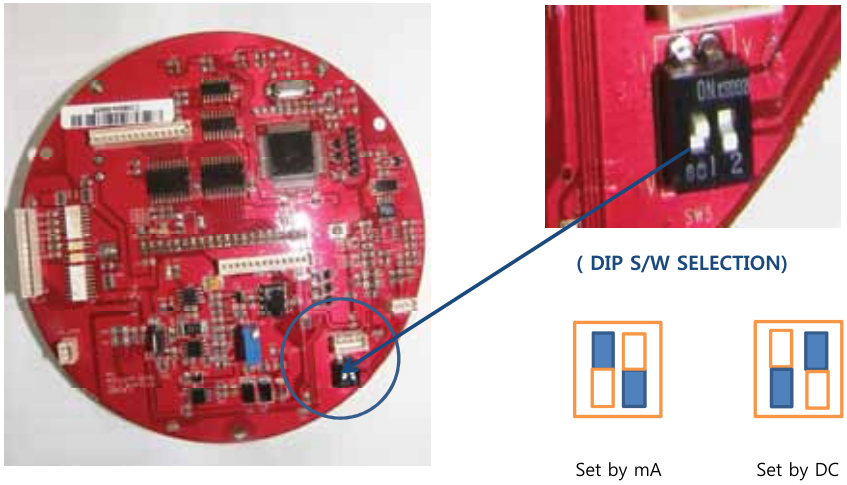
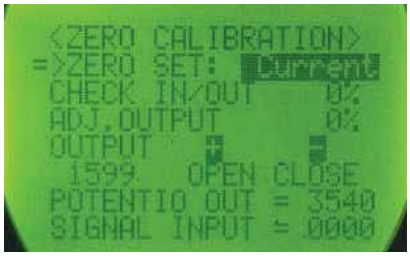
6. Before choosing the type of signal of current or voltage, be sure to set the DIP switch on the Control card built inside the actuator.



Above picture shows DIP switch set by mA.

7. 4-20mA is required for INPUT/OUTPUT signal.



a. Adjust DIP Switch for mA INPUT/OUTPUT signal (DIP Switch set: #1(input) ON, #2(output) OFF)

b. Input 4-20mA (SPAN) to the actuator using the calibrator.

c. When the actuator movement is finished, using a tester, check to see if the output value is 20mA, matching the input value.

d. If the output value does not coincide with 20mA input value, adjust the output value using Open/Close Control switch.

e. When the output value coincides with 20mA input, place Mode Switch at REMOTE and back to STOP, then Calibration is set. Proceed to the next step.

f. Input 4-20mA (ZERO) to the actuator using the calibrator.

g. When the actuator movement is finished, check the input value of 4mA using the tester.

h. If the output value does not coincide with 4mA input value, adjust the output value using the Open/Close Control Switch.

i. When the output value coincides with the input value, place Mode Switch at REMOTE, and to STOP again, then it is set and will return to the former menu.

***If cancellation is required, place Mode Switch at LOCAL, and turn to STOP again. Former menu returns.**

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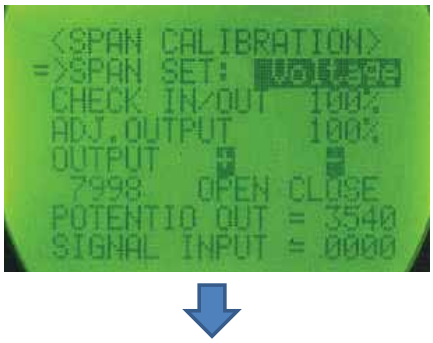
8. 0-10V is required for INPUT and OUTPUT SIGNAL
   a. Adjust and set DIP S/W for DC voltage. (DIP S/W set: #1(input) OFF, #2(output) ON.



   b. Input 10V (SPAN) to the actuator using a VOLTAGE calibrator.
   c. When actuator movement is finished, check if the output value is 10V, matching the input value, using a tester.
   d. If the output value does not coincide with the 10V input value, adjust the output value using the Open/Close Control Switch.
   e. If the output value does coincide with 10V input, place Mode Switch at REMOTE and to STOP again. Calibration is set; proceed to the next step.

   f. Input 0V (ZERO) to the actuator using a VOLTAGE calibrator.
   g. When the actuator movement is finished, check if the output value is 4V, matching the input value, using a tester.
   h. If the output value does not coincide with the 4V input value, adjust the output value using the Open/Close Control Switch.
   i. When the output value does coincide with the input value, place Mode Switch at REMOTE and then to STOP again. Then it is set and will return to the former menu.

***If cancellation is required, place Mode Switch at LOCAL, and turn to STOP again. Former menu returns.**

**** In case of using other voltage signals like 0-5V, 1-5V, 2-10V, use the above operating sequence.**

6) DEFAULT VALUE SET

i. DEFAULT-VALUE SET is used to reset all value changes to factory settings except

INPUT/OUTPUT current and voltage.

ii. To select DEFAULT-VALUE SET, place the cursor in front of 6. DEFAULT-VALUE SET. Place Mode Switch at REMOTE, then SETUP MODE appears. Confirm, then place Mode Switch at STOP to select DEFAULT-VALUE SET

iii. Once selected, the above screen appears.

iv. In order to reset to initial factory value settings (default-value set); place Mode Switch at REMOTE (ACCEPT) and place Mode Switch at STOP.

v. To keep the changed value settings, place Mode Switch at LOCAL (CANCEL) and to STOP again, returning to the Main Menu.

※ Factory initial values are as below.

MAIN MENU	SUB. MENU		INITIAL VALUE
INPUT/OUTPUT SET	INPUT TYPE SET		4 ~ 20mA
	OUT PUT SET		4 ~ 20mA
	IN/OUT REV SET		NORMAL MODE
RESOULUTION SET	DEAD-BAND SET		1.50%
	DEAD-TIME SET		2.0 sec
FUNCTION SET	ESD TYPE SET		STOP
	HOLD/INCHING SET		HOLD MODE
	SIG-FAIL TYPE SET		STOP
	RELAY CONTACT SET	SIG-FAIL RELAY	A(NORMAL OPEN)
		FAULT RELAY	A(NORMAL OPEN)
		OPENING RELAY	A(NORMAL OPEN)
		CLOSING RELAY	A(NORMAL OPEN)
		REMOTE-MODE RELAY	A(NORMAL OPEN)

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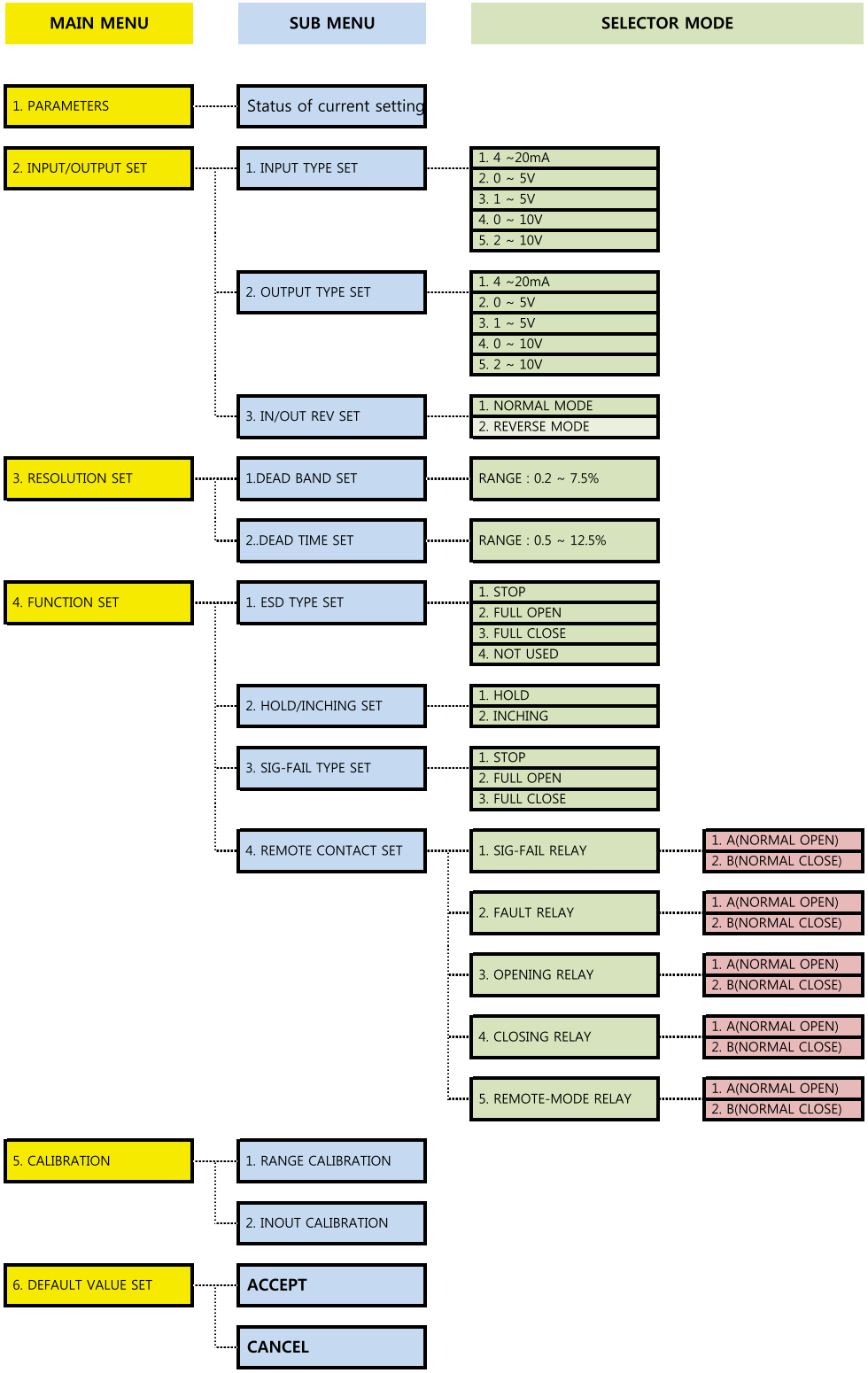
6. LCU - C PROGRAM FLOW CHART



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