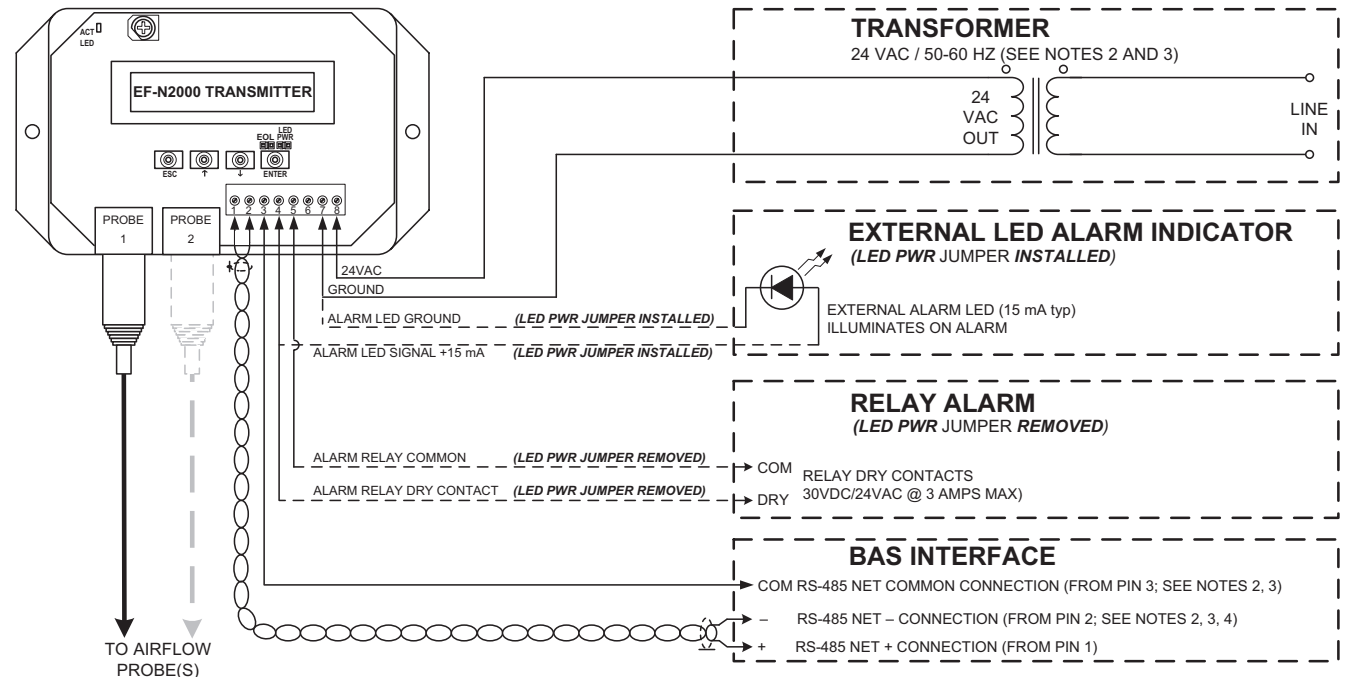




EF-N2000-U TYPICAL WIRING DIAGRAM

- | | |
|---------------------------------|-------------------------------|
| LED PWR JUMPER INSTALLED | LED PWR JUMPER REMOVED |
| 1: + RS-485 + CONNECTION | 1: + RS-485 + CONNECTION |
| 2: - RS-485 - CONNECTION | 2: - RS-485 - CONNECTION |
| 3: RS-485 COMMON | 3: RS-485 COMMON |
| 4: ALARM LED ANODE (+15mA) | 4: ALARM RELAY DRY CONTACT |
| 5: NO CONNECTION | 5: ALARM RELAY COMMON |
| 6: BI | 6: BI |
| 7: 24V GROUND | 7: 24V GROUND |
| 8: 24VAC POWER IN | 8: 24VAC POWER IN |



- NOTES:**
- CONNECT OUTPUT SIGNAL CABLE DRAINS TO EARTH GROUND AT ONE END OF CABLE ONLY.
 - EF-N2000 IS A NON-ISOLATED DEVICE USING A HALF-WAVE RECTIFIER ON THE 24VAC POWER INPUT. IF MULTIPLE DEVICES ARE POWERED BY THE SAME TRANSFORMER OUTPUT, ALL GND CONNECTIONS MUST BE COMMON, OR AN ISOLATION TRANSFORMER MUST BE USED TO PREVENT EQUIPMENT DAMAGE.
 - ALL DEVICES ON MULTIPLE EF-N2000 INSTALLATIONS WITH A COMMON POWER 24VAC SOURCE MUST BE WIRED IN-PHASE TO THE SAME TERMINALS (PIN 7 TO PIN 7, PIN 8 TO PIN 8).
 - RS-485 SHIELDED TWISTED PAIR (STP) WIRING (SUPPLIED BY OTHERS) IS RECOMMENDED FOR NETWORK CONNECTIONS.
 - NETWORK CONNECTIONS MUST BE MADE IN A DAISY CHAIN CONFIGURATION. T-CONNECTIONS AND STUBS ARE NOT PERMITTED.
 - WHEN EF-N2000 IS WIRED AS THE LAST DEVICE ON A NETWORK, APPLY JUMPER ACROSS EOL JUMPER TERMINALS.

EF-N2000-U SINGLE MODE BACNET OBJECTS AND MODBUS REGISTER MAP

EF-N2000-U (Single Mode) BACnet Objects

Analog Inputs	
Type_ID	Name
Device	EF-N2000
AI_1	Airflow
AI_2	Temperature
AI_3	Alarm Status: 0=No alarm, 1=High Alarm, 2=Low Alarm, 3=Both

Analog Values and Binary Outputs	
AV	BO
AV_1	Duct Area
AV_3	Traverse Status: 0=None, 1=Flow, 2=Temp, 3=Both
AV_4	Flow Ins 1
AV_5	Flow Ins 2
AV_6	Temp Ins 1
AV_7	Temp Ins 2
BO_1	Relay

Notes:

- Number of AV objects is dependent on the probe count.
- User Executed Services Supported:
Subscribe COV, Read Property, Write Property, Device Communication Control, Who-Is.

EF-N2000-U (Single mode) Modbus Register Map

Function	Address	Type	Units	Description	Range/Value
2	10001	boolean		Trouble Status	0:OK, 1:Trbl
4	30001-30002	float	FPM	Average Airflow	0 to 3,000
4	30003-30004	float	°F	Average Temp	-20 to 160
4	30005-30006	float	Sq.Ft	Duct Area	0 - 999.99
4	30007-30008	float	FPM	Insert 1 Flow	0 - 3,000
4	30009-30010	float	FPM	Insert 2 Flow	0 - 3,000
4	30011-30012	float	°F	Insert 1 Temp	-20 to 160
4	30013-30014	float	°F	Insert 2 Temp	-20 to 160
4	30101	word		Alarm Status	0: No alarm 1: High Alarm 2: Low Alarm 3: Both
4	30148	word		Firmware Revision	
4	300202	word		Float word order. Writeable	0: high word first; 1: low word first

EF-N2000-U DUAL MODE BACNET OBJECTS AND MODBUS REGISTER MAP

EF-N2000-U (Dual Mode) BACnet Objects

Analog Inputs

Type, ID	Name
Device	EF-N2000
AI, 1	Airflow 1
AI, 2	Airflow 2
AI, 3	Temperature 1
AI, 4	Temperature 2
AI, 5	Alarm Status: 0=No alarm, 1=High Alarm, 2=Low Alarm, 3=Both

Analog Values and Binary Outputs

AV, BO	Name
AV, 1	Duct Area 1
AV, 2	Duct Area 2
AV, 3	Traverse Status: 0=None, 1=Flow, 2=Temp, 3=Both
AV, 4	Flow Ins 1
AV, 5	Flow Ins 2
AV, 6	Temp Ins 1
AV, 7	Temp Ins 2
BO, 1	Relay

Notes:

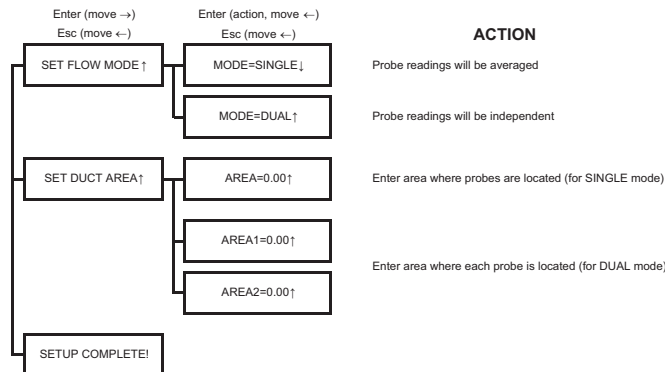
- Number of AV objects is dependent on the probe count.
- User Executed Services Supported:
Subscribe COV, Read Property, Write Property,
Device Communication Control, Who-Is.

EF-N2000-U (Dual Mode) Modbus Register Map

Function	Address	Type	Units	Description	Range/Value
2	10001	boolean		Trouble Status	0:OK, 1:Trbl
4	30001-30002	float	FPM	Flow 1	0 to 3,000
4	30003-30004	float	FPM	Flow 2	0 to 3,000
4	30005-30006	float	°F	Temperature 1	-20 to 160
4	30007-30008	float	°F	Temperature 2	-20 to 160
4	30009-30010	float	Sq.Ft	Duct Area 1	0 to 999.99
4	30011-30012	float	Sq.Ft	Duct Area 2	0 to 999.99
4	30101	word		Alarm Status	0: No alarm 1: High Alarm 2: Low Alarm 3: Both
4	30148	word		Firmware Revision	
4	300202	word		Floating word order. Writeable	0: high word first; 1: low word first

SETUP WIZARD MENU

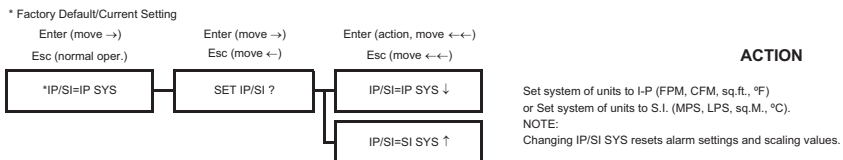
SETUP WIZARD



SYSTEM OF UNITS MENU

SYSTEM OF UNITS MENU

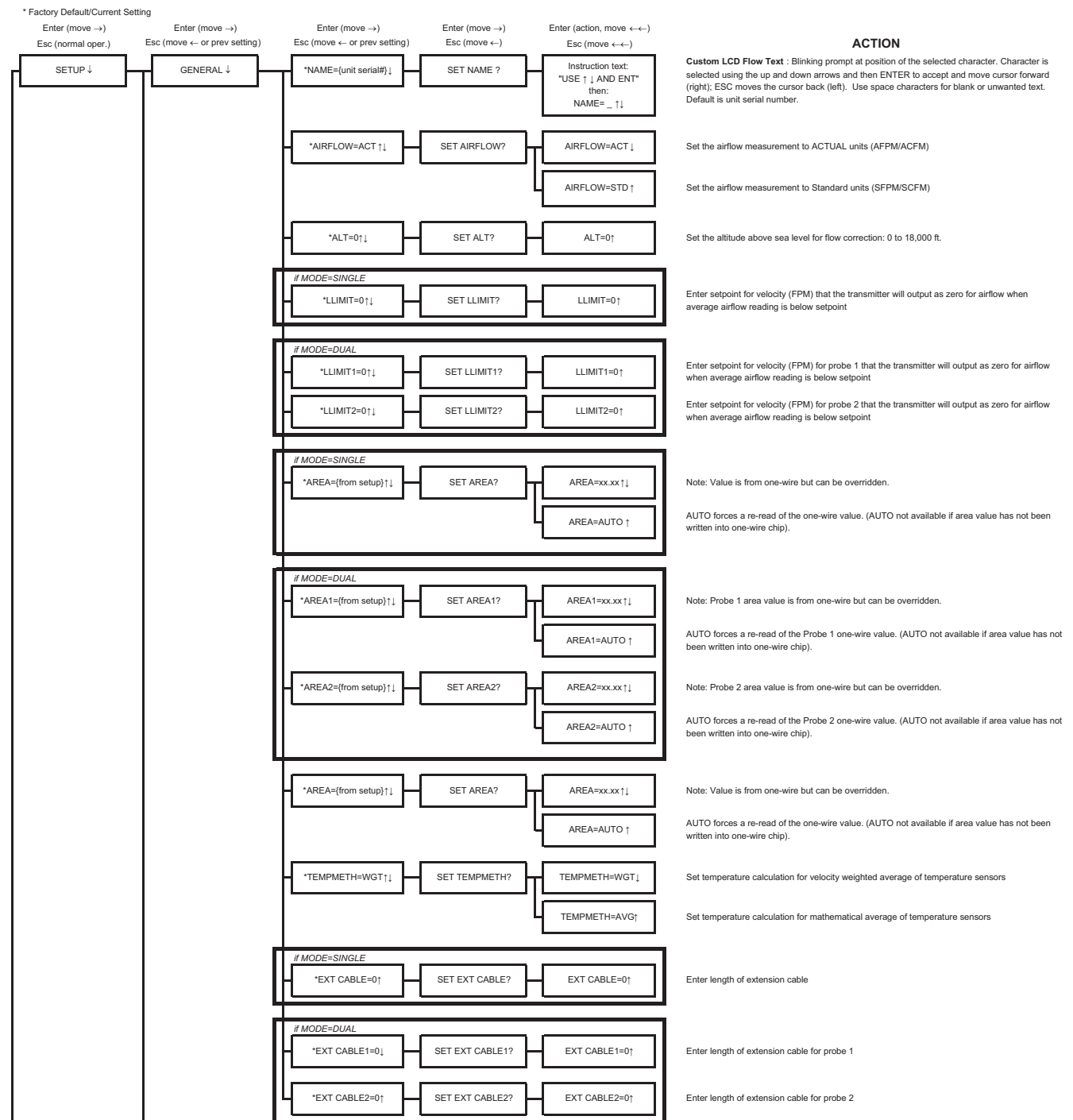
Simultaneously depress/release ENTER + ESC keys during normal operation to select



SETUP MENUS (PART 1 OF 6)

SETUP MENU

Simultaneously depress/release ↑ + ↓ keys during normal operation to select

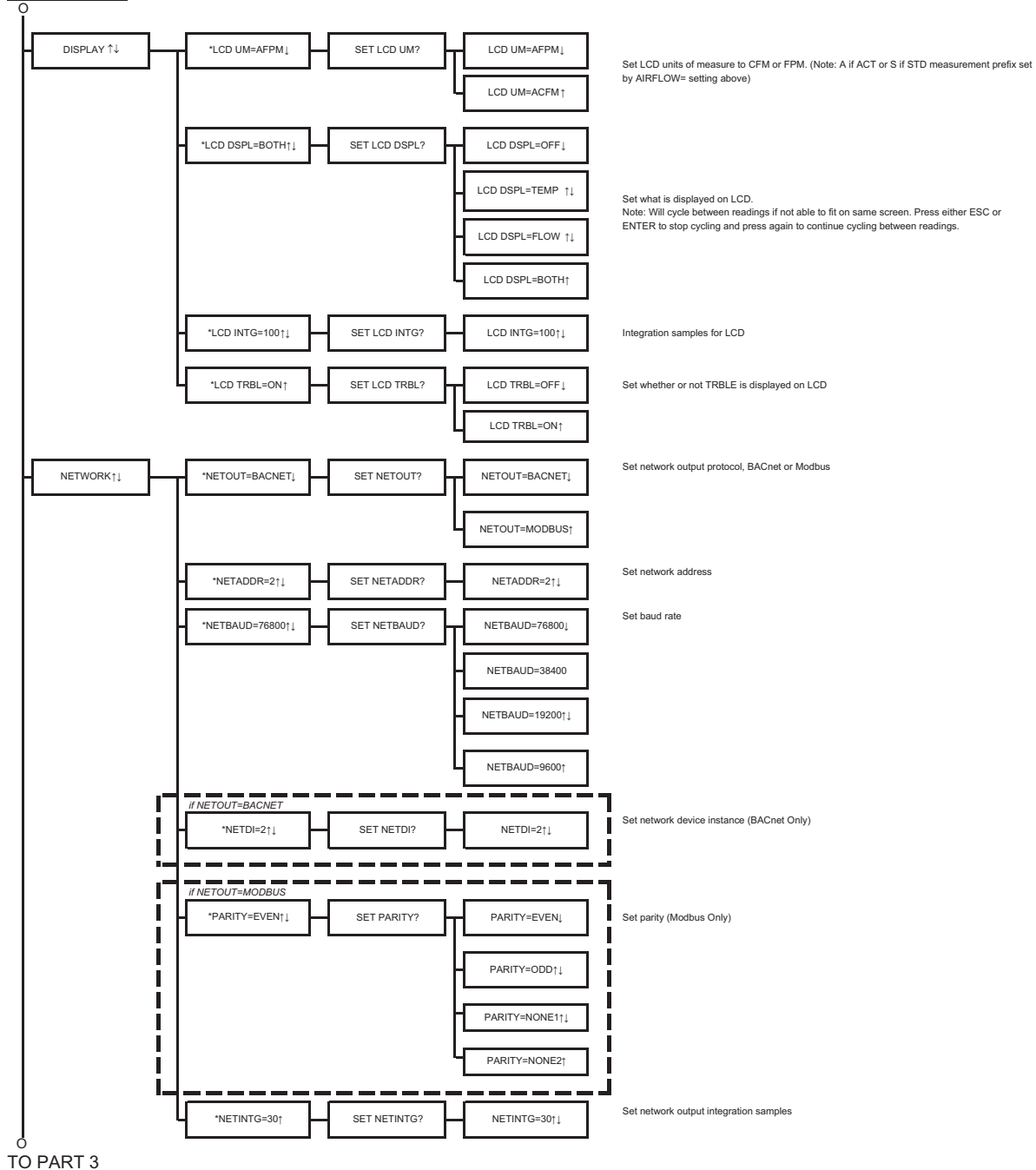


TO PART 5

TO PART 2

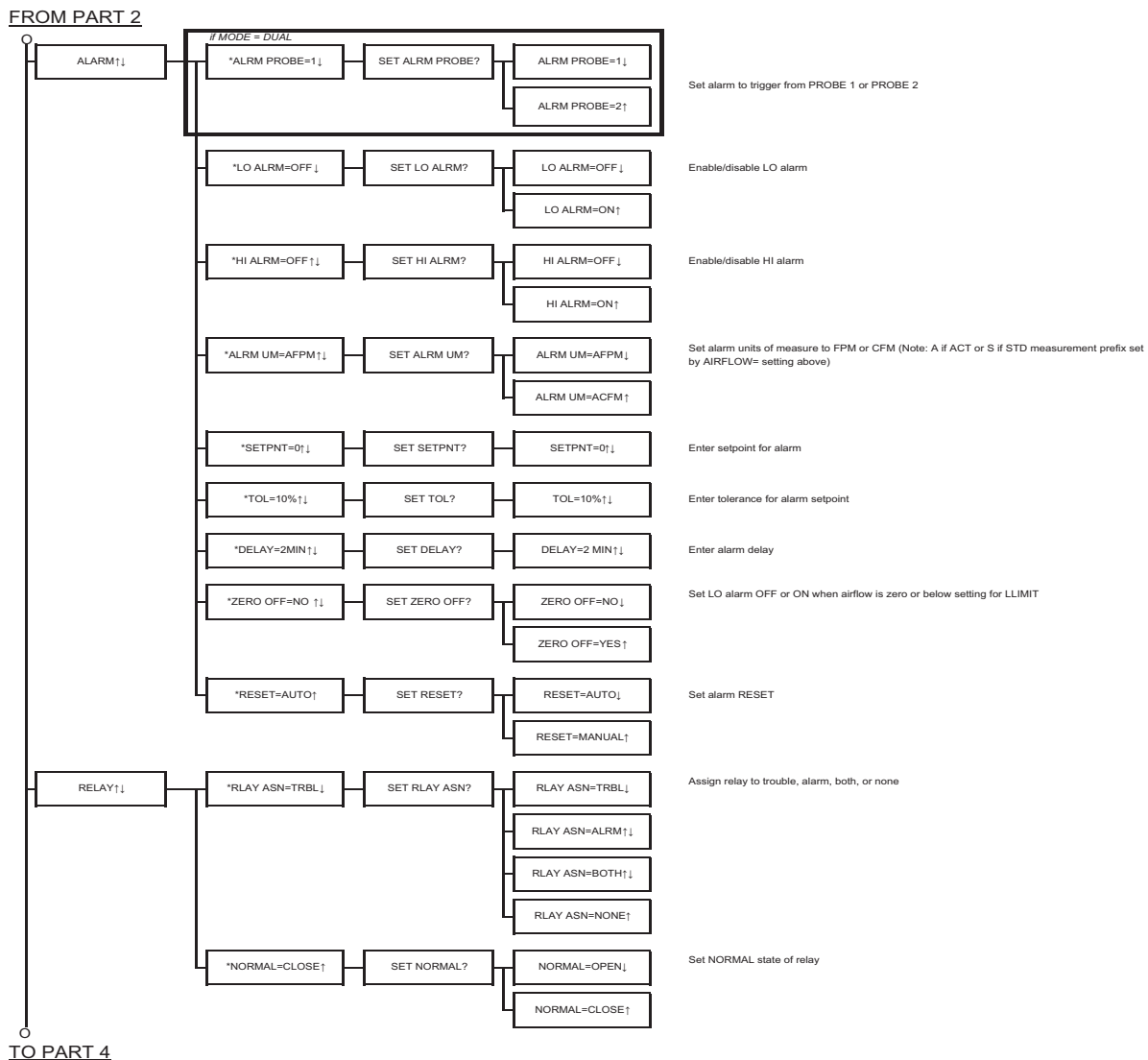
SETUP MENUS (PART 2 OF 6)

FROM PART 1

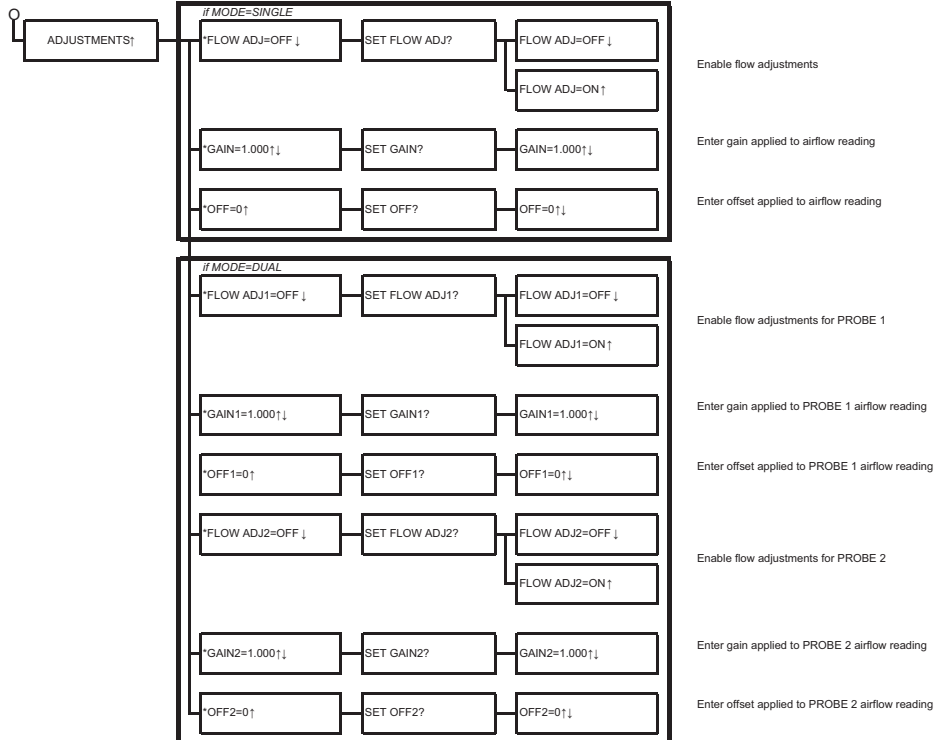


TO PART 3

SETUP MENUS (PART 3 OF 6)

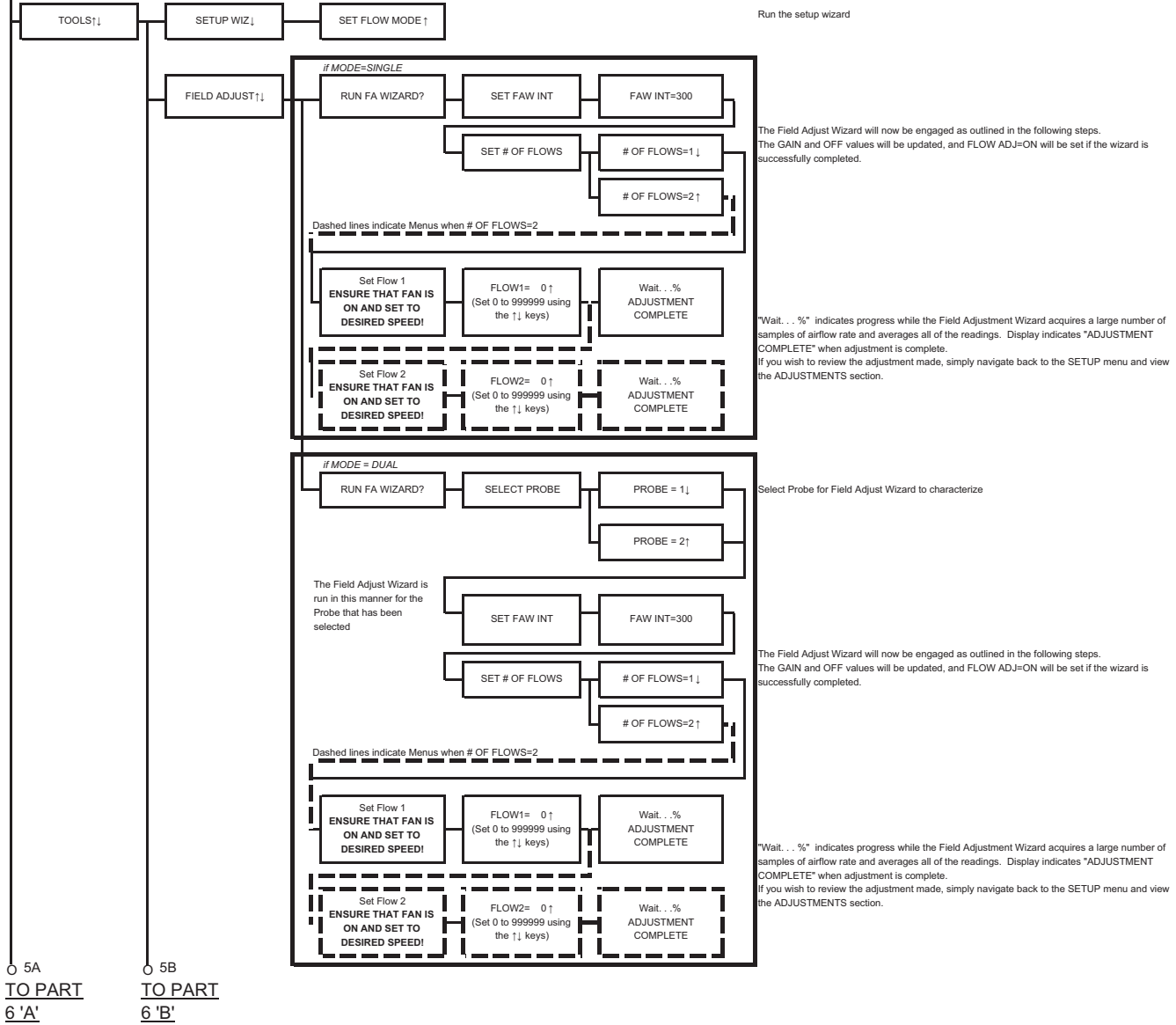


FROM PART 3



SETUP MENU (PART 5 OF 6)

FROM PART 1



SETUP MENUS (PART 6 OF 6)

FROM PART
5 'A'

FROM PART
5 'B'

