

# MegaTronXS 4-20mA Output Programming

## Defining the mA Output

### Step 1:

Push the **SET UP RUN** button to get this screen. From here push **SETPOINTS** (Button 1) to go to the next screen.

```

>HOME SETUP<
SETPOINTS          DATE/TIME
CALIBRATION        CONFIGURE
TIMERS              HISTORY
CUSTOMIZE           TOTALIZERS
ALARMS              RELAYS
    
```

### Step 2:

Press 6 for **mA OUT**

```

>SETPOINTS SETUP<
SENSORS             mA OUT
                   mA IN
    
```

### Step 3:

Press 1 for **OUTPUT 1**

```

>mA OUTPUTS<
OUTPUT 1
OUTPUT 2
OUTPUT 3
OUTPUT 4
    
```

### Step 4:

Press 5 for **SETUP**

```

>OUTPUT 1<
Signal Source = mA IN1
Lower Point   = 0.1
Upper Point   = 100.0
Condition     = mA IN1
MIN           = 0% at 0%
MAX           = 100% at 100
Operation     = ADD % of SRC
SETUP
    
```

### Step 5:

Press 1 for **SIGNAL SOURCE**

```

>OUT 1 SETUP<
SIGNAL SOURCE
4mA Value
20mA Value
CONDITIONER
    
```

### Step 6:

Arrow up until you get to the desired source for the output you want.

```

>OUT 1 SETUP<
SI  mA OUTPUT 1 SIGNAL SOURCE
4m  -> mA IN1
20
CO  PRESS UP/DOWN KEYS TO CHANGE,
    PRESS ENTER TO ACCEPT
    
```

### Step 7:

Press 2 for **4mA Value**

```

>OUT 1 SETUP<
SIGNAL SOURCE
4mA Value
20mA Value
CONDITIONER
    
```

### Step 8:

Enter the source reading that you want the output signal to be at 4mA.

```

>OUT 1 SETUP<
S  LOW VALUE (0.1)
4  [0000.1]
2
C  USE NUMBER KEYS TO CHANGE, PRESS
    ENTER TO ACCEPT, CANCEL TO ESCAPE
    
```

### Step 9:

Press 3 for **20 mA Value**

```
>OUT 1 SETUP<
SIGNAL SOURCE
4mA Value
20mA Value
CONDITIONER
```

### Step 10:

Enter the source reading that you want the output signal to be at 20mA.

```
>OUT 1 SETUP<
S  HIGH VALUE (100.0)
4  [0100.0]
2
C  USE NUMBER KEYS TO CHANGE, PRESS
   ENTER TO ACCEPT, CANCEL TO ESCAPE
```

## Signal Conditioning

A mA output can be conditioned or modified by another analog reading. This allows for two analog readings to be blended into one mA output.

### Step 1:

Select **CONDITIONER** from mA output setup.

```
>OUT 1 SETUP<
SIGNAL SOURCE
4mA Value
20mA Value
CONDITIONER
```

### Step 2:

Select the second signal source that will act as the conditioner to the mA output

### Step 3:

Define the 4mA and 20mA values of this second analog system.

### Step 4:

Select the Operation that the conditioner will perform to the output.

```
>OUTPUT 1<
Signal Source = mA IN1
Lower Point  = 0.1
Upper Point  = 100.0
Condition    = mA IN1
             MIN   = 0% at 0%
             MAX   = 100% at 100
             Operation = ADD % of SRC
SETUP
```

Example: A mA output of the pH set to provide 4mA at a pH of 6 and 20mA at a pH of 10.