



C.A.T. XTR

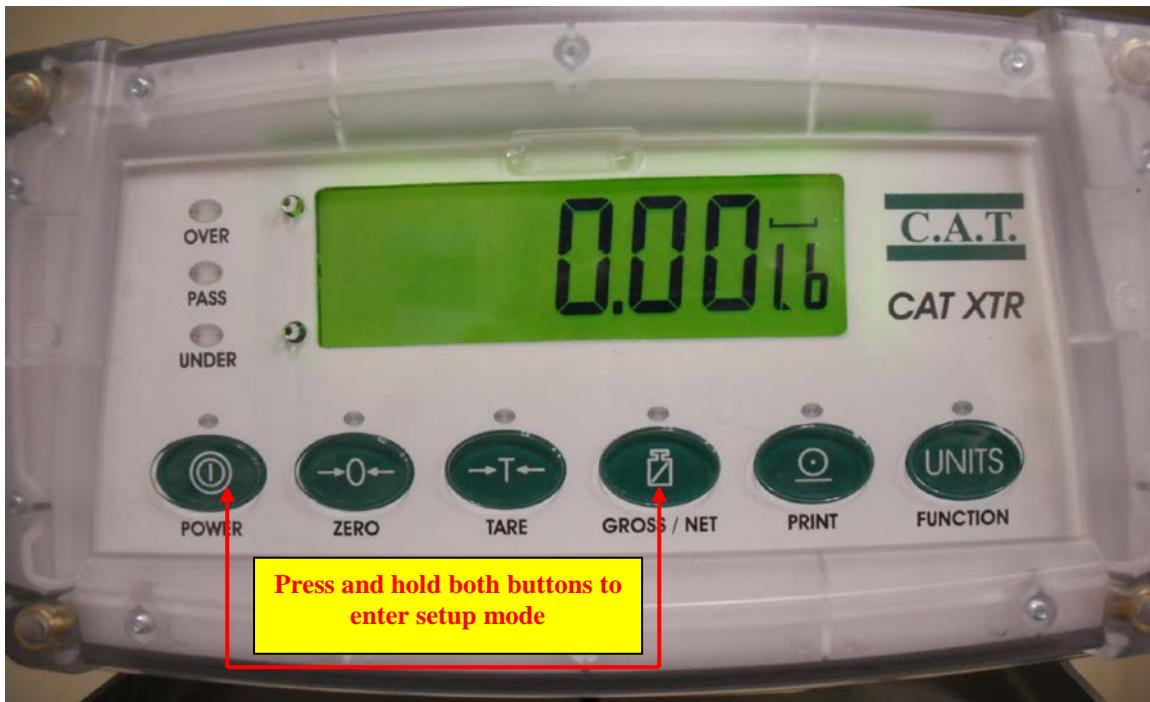
Setup and Calibration



Cooling & Applied Technology, Inc.
202 South Erie
P.O. Box 1279
Russellville, AR 72811

SETUP AND CALIBRATION

[Setup XTR for 25lb or 100lb](#)



Access Full Setup

- Ensure the instrument is on.
- Press and hold the <POWER> and <GROSS/NET> keys together for two seconds.



BUILD



This will be the first group <BUILD>.



Press  to advance to the next item in this group.

Decimal Point Position



Press to select and display the current setting.



Pressing will move the decimal to the desired



position. Press to save. After you save, the scale will return to the Decimal



Point Position. Press to toggle to the next item



OR PRESS TO EXIT

Capacity

Sets the nominal maximum capacity (or full scale) of the scale.



Press  to select and display the



current setting. The currently chosen digit will



be flashing. Press to advance to the next digit. When the digit to



edit is flashing, press to cycle from 0 through 9 (0025.00 for 25lbs



or 0100.00 for 100lbs). When the new digit to be set press to move to the next digit to edit and repeat the previous step; or press



 to accept all of the displayed digits (including the flashing digit)



and re-display the menu item name. Press to advance to the next item.



+ 

OR PRESS  TO EXIT

Resolution

The resolution is the number by which the indicator will count.



Press to select and display the current setting.



Press to cycle through the options



for that item (1 for .01, 2 for .02 ext.). Press to accept the displayed option and re-display the menu item name.



Press to advance to the next item.



+

OR PRESS + TO EXIT

Units

Sets the units for display.



Press to select and display the current settings.



Press to cycle through the options



for that item (lb, t, o, g, and kg). Press to accept the displayed option and re-display the menu item name.



Press to advance to the next item.



OR PRESS TO EXIT

Cable

Sets the load cell input to operate in 4-wire or 6-wire mode.



Press to select and display the current setting.



Press to select either 4 or 6 wire loadcell. Most loadcells



use 4 wires. Press to accept the displayed option and re-display the menu item name. Press to advance to the next item.



Press twice to advance to the next group <OPTION>.



OR PRESS TO EXIT

OPTIONS



Items within this Group are used to configure the operating parameters of the scale.



Press to advance to the next item in this group.

Use

This is where the basic use of the scale is set.



Press to select and display the current setting. Press to



NETP. Press to accept the displayed option and re-display the menu item name.



Press to advance to the next item.



OR PRESS TO EXIT

Filter

The instrument can average a number of consecutive readings when calculating the displayed weight. This is used to dampen unwanted weight fluctuations caused by vibrations or dynamic forces. High settings will stabilize the display at the expense of rapid response to sudden weight changes.



Press to select and display the current setting. Press to



until scale reads <0.5>. Press to accept the displayed option and re-display the menu item name.



Press to advance to the next item.



OR PRESS + TO EXIT

Motion

Sets how much weight variation over a defined time period is allowed before the displayed weight is deemed to be unstable.



Press to select and display the current setting. Press



until scale reads <1.0 – 1.0>. Press



FUNCTION



TARE

to accept the displayed option and re-display the menu item name. Press to advance Z.RANGE.



OR PRESS TO EXIT

C.A.T. XTR

Z.RANGE

(Allowable Zero Operating Range)

This setting restricts the range over which the Zero functions can operate.



Press **PRINT** to select -20_20. Press **FUNCTION** to accept the displayed option and re-display the menu item name. Press **TARE** to advance to the next item.

At this point, it's best to save your settings before calibration.

- Press and hold the **<POWER>** and **<GROSS/NET>** keys together for two seconds.



Calibration



Quick Cal



Press and hold for 3 seconds.



This will prompt you to the <Zero> screen. . .
Current weight displays. Remove all weight.



Press to perform Zero Calibration.

While the zeroing is in progress the display will show Z in P. Press



Press to toggle to this screen. . . Press



to advance to the next digit. When the digit to edit is flashing, press to cycle from 0 through 9 (0005.00 for 5lbs or 010.00 for 10lbs). Once the desired weight is entered, place



the weight on the scale and press . If the calibration is good, press to exit.

Error Messages**Weighing Errors**

Error	Description	Resolution
(U - - - -)	The weight is below the minimum allowable weight reading.	Increase the weight or decrease the minimum allowable weight reading.
(O - - - -)	The weight is above the maximum allowable weight reading. Warning - overloading may damage mechanical scale elements.	Check the condition of load cell connections. Check for damaged load cell.
(ZERO) (ERROR)	The weight reading is beyond the limit set for Zero operation. The operation of the <ZERO> key is limited in the setup during installation. The indicator cannot be Zeroed at this weight.	Increase the Zero Range (OPTION: Z.RANGE) or use the <TARE> key instead.
(STABLE) (ERROR)	Scale motion has prevented a <ZERO>, <TARE> or <PRINT> operation from occurring on command.	Try the operation again once the scale is stable.

Setup and Calibration Errors

Error	Description	Resolution
(ENTRY) (DENIED)	The instrument may be in Safe Setup and an item that needs Full Setup has been selected for editing.	Access Full Setup to edit the item.
	When accessing setup, more than three attempts have been made with the incorrect passcode.	Turn the instrument off. When the instrument is turned back on, enter the correct passcode to access setup.
(LIN.PT) (LO)	An attempt has been made to place a linearisation point below zero.	Incorrect linearisation point entered (must be between zero and full scale).
(PT.TOO) (CLOSE)	An attempt has been made to place a calibration point too close to an existing calibration point.	Re-enter the calibration point. Points must be spaced by at least 2% of full scale from each other.
(RES) (LO)	The scale build is configured for less than 100 graduations.	Check the resolution (count-by) and capacity settings.
(RES) (HIGH)	The scale build is configured for more than 30,000 graduations. (K307: 60,000 graduations)	Check the resolution (count-by) and capacity settings.
(SPAN) (LO)	The load cell signal range (span) is too small for these settings.	Incorrect span weight entered (must be between zero and full scale). Scale wiring incorrect. Wrong load cell capacity (too large). Wrong or no calibration weight added to scale.
(SPAN) (HI)	The load cell signal range (span) is too large for these settings.	Incorrect span weight entered (must be between zero and full scale). Scale wiring incorrect. Load cell capacity too small for application.
(ZERO) (LO)	An attempt has been made to calibrate zero below -2mV/V.	Scale wiring incorrect.
(ZERO) (HI)	An attempt has been made to calibrate zero above +2mV/V.	Remove all weight from scale. Scale wiring incorrect.

Diagnostic Errors

- Check: Service personnel can check this item on site.
- Return for Service: The instrument must be returned to the manufacturer for factory service.

Error	Description	Resolution
(E0001)	The power supply voltage is too low.	Check supply
(E0002)	The power supply voltage is too high.	Check scale / cables
(E0010)	The temperature is outside of allowable limits.	Check location
(E0020)	Scale build is incorrect. The number of graduations has been set too low or too high.	Fix up scale build
(E0100)	The digital setup information has been lost.	Re-enter setup
(E0200)	The calibration information has been lost.	Re-calibrate
(E0300)	All setup information has been lost	Enter setup and calibrate
(E0400)	The factory information has been lost.	Return for Service
(E0800)	The EEPROM memory storage chip has failed	Return for Service
(E2000)	ADC Out of Range Error. This may be caused from a broken load cell cable.	Check BUILD:CABLE setting. Check load cell cable, wiring, etc.
(E4000)	The battery backed RAM data has lost data.	Re-enter setup
(E8000)	The FLASH program memory is incorrect	Return for Service

The **E** type error messages are additive. For example if instrument is running off batteries and the temperature drops, the battery voltage may be too low. The resulting error messages will be **E0011** (0001 + 0010). The numbers add in hexadecimal as follows:

1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - A - B - C - D - E - F

(For example, 2 + 4 = 6, or 4 + 8 = C

C.A.T. XTR

Notes: