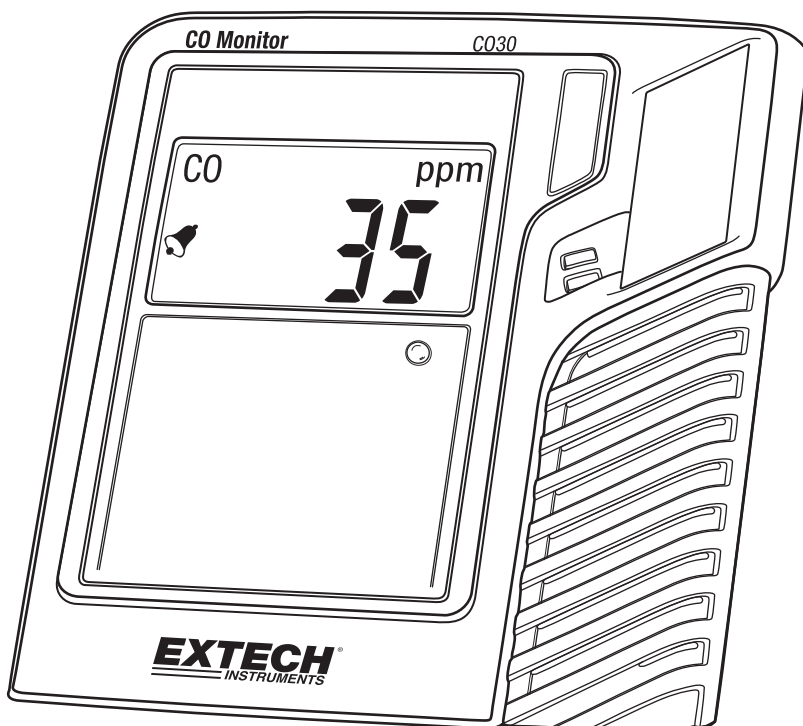


Digital CO Monitor

Model CO30



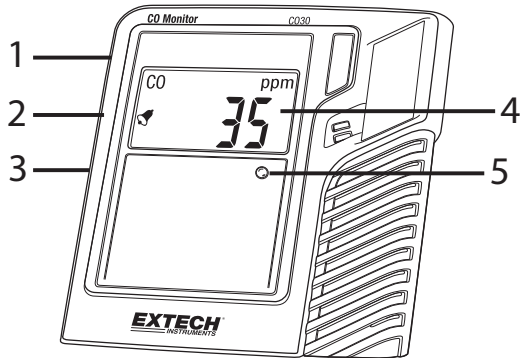
Introduction

Thank you for selecting the Extech Instruments Model CO30. The CO30 is a 3-in-one Carbon Monoxide (CO), temperature measurement, and humidity measurement meter. This device is shipped fully tested and calibrated and, with proper use, will provide years of reliable service. Please visit our website (www.extech.com) to check for the latest version of this User Guide, Product Updates, and Customer Support.

Description

Meter Description

1. Compensation adjustment
2. Control button
3. AC Adaptor jack
4. LCD Display
5. LED indicator



Note: Tilt Stand, Wall mount access, and battery compartment located on rear of meter.

IMPORTANT SAFETY NOTES

The CO30 Carbon Monoxide Monitor is intended for general purpose Air Quality monitoring only, and has not been certified for use pursuant to any state or city safety Carbon Monoxide Alarm or Monitoring requirements.

The CO30 Carbon Monoxide Monitor has not been tested by an independent lab to comply with UL 2034 or IAS 6-96 standard.

It is the responsibility of the customer to obtain and apply current local, state, and national regulations with regard to CO alarms, monitoring and testing.

Operation

Powering the meter

If the meter is supplied without batteries installed, install the supplied batteries in the rear battery compartment to power the meter. Please observe proper polarity.

If the meter is supplied with the batteries installed, and a protective battery strip is installed in the battery compartment, remove the protective strip to power the meter.

Alternatively, plug the AC adaptor into the jack on the side of the meter and then into an AC power source to power the meter.

Normal Operation Mode

When switched ON, the LCD displays '0000' for a period of time, depending on the time that the meter has been inactive. The meter will then proceed to the normal mode of operation where the LCD displays the current CO levels in ppm, the Temperature (°C/°F), and RH% (relative humidity) alternately every 6 seconds.

Status Indicator LED

The Front panel status LED uses a color-coding system to inform the user as to the measured CO concentration; Green for Good (<10ppm); Yellow for Caution (10 to 29ppm); Red for Danger (>30ppm). If the LED fails to illuminate please return the unit for service.

Control Button

The Control button located on the left side of the meter is used to control and program a variety of meter functions. Press and hold the Control button for at least 3 seconds to access the Control Setup Mode. Repeated presses of the Control button cycle through the available parameters. These parameters, in order, are:

- ZERO Calibration
- Temperature Unit selection (°C/°F)
- Temperature compensation (used in conjunction with side potentiometer)
- Humidity compensation (used in conjunction with side potentiometer)
- Alarm Beeper Threshold (25, 30, 35, 50, 100, 200 ppm)
- Factory Default setting reset
- Escape/Return (abort and return to normal mode)

ZERO Calibration

Ensure that the Zero Calibration is performed in a clean air environment (no CO gases).

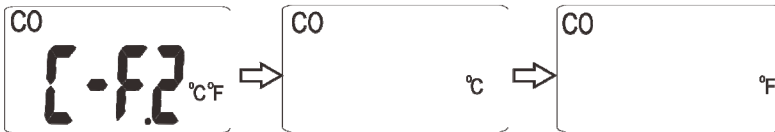
Press and hold the control button for 3 seconds (until  appears on the LCD screen) and then press and hold the Control button again to enter the calibration mode ('CAL' should appear on the display).

Release the control button and wait approximately 20 seconds for the calibration to complete. The meter will display 'END' for 2 seconds when calibration is complete and will then return to the normal mode of operation.



Changing Temperature Units C/F

When [-F2] is shown on the display, press and hold the control button to display the current temperature unit. Momentarily press the Calibration control button to toggle °C and °F units. To save setting, press and hold the control button. The meter will return to the normal mode.



Temperature Compensation Adjustment

When [SEt.] is shown on the display, press and hold the control button. The factory default '0.0' value will flash. Turn the compensation potentiometer clockwise to increase the temperature offset or counterclockwise to decrease offset). The range is -5.4°F to +5.4°F (-3.0°C to +3.0°C). When done, press and hold the control button to save the setting. The meter will return to the normal measurement mode and will reflect the offset when temperature readings are displayed.

Note: To perform an accurate offset adjustment, a standard reference is required for comparison.



Relative Humidity Compensation Adjustment

When **SEr.4** is shown on the display, press and hold the control button to enter the relative humidity compensation adjustment mode. Momentarily press the control button to make a step change in the RH% offset; the range is -9 to +9 RH %. When done, press and hold the control button to save the setting. The meter will return to the normal mode.

Note: To perform an accurate offset adjustment, a standard reference is required for comparison.



Warning: While performing temperature or RH% compensation adjustments do not touch the slotted openings on the meter housing, these are where the sensors are located. Otherwise, accuracy may be compromised.



Note: If the meter displays '---5' press the control button to step to the next setting.

Alarm Beeper Threshold Selection

When **bPr.6** is shown on the display, press and hold the control button. The factory default setting will flash. Momentarily press the control button to choose a 25ppm, 30ppm, 35ppm, 50ppm, 100ppm, or 200ppm threshold. After the selection, press and hold the control button to save and return to the normal mode.



The alarm beeper prompts personnel to evacuate an area because of the detection of unsafe concentrations of CO. The meter alarms when the CO concentration exceeds the default or user-programmed threshold.

The beeper may be temporarily silenced for approximately 4 minutes by pressing the Control button. After this time, if the meter continues to detect a CO concentration exceeding the threshold, it will alarm again. For safety purposes, the meter alarm function cannot be completely disabled.

Revert to Factory Default Settings

When **rFSn** is shown on the LCD display, press and hold the control button to reset the CO30 to its default (factory) settings.



Escape/Return Function

When **ESC8** is shown on the LCD display, press and hold the control button for 3 seconds to abort the current programming step and return to the normal measurement mode.



Maintenance

Low Battery Condition

When the battery icon (🔋) appears on the LCD, the batteries must be replaced. If the meter is low on battery voltage, erratic or inaccurate CO concentration readings may result. Never use the meter with the low battery icon displayed.

Battery Safety Reminders

- Please dispose of batteries responsibly; observe local, state, and national regulations.
- Never dispose of batteries in a fire; batteries may explode or leak.
- Never mix battery types; install new batteries of the same type.

Troubleshooting Error Codes

The following errors may appear on the CO30 display:

E-1: CO measurement exceeds specified measurement range

E-2: Temperature measurement exceeds specified measurement range

E-3: Relative Humidity (RH %) measurement exceeds specified measurement range

Specifications

Display	Multifunction LCD displays CO concentration, Air Temperature, and Relative Humidity
Status LED indicator	Tri-color status indication (Green <10ppm, Yellow: 10 to 29ppm, and Red >30ppm)
CO measurement range	0 to 999ppm
CO accuracy	±5% of reading or ± 10ppm
CO Resolution	1ppm
Temperature measurement range	32 to 122°F (0 to 50°C)
Temperature Resolution	0.1°F (0.1°C)
Relative humidity measurement range	20 to 90%RH
RH Resolution	1% RH
Temperature Accuracy	±1.8°F/1°C
Relative Humidity Accuracy	±5%
Alarm functionality	Meter beeps and displays the alarm bell icon when the CO level exceeds the alarm setpoint (default setpoint is 30ppm, user adjustable)
Temperature and RH Compensation	Manual; user-adjustable
CO Calibration	Standard user function
Zero Calibration	Standard user function
Power	4 x AAA batteries or supplied Universal AC adaptor
Meter dimensions	4.4 x 4.3 x 2.1 in. (113 x 108 x 53mm)
LCD display dimensions	1.9 x 1.1 in. (48 x 28mm)
Weight	159g (5.6 oz.)

Warranty

FLIR Systems, Inc. warrants this Extech Instruments brand device to be free of defects in parts and workmanship for one year from date of shipment (a six month limited warranty applies to sensors and cables). If it should become necessary to return the instrument for service during or beyond the warranty period, contact the Customer Service Department for authorization. Visit the website www.extech.com for contact information. A Return Authorization (RA) number must be issued before any product is returned. The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent damage in transit. This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. FLIR Systems, Inc. specifically disclaims any implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, incidental or consequential damages. FLIR's total liability is limited to repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.

Calibration, Repair, and Customer Care Services

FLIR Systems, Inc. offers repair and calibration services for the Extech Instruments products we sell. NIST certification for most products is also provided. Call the Customer Service Department for information on calibration services available for this product. Annual calibrations should be performed to verify meter performance and accuracy. Technical support and general customer service is also provided, refer to the contact information provided below.

Support Lines: U.S. (877) 439-8324; International: +1 (603) 324-7800

Technical Support: Option 3; E-mail: support@extech.com

Repair & Returns: Option 4; E-mail: repair@extech.com

Product specifications are subject to change without notice

Please visit our website for the most up-to-date information

www.extech.com

FLIR Commercial Systems, Inc., 9 Townsend West, Nashua, NH 03063 USA

ISO 9001 Certified

Copyright © 2014 FLIR Systems, Inc.

All rights reserved including the right of reproduction in whole or in part in any form

www.extech.com

Garantie

FLIR Systems, Inc. garantit que cet appareil Extech Instruments est exempt de défauts matériaux et de fabrication pendant un an à partir de la date d'envoi (une garantie limitée de six mois s'applique aux capteurs et aux câbles). Si le renvoi de l'appareil pour réparation devient nécessaire durant ou après la période de garantie, contactez le service client pour autorisation. Pour obtenir les coordonnées, visitez le site Web suivant : www.extech.com. Un numéro d'autorisation de retour (AR) doit être délivré avant tout retour de produit. L'expéditeur prend à sa charge les frais d'expédition, le fret, l'assurance et l'emballage correct de l'appareil afin de prévenir toute détérioration durant le transport. Cette garantie ne s'applique pas aux dommages imputables à l'utilisateur, tels que l'usage impropre ou abusif, un mauvais câblage, une utilisation non conforme aux spécifications, un entretien ou une réparation incorrecte, ou toute modification non autorisée. FLIR Systems, Inc. déclinera spécifiquement toute garantie ou qualité marchande ou aptitude à l'emploi prévu, et ne sera en aucun cas tenu responsable pour tout dommage conséquent, direct, indirect ou accidentel. La responsabilité totale de FLIR est limitée à la réparation ou au remplacement du produit. La garantie définie ci-dessus est inclusive et aucune autre garantie, écrite ou orale, n'est exprimée ou implicite.

Calibrage, réparation et services après-vente

FLIR Systems, Inc. offre des services de calibrage et de réparation pour les produits Extech Instruments que nous commercialisons. Nous fournissons également une certification NIST pour la plupart des produits. Contactez notre service client pour toute information sur les services de calibrage disponibles pour ce produit. Un calibrage doit être effectué chaque année pour vérifier les performances et la précision du mètre. Nous offrons également une assistance technique et un service à la clientèle. Veuillez vous reporter aux coordonnées fournies ci-dessous.

Lignes d'assistance: États-Unis (877) 439-8324; international: +1 (603) 324-7800

Service d'assistance technique : Option 3 ; E-mail : support@extech.com

Réparations et retours : Option 4 ; E-mail : repair@extech.com

Les spécifications produit sont sujettes à modifications sans préavis.

Pour les toutes dernières informations, veuillez visiter notre site Web.

www.extech.com

FLIR Commercial Systems, Inc., 9 Townsend West, Nashua, NH 03063 USA

Certifié ISO 9001

Copyright © 2014 FLIR Systems, Inc.

Tous droits réservés, y compris la reproduction partielle ou totale sous quelque forme que ce soit.

www.extech.com

Garantía

FLIR Systems, Inc., garantiza este dispositivo marca Extech Instruments para estar libre de defectos en partes o mano de obra durante un año a partir de la fecha de embarque (se aplica una garantía limitada de seis meses para cables y sensores). Si fuera necesario regresar el instrumento para servicio durante o después del periodo de garantía, llame al Departamento de Servicio a Clientes para obtener autorización. Visite www.extech.com para Información de contacto. Se debe expedir un número de Autorización de Devolución (AD) antes de regresar cualquier producto. El remitente es responsable de los gastos de embarque, flete, seguro y empaque apropiado para prevenir daños en tránsito. Esta garantía no se aplica a defectos resultantes de las acciones del usuario como el mal uso, alambrado equivocado, operación fuera de las especificaciones, mantenimiento o reparación inadecuada o modificación no autorizada. FLIR Systems, Inc., rechaza específicamente cualesquier garantías implícitas o factibilidad de comercialización o idoneidad para cualquier propósito determinado y no será responsable por cualesquier daños directos, indirectos, incidentales o consecuentes. La responsabilidad total de FLIR está limitada a la reparación o reemplazo del producto. La garantía precedente es inclusiva y no hay otra garantía ya sea escrita u oral, expresa o implícita.

Servicios de calibración, reparación y atención a clientes

FLIR Systems, Inc., ofrece servicios de reparación y calibración para los productos que vendemos de Extech Instruments. Además ofrecemos certificación NIST para la mayoría de los productos. Llame al Departamento de Servicio al Cliente para solicitar información de calibración para este producto. Para verificar el funcionamiento y precisión se debe realizar la calibración anual. Además se provee Soporte Técnico y servicios generales al cliente, consulte la información de contacto en seguida.

Líneas de soporte: EE.UU. (877) 439-8324; Internacional: +1 (603) 324-7800

Soporte Técnico Opción 3; correo electrónico: support@extech.com

Reparación / Devoluciones: Opción 4; correo electrónico: repair@extech.com

Las especificaciones del producto están sujetas a cambios sin aviso

Por favor visite nuestra página en Internet para la información más actualizada

www.extech.com

FLIR Commercial Systems, Inc., 9 Townsend West, Nashua, NH 03063 USA

Certificado ISO 9001

Copyright © 2014 FLIR Systems, Inc.

Reservados todos los derechos, incluyendo el derecho de reproducción total o parcial en cualquier medio

www.extech.com