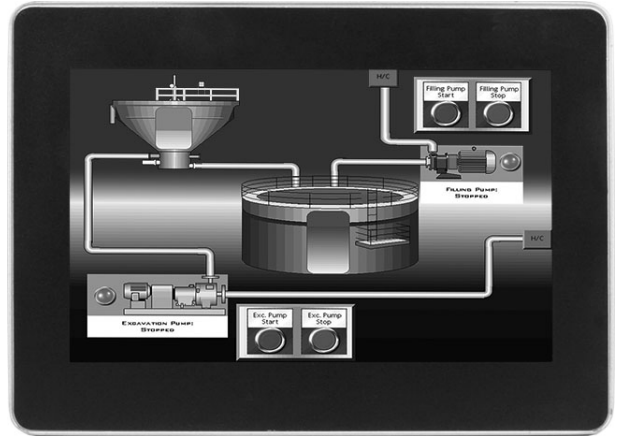
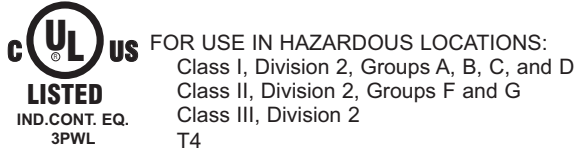


Model G07 - Graphite® Series 7" Color Touchscreen Operator Interface Terminal Installation Guide



See the Red Lion website at www.redlion.net or the enclosed USB thumbdrive for full user manual, Crimson® software and software manual.

SAFETY SUMMARY

All safety related regulations, local codes and instructions that appear in the manual or on equipment must be observed to ensure personal safety and to prevent damage to either the instrument or equipment connected to it. If equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Do not use the controller to directly command motors, valves, or other actuators not equipped with safeguards. To do so can be potentially harmful to persons or equipment in the event of a fault to the unit.



CAUTION: Risk of Danger.
 Read complete instructions prior to installation and operation of the unit.



WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR AREA IS KNOWN TO BE NON-HAZARDOUS.



WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.

ORDERING INFORMATION

DESCRIPTION	PART NUMBER
7" Color Touch Screen, Indoor Use	G07C0000
7" Color Touch Screen, Indoor/Outdoor Use	G07S0000

SPECIFICATIONS

POWER:

	G07C			G07S		
	10V	24V	30V	10V	24V	30V
Input Voltage	10V	24V	30V	10V	24V	30V
Typical Power HMI only:	7 W	7 W	8 W	8 W	9 W	9 W
Maximum Power HMI only:	12 W	13 W	14 W	13 W	14 W	15 W
Available Power for Modules:	21 W			21 W		
Max Power HMI With Module(s):	33 W	34 W	35 W	34 W	36 W	36 W

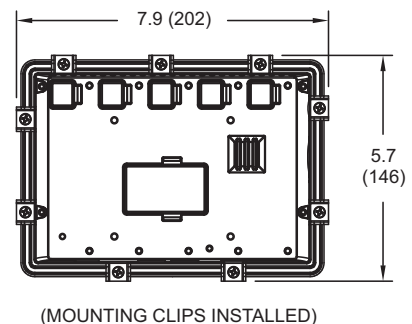
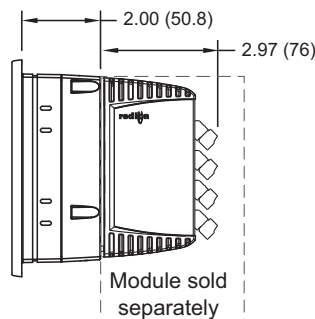
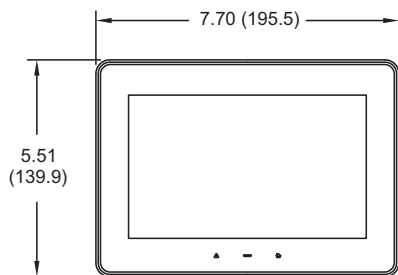
Must use a Class 2 circuit according to National Electrical Code (NEC), NFPA-70 or Canadian Electrical Code (CEC), Part I, C22.1 or a Limited Power Supply (LPS) according to IEC/EN 60950-1 or Limited-energy circuit according to IEC/EN 61010-1.

Power connection via removable three position terminal block.

ENVIRONMENTAL CONDITIONS:

Operating Temperature Range: -20 to 60 °C, or lowest range among equipment used in your Graphite system. Consult the user manual

DIMENSIONS In inches (mm)



or www.redlion.net/OpTemp for further details.
 Storage Temperature Range: -20 to 70 °C
 Vibration to IEC 68-2-6: Operational 5-500 Hz, 4 g
 Shock to IEC 68-2-27: Operational 40 g (10 g, modules w/relays)
 Operating and Storage Humidity: 0 to 85% max. RH non-condensing
 Altitude: Up to 2000 meters
 Installation Category II, Pollution Degree 2 as defined in IEC/EN 60664-1.

CERTIFICATIONS AND COMPLIANCES:

CE Approved
 EN 61326-1 Immunity to Industrial Locations
 Emission CISPR 11 Class A
 IEC/EN 61010-1
 RoHS Compliant
 ATEX Approved
 Ⓜ II 3 G Ex ic nA IIC T4 Gc
 Ⓜ II 3 D Ex tc IIIC T135°C Dc
 DEMKO 14 ATEX 1387X
 EN 60079-0, -11, -15, -31

IECEX Approved
 Ex ic nA IIC T4 Gc
 Ex tc IIIC T135°C Dc
 IECEX UL 15.0035X
 IEC 60079-0, -11, -15, -31
 UL Listed: File #E302106
 UL Hazardous: File #E317425
 Type 4X Indoor / IP66 Enclosure rating (Face only) for all models
 Type 4X Outdoor Enclosure rating (Face only) for G07Sxxxx models
 IP20 Enclosure rating (Rear of unit)

ABS Type Approval for Shipboard Applications

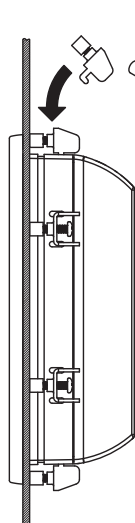
CONNECTIONS: High compression cage-clamp terminal block
 Wire Strip Length: 0.3" (7.5 mm)
 Wire Gauge Capacity: One 14 AWG (1.63 mm) solid,
 two 18 AWG (1.02 mm) or four 20 AWG (0.81 mm)

CONSTRUCTION: Cast aluminum enclosure with NEMA 4X/IP66 rating when correctly fitted with the gasket provided. These devices have only been evaluated for low risk of mechanical impact.

WEIGHT: 2.26 lb. (1.03 Kg)

OPERATOR INTERFACE INSTALLATION

MOUNTING INSTRUCTIONS



FOOT MAY BE REMOVED FOR THICKER PANEL INSTALLATIONS

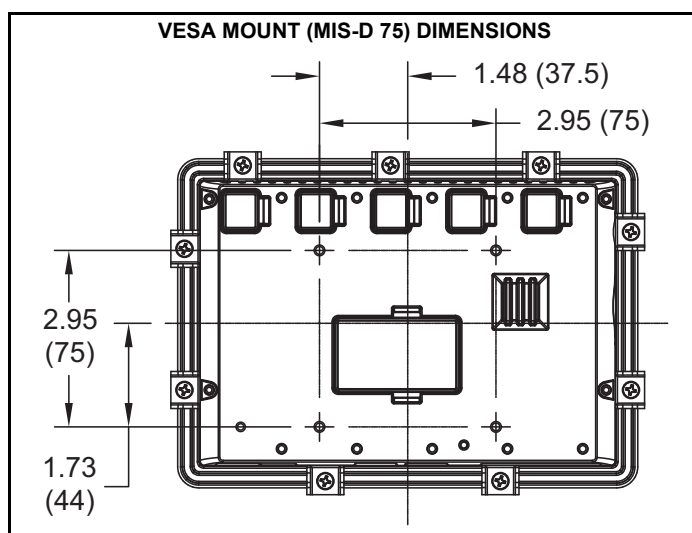
This operator interface is primarily designed for through-panel mounting. Four VESA mount tapped screw-holes (M4 x 0.7, 5 mm deep) are present on the rear of the panels to allow for stand or wall mounting. Care should be taken to remove any loose material from the mounting cut-out to prevent that material from falling into the operator interface during installation. A gasket is provided to enable sealing to NEMA 4X/IP66 specification. To maintain the IP66 rating of the panel, an equivalently IP rated enclosure should be used. Install the mounting clips provided and tighten to 6.0 pound-force inch [96 ounce-force inch] (0.68 N m) evenly for uniform gasket compression.

Provisions should be made to prohibit the product from being exposed to UV radiation while in use. Care should be taken not to rub or buff the touchscreen surface in a way that might cause the accumulation of static charges.

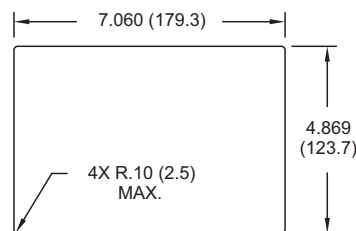
For hazardous location installation the following shall be taken into consideration:

- When used in a Zone 22 environment, the device shall be panel mounted in at least Zone 22 IECEX/ATEX-Certified tool accessible enclosure with a minimum ingress protection rating of at least IP64 as defined in IEC/EN 60529.
- When used in a Zone 2 environment, the device shall be panel mounted in at least Zone 2 IECEX/ATEX-Certified tool accessible enclosure with a minimum ingress protection rating of at least IP54 as defined in IEC/EN 60529.
- This device is open-type and must be mounted in a suitable dust-tight end-enclosure in accordance with articles 500 and 502 of the NEC and positioned so only the face of the display is exposed.
- Must be wired using Division 2 wiring methods as specified in article 501-4(b), 502-4(b), and 503-3(b) of the National Electric Code, NFPA 70 for installation within the United States, or as specified in section 19-152 of Canadian Electrical Code for installation in Canada.

¹ USB's shield may be connected to earth ground at the host. USB's shield in turn may also be connected to signal common.



PANEL CUT-OUT

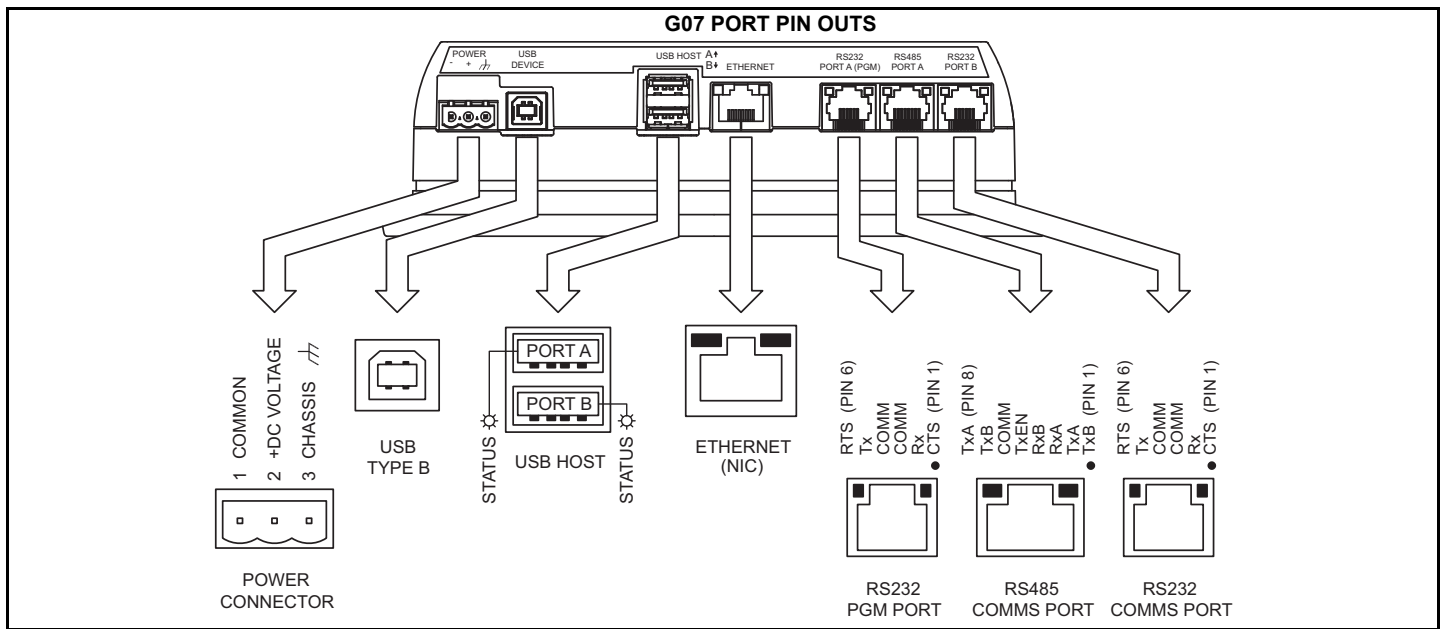


All tolerances ±.059" (±1.5 mm)

CONNECTING TO EARTH GROUND

The third pin of the power connector of the G07 is chassis ground for the unit. Your unit should be connected to earth ground. Steps should be taken beyond connecting to earth ground to eliminate the buildup of electrostatic charges.

The chassis ground is not connected to signal common of the unit. Maintaining isolation between earth ground and signal common is not required to operate your unit. But, other equipment connected to this unit may require isolation between signal common and earth ground. *To maintain isolation between signal common and earth ground care must be taken when connections are made to the unit.* For example, a power supply with isolation between its signal common and earth ground must be used. Also, plugging in a USB cable may connect signal common and earth ground.¹



BATTERY & TIME KEEPING

WARNING - EXPLOSION HAZARD - DISCONNECT POWER AND ENSURE THE AREAS IS KNOWN TO BE NON-HAZARDOUS BEFORE SERVICING/REPLACING THE UNIT AND BEFORE INSTALLING OR REMOVING I/O WIRING AND BATTERY.

A battery is used to keep time when the unit is without power. Typical accuracy (at 25°C) of the Graphite time keeping is less than one minute per month drift. The battery of a Graphite unit does not affect the unit's memory, all configurations and data is stored in non-volatile memory.

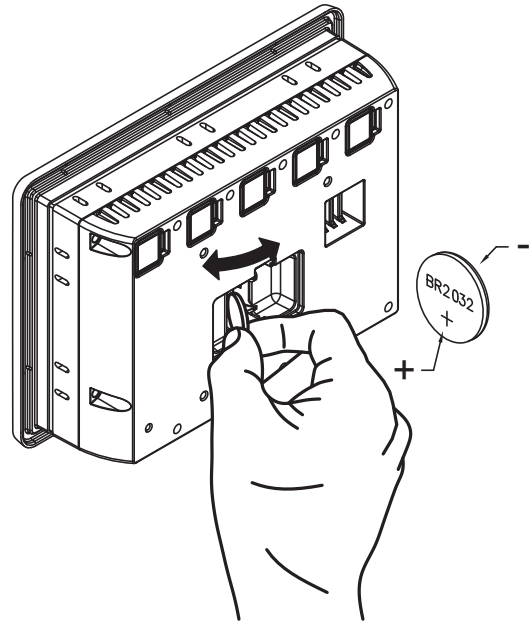
Changing the Battery

To change the battery of a Graphite, first remove power to the unit. Remove the battery cover. Grasp the top edge of the battery and push to the left to remove the battery from the holder. Lift the battery out and replace with a new battery.

Replace the battery cover, and re-apply power. Using Crimson or the unit's keypad, enter the correct time and date.

** Please note that the old battery must be disposed of in a manner that complies with your local waste regulations. The battery must not be disposed of in fire, or in a manner whereby it may be damaged and its contents could come into contact with human skin.*

The battery used by the panel is a lithium type BR2032.



LIMITED WARRANTY

(a) Red Lion Controls Inc. (the "Company") warrants that all Products shall be free from defects in material and workmanship under normal use for the period of time provided in "Statement of Warranty Periods" (available at www.redlion.net) current at the time of shipment of the Products (the "Warranty Period"). **EXCEPT FOR THE ABOVE-STATED WARRANTY, COMPANY MAKES NO WARRANTY WHATSOEVER WITH RESPECT TO THE PRODUCTS, INCLUDING ANY (A) WARRANTY OF MERCHANTABILITY; (B) WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE; OR (C) WARRANTY AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OF A THIRD PARTY; WHETHER EXPRESS OR IMPLIED BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE OR OTHERWISE.** Customer shall be responsible for determining that a Product is suitable for Customer's use and that such use complies with any applicable local, state or federal law.

(b) The Company shall not be liable for a breach of the warranty set forth in paragraph (a) if (i) the defect is a result of Customer's failure to store, install, commission or maintain the Product according to specifications; (ii) Customer alters or repairs such Product without the prior written consent of Company.

(c) Subject to paragraph (b), with respect to any such Product during the Warranty Period, Company shall, in its sole discretion, either (i) repair or replace the Product; or (ii) credit or refund the price of Product provided that, if Company so requests, Customer shall, at Company's expense, return such Product to Company.

(d) THE REMEDIES SET FORTH IN PARAGRAPH (c) SHALL BE THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDY AND COMPANY'S ENTIRE LIABILITY FOR ANY BREACH OF THE LIMITED WARRANTY SET FORTH IN PARAGRAPH (a).