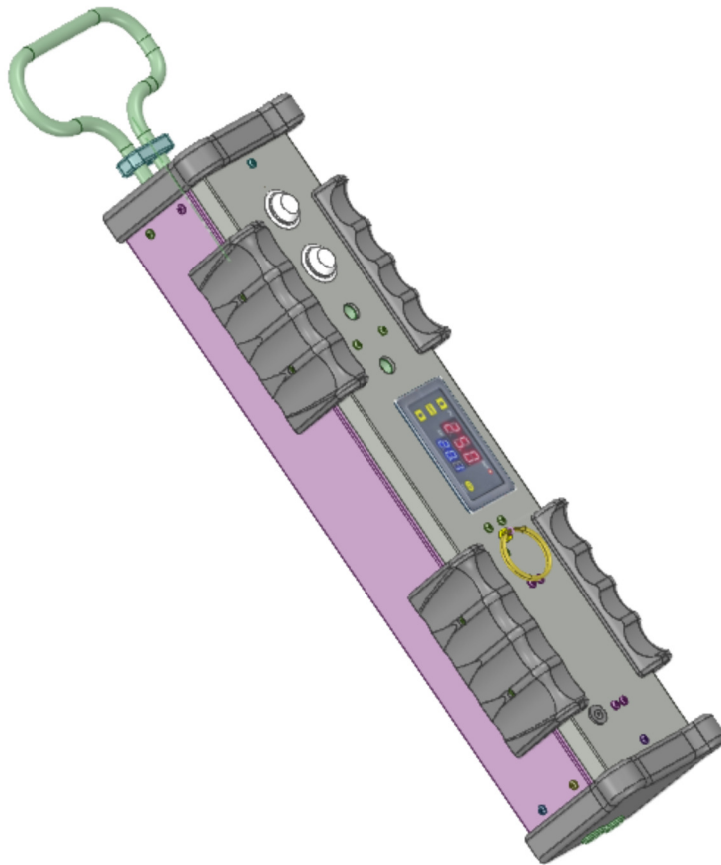




ORDNANCE TRAINING SOLUTIONS®

Universal Charge Controller



Ordnance Training Solutions ®

Universal Charge Controller

DESCRIPTION

Ordnance Training Solutions' Universal Charge Controller incorporates the latest technological advancements making this new generation training device the preferred choice meeting the stringent training requirements of today's military, law enforcement and security professionals.

Universal Charge Controller is inert, provides consistent (user-programmable) Fuse and Run times, and the integral rechargeable battery is always mission ready providing multiple activations per training session.

Specifically designed to withstand rigorous environments by utilizing extremely durable PVC and urethane materials. Provides safe, reliable and repeatable operations for indoor, outdoor, day and night training exercises to practice critical timing, repetitive memory and procedural skills where live- strip-charge training would ordinarily be conducted.

Size, weight and mode of operation provides safe handling, stowing, arming and deployment for

training exercises, while non-kinetic visual and audible stimulation is provided via high-intensity LED and loud siren.

Power magnets integrated into enclosure allows the Universal Charge Controller to be positioned on metallic surfaces and a lanyard facilitates placement on non-magnetic objects. Strategically placed grips facilitate operator handling during deployment.

Set programmable timer for appropriate Run and Fuse times for the exercise, deploy the Universal Charge Controller in desired location and remove pull-ring to activate. After the programmed Fuse Time, the integral LED and siren will activate for programmed Run Time. Replace pull ring and the Universal Charge Controller is ready to be redeployed for next exercise.

Technical Surveillance Counter Measures were consider as this device does not support WiFi, Bluetooth or cell phone functionality.

SPECIFICATIONS*

Controls

1.25" Pull Ring Activates / Secures for exercises, storage and transport.

Mode of Operation Removing pull-ring activates programmable timer. After programmed Fuse time, LED and siren activates for the programmed Run time. Replacing the pull-ring resets the timer and makes ready for next deployment.

ELECTRICAL

Power Internal 12VDC 800mA SLA AGM rechargeable battery.

UL Approved (MH28204)
CE Approved (G2M20203-0102-E-16)
Internally fused

Integral Digital Timer User-programmable micro-controlled timing for precise Fuse and Run times.

Integral Siren Qty 2, nominal 103 ±5 dB(A) at 15 Vdc at 24 inches (61 cm) at 25°C.

Integral LED Strobe

MECHANICAL

Material PVC and molded urethane rubber

Dimensions 444.5mm (17.5in) L X 108mm (4.2in) W X 101.6mm (4in) H

Color Light Gray

Warranty 1yr

*Subject to change without notice

OPERATION

The Universal Charge Controller is housed in a rugged PVC enclosure. The enclosure and integrated electronics are splash-proof, allowing the instrument to be deployed in wide-ranging environmental conditions. End caps and hand grips made from urethane rubber enhance ruggedness and handling capabilities.

Power

Power is provided by an internal 12VDC 800mA rechargeable battery. The sealed battery enclosure features an absorbed electrolyte system (AGM) for maintenance-free operation and long service life.

Depending on storage temperature, the internal battery shelf life is referenced below:

Shelf Life (% of normal capacity at 77F(25C)

3 Months	6 Months	12 Months
91%	82%	64%

User precautions:

- do not remove or disassemble
- do not incinerate
- do not dispose of with household waste
- recharge at least every 6 months of usage

The included charger should be used to recharge the battery following a series of deployments. Simply connect the charger to the charge port located on front panel and plug charger into appropriate AC 100 ~ 240VAC outlet. An LED indicator on the charger indicates the charger is operational.

- recharge the battery, then disconnect the charger to prevent overcharging

Charger Safety/ EMI info:
ETL1310, EN61558 Meets FCC Part15 Class B

Indicators

Non-kinetic visual and audible stimulation is provided via high-intensity LED and loud sirens incorporated into the front panel. These provide visual and aural indications the programmed Fuse and Run Time exercise has expired. Two LEDs and two sirens are used to ensure operators can see and hear activations from safe distances normally practiced when using non-inert training devices.

Note: use appropriate hearing protection during the exercise. Each siren produces nominal 103 ± 5 dB(A) at 15 Vdc at 24 inches (61 cm) at 25°C

Controls

Control is accomplished via a user-programmable microprocessor controlled timer located on front panel. The timer provides multiple operational modes, and Fuse and Run Time settings from 0 to 999 seconds, minutes or hours. This flexibility provides operators many options to simulate a wide variety of exercises. Once mode and timer values are programmed, these values are stored internally and recalled allowing the device to be used for multiple exercises without having to reprogram for each operation.



The optimum program mode for typical Fuse and Run Time operation would be accomplished by;

Set Program Mode

1. Remove Pull Ring and timer will turn on.
2. Press and hold Mode Button for 2 seconds.
3. Press Up/Down Button until Fuse Time Display (red) reads P0 and the Run Time display (green) displays 0. The timer function is set for 0 to 999 seconds.
4. Press Mode Button briefly, then press Up/Down Button until Run Time (green) display reads P1-2. The timer mode is set to countdown the Fuse Time setting, then active the LED and sirens for Run Time setting.

5. Press and hold the Mode Button until the Fuse Time display starts counting down.
6. Press and hold the Mode Button for 1 second and the Fuse Time display (red) will flash. Use the Up/Down Button to select the desired Fuse Time in seconds (0 to 999sec).

Set Timer Mode

7. Press the Mode Button again and the Run Time display (green) will flash. Use the Up/Down Button to select the desired Run Time in seconds (0 to 999sec).
8. Press the Mode Button again and these settings will be stored in the controller memory. Press the Mode Button again and these settings will be stored in the controller memory.
9. Reinsert Pull Ring

After completing the above steps to program the controller, alternate Run Time and Fuse Times can easily be changed by repeating steps 6 and 7 above.

Activation

Once the timer module has been programmed, all settings are retained in memory to facilitate multiple same-day operations without the need to reprogram for subsequent operations.

To active, deploy the Universal Charge Controller in desired location, remove Pull Ring and the programmed operation starts.

After activation has completed, the timer will pause until the Pull Ring is replaced, then be ready for next deployment and activation.

Additional Operational Modes

Following steps 1 thru 8 outlined above, additional programming options are available to meet needs of alternative operating modes by selecting these options:

- P0 – 0 Sets Fuse and Run Time to Seconds (0 to 999)
- P0 – 1 Sets Fuse and Run Time to Minutes (0 to 999)
- P0 – 2 Sets Fuse and Run Time to Hours (0 to 999)

P1 – 0 Remove Pull Ring. LED and Horn are activated after Fuse Timer is expired, and remain on until Pull Ring is inserted.

P1 – 1 Remove Pull Ring. LED and Horn are activated immediately and remain on until Fuse Timer is expired.

P1 – 2 Preferred Mode of Operation

Remove Pull Ring. LED and Horn are activated after Fuse Timer has expired and remain on until Run Timer has expired.

P1 – 3 Remove Pull Ring. LED and Horn are activated immediately and remain on until Fuse Timer is expired, then LED and Horn turn off until Run Timer is expired, then LED and Horn turn on until Pull Ring is reinserted.

P1 – 4 Remove Pull Ring. LED and Horn are activated after Fuse Timer has expired, LED and Horn are reactivated until Run Timer has expired, then automatically restarts.

P1 – 5 Remove Pull Ring. LED and Horn are activated immediately and remain on until Fuse Timer has expired, then LED and Horn turn off until Run Timer is expired, then automatically restarts.

Programming Instructions

Initial 1-time Setup – Program Timer for Sec, Min, or Hours
 Remove PULL PIN. Press & hold SET for 2 seconds. Press Up/Down Arrow until display reads P0-0 to select Seconds, P0-1 to select Minutes or P0-2 to select Hours. Press SET. Press Up/Down Arrow until display read P1-2. Press & hold Set until display resets. Timer mode is now saved to memory.

Recurring Setup – Program Fuse and Run Time
 Remove PULL Pin. Press / hold Set 1 second. RED display Flashes. Press Up/Down arrow to select desired Fuse Time. Press / hold Set 1 second. GREEN display flashes. Press Up/Down arrow to select desired Run Time. Wait until display resets. Run and Fuse Times are now saved to memory.

Ordnance Training Solutions ®

a/k/a Industrial Electronics, Inc.

WARRANTY

Ordnance Training Solutions* (OTS) warrants that the items will be delivered free from defects in material or workmanship. OTS makes no other warranties, express or implied, and specifically NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

OTS's exclusive liability is limited to repairing or replacing at OTS's option, items found by OTS to be defective in workmanship or materials within one year from the date of delivery. OTS's liability on any claim of any kind, including negligence, loss, or damages arising out of, connected with, or from the performance or breach thereof, or from the manufacture, sale, delivery, resale, repair, or use of any item or services covered by this agreement or purchase order, shall in no case exceed the price allocable to the item or service furnished or any part thereof that gives rise to the claim. In the event OTS fails to manufacture or deliver items called for in this agreement or purchase order, OTS's exclusive liability and buyer's exclusive remedy shall be release the buyer from obligation to pay the purchase price. In no event shall OTS be liable for special or consequential damages.

Quality Control

Before being approved for shipment, each OTS instrument must pass a stringent set of quality control tests designed to expose any flaws in materials or workmanship. Permanent records of these tests are maintained for use in warranty repair and as a source of statistical information for design improvements.

Repair Service

If it becomes necessary to return this product for repair, it is essential that Customer Service be contacted in advance of its return so that a Return Authorization Number can be assigned to the unit. Also, OTS must be informed, either in writing, by telephone, or facsimile transmission, of the nature of the fault of the product being returned and the model, serial number and revision number. Failure to do so may cause unnecessary delays in repairs. The OTS standard procedure requires that products returned for repair pass the same quality control tests that are used for new production products. Products returned should be packed to withstand normal transit handling and must be shipped PREPAID to OTS. The address label and package should include the Return Authorization Number assigned. Instruments returned that are damaged in transit due to inadequate packing will be repaired at the sender's expense and it will be the sender's responsibility to make claim with the shipper. Instruments not in warranty should follow the same procedure and OTS will provide quotation for repairs.

Damage in Transit

Shipments should be examined immediately upon receipt for evidence of external or concealed damage. The delivery carrier should be notified immediately of any damage, since the carrier is normally liable for damage during shipment. Packing materials, waybills, and other such documentation should be preserved in order to establish claims. After carrier notification, please notify OTS of the circumstances so that assistance can be provided in making damage claims and providing replacement equipment if necessary.

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