



# The G.L.O.V.E. USER MANUAL

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Pictured on cover:
Compliant Technologies CT-F1 G.L.O.V.E.

### **CHAPTER 1: Safety and Terms**

### **SAFETY:**

CEW'S (Conducted Electrical Weapon) are not risk free and should be treated seriously like any other weapon. Follow all laws, agency policies and TTP's (Tactics Techniques and Procedures) when employing the G.L.O.V.E. CEW or any weapon.

CEW's can provide force multiplication to one or more officers and thus enhance the safety of the user(s) and the public through apprehension and deescalation by non-lethal means of force but at the same time can be dangerous if not used correctly. Follow all Cautions, Warnings and Notes highlighted throughout this manual.

#### TERMS:



If not followed can result to injury or death



If not followed can result in equipment damage or failure



Information to be highlighted

### **CHAPTER 1: Safety and Terms**

**TERMS: CONTINUED...** 

WILL/SHALL Mandatory and Non-Negotiable

SHOULD Suggested Course of Action

MAY Option at the users discretion

CEW Conducted Electrical Weapon

G.L.O.V.E. <u>Generated Low Output Voltage Emitter</u>

TTP's Tactics, Techniques and Procedures

NPI Neuro-Peripheral Interference

ROE Rules of Engagement



In order to operate The G.L.O.V.E. you must be trained and qualified on this tool. See your agency's instructor for training and qualification or contact Compliant Technologies for more information.



Once qualified and certified on The G.L.O.V.E. an individual's certification is good for 2 years from the date of course completion. All individuals will have to go through re-certification or instructor level courses by the end of their second year. Failure to complete the bi-annual training will disqualify you from G.L.O.V.E. use until you recertify.

### CHAPTER 2: General Overview, Specifications and Components

The G.L.O.V.E. stands for Generated Low Output Voltage Emitter CEW. It is a tool used within the Force Continuum to supplement existing Law Enforcement, Corrections, Security, Military and EMS personnel. It is not intended to compete with or replace any existing tool but to supplement existing weapons and tools within an agency's policies and TTP's.

The G.L.O.V.E. is a "Force Multiplier" for officers operating within their agency's current Force Continuum when on their own or in mass.

G.L.O.V.E. construction is made up of high-grade leather and man-made materials. There are various models of the G.L.O.V.E. but the CEW technology for all tactical models is the same.

#### **GENERAL SPECIFICATIONS:**

- 8 models
- Sizes: M, L, XL, XXL
- Activation: wrist switch 1 second on and 3 second off
- **Duration of use: 2.0 hours**
- **Duration of charge: 2 days to months**
- **Battery: 3.7v Lithium Ion battery**
- Charge time: 2 hours
- Maximum Voltage: 210-320V (cannot go above 380V)
- Maximum Current: 0.9 1.5A
- Pulse duration [µs] 105 115
- Pulse charge [μC] 84 125
- Pulse repetition rate [pps] 29.7 30.8
- **Duty cycle [%] 0.32 0.35**
- Operating temperature: 14°F to 122°F (-10°C to 50°C)

(Pictured on Right): **Compliant Technologies** CT-EBA (E-Band Restrictor/Arm)



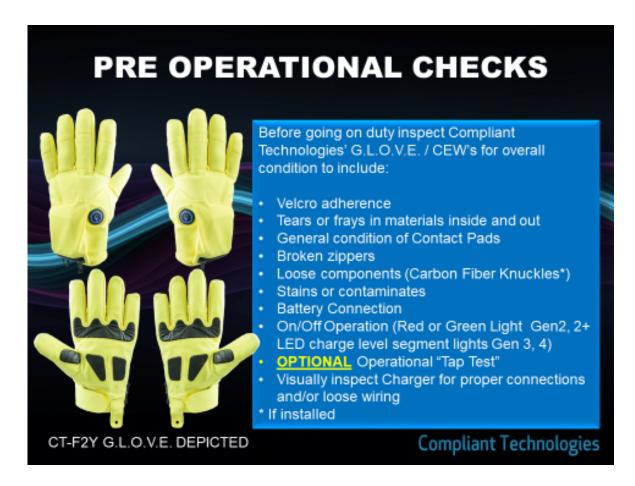
### **CHAPTER 2: General Overview, Specifications and Components**



Pictured Right:
Compliant Technologies
CT-F2T (Training G.L.O.V.E.)

1/50<sup>TH</sup> The Power of the regular G.L.OV.E. Great for training without feeling the full effects of the G.L.O.V.E which allows for Longer training times in various Scenarios.

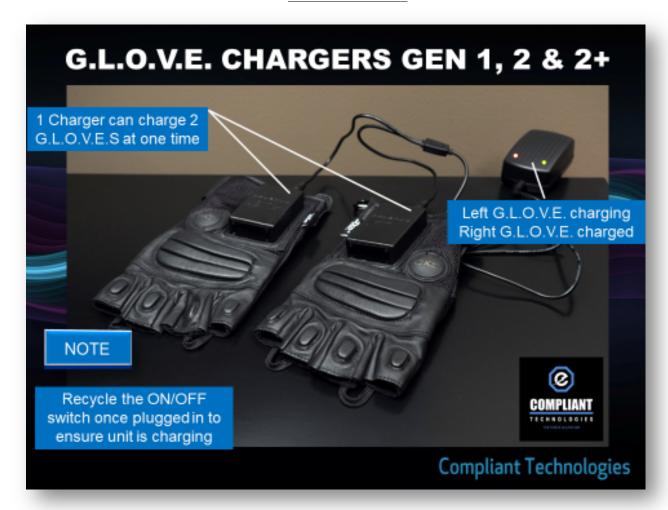




If any component negatively affects the operational worthiness and readiness of The G.L.O.V.E. then it will be deemed unserviceable and removed from service.

### **NOTE**

If one G.L.O.V.E. is inoperative the other can still be put into service. One G.L.O.V.E. will still be adequately effective in service.



GEN 1, 2 and 2+ G.L.O.V.E. chargers come with 1 cable, capable of charging 2 G.L.O.V.E.s at once. Before plugging in make sure there are no frayed or broken wires and that the adaptor plugs are securely connected to the wires leading to the power supply.

The power supply has 2 lights that glow red or green. Each light represents the status of The G.L.O.V.E. connected to that particular wire. When charging, the power supply light will be red until charging is complete at which time the light will turn green. Simply unplug The G.L.O.V.E. and the power supply and store until use is required.

The charge on The G.L.O.V.E. can last for months if not turned on and up to a few days when in the "ON / STANDBY" mode. Once in action The G.L.O.V.E. can stun for approximately 2 hours of continuous use depending on the level of charge. When the charge on The G.L.O.V.E. is getting low the green battery light in the battery compartment will turn red indicating it's time to recharge the battery.



GEN 3 and 4 G.L.O.V.E. chargers come with 1 or 2 charging cube and 2 USB cables. Before plugging in make sure there are no frayed or broken wires and that the adaptor plugs are securely connected to the wires leading to the power supply.

The charging Cubes plug into the wall while the USB can be plugged into the charging cube or USB socket. The Battery/Micro-Processor (B/MP) has 4 LEDs indicating charge which are accessed through the zippered pouch on the wrist. Each segment represents 25% of charge. e. When charging, the B/MP LED segments will continue charging until all 4 LEDs are lit up. When the B/MP is completely charged the LEDs will turn green indicating charging is complete. Simply unplug the wire from the charging device and B/MP and store until use is required.

The charge on The G.L.O.V.E. can last for months if not turned on and up to a couple days when in the "ON / STANDBY" mode. Once in action The G.L.O.V.E. can stun for approximately 2 hours of continuous use depending on the level of charge. At 25% B/MP remaining power, recharge the G.L.O.V.E.(s).

### G.L.O.V.E. BATTERY/MICRO-PROCESSOR GEN 2 & 2+



The Indicator light on the battery should be at the zipper end of the pouch. When on, a green light will glow indicating the battery is charged and blinks red when the battery needs to be re-charged. Be careful when changing the battery, each wire is different so therefore installation should be easy and error free. The wiring is short inside the glove so use caution when installing the battery and don't pull hard on the wires as this could damage the G.L.O.V.E.s connector and internal wiring.

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Pictured Left: Compliant Technologies CT-ES (Electronic Shield)

Pictured Far Left: Compliant Technologies CT-ES Control Panel

Features: Electronic Pulse
Using G.L.O.V.E.
technology and High
Intensity Green LED pulsating light







# G.L.O.V.E. MICRO-PROCESSOR / BATTERY GEN 3 and 4



The battery indicator lights and charging port should be at the zipper end of the G.L.O.V.E. pouch and the serial number on the side oriented up. Be careful when removing and installing the B-MP. Do not grab the wires but each connector. When installing make sure all prongs go into each connector properly or the G.L.O.V.E. will not function. The wiring inside the G.L.O.V.E. is short so use caution when installing the B-MP and don't pull on the wires as this could damage internal connections.

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Pictured Right: Compliant Technologies CT-SS (Sound Shield)

Pictured Far Right: Compliant Technologies CT-SS (Sound Shield) Handles and Controls

Features: 33 – 130db speakers





To download the mini SD card to the computer simply make sure the G.L.O.V.E. is off. Remove the SD card from the Battery/Micro-Processor and slide the mini SD card into the provided reader.

Plug the mini SD card reader into the computer and determine what drive is identified as the USB. Open the USB drive and select the appropriate date. The file will be the serial # of the Battery / Micro-Processor and date. The sub files will be each event displaying the DATE: HOUR:MINUTE:SECOND of when you grabbed an individual or conductive object and when you released.



Thousands of events can be stored on the mini SD card. Compliant Technologies recommends downloading the data at least quarterly and transferring to a secure storage file.

### **CHAPTER 4: Basic Glove Operations**

The G.L.O.V.E. is turned ON by pressing and holding the ON/Off button for 1 second. Upon activation the ON/OFF button will light up along with the light on the battery. To turn The G.L.O.V.E. off press and hold the ON/OFF button down again for 2-3 seconds and the light will go off along with the corresponding battery light.

An Operational "Tap Test" which is <u>Optional</u> can be performed by activating the G.L.O.V.E. and quickly tapping it on the hand or forearm. The G.L.O.V.E. will give the user a slight electrical charge letting the operator know it's operational.



No more than 2 (1 pair equivalent) of gloves should be applied at one time to one individual with no more than 15 seconds in duration on a Level 2 ROE event

The G.L.O.V.E will work through soaked thin clothing layers such as T-shirts and very thin blouses and dress shirts etc.

# NOTE

The G.L.O.V.E. must come in contact with the subject's skin.

The G.L.O.V.E.'s CEW component is not affective through clothing or hair and can be degraded on individuals who are extremely hairy.

CEW component of the G.L.O.V.E. is not affective on animals because of their fur.

The user and other officers can touch the person the G.L.O.V.E. is applied to without fear of being shocked.

The G.L.O.V.E. can get wet but can't be immersed in water. The effectiveness of The G.L.O.V.E. does not change or diminish when the subject or user are wet.

The G.L.O.V.E. should not be operated around flammable substances and If possible avoid all flammable materials.

### CHAPTER 5: Medical, Physiological Effects, ExDS

#### **MEDICAL:**

CEW's stimulate the sensory and motor systems of the Central and Peripheral Nervous Systems which inhibits/ distracts the subject from performing coordinated muscle movement.

Many medical and research study's involving CEW's have been conducted over past decades. The vast majority of these findings conclude that, when used properly and within legal limits, agency policy and along with sound TTP's, these tools pose no immediate threat or significant health risk to the general population. However, Compliant Technologies recommends <u>not</u> using The G.L.O.V.E. or other CEW's on the following higher risk portions of the population:

- The elderly
- · Small children
- Pregnant women
- The severely handicapped
- Those with obvious health conditions

### **PHYSIOLOGICAL:**

CEW's may increase the affects that can cause sudden death including Physiological changes with:

- Increase in blood pressure
- Changes in blood chemistry
- Increase in respiration and heart rates
- · Changes in heart rhythm
- Increase in Adrenaline
- The longer the CEW exposure, the greater the potential risk



Any use of force, including CEW(s) employment, may cause or contribute to death or serious injury. Follow your agency's guidance and policies when dealing with medically compromised persons.

### **CHAPTER 5: Medical, Physiological Effects, ExDS**

Various Agencies are called upon daily to deal with the general public. Sometimes the response is to individuals in various states or mind, or emotion and often times under the influence of some form of drug or alcohol. These individuals may also have underlying medical conditions that may or may not be easily discernable with casual observation and thus may be susceptible to an arrest-related death.

When dealing with suicidal individuals be sure to follow your agency polices, TTP's and other related protocols when dealing with these subjects.

### EXDS (EXCITED DELERIUM SYNDROME):

Controversy has continued regarding the cause and manner of death of some highly agitated persons held in police custody, restrained or incapacitated by CEW(s).

ExDS is a Syndromal disorder (sets of symptoms) and is highly debated because the mechanism of lethality is unknown.

When triggered, dopamine levels increase in the brain and a lethal cascade of neural activities progress from Hyperthermia (body too hot) to Asphyxia and sudden Cardiac Arrest then death. Medical examiners frequently cite Psychostimulant (ADHD drugs) intoxication as a contributing factor.

In North America ExDS is most frequently associated with Cocaine, Methamphetamine, and Cathinone (Bath Salts) use. Alcohol may or may not be on board or the individual may not be on any stimulants at all.

#### **Characteristics of ExDS include:**

- Bizarre and Aggressive behavior
- Shouting
- Paranoia
- Panic
- Violence
- Unexpected physical strength
- Hyperthermia (Hallmark symptom of ExDS)

### CHAPTER 6: Tactical Considerations for Use of Force

When considering Use of Force, operators will take into consideration the following:

- The user's experience level, and comfort level with their agency's equipment, TTP's, and the individual(s) situational awareness at that time, and available back-up
- The subject(s) actions/behaviors during the course of the interaction with the officer(s)
- · The risk/benefit associated with any given level of force utilized during the encounter

When dealing with anyone, always give the subject(s) a reasonable opportunity to comply before force is used. When the decision to use force is made, use only that minimum amount of force necessary to accomplish lawful objectives within the scope of the agency's force continuum, policies and TTP's.

It is recommended to have an additional officer on scene to cuff while the G.L.O.V.E. is being employed. Always advise other officers of G.L.O.V.E. employment by saying, "GLOVE ON!"

Users should radio in CEW employment use and call in a post event status report.

No weapon or tool used within the Force Continuum is ever operational or effective 100% of the time so an individual's Situational Awareness, knowledge of agency policies, TTP's, training and experience is key! Users should be ready to employ other force options, or disengage if practical.

## NOTE

The user and other officers can handle and handcuff the subject without fear of being stunned as long as the user doesn't grab the other officer(s) skin.

When grabbing the subject's extremities the officer(s) may be in a better position to manipulate the subject to prevent serious fall injuries due to the G.L.O.V.E. application, but, safety to the officer or subject can never be guaranteed.

Some G.L.O.V.E. models have demonstrated that officers have the ability to retrieve and handle other tools and weapons to include firearms without being stunned. Agencies will set their own TTP's and Policies and select the best model for their agency needs.

### **CHAPTER 6: Tactical Considerations for Use of Force**

No one **SHALL** ever employ the G.L.O.V.E. for the following:

- Verbal defiance or belligerence
- **Punishment**
- Torture
- Horse play

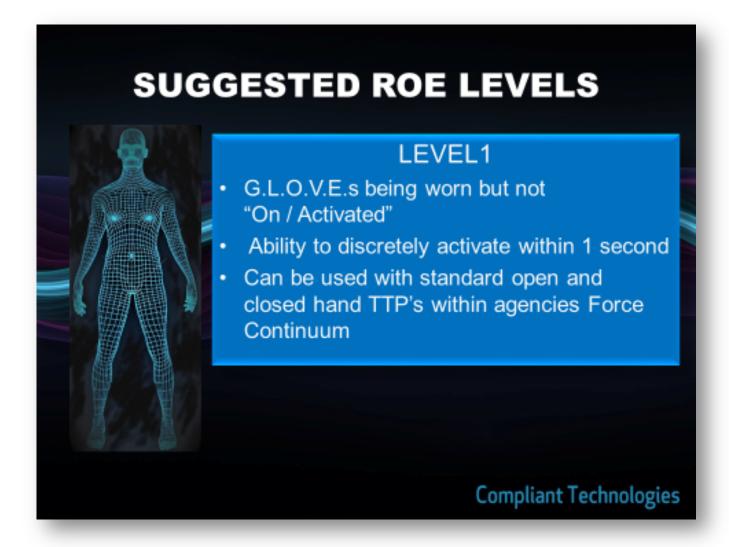
Avoid using the G.L.O.V.E. against certain portions of the population to include:

- The elderly
- Small children
- Pregnant women
- The severely handicapped
- · Those with obvious health conditions





Agencies will set their own TTP's and training policies incorporating The G.L.O.V.E.



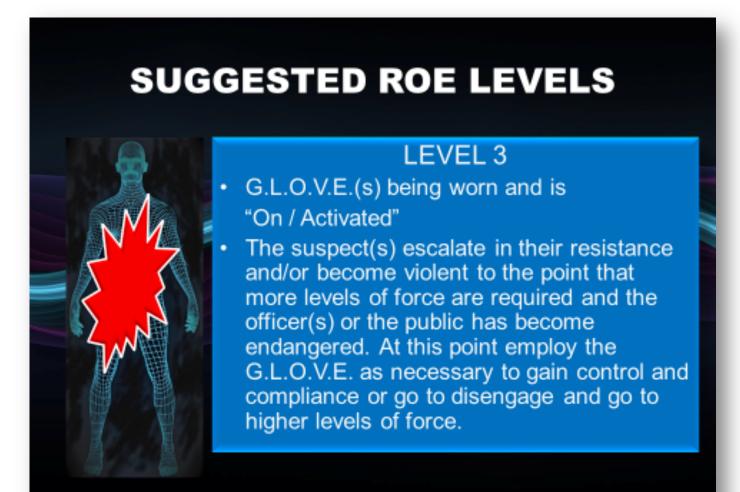
### NOTE

Compliant Technologies does not set any policies or TTP's. Our ROE is simply a suggested framework from which an agency can develop and set their own standards.

### SUGGESTED ROE LEVELS LEVEL 2 G.L.O.V.E.s being worn "On / Activated" The decision is made to employ the G.L.O.V.E. Officer(s) can grab the hands and arms, legs and feet, back and shoulders Avoiding the head and face, throat, chest and groin area WARNING One G.L.O.V.E. is normally all that's needed per employment but no more than 2 G.L.O.V.E.s shall be used per interaction per individual No more than 15 seconds duration is recommended per application **Compliant Technologies**

### NOTE

Compliant Technologies does not set any policies or TTP's. Our ROE is simply a suggested framework from which an agency can develop and set their own standards.



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### **POST INCIDENT:**

After an incident in which an officer or user employs The G.L.O.V.E. they will be able to record the event on the Compliant Technologies' G.L.O.V.E. / CEW After Action Review Form

This form can be filled out on-line at: www.complianttechnolgies.net Go to the contact page and select "Submit After Action Survey" It will automatically be sent to Compliant Technologies for review.



Use your agency's TTP's for reporting significant events for CEW employment, CEW termination and post event status reporting.



For most agencies, when CEW employment has taken place, it is required to initiate CEW post incident EMS medical response.

#### TROUBLE SHOOTING:

The G.L.O.V.E. is a tool made to ensure reliability and operability, ready for those who need them when that critical time arrives. Unfortunately, no technology is ever 100% operational or reliable 100% of the time. Therefore, the following is a trouble shooting guide for The G.L.O.V.E. In the event of a malfunction.

### • Failure of G.L.O.V.E. to turn on or stun

- 1. Visually and functionally inspect the On/Off switch. The ON/OFF switch light should turn on in 3 seconds and the green battery light should come on in the back of the battery. If the light doesn't come on then the battery is completely dead or the switch is bad. Attempt to recharge the G.L.O.V.E., if the problem still persists remove the G.L.O.V.E.'s battery (if equipped to do so) and replace with another battery. If the problem still persists then check the charger.
- 2. Visually and functionally inspect The G.L.O.V.E. charger. Make sure that it is plugged in and connects easily to The G.L.O.V.E. and that the appropriate red and green lights illuminate depending on the status of the battery. If the charger doesn't seem to be working properly, switch chargers and try recharging The G.L.O.V.E. If The G.L.O.V.E. does recharge, then the charger was bad, remove it from service and contact Compliant Technologies. If The G.L.O.V.E. still doesn't charge, then there is an issue with it, so remove The G.L.O.V.E. from service and contact Compliant Technologies.

#### Failure of G.L.O.V.E. to turn off

- 1. Visually and functionally inspect the On/Off Switch (Light Off) Recycle Switch 2 times.
- 2. Conduct the Operational "Tap Test" Optional. If The G.L.O.V.E. is still functioning then remove and replace the battery (if equipped to do so). If the problem still persists remove and replace the battery with a different battery. If the problem is still present, then remove The G.L.O.V.E. from service and contact Compliant Technologies.

### TROUBLE SHOOTING: CONTINUED...

Lithium Ion Battery Issues

Compliant Technologies' G.L.O.V.E. and other CEW's use Lithium Ion Batteries to operate. In the unlikely event you have a battery issue and the battery is:

- Hot
- Smoking
- Sparking or catching fire
- 1. If the G.L.O.V.E. is on and being worn immediately turn it off and take off The G.L.O.V.E., place it on a non-flammable surface outside and away from other people and flammables and contact Compliant Technologies.

Pictured Right: Compliant Technologies' Generation 2 and 2+ Replaceable 3.7 Volt Lithium Ion Battery/Micro Processor.





DO NOT ATTEMPT TO REPAIR THE G.L.O.V.E. THIS WILL VOID THE MANUFACTURER'S WARRANTY.



The G.L.O.V.E. has a removable battery housed in a zippered battery compartment. Compliant Technologies recommends battery replacement every 2 years.

### SAFETY PRECAUTIONS FOR LITHIUM ION BATTERIES:

### When Using the Battery:

Misusing the battery may cause the battery to get hot, explode, or ignite and cause serious injury. Be sure to follow the safety rules listed below:

- Do not carry or store the batteries together with necklaces, hairpins, or other metal objects.
- Do not solder directly onto the battery.
- Do not place the battery in fire or heat the battery.
- Do not place the batteries in microwave ovens, high-pressure containers, or on induction cookware.
- Do not install the battery backwards so that the polarity is reversed.
- Do not connect the positive terminal and the negative terminal of the battery to each other with any metal object (such as wire).
- Do not penetrate the battery with nails, strike the battery with a hammer, step on the battery, or otherwise subject it to strong impacts or shocks.
- Do not expose the battery to water or salt water, or allow the battery to get wet.
- Do not disassemble or modify the battery. The battery contains safety and protection devices, which, if damaged, may cause the battery to generate heat, explode or ignite.
- Do not place the battery on or near fires, stoves, or other high-temperature locations. Do not place the battery in direct sunshine, or use or store the battery inside cars in hot weather. Doing so may cause the battery to generate heat, explode, or ignite. Using the battery in this manner may also result in a loss of performance and a shortened life expectancy.
- Do not insert the battery into equipment that is hermetically sealed. In some cases hydrogen or oxygen may be discharged from the cell, which may result in rupture, fire or explosion.

Immediately discontinue use of the battery if, while using, charging, or storing the battery, the battery emits an unusual smell, feels hot, changes color, changes shape, or appears abnormal in any other way.

In the event the battery leaks and the fluid gets into one's eyes, do not rub them. Rinse thoroughly with water and immediately seek medical care. If left untreated the battery fluid could cause serious damage to the eyes.

When the battery is dead, insulate the terminals with adhesive tape or similar materials before disposal.



Handle

with Care

#### SAFETY PRECAUTIONS FOR LITHIUM ION BATTERIES: continued...

### When Charging the Battery:

- Only use chargers that have specially been designed for use with lithium-ion batteries.
- Do not attach the batteries to a power supply plug or directly to a car's cigarette lighter.
- Do not place the batteries in or near fire, or into direct sunlight. When the
  battery becomes hot, the built-in safety features are activated, preventing
  the battery from charging further, and heating the battery which can destroy
  the safety features equipment and can cause additional heating, or ignition
  of the battery.
- Do not continue charging the battery if it does not recharge within the specified charging time. Doing so may cause the battery to become hot, explode, or ignite.

The temperature range for charging the battery is 0°C to 45°C. Charging the battery at temperatures outside of this range may cause the battery to become hot or, effect the performance of the battery, or reduce the battery's life expectancy.

### When Discharging the Battery:

Do not discharge the battery using any device except for The G.L.O.V.E. When the battery is used in devices aside from The G.L.O.V.E. it may damage the performance of the battery or reduce its life expectancy. If the device causes an abnormal current flow, it may cause the battery to become hot, explode, or ignite and cause serious injury.

The temperature range for which the battery can be discharged is -10°C to 55°C. Use of the battery outside of this temperature range may damage the performance of the battery or may reduce its life expectancy.

#### When Storing the Battery:

If you are not planning on using the battery for about 6 months or longer, first charge it fully and then recharge it once a year. A lithium-ion battery that has been left un-charged for too long will no longer be able to be re-charged. The Storage temp should be from -5°C to 35°C.

### **DECONTAMINATION:**

Periodic cleaning of the outside surface area of the G.L.O.V.E. is recommended with mild soap and water and/or a PDI Sanicloth® or other similar disinfectant. Decontaminating the G.L.O.V.E. due to blood and/or other bodily fluids, etc. should be done with a PDI Sanicloth® or other similar disinfectant.

Compliant Technologies recommends Glove STIX for internal care and decontamination of the G.L.O.V.E.

Glove STIX and refills may both be purchased by calling (859) 447-0576 or on line at www.complianttechnologies.net



### **CHAPTER 9: Warranty and Contact Information**

#### **WARRANTY:**

Compliant Technologies provides a full one year warranty from date of delivery on all purchased products and a full time warranty on all products enrolled in Compliant Technologies subscription plan. If a problem can't be diagnosed and corrected while still under warranty simply return The G.L.O.V.E. to Compliant Technologies.

Reckless or improper use of the glove is not covered under warranty.

### **CONTACT INFORMATION:**

Compliant Technologies can be reached at:

P.O. Box 24714 Lexington, KY 40524

Phone #: 859-447-0576

Our email address is: info@complianttechnologies.net

Please contact us if you find any error in this manual or if you have any suggestions. Your input is greatly desired and appreciated.