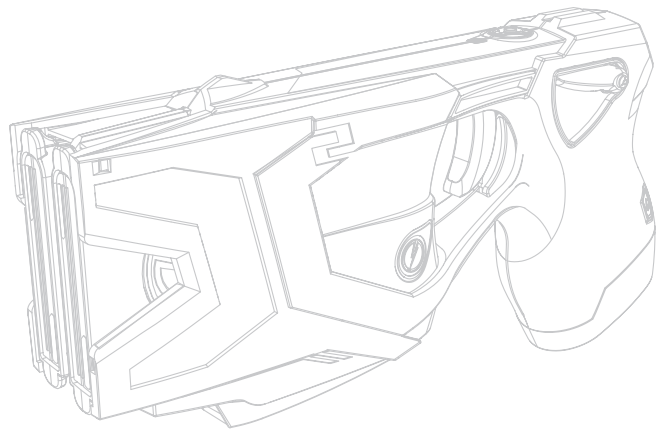




# TASER<sup>®</sup> X2<sup>™</sup> CEW

## User Manual



Models 22000, 22001, 22002, 22003



### **IMPORTANT SAFETY INSTRUCTIONS.**

Read all warnings and instructions. Save these instructions.

MMU0037 Rev: C

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## Important Safety and Health Information

Read, understand and follow the most current product warnings, safety instructions, and training materials. All product warnings are not included in this Manual. A Product Warnings document is included with this Conducted Electrical Weapon (CEW) and the most current warnings are posted on our website at [www.TASER.com](http://www.TASER.com). The most current training materials are available by contacting TASER’s Training Department. Do not attempt to use this CEW until you have completed training with a TASER International, Inc. (TASER) Certified Instructor.

 <b>WARNING</b>	
	<p><b>Complete Training First</b>                      Significant differences exist between each of the TASER CEW models. Do not use or attempt to use any CEW model unless you have been trained and certified by a Certified TASER Instructor on that particular model.</p>
	<p><b>Read and Obey</b>                      Read, study, understand, and follow all instructions, warnings, information, training bulletins and relevant TASER training materials before using the TASER X2™ CEW. Failure to comply with the product instructions, warnings, information, training bulletins, and TASER training materials could result in death or serious injury to the user, force recipient, and others.</p>
	<p><b>Obey Applicable Laws</b>                      Use of CEWs must be legally justified and comply with applicable federal, state, and local laws and regulations. The decision to use a CEW in a particular manner or circumstance must follow applicable law enforcement agency Guidance.</p>
<div style="border: 1px solid black; padding: 5px;">  <div style="display: inline-block; vertical-align: top; margin-left: 10px;"> <p style="margin: 0;"><b>WARNING</b></p> <p style="margin: 0;"><b>Conducted Electrical Weapon</b></p> <ul style="list-style-type: none"> <li>• Can temporarily incapacitate target.</li> <li>• Can cause death or serious injury.</li> <li>• Obey warnings, instructions and all laws.</li> <li>• Comply with current training materials and requirements.</li> <li>• See <a href="http://www.TASER.com">www.TASER.com</a>.</li> </ul> </div> </div>	

TASER® CEWs are designed in probe-deployment mode to temporarily incapacitate a person from a safer distance while reducing the likelihood of serious injuries or death. When used as directed, TASER CEWs have been found to be safer and more effective than other traditional use-of-force tools and techniques. However, it is important to remember that the use of force and physical incapacitation, by their very nature, involve risk that someone will get hurt or may even die from factors that include, but are not limited to: physical resistance, exertion, individual susceptibilities, and/or unforeseen circumstances. Any use of force, including the use of a CEW, or physical exertion involves risks that a person may get hurt or die.

For a full list of current warnings, visit [www.TASER.com](http://www.TASER.com).

## Use of Force Policy

Each agency is responsible for creating its own use-of-force policy and determining how TASER CEWs fit into their use-of-force matrix based on legal and community standards. Make sure your agency has a use-of-force

policy that addresses TASER CEW use and that this policy is clearly addressed during end-user training.

## Software Update

Before using your X2 CEW, confirm with your armorer or other qualified person that the X2 software has been updated.

## What is the X2 CEW?

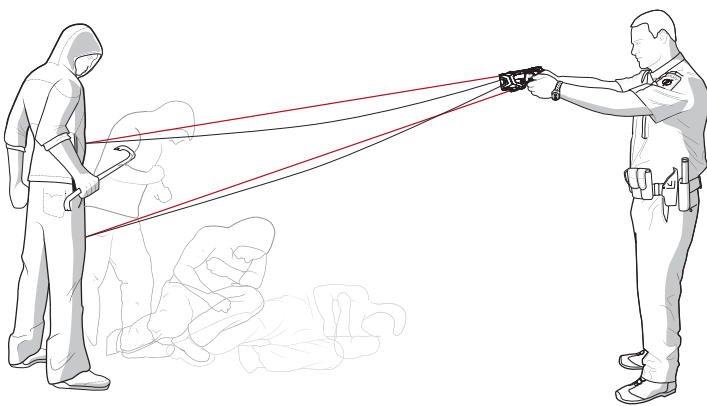
The TASER X2 CEW is a software upgradable, 2-shot weapon manufactured by TASER International, Inc.

The X2 CEW uses 2 replaceable Smart™ cartridges containing compressed nitrogen to deploy two small probes that are attached to the X2 CEW by insulated conductive wires. The X2 CEW transmits electrical pulses along the wires and into the body which are designed to affect the sensory and motor functions of the peripheral nervous system and cause involuntary muscle contractions. The cartridges are available with various wire lengths from 15' to 35' (4.6 meters to 10.7 meters). The X2 CEW deploys the cartridges one at a time. It is possible to apply energy beyond the initial burst to a deployed cartridge without deploying the remaining cartridge. It also is possible to apply a Warning Arc display or drive-stun without deploying any of the cartridges loaded in the CEW.

The X2 CEW has an internal memory that stores the operating software and a record of every deployment. See the **Trilogy Log** section in this manual for more details. The X2 CEW's Trilogy™ log can be downloaded to EVIDENCE.com services. Those who do not have an EVIDENCE.com account can use Offline EVIDENCE Sync software to download a simplified log to a local computer.

The X2 CEW has an estimated useful life of 5 years.

## Neuro Muscular Incapacitation (NMI)



TASER technology is designed to use electrical impulses similar to those in your body's nervous system to cause stimulation of the sensory and motor nerves. Neuro Muscular Incapacitation (NMI) occurs when a CEW is able to cause involuntary stimulation of both the sensory nerves and the motor nerves. It is not dependent on pain and can be effective on subjects with a high level of pain tolerance.

Previous generations of stun guns primarily affected the sensory nerves only, resulting in pain compliance.

A subject with a very high tolerance to pain (e.g., a drug abuser, person in serious psychological distress, or a trained, focused fighter) might not be affected by the pain or might be able to fight through the pain of a traditional stun gun.

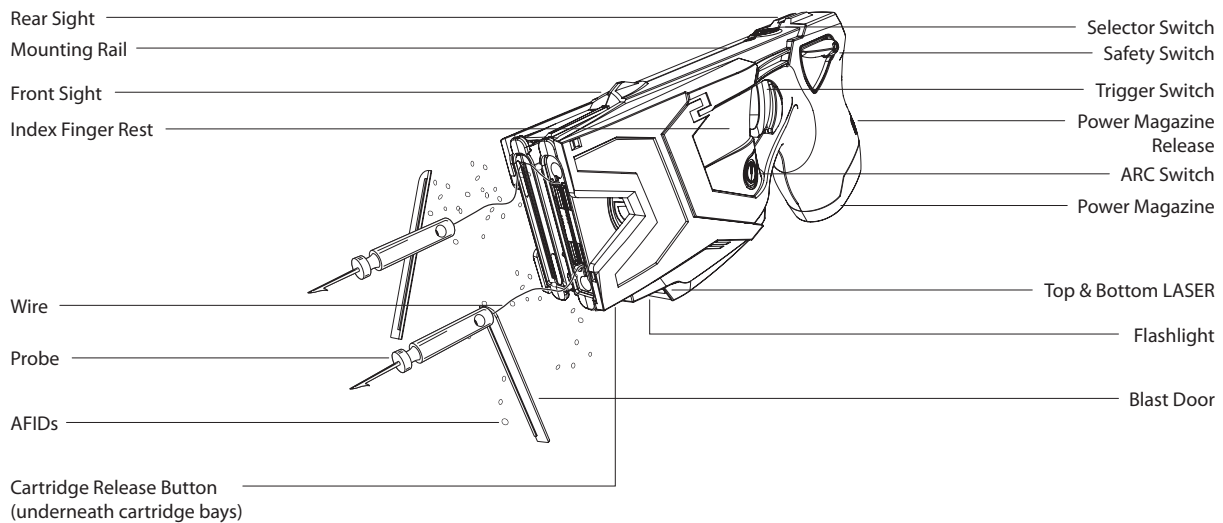
## Basic X2 CEW Electrical Theory

- Electricity must be able to flow between the probes or the electrodes to deliver an electrical charge and will generally follow the path of least resistance.
- The greater the spread between the probes on the target, generally the greater the effectiveness.
- Electricity will generally not pass to others in contact with the subject unless contact is made directly between or on the probes, or the wires are touched.
- Electricity can arc through most clothing, and even some bullet-resistant materials.
- Exposure to water will not increase the power to the subject (the delivered electrical charge is fixed inside the TASER CEW, and will not increase significantly even with environmental changes).
- The X2 CEW's Rotational-Pulse Drive™ technology rotates discharges across the 2 cartridge bays. This alternation of pulsed output across multiple cartridges allows a single X2 CEW to affect up to 2 subjects simultaneously but was primarily designed to give the operator an immediate back up shot in case of a miss.
- The Rotational Pulse Drive technology supports cross connection, or X Connect™ technology, which can make the X2 CEW effective even if some probes do not hit the target. As long as one top probe and one bottom probe hit the subject, the circuit can be completed, even if the probes were deployed from different cartridges.
- The Current Metering technology is designed to deliver optimal output.
- Medical studies have found that modern pacemakers and implanted cardiac defibrillators withstand external electrical defibrillators many orders of magnitude stronger than the TASER CEW conducted energy pulses.



## X2 CEW Features

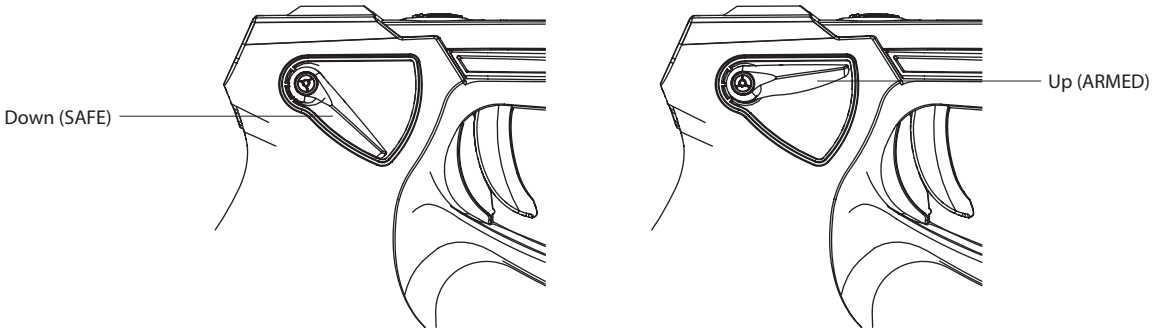
Get to know the X2 CEW:



## Safety Switch

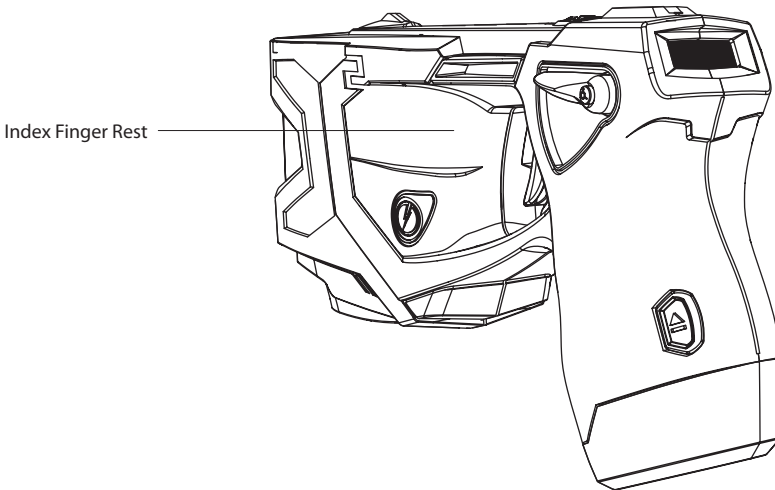
Ambidextrous safety can be operated from either side of the CEW.

- Safety switch down (SAFE).
- Safety switch up (ARMED) and ready to deploy.
- Do not block the safety on one side of the X2 CEW while attempting to move it on the other side. This can break the safety and disable the CEW.
- With default settings, if the X2 CEW's safety switch is left in the up (ARMED) position for more than 20 minutes, the system goes into low power mode to reduce the amount of power consumed. Power is still consumed and will eventually drain the battery if the 'safety switch remains in the 'ARMED' position. To re-arm the CEW, shift the safety to the down (SAFE) position, and then shift it back to the up (ARMED) position.



## Index Finger Rest

On each side of the X2 CEW is an ergonomically designed rest upon which to place the tip of your index finger when you are not pulling the trigger switch or pressing the ARC switch.

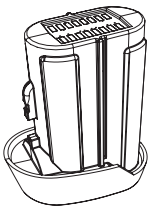


## Arc display/Re-energize/Cartridge advance (ARC) Switch

The ARC switch is used to employ a Warning Arc display, select cartridges, and select menu items during system programming and option selection. ARC switch functions are described in the *Arc display/Re-energize/Cartridge advance (ARC) Switch* and *Configuring the X2 CEW and Viewing the System Status* sections of this manual.

## Performance Power Magazine (PPM) Battery Pack

The Performance Power Magazine is a lithium energy cell power supply system for the X2 CEW.



NOTE: X2 battery packs will not work with the X3® or X26™ CEWs, and battery packs designed for the X3 or X26 CEWs will not work with the X2 CEW.

Do not store the PPM anywhere that the gold contacts on the top of the PPM may touch metal objects. If you cause an electrical short between these contacts, the short will drain the lithium energy cells and may cause the pack itself to become dangerously hot.

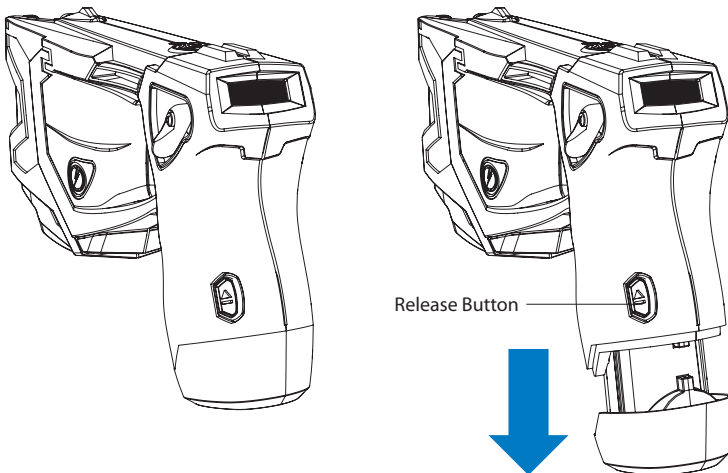
The PPM battery has enough power for approximately 500 5-second discharges depending on temperature, environment, use of the flashlight, and other factors. The PPM battery will deplete faster in colder weather than warm weather. Likewise, the battery will deplete faster with the flashlight active.

For more information on installing the PPM, see the *Changing the PPM* section in this manual.

NOTE: Other battery pack options are available for the X2 CEW. See the *Tactical Performance Power Magazine (TPPM) Battery Pack and Automatic Shut-Down Performance Power Magazine (APPM) Battery Pack* sections in this manual.

## Changing the PPM (or Other Battery Pack)

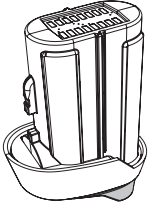
- 1 Point the CEW in a safe direction.
- 2 Shift the safety switch to the down (SAFE) position.
- 3 Remove the Smart cartridges. See the *Unloading* section in this manual for more information.
- 4 To unload the PPM, depress the PPM release button and remove the PPM from the handle of the CEW.



- 5 Inspect the battery contacts. Ensure that they appear in working order and are free from dirt or other residue that may interrupt the battery connection to the CEW.
- 6 Install the new PPM and ensure that it is fully inserted into the X2 CEW. Apply sufficient force to ensure the PPM is fully seated. When the PPM battery pack seats properly, the PPM release button should pop out from the recessed position with an audible click.

## Tactical Performance Power Magazine (TPPM) Battery Pack

The optional TPPM has an extension to provide a larger grip on the CEW. The TPPM does not hold an extra cartridge.



## Automatic Shut-Down Performance Power Magazine (APPM) Battery Pack

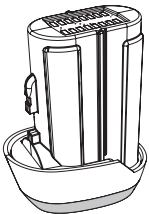
The optional APPM is a modified battery pack that shuts down the output of the X2 CEW after 5 seconds and also contains a built-in speaker that alerts you to the impending shut down.

**Under stressful situations, audio exclusion might prevent you from hearing the alert from the APPM.**

There are two ways your agency can configure your CEW to work with the APPM. With the default option, shut down will occur 5 seconds after a trigger-initiated energy burst, but ARC switch functioning will not be affected. With the other option, shut down will occur after 5 seconds whether you press the trigger or the ARC switch. To use the second option, the agency must configure the CEW through EVIDENCE.com.

### Automatic Shut-Down Performance Power Magazine (APPM) Battery Pack Trigger-Initiated Shut Down Only Option

The APPM provides an audible beeping alert for the last 2 seconds of a trigger-initiated cycle before automatically shutting down the cycle. After 5 seconds' deployment duration, the energy burst will stop even if your finger is still pulling the trigger switch. To reenergize the deployed cartridge, first ensure that your finger is off the trigger switch, and then press the ARC switch.



**With the APPM's trigger-initiated shut down option, pressing the ARC switch before the 5-second, trigger-initiated cycle has ended and holding the ARC switch will cause the cycle to continue past the 5-second limit.**

### Automatic Shut-Down Performance Power Magazine (APPM) Battery Pack Trigger- and ARC Switch-Initiated Shut Down Option

The APPM provides an audible beeping alert for the last 2 seconds of a trigger- or ARC switch-initiated cycle before automatically shutting down the cycle. After 5 seconds' deployment duration, the energy burst will stop

even if your finger is still pulling the trigger switch or pressing on the ARC switch. To reenergize the deployed cartridge, first ensure that your finger is off the trigger switch, and then press the ARC switch. To reenergize the ARC switch, remove your finger from the ARC switch and re-press the ARC switch.

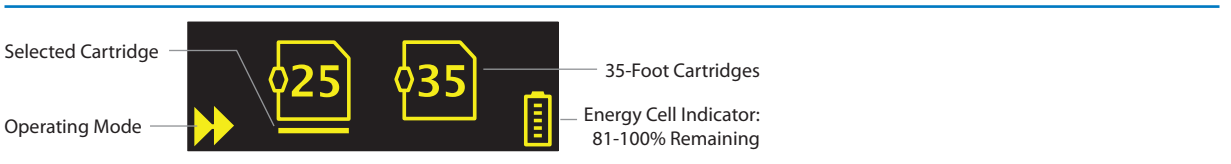
## Automatic Shut-Down Performance Power Magazine (APPM) Battery Pack Replacing the APPM with a Different Battery Pack

Your CEW will recognize the APPM as a unique type of battery pack. If you remove the APPM and replace it with a different type of battery pack, the X2 CEW will return to its normal configuration. That is, there will no longer be an audio alert, and the energy cycle will continue after 5 seconds if your finger is still holding down the trigger or ARC switch. Always confirm that the CEW performs as expected before returning it to duty after changing any battery pack.


**Remove the cartridges before testing the CEW function. See the Unloading section in this manual for more information.**

## Advanced Central Information Display (CID)

The Advanced CID is a monochrome organic light emitting diode (OLED) on the back of the X2 CEW that provides information about the CEW. When the safety switch is shifted into the up (ARMED) position, the CID will display the cartridge bays and battery status.




## Cartridge Icons




Left to right: 15-, 25-, and 35-foot live cartridges. These cartridges have not been deployed.




Training cartridges (blue blast doors) will display with a yellow icon.



Loading training cartridges into the X2 CEW will not affect the CEW's ability to deploy. If both live and training cartridges are loaded in the X2 CEW, both firing bays remain active. Loading a training cartridge into an X2 CEW will not lock a live cartridge that is also loaded in the CEW.



The currently selected cartridge will have a yellow bar underneath it. If you pull the trigger switch, this is the cartridge that will be deployed.



After a cartridge has been expended, the cartridge deployed icon is displayed.



If no cartridge is loaded in the cartridge bay, the space otherwise occupied by a cartridge icon will be blank.



If something is wrong with the cartridge, the cartridge bay error icon is displayed. The cartridge might not deploy. See the **Load the Smart Cartridges** section in this manual for instructions on loading and unloading Smart cartridges from an X2 CEW.



When the CEW is in the Semi-Automatic mode, the loaded cartridge icon indicates that the next trigger pull will deploy a cartridge.

## System Status Icons

The system status icons are designed to inform you of a fault in the X2 CEW. It is a fault indicator only, and it is the user's responsibility to heed the fault indicators, conduct proper maintenance and repair, and ensure that the CEW is working properly before any use. Failure to heed the system status icons could cause serious injury or death.

All faults are recorded in the X2 CEW's Engineering log.



**Major Fault indication.** A yellow triangle in the upper-right side of the CID indicates that the logging or date and time functions are not working properly. The CEW will still produce an electrical output (e.g., the CEW should still arc and deploy cartridges), but the accountability functions are compromised.

Shift the safety switch to the down (SAFE) position and then to the up (ARMED) position; the fault may clear.

Whether the fault clears or not, it will be recorded in the Engineering log. If the fault did not clear, the CEW may need to be repaired or replaced. See the **Product Returns** section in this manual for instructions.



**Critical Fault indication.** A yellow stop sign in the upper-right side of the CID indicates a system failure.

Critical faults are rare. Shift the safety switch to the down (SAFE) position and then to the up (ARMED) position; the fault may clear.

If the fault does not clear, do NOT attempt to use the CEW. The CEW may need to be repaired or replaced. See the **Product Returns** section in this manual for instructions.

**NOTE:** If a fault icon appears in the position normally associated with the cartridge status icon, this usually indicates a fault with a cartridge and not necessarily a critical CEW fault. Replace the cartridge and see if the icon goes away. See the **Unloading** section in this manual for instructions on loading and unloading Smart cartridges from an X2 CEW.



**Invalid Battery Pack.** If you see a blinking exclamation point and battery icon, this indicates that the CEW did not recognize the battery correctly. Remove the battery pack and reinsert it. If the error is still present, try another battery pack. If the icon still displays, this usually indicates that something has happened to the battery connector inside the CEW and the CEW should be serviced. See the *Product Returns* section in this manual for instructions.



An APPM battery pack is installed in the CEW. See the *Automatic Shut-Down Performance Power Magazine (APPM) Battery Pack* section in this manual for more information.



A TASER CAM HD recorder is installed in the CEW. See the *TASER CAM HD Operating Manual* for more information.



A TASER CAM HD recorder with the automatic shutoff (AS) feature is installed in the CEW. See the *TASER CAM HD Operating Manual* for more information.



When you plug the USB connection into the X2 CEW, the USB connection status icon will appear. See the *USB Connection Status* section in this manual for more information.

## Operating Mode Icons



This is the icon for the Semi-Automatic mode. The CEW is shipped in Semi-Automatic mode.



This is the icon for the Manual mode.

## Battery Level Icons

When the safety switch is in the up (ARMED) position, the CID will display the percentage of battery power remaining. Remaining capacity will display in 20 percent increments.

When the battery level drops to 20 percent, TASER International recommends that the battery pack be replaced.



Battery  
81–100%



Battery  
61–80%



Battery  
41–60%



Battery  
21–40%



When the battery capacity is at 1–20 percent, the CID will flash the warning **LO BATT** on the CID when the safety switch is cycled to the up (ARMED) position.



Battery  
0 – 20%  
Blinking

If the battery capacity is at 1–20 percent, and the CEW is being discharged, this icon displays in the lower-right portion the CID.



When the TASER CAM HD battery is depleted, the CID will flash the warning **RECHARGE BATTERY** on the CID when the safety switch is cycled to the up (ARMED) position.



When the PPM, TPM, or APPM battery is depleted, the CID will flash the warning **CHANGE BATTERY** on the CID when the safety switch is cycled to the up (ARMED) position.

## Sample CID Displays

The CID below shows the X2 CEW loaded with a 25-foot and another cartridge. The 25-foot cartridge is selected. (The leftmost, active cartridge is always selected by default.) The battery is 61–80 percent full, and the Semi-Automatic mode icon displays. There is a cartridge fault.



The CID below shows an X2 CEW with a battery 61–80 percent full. Only 1 cartridge is loaded, and the Semi-Automatic mode icon displays.



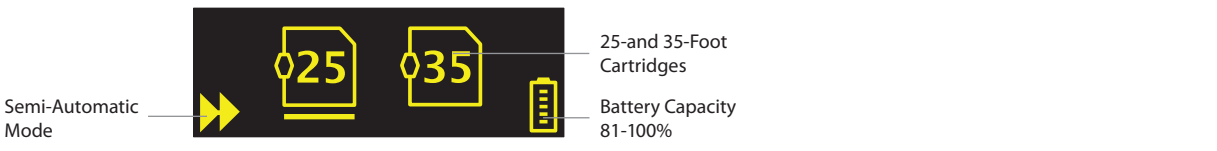
The CID below shows the Semi-Automatic mode icon and a battery that is 41–60 percent full. The first cartridge has been expended, and the second cartridge is selected.



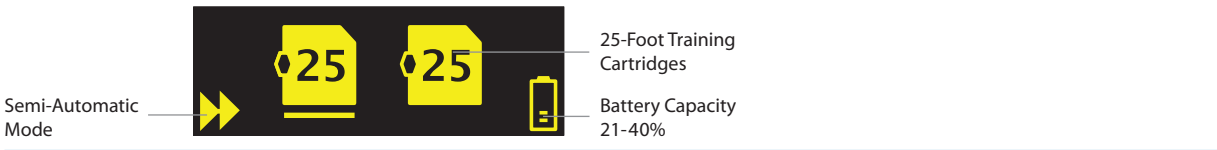
The CID below shows the Semi-Automatic mode icon and a battery that is 81–100 percent full, loaded with 25-



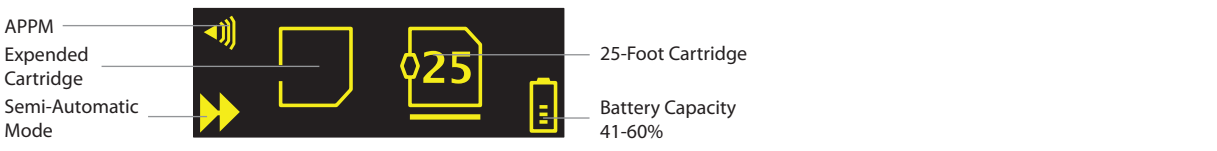
and 35-foot cartridges. The 25-foot cartridge is selected; it will be deployed when the trigger is pulled.



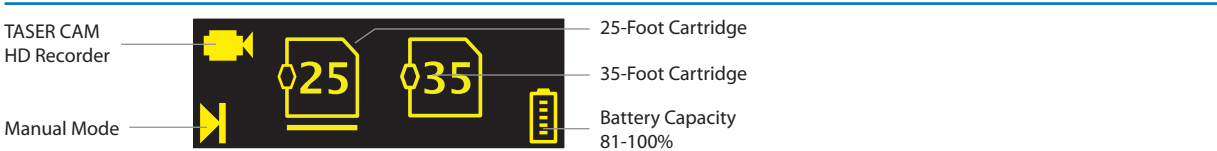
The CID below shows the Semi-Automatic mode icon, with two 25-foot training cartridges, and a battery that is 21–40 percent full. The left cartridge is selected.



The CID below shows the Semi-Automatic mode icon, with one expended cartridge, one 25-foot cartridge that is currently selected, a battery at 41–60 percent capacity, and an APPM battery pack installed.



The CID below shows the manual mode icon, with one 25-foot cartridge that is currently selected, a 35-foot cartridge, a battery at 81–100 percent capacity, and a TASER CAM HD recorder installed.



## Probe-Deployment Mode

When the X2 CEW trigger switch is pulled and then released, it delivers an automatic 5-second Precision Shaped Pulse™ deployment & cycle (unless the safety switch is shifted to the down (SAFE) position during those 5 seconds).

In probe-deployment mode, the CID display shows the deployment cycle duration for the most recent cartridge deployed. If you deploy a second Smart cartridge a few seconds later (while the first cycle is running), the CID will stop showing data for the first cartridge (though the first cartridge will still complete its deployment cycle) and start displaying the deployment cycle duration for the second cartridge.

The cycle can be stopped at any time by shifting the safety switch to the down (SAFE) position. If both cartridges are cycling and the safety switch is moved to the down (SAFE) position, then the electrical cycle will stop for BOTH cartridges.

## Spark Duration

The CID displays a count indicating how many seconds the deployment cycle lasts. The CEW will count up from the number 1 up to 99. At 99 seconds, the count will restart at 1.



## ARC Switch

If you press the ARC switch, the CID will display the deployment cycle duration with the operating mode icon. In the CID shown below, the Warning Arc display has been in effect for 3 seconds. The Semi-Automatic mode icon displays, and the battery is 81–100 percent full.



## Top LASER

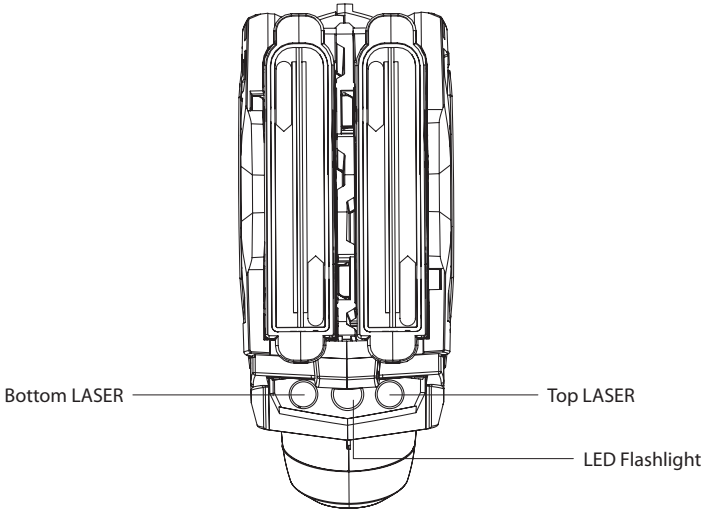
The top LASER installed in the X2 CEW is oriented with the mechanical sights. At 15 feet (4.6 m), the aiming point is aligned to the approximate trajectory of a 25 foot (7.6 m) cartridge's top probe.

## Bottom LASER

At 15 feet (4.6 m), the bottom LASER is aligned to the approximate trajectory of a 25-foot (7.6 m) cartridge's bottom probe. The bottom LASER only appears when the selected bay contains a live cartridge or a resettable training cartridge.

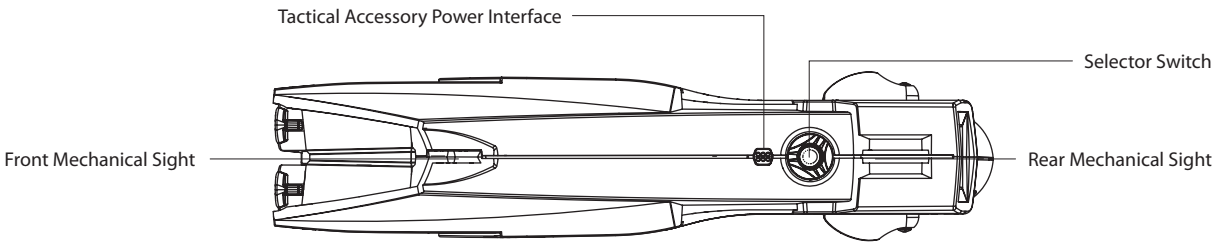
**The bottom LASER is not aligned to the trajectory of a 35-foot (10.7 m) cartridge.**

The X2 CEW can be configured to disable the bottom LASER when a 35-foot cartridge is selected in the CEW.



## Mechanical Sights

The mechanical sights on the X2 CEW are molded to provide manual aiming of the CEW. The mechanical sights are set to coincide with a top probe's trajectory at a 15-foot distance.



## Tactical Accessory Power Interface

This is a power plug for future X2 accessories.

## LED Flashlight

The X2 CEW has a high intensity white LED to aid the user in dark environments.



## Selector Switch

With the safety switch in the down (SAFE) position, press the selector switch on the top of the X2 CEW to configure the system. See the *Configuring the X2 CEW and Viewing the System Status* section in this manual for more information.

The selector switch is slightly recessed to ensure that it is not pressed unintentionally during normal operations.

Pressing the selector switch when the safety is in the up (ARMED) position puts the X2 CEW in stealth mode—the flashlight and LASER are turned off and the CID will dim. Pressing and holding the switch a second time will turn on the flashlight and LASER.

NOTE: The stealth mode cannot activate features that were turned off during CEW configuration. If the X2 CEW is configured to not use its flashlight or LASERS, the stealth mode will not turn them on.

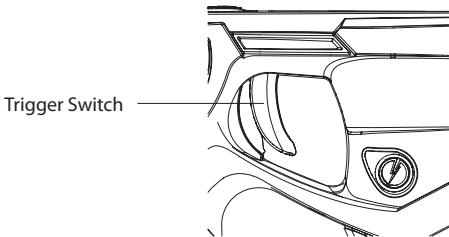
NOTE: Using pens or paper clips to attempt to press the selector switch may damage it. Only use your finger to press the selector switch.

## Trigger Switch

Unlike a firearm trigger, the X2 CEW trigger switch is a momentary electrical switch. The trigger is operational only when the safety is in the up (ARMED) position. Pulling and releasing the trigger switch will deploy the first selected cartridge and result in an approximately 5-second discharge cycle unless the safety is shifted to the down (SAFE) position to discontinue the 5-second cycle. Pulling and holding the trigger switch for more than 5 seconds will result in a continuous discharge until the trigger switch is released or the battery is depleted—whichever happens first.

An X2 CEW equipped with the APPM battery pack is limited to 5-second discharges and emits an audio alert 2 seconds before the end of the cycle. See the *Audio Performance Power Magazine (APPM) Battery Pack* section in this manual for more information.

**In the event of an accidental discharge, immediately shift the safety switch to the down (SAFE) position to stop the discharge cycle.**



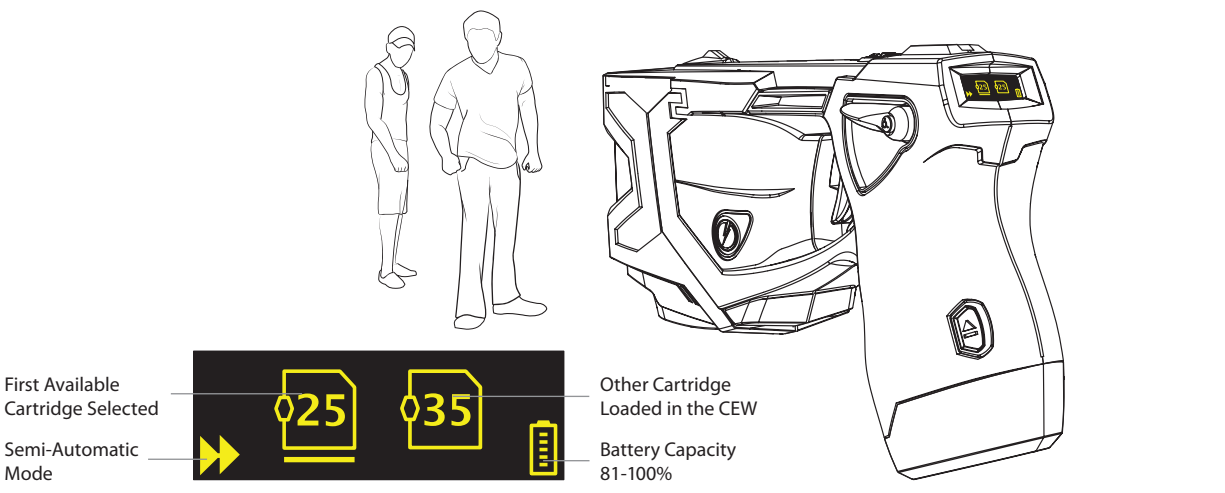
## Ergonomic Grip Design

The handle of the X2 CEW is optimized for comfort with specific features for safe and effective use for people of most sizes.

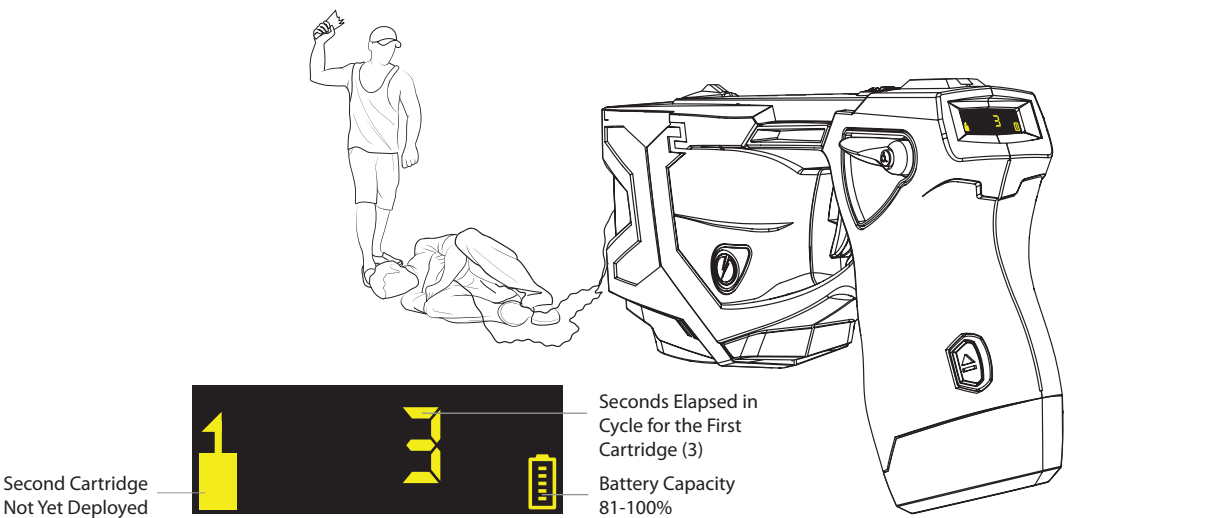
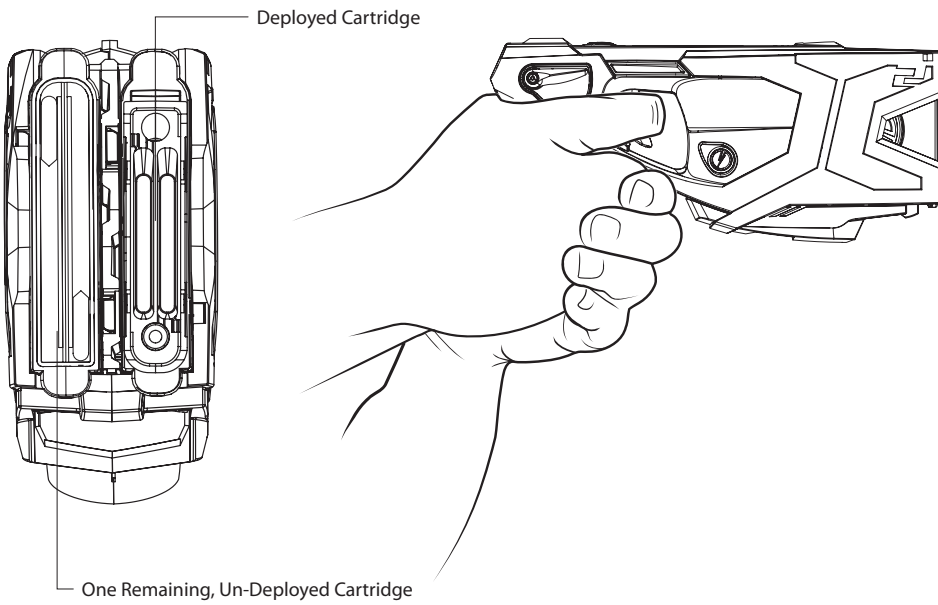
## Semi-Automatic Mode

Depending on your agency's settings, your X2 CEW will function in either the Semi-Automatic or Manual firing mode. The X2 CEW is programmed in Semi-Automatic mode when it leaves the factory. If your CEW is configured to function in the Manual mode, see the **Manual Mode** section in this manual.

**Sequential trigger pulls can deploy a Smart cartridge. At the beginning of the event, the leftmost active cartridge is selected by default.**



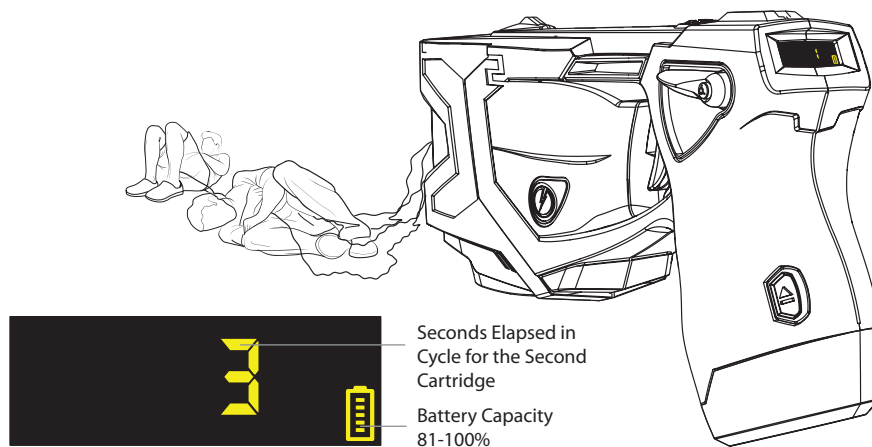
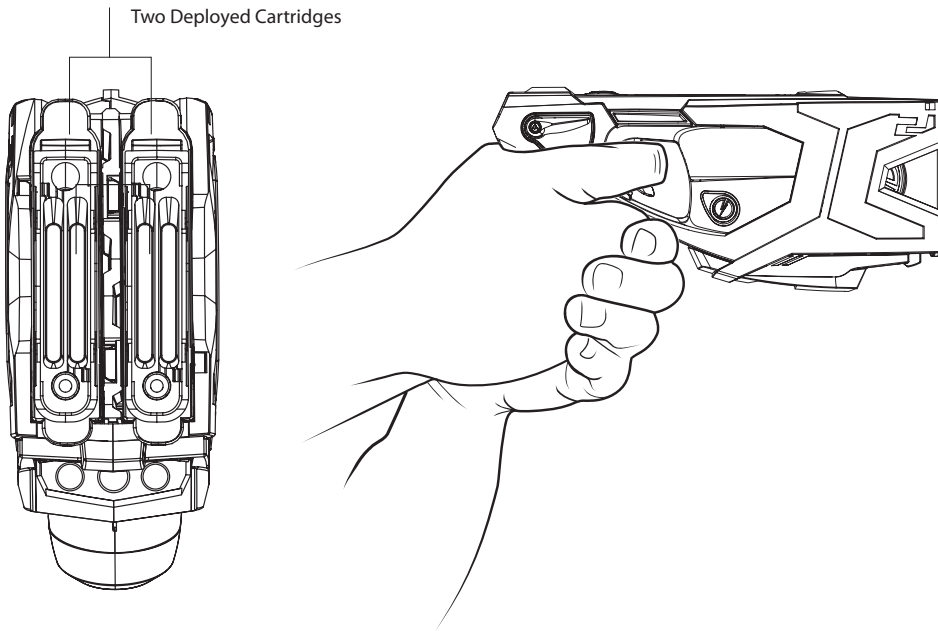
- 1 Pull the trigger to deploy the selected cartridge.



The X2 CEW energizes the first cartridge. Releasing the trigger automatically selects the next cartridge while the first cartridge is deploying.

If you have engaged a target and contact is good, pressing and holding the ARC switch will apply energy to both cartridge bays but will not deploy an unexpended cartridge. This allows you to apply cycles to a continually resisting subject, if needed, without expending the remaining cartridge.

- 2 Pull the trigger to deploy the second cartridge.



When both the first and second cartridges are energized each of the two firing bays will run for approximately 5 seconds on its own counter. If the second cartridge is deployed while the first cartridge is still energized, the first cartridge's cycle will end before the second cartridge's cycle ends. Therefore, to energize both cartridge bays, press the ARC switch. If the ARC switch is held down after the second cartridge's cycle ends, both cartridge bays will continue to cycle.

NOTE: If the probes from cartridge bay #1 are in subject A and the probes from cartridge bay #2 are in subject B, then pressing the ARC switch will energize both cartridge bays and both subject A and B will receive the effects of the CEW.

Shifting the safety switch to the down (SAFE) position stops the cycle for all cartridge bays.

NOTE: Do not pull the trigger and press the ARC switch simultaneously. The trigger will override the ARC switch.

## Manual Mode

Depending on your agency's settings, your X2 CEW will function in either the Semi-Automatic or Manual firing mode. If your CEW is configured to function in the *Semi-Automatic mode*, see the Semi-Automatic Mode section in this manual.

NOTE: The Semi-Automatic mode is the default method of operation. Manual mode can be configured only through EVIDENCE.com.

## Manual Mode

### Arc display/Re-energize/Cartridge advance (ARC) Switch Functions

The trigger and ARC switch work slightly different in the Manual mode than they do in the Semi-Automatic mode. In Manual mode, pulling the trigger does not advance cartridge selection. Instead, the ambidextrous ARC switch is used to select the Smart cartridges. By default, the left cartridge (or the first available cartridge, from left to right) is selected automatically. (This is the left side from your perspective, while pointing the CEW.) Pulling the trigger deploys the left cartridge. Pressing and releasing (quickly tapping once) the ARC switch selects the next available cartridge. An additional trigger pull is required to deploy the next selected cartridge.

A sustained press of the ARC Switch for approximately ½ second or more energizes the front of the cartridges without deploying (discharging) them. See the *Warning Arc Display* section of this manual for more information. If you have already deployed cartridges, pressing the ARC switch and holding it down supplies energy to the deployed cartridges without deploying any un-discharged cartridges.

If you have engaged a target with the first cartridge and contact is good, you can apply additional cycles to a continually resisting subject, if needed, without deploying the remaining cartridge. Holding the ARC switch down continually will arc the CEW until the ARC switch is released or the PPM is depleted, whichever happens first.

Because the ARC switch is ambidextrous, you can press from either side as you hold the CEW in a two-handed grip.

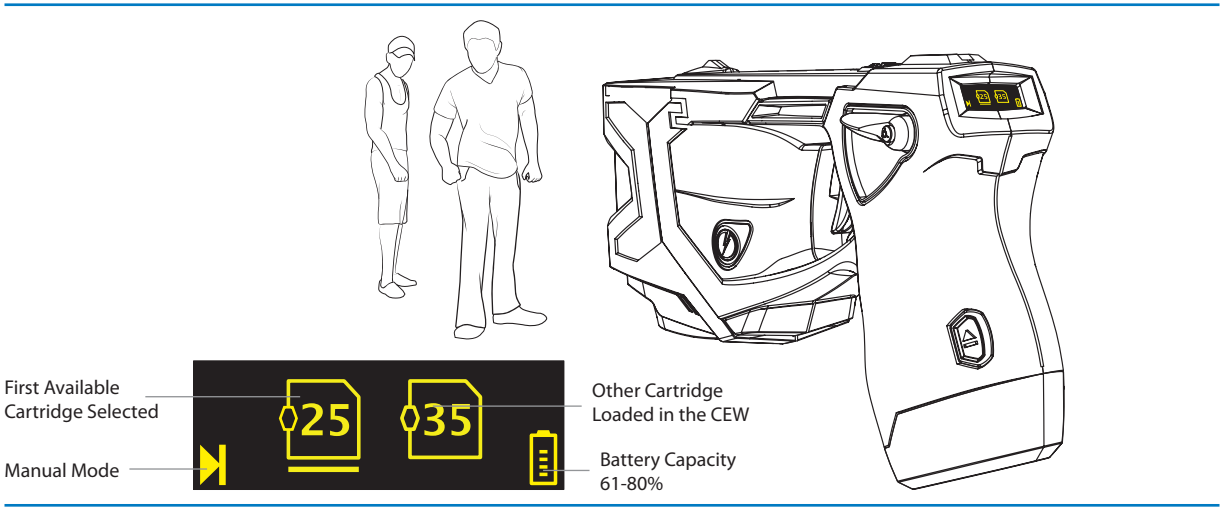
## Manual Mode

### Trigger Functions

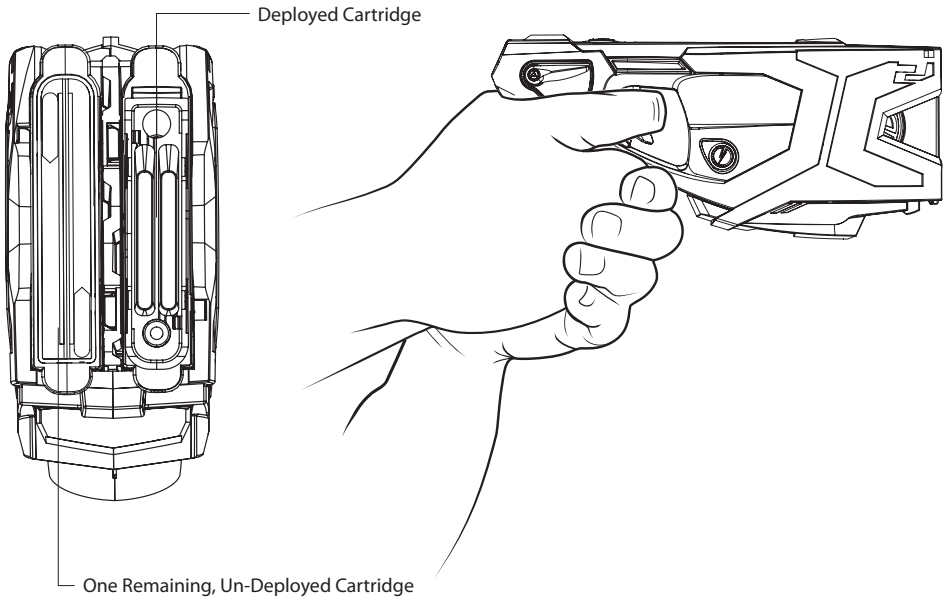
In Manual mode, after the first cartridge is deployed, pulling the trigger again will apply additional energy through the wires to the probes. Unlike with the Semi-Automatic mode, this will not deploy additional cartridges. It is recommended to always press and hold the ARC switch when you need to re-energize a deployed cartridge without expending the additional cartridge (in both Manual and Semi-Automatic mode).

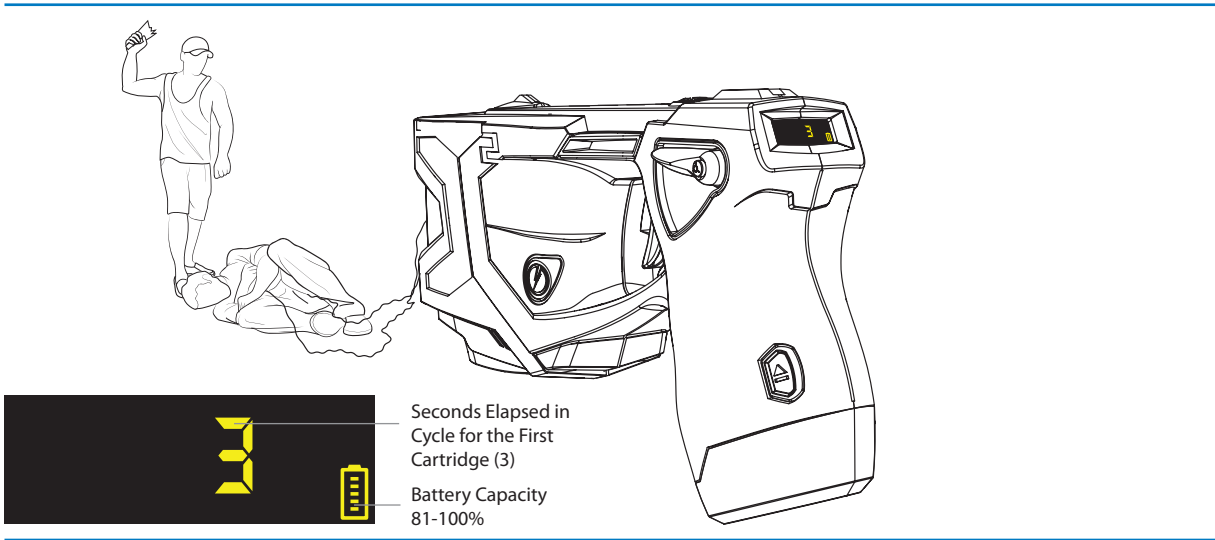
After deploying a cartridge, you can press and release (quickly tap once) the ARC switch to select another cartridge to use. You do not have to wait for the cycle of the first cartridge to end before deploying a new cartridge.





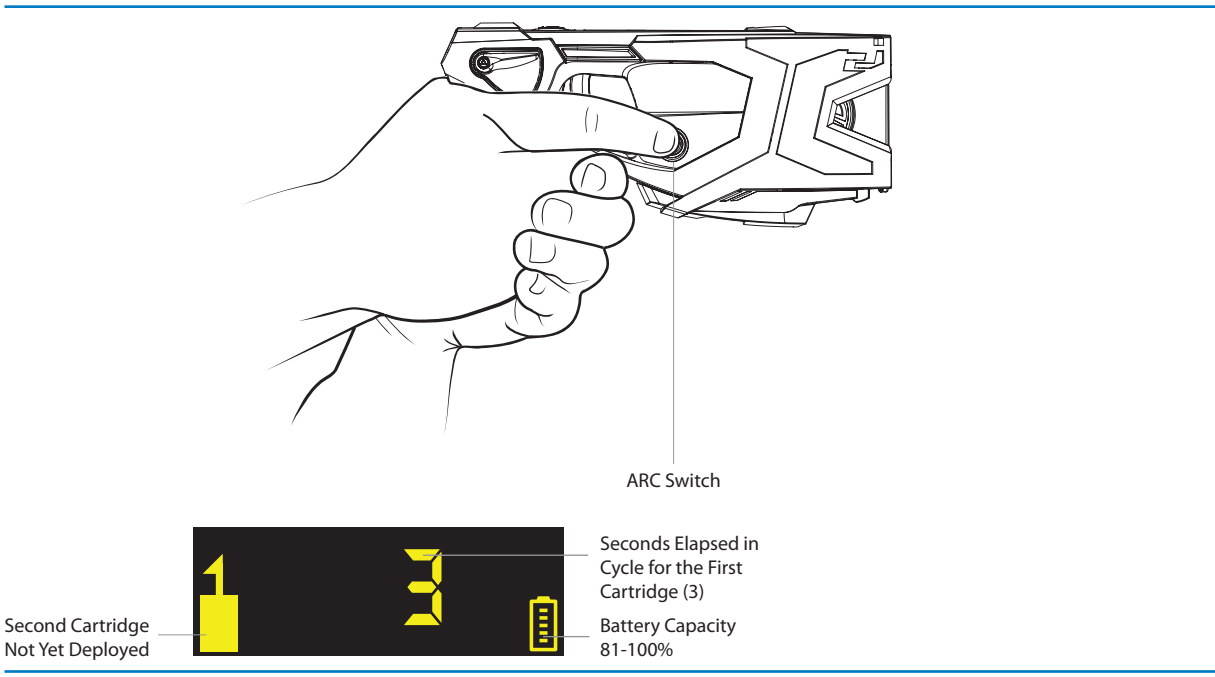
1 Pull the trigger switch to deploy the first cartridge.



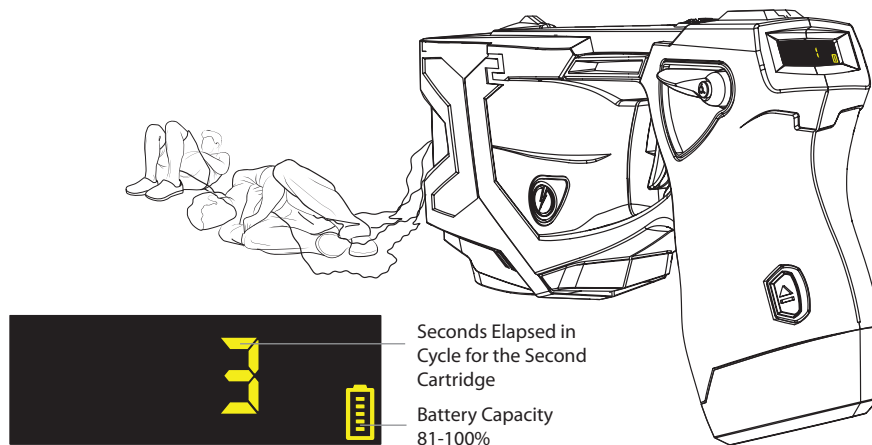
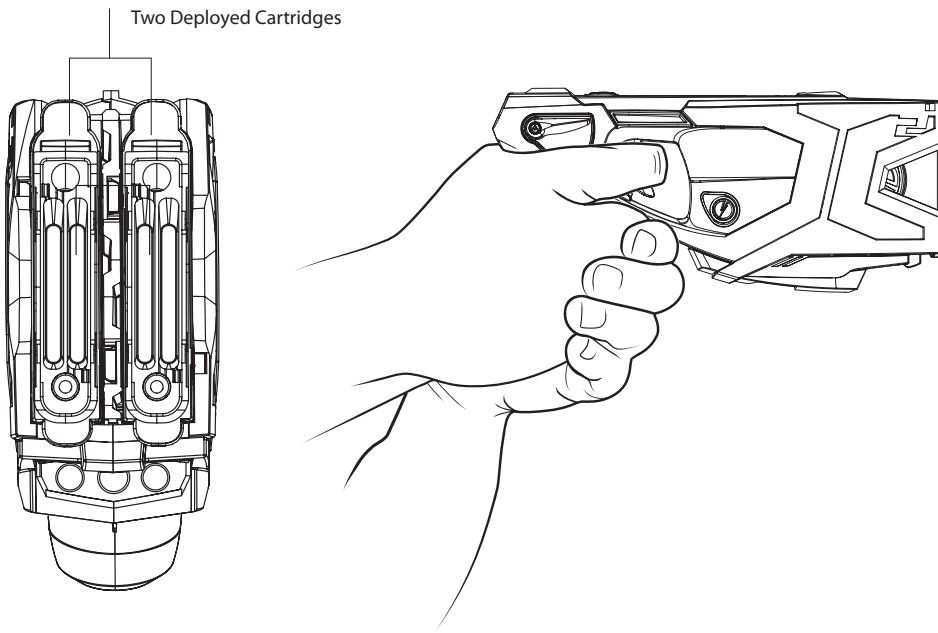


The X2 CEW energizes the first cartridge.

2 Quickly press (tap once) the ARC switch to select the second cartridge.



3 Pull the trigger to deploy the second cartridge.



Because both the first and second cartridges are energized each of the two firing bays will run for approximately 5 seconds on its own counter. If the second cartridge is deployed while the first cartridge is still energized, the first cartridge's cycle will end before the second cartridge's cycle ends. Therefore, to energize both cartridge bays, press the ARC switch. If the ARC switch is held down after the second cartridge's cycle ends, both cartridge bays will continue to cycle.

NOTE: If the probes from cartridge bay #1 are in subject A and the probes from cartridge bay #2 are in subject B, then pressing the ARC switch will energize both cartridge bays and both subject A and B will receive the effects of the CEW.

Shifting the safety switch to the down (SAFE) position stops the cycle for all cartridge bays.

NOTE: Do not pull the trigger and press the ARC switch simultaneously. The trigger will override the ARC switch.

## Configuring the X2 CEW and Viewing the System Status

Remove the Smart cartridges from the X2 CEW before configuring the CEW or viewing its status. See the *Unloading* section in this manual for more information.

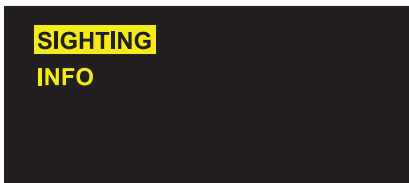
Before using an X2 CEW, set the LASER settings and LED flashlight (if necessary). You also can view status information about your CEW on the CID.

### Setting the Sighting Options

You can set up your X2 CEW to turn the LED flashlight and LASER sights off or on, in several configurations.

Follow these steps:

- 1 Point the X2 CEW in a safe direction.
- 2 Shift the safety switch to the down (SAFE) position.
- 3 Remove the Smart cartridges from the X2 CEW. See the *Unloading* section in this manual for more information.
- 4 Press and hold the selector switch until the main menu displays.



- 5 Press the left ARC switch to open the sighting options.
- 6 Press the right ARC switch to select the needed setting.



OO – Flashlight OFF and LASER OFF  
LO – LASER ON and flashlight OFF  
OF – LASER OFF and flashlight ON  
LF – LASER ON and flashlight ON

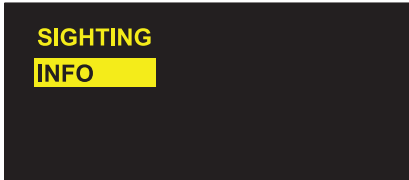
- 7 Press the selector switch to return to the main menu.
- 8 If you are done configuring the X2 CEW, press the selector switch again to exit. Or, to set other options, use the right ARC switch to scroll through the menus.

### Viewing the System Information

To view information about the X2 CEW system (for example, the serial number, date, time, and software revision level), follow these steps:

- 1 Point the X2 CEW in a safe direction.
- 2 Shift the safety switch to the down (SAFE) position.
- 3 Remove the Smart cartridges from the X2 CEW. See the *Unloading* section in this manual for more information.
- 4 Press and hold the selector switch until the MAIN MENU displays.

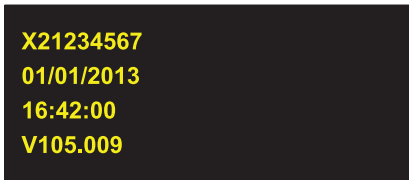
- 5 Press the right ARC switch until the INFO option is selected.



- 6 Press the left ARC switch. The SYSTEM option should be highlighted by default.



- 7 Press the left ARC switch. From top to bottom the CID displays the X2 CEW's serial number, date, time (GMT), and software revision number.



- 8 Press the selector switch to return to the INFO MENU.
- 9 If you are done viewing the system information, press the selector switch again to go to the MAIN MENU. Or, to view other information, use the right ARC switch to scroll through the menus.

## Viewing the Battery Pack Information

To view information about the battery pack, follow these steps:

- 1 Point the X2 CEW in a safe direction.
- 2 Shift the safety switch to the down (SAFE) position.
- 3 Remove the Smart cartridges from the X2 CEW. See the **Unloading** section in this manual for more information.
- 4 Press and hold the selector switch until the MAIN MENU displays.
- 5 Press the right ARC switch until the INFO option is highlighted.

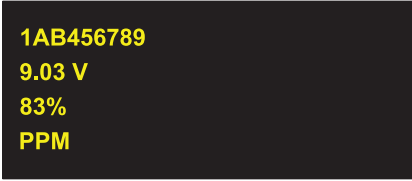


- 6 Press the left ARC switch.
- 7 Press the right ARC switch until the PPM option is highlighted.

NOTE: If you have an APPM or TPPM installed, the system will still indicate the battery pack is a PPM.



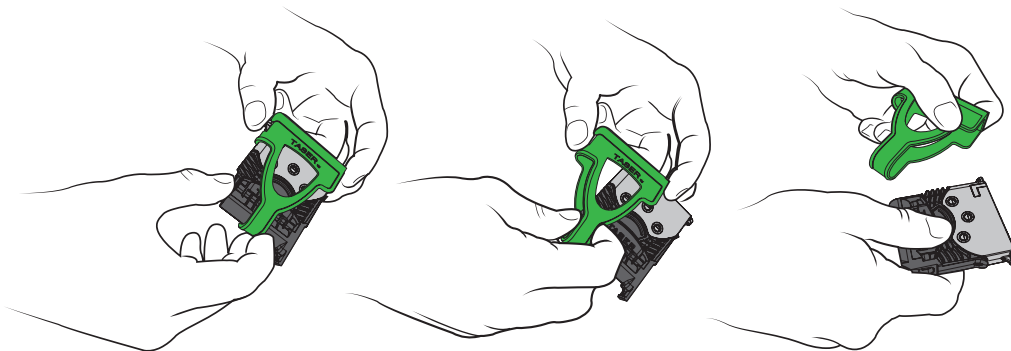
- 8 Press the left ARC switch. From top to bottom, the CID displays the battery pack serial number, remaining battery voltage, estimated battery capacity remaining, and type of battery pack



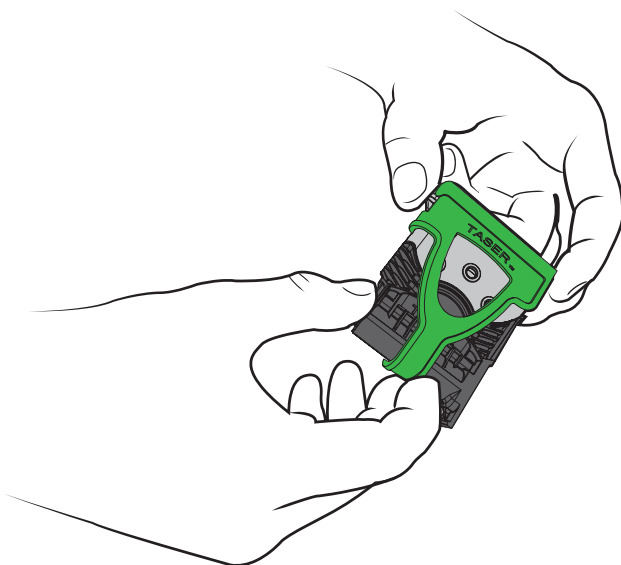
- 9 Press the selector switch to return to the INFO MENU.
- 10 If you are done viewing the battery information, press the selector switch again to go to the MAIN MENU. Or, to view other information, use the right ARC switch to scroll through the menus.

## Remove the Shipping Cover from the Smart Cartridge

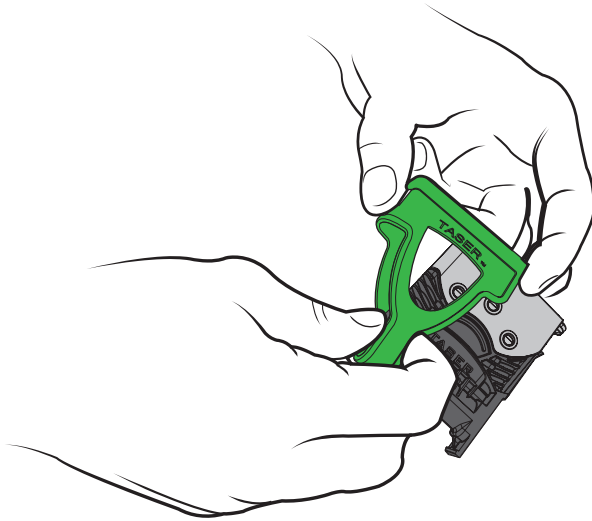
Smart cartridges (sold separately) are shipped with a shipping cover in place. Carefully remove the cover before attempting to load a cartridge into an X2 CEW.



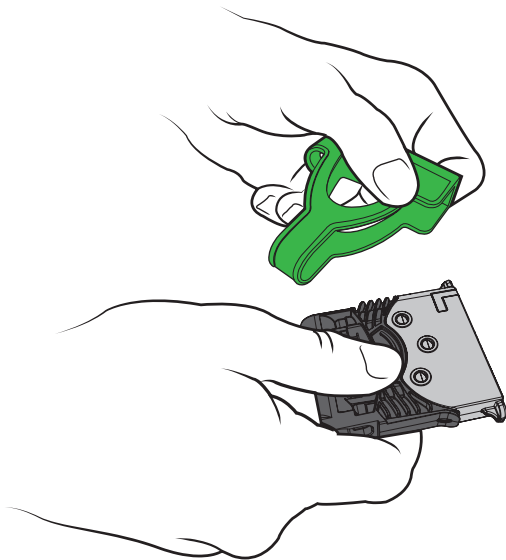
- 1 Hold the cartridge over a table or other close by surface so the cartridge will not fall to the floor if it is dropped.
- 2 Hold the cartridge so the blast doors are facing away from you and others. (The blast doors are behind the solid portion of the cartridge cover with the word REMOVE on it.)
- 3 Find the cartridge tab sticking out the rounded side of the shipping cover.



- 4 Push against this tab while pulling the cartridge out. You might consider pushing on the cartridge with your thumbs and holding the cover with your fingers. There should be an audible click when the cover releases the cartridge.



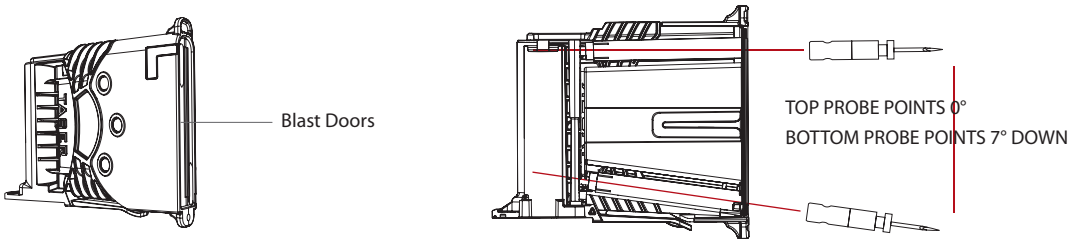
- 5 Pull the cartridge out of the cover.





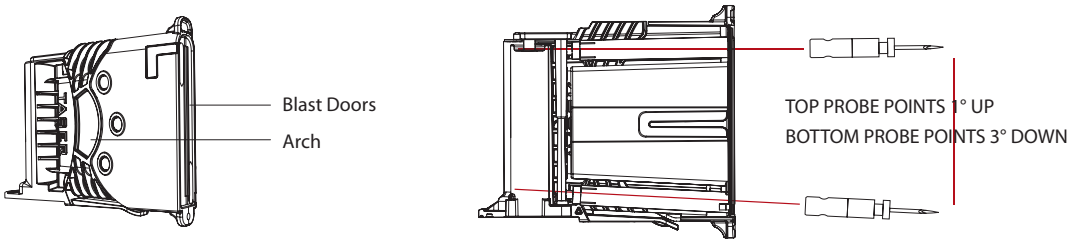
## Standard-Range (15 ft/4.6 m and 25 ft/7.6 m) Smart Cartridges

A 15-foot cartridge is identified by yellow blast doors. A 25-foot cartridge has black blast doors.



## Long-Range (35 ft/10.7 m) Smart Cartridges

A 35-foot cartridge is identified by a raised arch on the side. A 35-foot cartridge has black blast doors.



When using the 35-foot Smart cartridge, be aware that the top probe may hit above the LASER. Adjust your aim to avoid hitting sensitive areas.

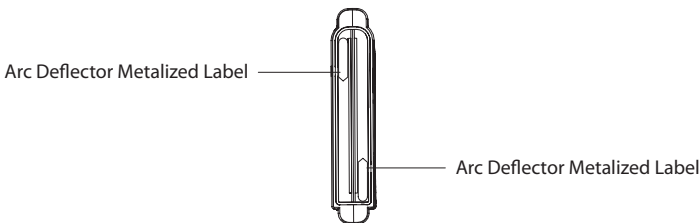
## Smart Cartridges General Instructions

Never attempt to open or modify a Smart cartridge. Tampering with a Smart cartridge could cause it to fire or malfunction (which may result in serious injury).

Remove the Smart cartridge from the X2 CEW before inspection.

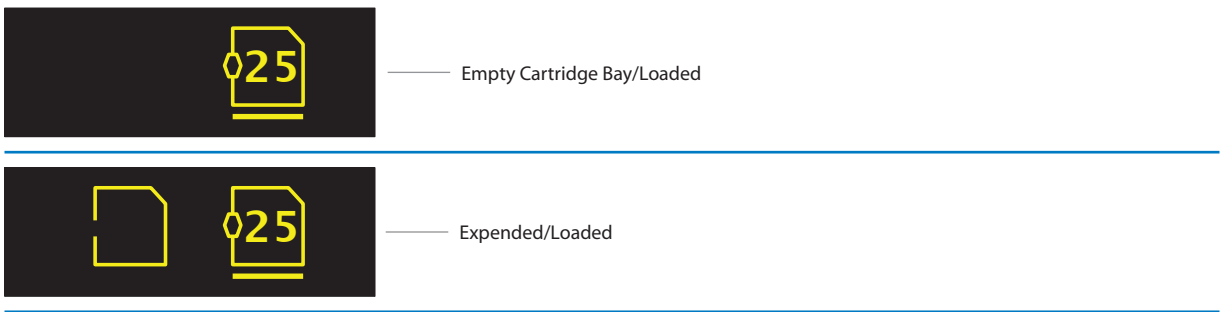
Before installing and using a Smart cartridge, inspect the blast doors for cracks. The inspection should include checking the break seam running down the center and both sides of the front of the blast door. If the blast doors are cracked, remove the Smart cartridge from service.

Also, inspect the Arc deflector metalized labels. Over time, the labels may show signs of wear. This is normal. If the labels have worn away completely or fallen off, remove the Smart cartridge from service.



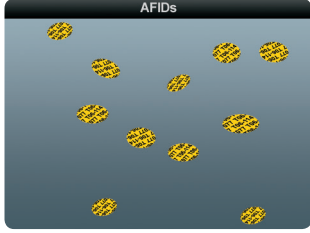
The X2 CEW can determine whether the Smart cartridges loaded in the cartridge bays have been expended or

not. The CEW also can determine whether all the cartridge bays are loaded or not. This means the CEW will not select an empty bay or an expended cartridge when a live cartridge is available. Cartridge status is displayed on the CID.



## AFID

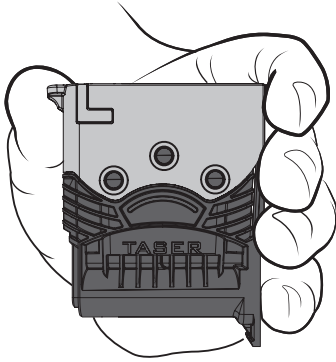
Every time a Smart cartridge is deployed, approximately 20–30 small confetti-like Anti-Felon Identification (AFID) tags are ejected. Cartridges can be assigned to individual users, as each is serialized. Each AFID tag is printed with the corresponding serial number of the cartridge, allowing determination of which user deployed the particular cartridge.



## Load the Smart Cartridges

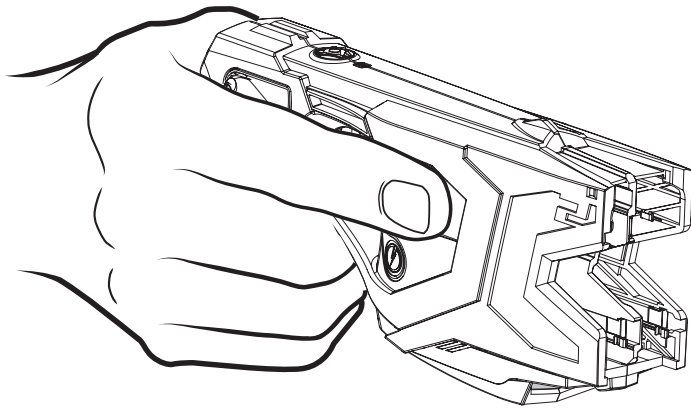
**Never place your hands, fingers or other body part in front of the cartridge. This is especially important when loading and unloading the cartridge. Serious injury could result. When loading and unloading always hold the cartridge on the sides or top.**

Smart cartridges are shipped with a shipping cover in place. Remove these covers before attempting to load a cartridge into an X2 CEW. See the *Remove the Shipping Cover from the Smart Cartridge* section in this manual for more information.

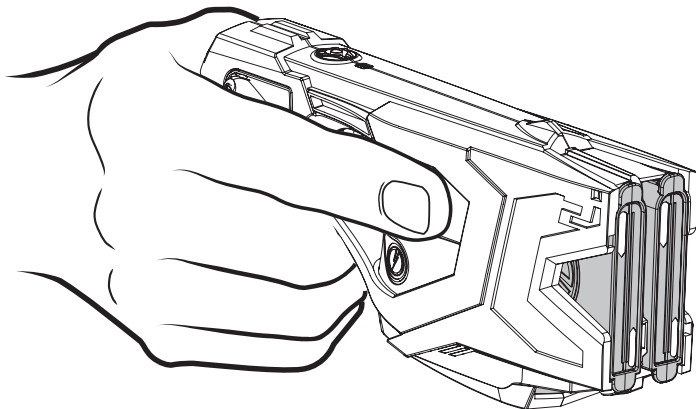


Always treat your X2 CEW as if it were loaded. Also, be aware that it is more difficult to tell whether an X2 CEW is loaded than it is with previous-generation TASER CEWs.

Unloaded X2 CEW viewed at an angle:



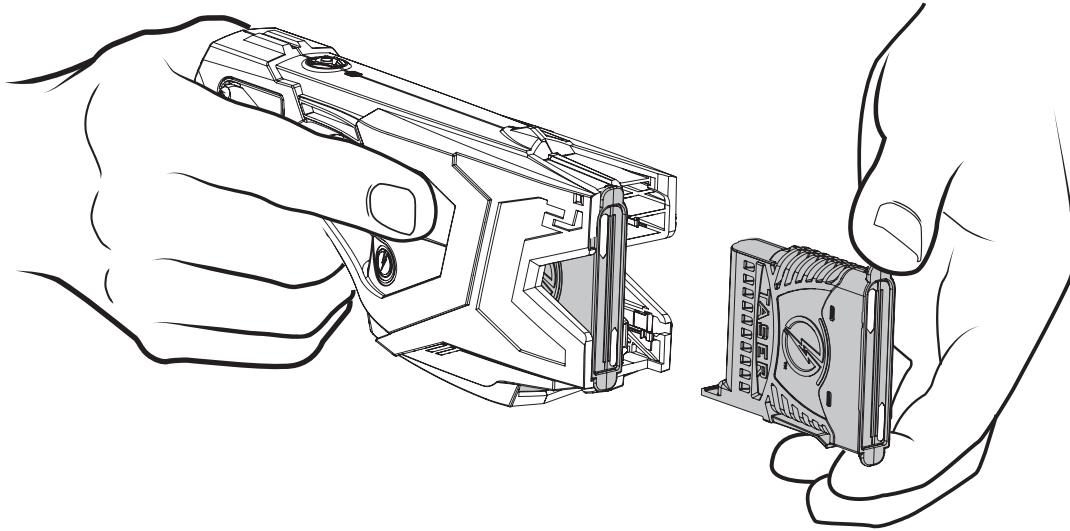
Loaded X2 CEW viewed at an angle:



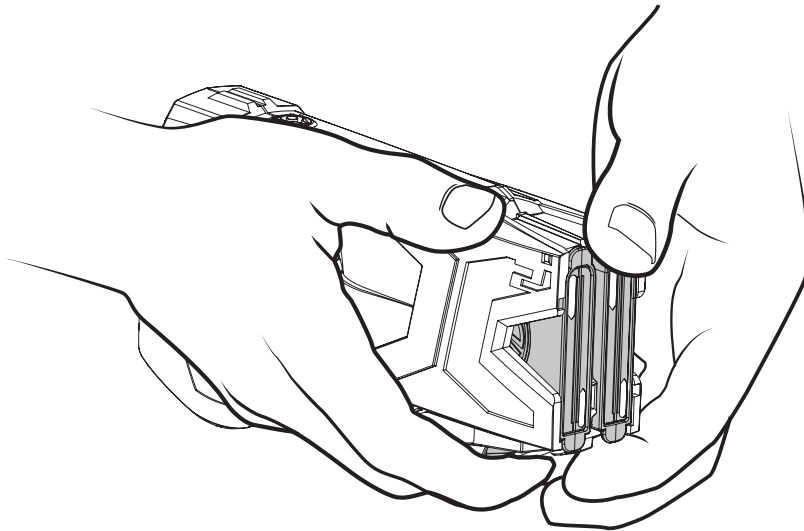
- 1 Point the CEW in a safe direction.
- 2 Ensure the safety switch is in the down (SAFE) position and your finger is not on the trigger or ARC switch.
- 3 Ensure the protective shipping cover is removed from the Smart cartridge.

- 4 Keeping your hand away from the blast doors, gently push the Smart cartridge into the cartridge bay until an audible click is heard.

Note the position of the tab on the bottom of the cartridge; this side of the cartridge goes in the bottom of the X2 cartridge bay.



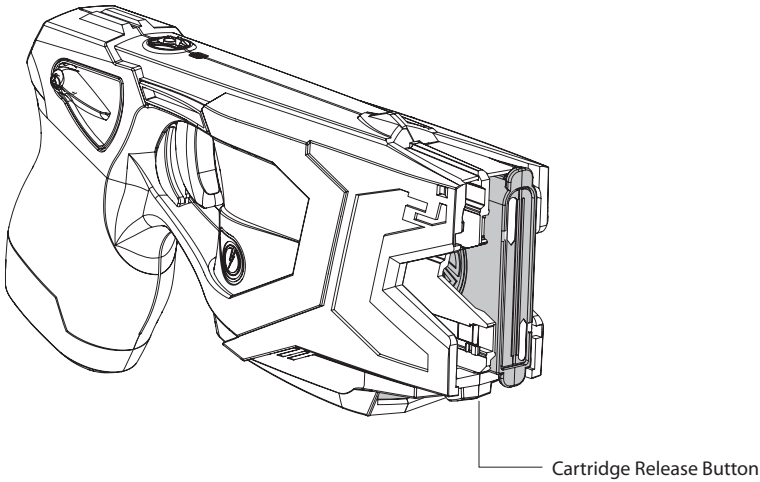
- 5 Verify that the cartridge is secure by pulling on the tabs on the lower and upper part of the cartridge.



By loading from the right cartridge bay to the left bay (or left to right if the right hand is used), it is less likely the operator will place fingers in front of the blast doors of loaded cartridges.

## Cartridge Release Button

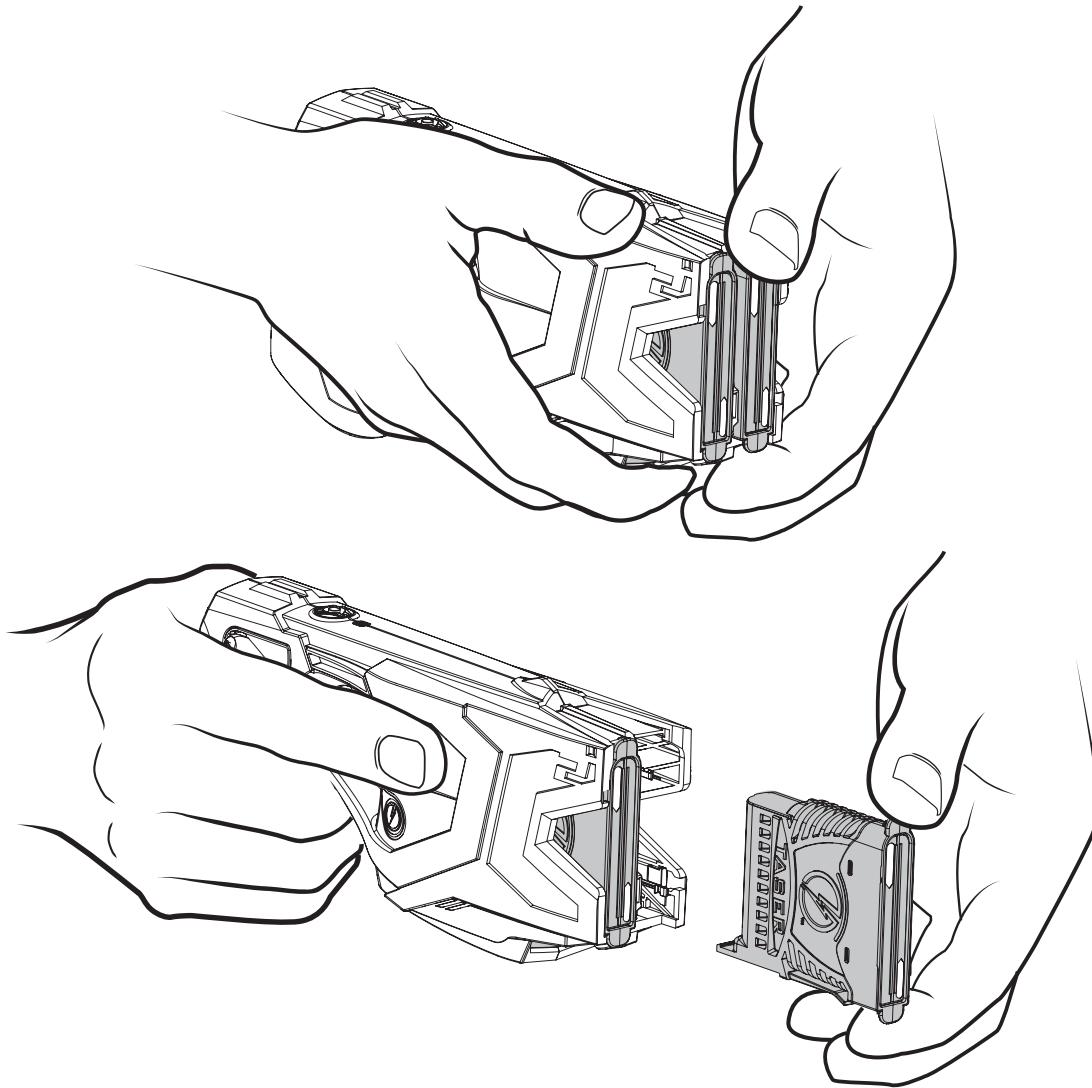
Smart cartridges are held in the X2 CEW after they are loaded. Press the cartridge release button to release the cartridges before attempting to remove them from the CEW. For further instructions, see the **Unloading** section in this manual.



## Unloading

- 1 Point the CEW in a safe direction.
- 2 Ensure the safety switch is in the down (SAFE) position.
- 3 Keep your hands away from the front of the cartridges.
- 4 Press the cartridge release button with the index finger of your supporting hand.
- 5 Firmly pull the cartridge out of the bay by pulling on the upper tab and lower tab of the cartridge. If the expended cartridge feels as if it is stuck in the cartridge bay and will not easily dislodge, try firmly pressing on the cartridge release button directly below the individual cartridge that is difficult to remove.

NOTE: Use the left hand to unload cartridges beginning with the leftmost cartridge bay. By unloading from left to right (or right to left if the right hand is used), it is less likely you will place fingers in front of the blast doors of loaded cartridges.



The Smart cartridges can be reloaded independently. That is, if one of the two cartridges has been expended, you can replace the expended cartridge with a new one. You do not have to wait until both cartridges have been expended before reloading.

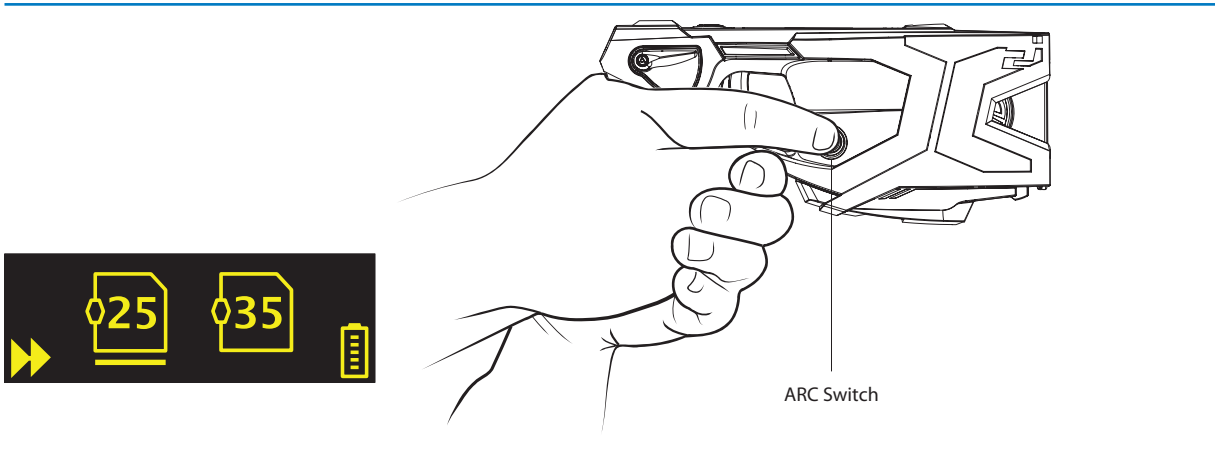
To replace the expended cartridge:

- 1 Point the CEW in a safe direction.
- 2 Ensure the safety switch is in the down (SAFE) position.
- 3 Press the cartridge release button.
- 4 Firmly pull the cartridge out of the bay by pulling on the upper tab and lower tab of the cartridge.
- 5 Keeping your hand away from the blast doors, gently push a new Smart cartridge into the cartridge bay until an audible click is heard.
- 6 Verify that the cartridge is secure by pulling on the tabs on the lower and upper part of the cartridge.
- 7 Verify that the remaining Smart cartridge is secure by pulling on the tabs on the lower and upper parts of the cartridge.

## Selecting Cartridges

By default, the leftmost (when the front of the CEW is facing away from the user) live cartridge is selected. You can use the ARC switch to designate which cartridge you want to use. You do not have to start with the left cartridge.

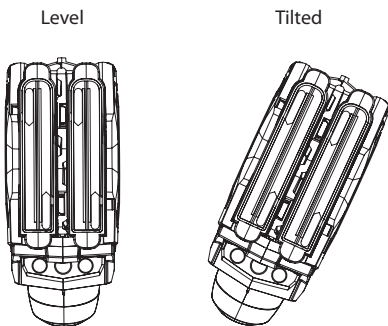
For example, you can load Smart cartridges of different ranges into the CEW. You might load one 25-foot (7.6-meter) cartridge into the left bay and one 35-foot (10.7-meter) cartridge into the right bay. As shown in the CID below, if the subject is between 25 and 35 feet away, quickly press and release (tap) the ARC switch to select the 35-foot cartridge.



Pressing and releasing the ARC switch quickly selects the second cartridge.



## Aiming and Probe Placement



For most deployments, hold the CEW level. Do not tilt the CEW unless it is necessary to align the CEW with the target.

All TASER CEW deployments should be in accordance with current TASER training and warnings, and department training, policies, and procedures.

Normally, aim the LASER at the preferred target areas of the body, which are the lower torso and legs when the subject is facing you, or the subject's back if the subject is turned away from you.

**When possible, avoid intentionally targeting the CEW on sensitive areas of the body such as the head, eyes, throat, chest/breast, or known pre-existing injury areas without legal justification.**

The top probe is designed to impact the target near the top LASER beam but exact placement can vary depending on numerous factors, including, but not limited to the distance, type of cartridge, and environmental factors.

Hold the X2 CEW so that the cartridge is vertical for an upright target. If both the upper and lower LASERs are active, you should be able to estimate where each probe will hit.

NOTE: The LASERs are designed to coincide with the top and bottom probes of a 15' or 25' Smart cartridge at 15 feet. Thus, if your target is 15 feet away, and your CEW is loaded with a 25-foot Smart cartridge, the probes will strike the target approximately where the LASERs are projected. If the CEW is being held perfectly vertical, the top and bottom LASERs should be vertically aligned. If you are significantly closer or further than 15 feet to the target, the LASERs will appear to be out of alignment. This is because the two LASERs are located almost 1 inch apart side-by-side on the CEW and zeroed to 15 feet.

With previous-generation TASER CEWs, the electrical current is relatively quiet in actual human use. Therefore, the CEW may make very little sound when the probes are successfully deployed on a human or a conductive target. With the X2 CEW, the noise level will vary. If a single cartridge is deployed and both probes make direct contact with a human or animal and an electrical circuit is completed and maintained, the current will be relatively quiet. Multiple cartridge deployments and Warning Arc displays are likely to make more noise than typical of single-cartridge TASER CEWs.

## Potential Causes of Reduced or No Effectiveness

- **Loose or Thick Clothing.** If the probes lodge in clothing and are too far away from the subject, CEW effectiveness is reduced and can be eliminated.
- **Miss or Single Probe Hit.** The electrical current must pass between a positive probe and a negative one (Top and Bottom Probe) in a completed and maintained circuit. If one probe misses, a second cartridge may be deployed, if practical and justified, to complete the electrical circuit. Also, using the X2 CEW in the drive-stun mode may complete the circuit between the single probe and the CEW electrode.
- **Low Nerve or Muscle Mass.** If the probes impact in an area where there is very little muscle mass (e.g., the side of the rib cage), the effectiveness can be significantly diminished.
- **Limited Probe Spread.** Probe spreads of less than 4-9 inches/20-23 cm (including drive-stun) may result in little or no incapacitation effect and become primarily a pain compliance option.
- **Wires Break.** If a wire breaks (e.g., during a struggle), the current will not flow to the probes and an additional deployment may be required. Drive-stun may still be available.

**Do not become over-dependent on the TASER CEW. No force option, including CEWs, is 100% effective in every situation. Do not deploy the CEW without following your department policies and procedures.**



## Warning Arc Display

With the safety in the up (ARMED) position, pressing and holding the ARC switch displays a Warning Arc discharge across the front of the X2 CEW.

With a Warning Arc display, the user may deter a subject without having to use actual force. Unlike with the M26™, X26, and X26P™ CEWs, a Warning Arc can be accomplished without removing the live cartridges. Pressing the ARC switch does not deploy the Smart cartridges even if the X2 CEW is loaded.

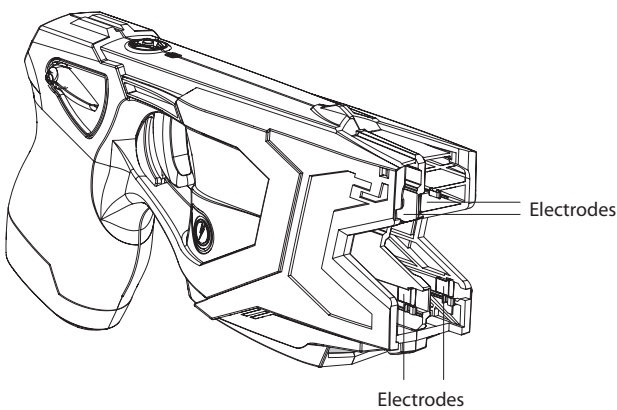


NOTE: Pressing the ARC switch for a half-second or less will advance cartridge selection to the right. A sustained ARC switch press (greater than half a second) will not advance the cartridge selection.

**Use the ARC switch, not the trigger switch, to employ the Warning Arc display. Pulling the trigger switch will deploy a loaded unfired cartridge.**

## Electrodes

The front of the X2 CEW has 4 metal electrodes. The electrodes provide the ability to use the X2 CEW in a “drive-stun” mode as a traditional stun gun-type CEW.



## Drive-Stun Backup

Drive-stun capability is available with the X2 CEW. To apply a drive-stun, place the safety in the up (ARMED) position and press the ARC switch, just as you would to employ a Warning Arc display.

Use the ARC switch instead of the trigger to activate the X2 CEW for a drive-stun. When you use the ARC switch, energy will spark across all the electrodes or arc deflector metalized labels without deploying the cartridges.

The drive-stun mode is not designed to cause incapacitation and generally becomes primarily a pain compliance option. Probe deployment is usually considered more desirable if incapacitation is the desired objective, even at close range. Some of the advantages of probe deployment include:

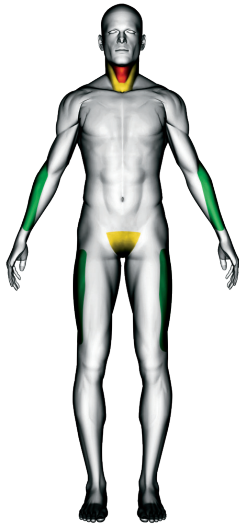
- Drive-stun is only effective while the CEW's electrodes are in direct contact with the subject or when pushed against the subject's clothing. As soon as the CEW is moved away, the energy being delivered to the subject stops. Deploying the probes allows the user to separate from the subject while increasing the ability to maintain control.
- Due to automatic reflex actions, most subjects will struggle to separate from the CEW. Each time the CEW comes back in contact with the subject, another set of marks may be visible on the subject's skin or clothing. Using the probes allows for one point of discharge.
- If the probes are deployed, even at very close range, the user may drive-stun to another portion of the body that is further away from the probes, thereby increasing the possibility of inducing incapacitations.

If the drive-stun is not effective, evaluate the location of the drive-stun, consider an additional cycle to a different pressure point, or consider alternative force options.

When using the drive-stun, push (drive) the front of the X2 CEW firmly against the body of the subject. Simply "touching" the X2 CEW against the subject is not sufficient. The subject is likely to recoil and try to get away from the CEW. It is necessary to aggressively drive the front of the CEW into the subject for maximum effect.

## Recommended Drive-Stun Areas for Maximum Effect

Only use the X2 CEW pursuant to your agency's policies and guidance. Drive the X2 CEW into the following areas for maximum effectiveness:



Suggested pressure points are highlighted in the green areas. Use care when applying the drive stun to the neck or groin (yellow and red areas - users should only target these areas when they are defending themselves against a violent attacker). Stay away from the trachea and back of the neck. The trachea is soft tissue and could easily be crushed. The cervical portion of the spine is very sensitive to pressure. Also, care should be taken when applying a drive stun to the pelvic triangle to avoid the possibility of crushing the testicles. Because of the risk of injury, these areas should not be used on subjects who do not pose an immediate threat.

**Refer and adhere to your department's policy and training regarding drive-stuns in these and other sensitive areas.**

## Function Test

TASER International recommends conducting a function test prior to the start of your shift. The function test is done to verify that the CEW's core electronics are working properly.

Unlike previous TASER CEW systems, an X2 CEW can be function tested with the cartridges loaded. In fact, it is recommended you perform the test with cartridges installed to reduce stress on the CEW's components.

To perform a function test:

- 1 Point the CEW in a safe direction.
- 2 Place the top rail of the X2 CEW in the palm of your secondary hand so you can grip the top rail and your thumb can reach the ARC switch, while the remainder of your secondary hand and fingers are away from the front of the CEW.
- 3 Shift the safety switch to the up (ARMED) position. Keep all fingers away from the trigger and keep the CEW pointed in a safe direction. While performing a spark test, DO NOT touch the trigger at any time.
- 4 Use your thumb to press the ARC switch.

**Use the ARC switch, not the trigger, to perform a spark test. Pulling the trigger switch will deploy a loaded unfired cartridge.**

A 2- to 3-second sustained press of the ARC switch should activate the Warning Arc long enough to hear and see the X2 CEW arc. It is not necessary to extend the duration.

**View the arc from the top or side of the CEW. Do not point the CEW at your face or have it near your face.**

- 5 Look at the CID display and verify the following:
  - No critical or major fault icons display on the upper-right corner of the CID.
  - The cartridge information matches the cartridges inserted in the X2 firing bays.
  - The battery icon displays a 20 percent or greater capacity.

If any of the above verifications fail, return the unit to your agency's CEW technician for service.

- 6 Shift the safety switch to the down (SAFE) position.

The function test only checks the functionality of the core electronics. It does not check the functionality of the

trigger. If you wish to perform a trigger function test, the following procedure is recommended:

- 1 Ensure the safety switch is in the down (SAFE) position.
- 2 Safely unload both cartridges. See the **Unloading** section in this manual for more information. A trigger function test should never be conducted with a Smart cartridge in or near the CEW.
- 3 Point the X2 CEW in a safe direction that allows you to see the arc in the cartridge bays. Do not point the CEW at your face or have it near your face.
- 4 Shift the safety switch to the up (ARMED) position.
- 5 Pull the trigger.
- 6 Allow the X2 CEW to arc long enough to hear and visually confirm the arc in cartridge bay #1.

**View the arc from the top or side of the CEW. Do not point the CEW at your face or have it near your face.**

- 7 Shift the safety switch in the down (SAFE) position.
- 8 Reload the cartridges if appropriate to do so.

## What to Do Following CEW Use

### Considerations for Handling Used Probes



#### **Biohazard**

Each agency will establish its own procedure for probe removal, collection, biohazards, evidence collection and maintenance. Treat probes that have penetrated the body as contaminated needles (biohazard). Remember, however, that the probes may also be valuable evidence.

If the probes must be removed from the subject, follow all department policies and procedures, including for handling biohazards.

Below are suggested methods for probe removal.

- Grab the probe firmly and quickly pull it straight out. Do not twist the probe as the barbed tip may cause additional injury.
- If the probes are not going to be collected and maintained for evidence, carefully place used probes sharp-tip first into a sharps container, secure in place, and place in a secure location where no one will accidentally touch the probes.
- Once the subject is restrained, prior to removing the probes, evaluate the need for medical attention as you would with any other use-of-force incident.\*
- Take photos of any injuries, place the photos into evidence.\*

- Collect the expended cartridge, probes, and AFIDs and place them into evidence.\*
- \* As directed by department policy. The TASER training materials provide additional information on forensic evidence collection procedures. The probes, wires AFIDs, and cartridge can yield important forensic evidence if properly collected, maintained, and analyzed.

## Effects on Animals

The M26 and X26 CEWs can be an effective option for dealing with aggressive animals and have generally been successful in most deployments. The X2 CEW uses similar technology, but does not yet have the same service record as the previous models.

NOTE: If a probe deployment completed circuit is initiated and maintained, the aggressive animals are usually incapacitated/stunned momentarily in M26 and X26 deployments, but recover quickly. The vast majority of the animals quickly left the scene and broke the wires.

If deployed on a domestic animal, consider having animal control available to restrain the animal.

## Police/Military K-9 Caution

CEW operators and K-9 officers must work closely together to develop policies and procedures for deploying the CEW when a K-9 is present. If a K-9 bites a probe or the wires or bites the suspect between the probes, or touches the cartridge wires, the K-9 could receive a shock. This could have a significant negative impact on the future duty use of the K-9.

## Uploading Software Revisions

The X2 CEW internal software provides functionality for all aspects of the CEW. The software can be upgraded to the most recent version by using an X2 CEW Dataport Download Kit (purchased separately) and an Internet-connected PC connected to EVIDENCE.com services. You must connect to EVIDENCE.com services to obtain the software updates.

**Do not remove the USB cable or shift the safety switch to the up (ARMED) position during the reprogramming cycle.**

## Dataport Download Kit

Optional download kits are available to permit departments to access the encrypted deployment information in the X2 CEW memory through the EVIDENCE.com services or the Sync Offline Client software (Online or Offline).

NOTE: If you have a TASER CAM HD recorder, please see the *TASER CAM HD Operating Manual* for downloading instructions.

The X2 CEW uses a USB adapter to connect to any Windows® 98, 2000, XP, ME, or 7 computer. The simplicity of USB makes using the dataport download kit an easy, fast process. The cable connects to the CEW through the battery compartment.

## USB Connection Status

The USB icon will display when the CEW is searching for the EVIDENCE Sync client software. The icon will display solid when the CEW is connected to the software.



## EVIDENCE Sync Software

If you do not have an EVIDENCE.com account, the EVIDENCE Sync software enables you to download the simplified Event log to your local computer and print it. The software will not enable you to download the full Trilogy log or update your X2 CEW software.

Each time you open the EVIDENCE Sync software, the system will ask you if you want to work offline or log into EVIDENCE.com. Working offline will enable you to download the CEW to your personal computer. The login option will direct you to create an EVIDENCE.com account.

## Trilogy Log

The X2 CEW captures various pieces of information about the device – this is referred to as the Trilogy log:

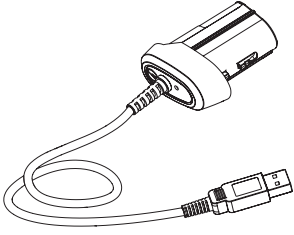
- Event log
- Pulse log
- Engineering log

The data set from the Trilogy log is uploaded securely to EVIDENCE.com services, where the information is encrypted, stored securely, and organized into dashboards that allow your agency to easily monitor the usage and system status of your entire arsenal of X2 CEWs.

Upon upload to EVIDENCE.com services, the system displays the information from the Event and Pulse logs.

## Event Log

The Event log tracks events and may help protect a user from claims of excessive force by providing documentation of the time and date for each CEW deployment. The Event log also provides agencies with a powerful management tool to track usage patterns and help prevent misuse. You do not need to download the X2 CEW to EVIDENCE.com services to obtain the Event log – the simplified Event log can be downloaded directly to your PC using the EVIDENCE Sync (Offline) software.



The Event log includes the following information for the most recent (approximately) 16,000 entries:

- Each entry contains the date and time of each event.
- Entries include Armed, Safe, Trigger, ARC, USB connection, PowerSave mode, software updates, time synchronizations, language changes, flashlight on/off, etc.
- The duration of each Trigger and ARC event.
- The duration of each Safe event (when the safety switch was moved to the down [SAFE] position and how long the CEW was armed).
- The internal temperature is shown for armed session events except for Trigger and ARC events.
- Battery percentage is shown for all armed session events (Armed, Trigger, ARC, Safe).
- Cartridge information is shown for all armed session events (Armed, Trigger, ARC, Safe).

When the log fills to approximately 16,000 entries, it will delete the oldest 4,000 records and write new ones. This process will continue in 4,000-record increments.

## Pulse Log

The Pulse log records pulse activity of each pulse (e.g., probe deployments and Warning Arc displays). The Pulse log can help determine if the CEW's output was within specifications and determining if and when electricity was delivered to a subject.

## Engineering Log

The Engineering log monitors the performance of every key sub-system within the X2 CEW and provides alerts to the user on the CID if any subsystem is not performing properly and if maintenance is advisable. Any internal circuitry errors that occur inside the X2 CEW are written to this log. This information is used for diagnostics and warranty issues. (Your agency administrator has the ability to configure your department's EVIDENCE.com settings to automatically upload these logs or not.)

## Time Synchronization

The CEW has a real-time clock powered by the battery pack and an internal battery as well. The CEW should keep accurate time even when the battery pack is removed.

The X2 CEW is programmed to GMT at the factory. Every time the X2 CEW is connected to EVIDENCE.com services, the system will perform a time synchronization to GMT. The conversion to local time, including adjustments to daylight savings time, are all computed in the PC-based software. There is no need to program the X2 CEW to local time or to reprogram the CEW to daylight savings time.



If you do not have an EVIDENCE.com account, the CEW will synchronize with your local computer's time.

## X2 CEW Maintenance and Care

Each agency should establish a maintenance and handling program.

**The X2 CEW product is a sensitive piece of electronic equipment, and should be handled with care. Avoid dropping an X2 CEW. Do not use an X2 CEW that has a cracked handle.**

- Check the battery pack regularly. Replace it when the battery percentage reaches 20%.
- Occasionally wipe out the X2 cartridge deployment bays with a dry cloth. Multiple cartridge firings create carbon build-up (particularly after training courses) that should be removed.

**Do not wipe out the X2 bays immediately after the CEW has been fired as you might receive a latent short electrical shock. Wait at least 5 minutes after the last discharge of the X2 CEW before wiping out the bays.**

- Secure the X2 CEW in a protective holster when the CEW is not in use.
- Function test the CEW regularly.
- Update the CEW's software when updated software is released.
- Download your X2 CEW data to EVIDENCE.com services or your local PC at least once per quarter and always before sending the CEW to TASER International.
- Avoid immersing the X2 CEW in water or exposing the X2 CEW to excessive moisture or water.
- See the troubleshooting guide at [www.TASER.com](http://www.TASER.com) for additional maintenance instructions.

## Dropped or Wet X2 CEW

**Do not immerse the CEW in water. Any CEW loaded with Smart cartridges that is submerged in water may unexpectedly deploy the cartridges. If your CEW has been submerged in water or exposed to a significant amount of water for an extended time, remove it from service and contact TASER.**

Follow these steps for a CEW exposed to some moisture *but not submerged in water*.

- 1 Point the CEW in a safe direction and away from your body.
- 2 Shift the safety switch to the down (SAFE) position.
- 3 Safely remove the battery pack.
- 4 Safely remove all cartridges.
- 5 Let the CEW dry out.

**Dry the X2 CEW thoroughly (at least 24 hours). Do not use an external heat source such as a microwave oven or hair dryer to dry the X2 CEW.**

- 6 Point the CEW in a safe direction and away from your body and ensure that the safety switch is in the down (SAFE) position.
- 7 Safely reinstall the battery pack.
- 8 Wait 1 minute before proceeding to the next step. Confirm that the CEW is not getting warm.

- 9 Shift the safety to the up (ARMED) position.
  - If the CEW discharges without the trigger being pressed, shift the safety switch to the down (SAFE) position immediately, remove the battery pack, return the CEW to TASER International per the return policies if the CEW is still under warranty.
  - If the CEW does not discharge, go to step 10.
- 10 Look at the CID to ensure the X2 CEW is functioning properly and the CID is not showing any error icons.
- 11 Confirm that the LASER and flashlight are working properly.
- 12 Press the trigger switch to test the trigger function. Conduct three complete 5-second discharges to confirm the proper pulse rate and observe that the cycle stops at 5 seconds. See the instructions under **Function Test** for more information.
- 13 Press the ARC switch to test the functioning. See the instructions under **Function Test** for more information.
- 14 If the trigger or ARC switch does not work, or if the CID shows a critical error icon, shift the safety switch to the down (SAFE) position immediately, remove the battery pack, and return the CEW to TASER International per the return policies if the CEW is still under warranty.
- 15 If the CEW does function normally, shift the safety switch to the down (SAFE) position.
- 16 Connect the CEW to EVIDENCE Sync and confirm the internal time is correct. See the **EVIDENCE Sync User Manual** for more information.
- 17 Confirm that the 3 trigger discharges were recorded properly in the download records.
- 18 Return the CEW to service.

## TASER Online Troubleshooting Guide

A troubleshooting guide is available by visiting [www.TASER.com](http://www.TASER.com). If you need product support on accessories or have any other questions, please contact customer service at:

U.S.: 1.800.978.2737 or 1.480.905.2000

International: +1.800.978.2737 or +1.480.905.2000

## Product Returns

To return a TASER product for service, first follow the procedures at [www.TASER.com](http://www.TASER.com).

**Always perform a complete download from the X2 CEW before returning it for RMA. Any data information will be lost during servicing work performed by TASER.**

**If the TASER CEW has been exposed to bodily fluids or other bio-hazards, please follow your agency guidance and if appropriate contact TASER's Customer Service Department at +1.800.978.2737 or +1.480.905.2000 for specific instructions BEFORE returning the X2 CEW.**

## EVIDENCE.com Services

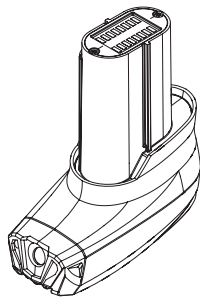
You can upload the data from your X2 CEW using EVIDENCE.com or EVIDENCE.COM Lite services. EVIDENCE.com Lite is a free version of the EVIDENCE.com services for uploading the X2 CEW, viewing the Trilogy log, and updating the CEW software.

The full EVIDENCE.com pay service allows you to manage video records in addition to your CEW records. Visit [www.evidence.com](http://www.evidence.com) for details.

## EVIDENCE Sync Software for Offline Mode

The EVIDENCE Sync Software for Offline Mode is intended for CEW users who do not have an EVIDENCE.com or EVIDENCE.com Lite account. The software enables you to download a simplified Event log to your local computer and print it. Visit [www.evidence.com](http://www.evidence.com) or [www.TASER.com](http://www.TASER.com) for details.

## TASER CAM HD Recorder



The TASER CAM HD recorder allows users to capture vital information prior to, during, and after deployment or potential deployment of the X2 CEW. The TASER CAM HD recorder is an audio-video recording device that replaces the standard battery pack. The TASER CAM HD recorder is activated when the safety switch is in the up (ARMED) position and there is a boot-up time delay of approximately 2 seconds after the safety switch is moved to the up (ARMED) position before it starts to record.

The TASER CAM HD battery is rechargeable and is capable of approximately 100 5-second firings when completely charged. Charging is accomplished through a 110-volt wall adapter through the USB cable.

The TASER CAM HD can record approximately 1 hour of video at maximum resolution before recording over previous files (continuous loop system).

Video and audio is downloaded via a USB cable and EVIDENCE Sync software to your local computer or to EVIDENCE.com services.

There also is an automatic shutoff (AS) version of the TASER CAM HD recorder that emits an alarm and shuts down the energy cycle after 5 seconds, like the APPM.

## Holsters

Several holsters are designed for use with the X2 CEW. Both right- and left-handed configurations are available. Visit our website at [www.TASER.com](http://www.TASER.com) for details.

## Additional Information

New TASER brand products are under development. Visit our website at [www.TASER.com](http://www.TASER.com) for the latest information.

Material Safety Data Sheets (MSDS) for lithium batteries are available by contacting TASER.

## TASER Training Academy

The TASER Training Academy provides training on the use and maintenance of all TASER products. Training is geared toward the special needs of law enforcement officers, correctional officers, medical personnel, the military, professional security, and private citizens. CEW functions, medical issues, device maintenance, and personal safety are just a few of the topics covered in the offered courses.

Located at TASER's headquarters in Scottsdale, Arizona, the TASER Training Academy features a state-of-the-art classroom facility complete with 48 work stations equipped with power and Internet access, safety mats, and the Ti Training interactive training simulator.

We "fight like we train." It is for this reason that we emphasize hands-on, interactive and scenario-based training. Most of our courses involve some degree of physical activity and participation. We make reasonable efforts to simulate real-life stress and circumstances, to provide realistic training to better prepare the student for success in the field. Through the use of our Ti Training interactive force simulator and Simulation Training Suits, we promote sound use of force judgment, tactics and follow up procedures.

Our cadre of instructors consists of active and former law enforcement officers and military trainers. Many are internationally recognized experts in use of force at all levels with extensive training backgrounds.

All of our instructors are committed to providing high-level training and to forming lasting relationships to support our students long after they leave the TASER Training Academy.

For more information visit our website [www.TASER.com](http://www.TASER.com) or give us a call at +1.800.978.2737 option 7 or +1.480.905.2000.

Courses currently offered or in development:

- TASER User Course
- TASER Instructor Course
- TASER Master Instructor Course
- TASER Technical Solutions and Investigations Course
- TASER Use of Force, Risk Management and Technical Solutions Seminar

## Medical Research

TASER CEWs are among the most extensively studied force options. Many CEW-related medical and field studies have been published. For more information go to [www.TASER.com](http://www.TASER.com).

See the current product warnings, training materials, licensing agreements, and specification sheets for more information about your TASER product.



# TASER

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