

X-CAP Kit Operator's Manual Document EX2302

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X-CAP Kit Components



FIGURE 1

- 1. Battery Charger
- 2. Connector Cable for XP Simulators
- 3. Connector Cable for X-0 Simulators
- 4. X-CAP Transmitters

- 5. Arm/Disarm Switch
- 6. Function/Power Switch
- 7. Battery Charger Port

Your X-CAP Kit comes with the X-CAP Receiver and two X-CAP Transmitters of different colors. The different color X-CAPs allow the X-CAP Receiver to distinguish between the two Transmitters. The X-CAP Transmitters can be used as a direct substitute for a blasting cap in IED or other explosive circuitry.

The X-CAP Receiver can be used to provide an audible signal or fire an Explotrain X-0 or XP Simulator to provide a blast effect as a result of triggering the X-CAP.



X-CAP Receiver

The X-CAP Receiver has two modes: **TEST** and **LIVE**.

TEST mode produces an audible sound from the Buzzer when a signal is received and can be used with or without connecting the X-CAP Receiver to a Simulator. Typical applications of TEST mode would be desktop or classroom use or as verification of functionality of a device in a scenario before switching to LIVE mode.

LIVE mode output provides an output through the Connector Cables for X-0 or XP Series Simulators.

To operate an X-0 Series Simulator, connect the 3-pin X-0 Connector Cable (#3, Figure 1) to the Input Plug of the Simulator's Control Box. Use the Arm/Disarm Pushbutton Switch (#5, Figure 1) to Arm and Disarm the Simulator. When the X-CAP Receiver receives a Fire signal from an X-CAP Transmitter, it will send a contact closure Fire signal to the Simulator's Control Box via the Connector Cable.

To operate an XP Pneumatic Simulator, connect the 2-pin XP Connector Cable (#2, Figure 1) to the input plug of the Simulator. When the X-CAP Receiver receives a Fire signal from an X-CAP Transmitter, it will send a 12-volt DC Fire signal to the Simulator via the Connector Cable.

Do Not connect the XP Connector Cable to an X-0 Series Simulator.

Do Not connect the X-0 Connector Cable to an XP Simulator.

TEST Mode Operation

- 1. Turn the Function/Power Switch to **TEST**.
- 2. The X-CAP Receiver will beep when signal from X-CAP Transmitter is received.
- 3. The X-CAP Receiver will beep again if another X-CAP transmitter signal is received after five seconds.

LIVE Mode Operation

- Connect the X-0 Connector Cable to the Control Box INPUT of an X-0 Series Simulator or connect the XP Connector Cable to the input plug of an XP Simulator.
- 2. Turn the Function/Power Switch to LIVE.
- 3. Use the Arm/Disarm Switch to Arm and Disarm the X-0 Simulator.



- 4. The X-CAP Receiver will output a switch closure Fire signal through the X-0 Connector Cable and a 12-volt DC Fire signal through the XP Connector Cable when a signal from the X-CAP Transmitter is received.
- 5. The X-CAP Receiver will output another Fire signal if another X-CAP Transmitter signal is received after five seconds.

LIVE Mode Operation Options

- 1. Open the X-CAP Receiver housing and locate the 4-position row of DIP Switches.
- 2. Turn Switch 1 OFF for an instant output or ON for a 3 second delay.
- 3. Turn Switch 2 OFF for a single output or ON to repeat the output three times.
- 4. Switches 3 and 4 are non-functional.

X-CAP Transmitter Selection

- 1. Ensure Function/Power Switch is in the center OFF position and open the X-CAP Receiver housing and locate the 8-position row of DIP Switches.
- 2. Use the DIP switches of the X-CAP Transmitter Selector DIP Switch to select which X-CAP Transmitter(s) the X-CAP Receiver will respond to by sliding the switch(es) corresponding to the desired color(s) to the ON position. Use the following table based on the color of the leads of the X-CAP Transmitter:

Lead Color	Number
Red	1
Yellow	2
Green	3
Blue	4
Orange	5
Violet	6
White	7
Brown	8

X-CAP Receiver Charging

- Ensure Function/Power Switch is in the center OFF position and insert the charging plug of the Battery Charger into the Charging Port of the X-CAP Receiver.
- 2. Plug the Battery Charger into a wall outlet.
- 3. The Battery Charger LEDs indicate the charging status.



X-CAP Transmitter

The X-CAP Transmitter transmits a signal to the X-CAP Receiver and is intended primarily to be used in training aids simulating explosive devices as a substitute for a blasting cap or detonator in actual circuitry. The X-CAP transmits at less than 1 mW and requires an input of 3.5 to 13 volts DC to function. Higher voltages may be used, but this type of operation can dramatically shorten the life of your transmitter. **Note:** The X-CAP Transmitters are not DC polarity sensitive.

Connecting the X-CAP Transmitter

- 1. Connect the leads of your X-CAP Transmitter to your circuit.
- 2. The X-CAP will transmit a Fire signal to the X-CAP Receiver when your circuit supplies the voltage signal as described above.

Thank you for purchasing your Model X-CAP Kit.

We at Explotrain, LLC truly appreciate your business.

If you have any questions or comments on this, or any of our products, please let us know.

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