



X-ACT Battlefield Effects Active Control Tablet

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Description

The X-ACT is an Android tablet-based application that provides an entire Battlefield Effects training capability with complete control over the entire scenario. This technology provides the ability for an instructor to fire any simulator programmed into the system On Demand, change the settings, and fully customize any type of firing sequence with up to 16 simulators.

The X-ACT monitors each simulator and identifies any issues that may arise. The X-ACT can immediately change settings in real-time with adjustable firing, delays, and feedback reports.



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Capabilities

- Controls and monitors up to 16 simulators
- Arm, Disarm, and Fire simulators with the tap of a button
- Portable and battery powered
- Fully customized aerial photo upload capable
- Drag and drop simulators on uploaded map
- Monitors current and voltage for all components

Operation (Quick Start)

1. Turn on all Control Box(es) (up to 16) and Simulators within range of the X-ACT Wi-Fi Interface.
2. Press the Power Button on the X-ACT Wi-Fi Interface and Allow up 10 seconds to connect before starting the X-ACT App (Software) on Tablet. (Note: The X-ACT Wi-Fi Interface will be referred to as the Wi-Fi Interface.)
3. Turn on Tablet, swipe down from the top and tap the Settings gear icon. Under the Network & Internet section, tap Wi-Fi and look for a Wi-Fi device starting with 'X-ACT-XXXX' (Figure 1). Tap the 'X-ACT-XXXX' device to connect to the Wi-Fi Interface. This allows the tablet to connect directly to the X-ACT Wi-Fi Interface and Control Box without the use of a Wi-Fi router/access point. Note: you will NOT have an Internet connection using this Interface.
4. On the Tablet, tap the Circle at the bottom or side status bar to go back to the Home screen. Locate and tap the X-ACT App icon to start the program.
5. When the X-ACT App opens, tap the Connect button.
6. If more than 10 devices are connected, tap the Menu option (the three vertical dots in the upper right) and tap '10/16 Units' to enable the 16 Units control mode. In this mode, ensure the simulator's Unit ID switches are set between 0 and F. Tapping the '10/16 Units' Menu option alternates between the two modes. If you have 10 simulators or less, use the '10 Units' mode and ensure the simulator's Unit ID switches are set between 0 and 9.

In a few seconds the screen should be populated with the simulators that are connected to the Wi-Fi Interface (Figure 2).

Wi-Fi Connection

The X-ACT Wi-Fi Interface allows the tablet to connect directly to the Wi-Fi interface and Control Box without use of a Wi-Fi router/access point. Note: this Wi-Fi connection does not allow Internet connectivity.

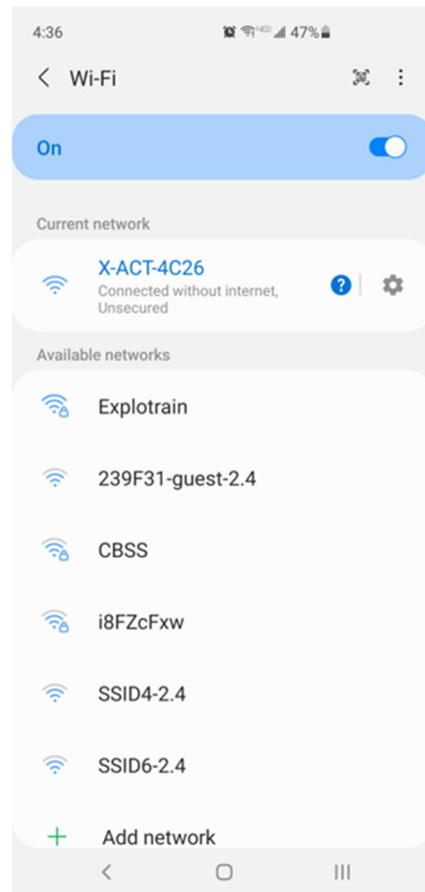


FIGURE 1

Disconnection

If the normal power-up sequence is interrupted, i.e. powering up the simulators first, then secondly the Wi-Fi Interface, it may be necessary to tap the "Scan" button in the App to force the Wi-Fi Interface to restart a scanning sequence. When the "Scan" button is tapped, the app will automatically disconnect from the Wi-Fi Interface, indicate scan sequence with a progress bar, and then re-connect to the Wi-Fi Interface.

X-ACT App Control Screen

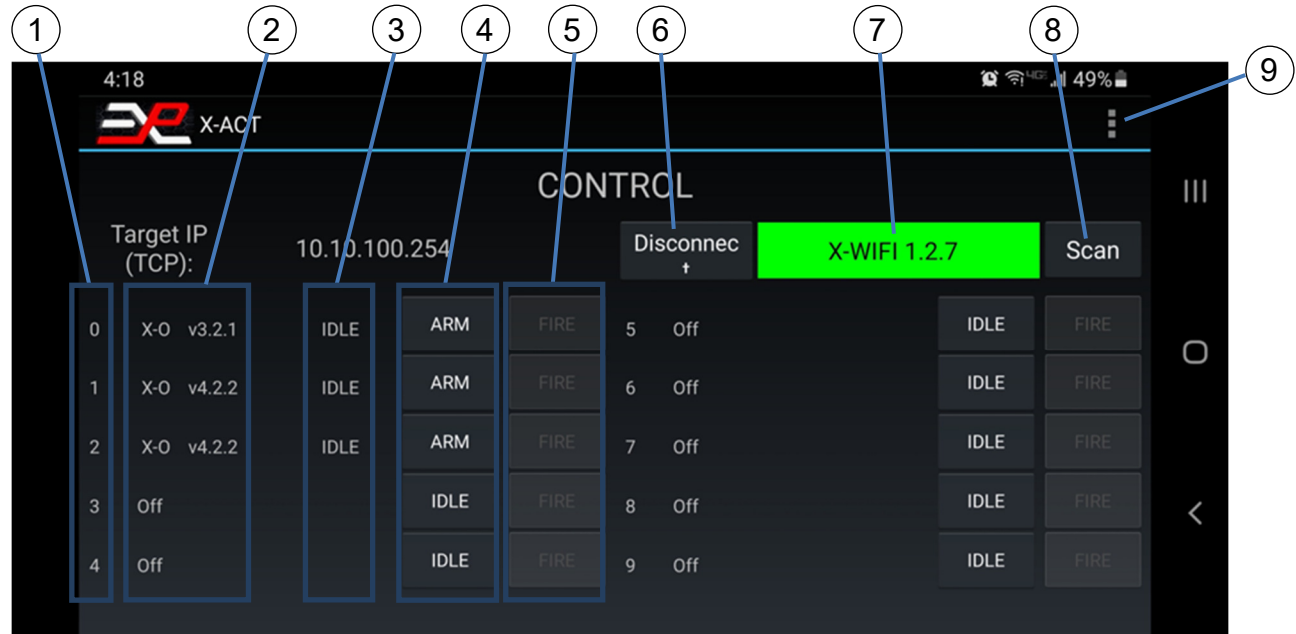


FIGURE 2

- | | |
|--------------------------------|---|
| 1. Simulator Unit ID Indicator | 6. Wi-Fi Connect/Disconnect Button |
| 2. Simulator Type Indicator | 7. Connection Status and Name Indicator |
| 3. Simulator Status Indicator | 8. Scan Button |
| 4. ARM/IDLE Toggle Buttons | 9. Menu Button |
| 5. FIRE Buttons | |

Once connected, the screen will populate with the simulators that are connected to the Wi-Fi Interface (Figure 2). Note: the Wi-Fi interface name is highlighted in GREEN when connected to the tablet. Indicator turns RED when disconnected.

Initially, the simulators will be in IDLE state (Figure 2). When the ARM button is tapped, the simulator's status changes to ARMED and the FIRE button is now enabled (Figure 3). To fire the simulator, tap the FIRE button. The state will change to FIRING, then FIRE DELAY and after a few seconds it will return to ARMED.

If you have more than 10 Simulators, tap the Menu button and tap the '10/16 Units' Menu option (Figure 4).

Simulators ARMED and FIRE Buttons enabled

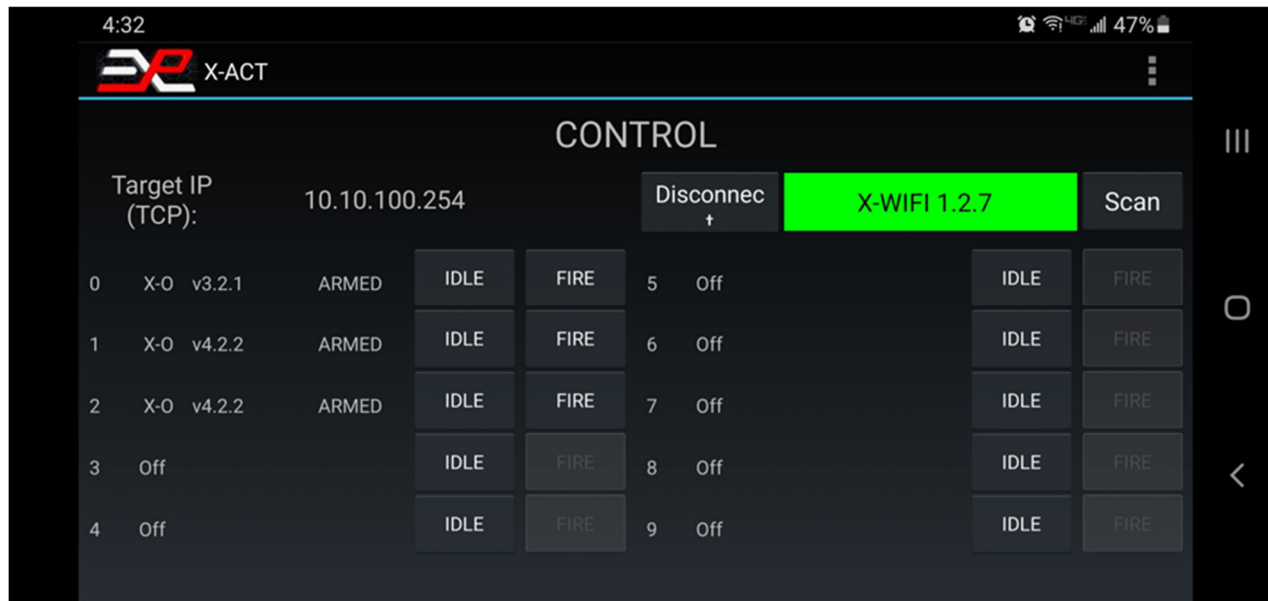


FIGURE 3

All 16 simulators displayed

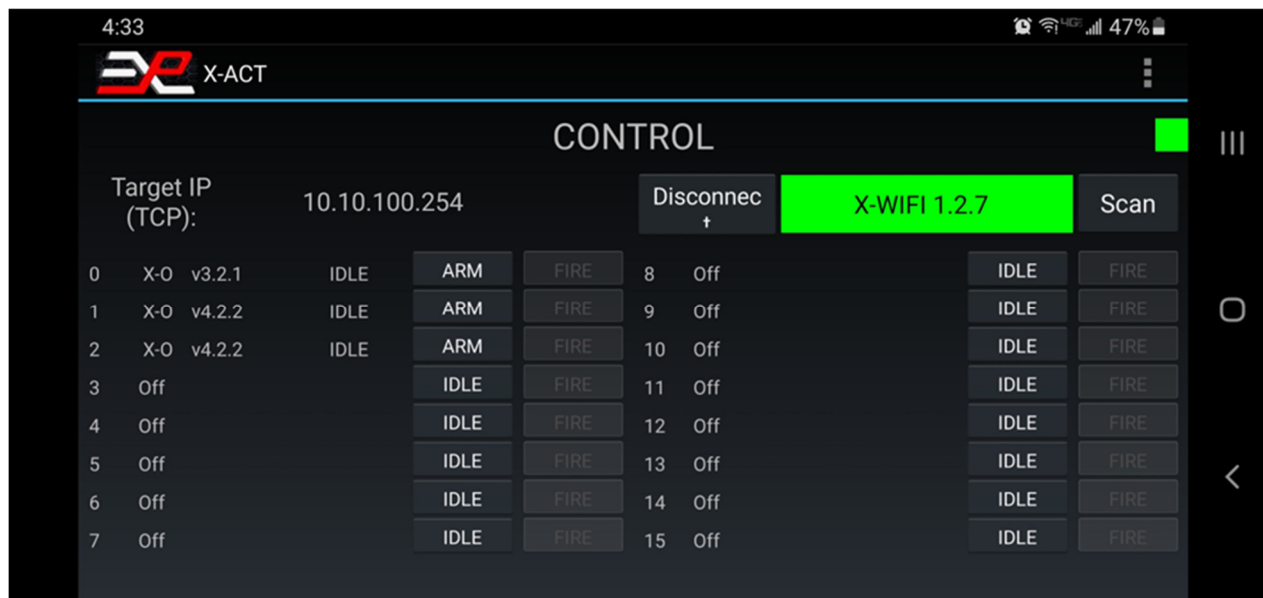


FIGURE 4

Map View

To select Map View, tap the Menu (three dots in the upper right-hand corner) to display the drop-down menu. The Map View offers a graphical representation of the simulators superimposed on a map of your choosing. It could be a map downloaded from Google Maps or any other online provider, or a picture of a hand drawn map.

The app is installed with a sample map. To use it, tap on the Menu, tap Pick New Map and tap 'map_sample.png'

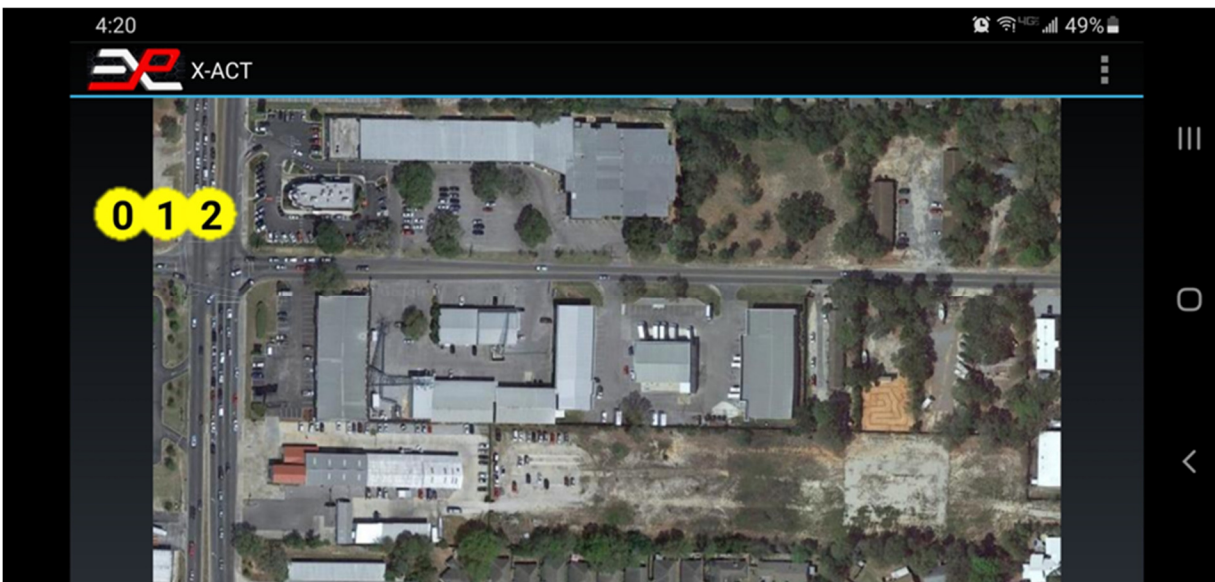


FIGURE 5

Organizing the icons

After the map is downloaded, the icons will be initially lined up to the side or the top of the display, depending on the tablet's orientation. If you cannot see all the icons, open the Menu and tap 'Reset Icons'. Note that if the app is currently connected to the X-ACT Wi-Fi, only the icons for the connected simulators will be visible.

Open the Menu and tap "Move Icons". Tap the icon for the simulator you want to move. The number corresponds to the simulator's Unit ID address. Then tap the display in the location where you want to place the icon.

Once you have moved the icons to the desired position, open the Menu again and tap "Save Icons Positions". The icon positions are not associated with a particular map, so if you change the map the icons will not automatically reposition themselves.



FIGURE 6

Operating in Map View mode

The graphic in the simulator's icon indicates the simulator's state as follows:

- White circle: IDLE
- Yellow circle: ARMING or ARMED
- Red circle: FAULT
- Red flame: FIRING or FIRE DELAY

To operate a simulator, tap the icon with short or long presses as follows:

- Short press: alternates between IDLE and ARMED
- Long Press: Fires if the simulator is ARMED or does nothing if the simulator is in IDLE state.

Scripts

Scripts is a powerful feature allowing you to define a sequence of commands (including precise delays) to be executed automatically. A script will allow you to fire the simulators in any order with a delay, if desired, in a predictable and reproducible way. A Script is a text file stored in the Download folder of your tablet that contains a sequence of commands and optional delays.



FIGURE 7



Following is an explanation of the demo script included with the app.

```
0 - 0
1 - #1,0
2 - #1,3
3 - #2,3
4 - #1,4
5 - w 800
6 - #2,4
7 - w 4000
8 - #1,2
9 - w 1000
10 - #2,2
```

Here is what this script does:

- **"0"** this is an ID Query command sent through the X-ACT Wi-Fi to the simulator. This command returns the X-WIFI firmware version and populates the green Connection Status label box . It is an optional command.
- **"#1,0"** this command instructs the X-ACT App to send command "0" (an ID Query) to the simulator at address 1.
- **"#1,3"** this command instructs the X-ACT App to send command "3" (an ARM command) to the simulator at address 1.
- **"#2,3"** this command instructs the X-ACT App to send command "3" (an ARM command) to the simulator at address 2.
- **"#1,4"** this command instructs the X-ACT App to send command "4" (a FIRE command) to the simulator at address 1.
- **"w 800"** this command is an 800mS delay
- **"#2,4"** this command instructs the X-ACT App to send command "4" (a FIRE command) to the simulator at address 2.
- **"w 4000"** this command is a 4000mS delay (4 seconds).
- **"#1,2"** this command instructs the X-ACT App to send command "2" (an IDLE command) to the simulator at address 1.
- **"w 1000"** this command is a 1000mS delay (1 second).
- **"#2,2"** this command instructs the X-ACT App to send command "2" (an IDLE command) to the simulator at address 2.

Note that if you want to send a FIRE command followed by an IDLE command to a given simulator, a 5 second delay is always necessary after the fire command. If the IDLE command was sent immediately after the FIRE command, it would abort the FIRE command.



Editing a script

To edit an existing script, simply tap on a record while the script is displayed. The record will be printed near the bottom of the screen for reference and a row of buttons will be displayed right below that at the bottom of the screen.

You can use these buttons to respectively insert a new record, delete a record, edit a record and save the new script, under the same name or under a new name.

You cannot create a new script from scratch or delete an existing script directly within the app but if you want to create a new script, it is easy to open the demo script, modify it, and save it under a new name.

Alternately, outside the app you can use a text editor e.g., Notepad in Windows to create a script from scratch or to edit an existing one. Create the script with the commands only (not the line numbers), save it as a .txt file and send via email or copy to the tablet or phone. Download the text file on the tablet or phone and change the extension to .XCR. Note: the file must be in the DOWNLOAD folder of the device, not on an SD card. Open the X-ACT app and choose the 'RUN SCRIPT' option in the drop-down Menu. The new script file should show up along with the DEMO.XCR file.

The scripts are saved in the Download folder which makes it easy to exchange scripts via emails. Email attachments can be easily saved to the download folder and opened from within the X-ACT app.



**Thank you for purchasing your
X-ACT Battlefield Effects
Active Control Tablet**

**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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