

Drones

In the 2010s, culture is moving slowly, perhaps too slowly, toward automation. While there have been growing pains, this has given unique advantages to **Chronicles of Darkness** characters. One example of these advantages is drones. Typically, the term “drone” refers to unmanned aerial crafts, and particularly those utilized by military personnel. Drones are also often employed in law enforcement, bomb disposal, photography, retail delivery, navigation, and agricultural fields, among others. Here, “drone” is a more blanket term, referring to any unmanned vehicle, from toy radio controlled cars to the General Atomics MQ-9 Reaper. Drones use similar but not identical rules to vehicles, found in the **Chronicles of Darkness Rulebook**, p. 99.

Drone Statistics

Drones use the following statistics.

Dice Pool Modifier: This modifier (usually a penalty) is applied to any use of the drone. This reflects a number of factors, including the difference between normal human motion and drone motion, coordination between the pilot’s direct space and the drone’s, awkward maneuverability, and anything else that could interfere with the process. Unless otherwise noted, drone control requires a Wits + Computer roll.

Size: The drone’s Size rating.

Durability: The drone’s Durability.

Structure: The drone’s Structure. A drone suffering half or more of its Structure in damage levies a -2 to any operation rolls. A drone suffering three fourths or more of its structure levies -5 to all operation rolls. These penalties include any secondary dice pools (below).

Speed: The drone’s Speed rating. For any base Speed rating over 20, assume the drone accelerates to half its Speed in one turn, and reaches full Speed in the next.

Range: The drone’s effective operating range. Beyond this point, the drone shuts down. Ranges are expressed in meters. This assumes basic line of sight; obstruction cuts this range in half. Also, this assumes radio control for civilian drones. Access to satellite systems extend this range indefinitely, but is strictly controlled by government agencies or satellite owners. Also note, these Ranges are very loose, rough traits used to add an element of drama and limitation to gameplay. The reality of radio ranges is complex, way more than these rules assume. Two seemingly identical devices could operate at wildly different ranges in reality, with even the tiniest interference. Don’t bother with ranges unless it adds to your stories.

Availability: This is the equipment Availability rating for the drone. This uses the normal Availability rules on p. 100 of the **Chronicles of Darkness Rulebook**.

Secondary Dice Pool: Many drones have a secondary purpose. This dice pool applies to the appropriate action, and is used in place of the pilot’s dice pool. For example, a bomb diffusing drone may have fine manipulators and color detection systems for delicate ordinance disposal, reflected by a 7 dice pool. This would be used in place of the pilot’s own Skill. Generally, a

drone is incapable of conducting actions outside movement and those permitted by secondary dice pools. Drones can have tags, like vehicles in the Chronicles of Darkness Rulebook. If necessary, they're included here.

Sample Drones

Here are a handful of sample drones to facilitate your stories. These are just basic, rough templates. Feel free to modify most of the statistics by a point or two in a given direction. A more efficient drone should come with a commensurately higher Availability rating.

Also note that ingenuity can be factored into Availability. A good, solid camera UAV can be imported from China at about the cost of a solid fast food dinner, but that takes time and some searching. Drone ubiquity means a wide range of styles, costs, and capabilities. Also, drone technology is improving at a fever pitch. Depending on the specific timeline of your chronicle, and relative level of realism and cutting-edge tech availability, these statistics can vary wildly. These statistics reflect an "average" chronicle, not solely focused on drones in play, but where one or two characters have at least a passing interest in using unmanned vehicles to solve problems.

Name	Dice Pool Mod	Size	Dura	Struc	Speed	Range	Avail
RC Car	-3	2	1	3	10	50	1
Consumer UAV	-2	2	0	2	10	100	2
Bomb Disposal Unit	-3	4	8	10	6	200	5
Commercial Aircraft	-3	15	4	15	120	5000	5
Military Aircraft	-3	25	8	25	350	1000k	6

RC Car

This is a common, store-bought, relatively cheap radio-controlled car designed for children. Hobbyists can make much stronger, faster, and durable models, and sometimes ones of much more massive size. RC ground vehicles are rather benign, if a bit loud. They're not particularly advantageous without modifications. On the other hand, they're cheap and available everywhere.

Consumer UAV

These small devices represent a range of small flying devices available on the consumer market. The most common are gyrocopters used for photography, but this could include radio controlled helicopters, retail delivery robots (which of course would be significantly larger than these basic statistics suggest), or other small, commercially-available drones.

Consumer UAVs are essentially high maneuverability devices, which can avoid many obstructions by moving through three-dimensional space. By themselves, they're not highly functional. But, with only simple equipment like cameras or other sensors, they can extend the perceptions of a would-be investigator, and allow access into places which are otherwise nigh-impossible for human intrusion.

Not only are they small, but necessarily light. Even with modifications to interact with their environments, they can only lift the lightest weights; sufficiently modified, they can lift objects one lower Size than their own.

Bomb Disposal Unit

Unmanned Explosive Ordinance Disposal (EOD) units are a catch-all term for armored robots built to safely neutralize dangerous explosives, minimizing human costs. They're typically built with a multiple tread system, so they can traverse highly challenging terrain safely. For this reason, despite their slow speed, they suffer no penalties for most terrain.

Additionally, unmanned EODs are equipped with bomb disposal equipment. Often, this takes the form of the Fine Manipulator Modification (below), which is built into every unit. Some use high-pressure water jets and other neutralization tools.

Secondary Dice Pool: Dexterity + Crafts (Bomb Disposal Specialty) - 8

Commercial Aircraft

These larger aircraft drones are used for tasks such as crop dusting, terrain mapping, or other specialized purposes. They generally look like smaller airplanes.

These sorts of commercial aircraft typically require special permits in most of the developed world. Used suspiciously, or outside their permitted task can draw law enforcement or even military attention.

Secondary Dice Pool: Since these statistics reflect a wide range of vehicles with a wide range of tasks, reflect their intended task with a single secondary dice pool at 5 dice.

Military Aircraft

These larger aircraft are used for military scouting and offensive purposes. They're remarkably expensive, highly regulated, and highly secured. They typically carry weapons which are

Secondary Dice Pool: Military drones either have a dice pool for surveying areas (8 to Perception + Investigation), or to weapons systems (8 to Dexterity + Firearms). Drone weapons are often immensely damaging, using the explosives rules on p. 135 of **Hurt Locker**. These

weapons annihilate buildings and people wholesale. If you need game statistics for this level of attack, damage is in the +5 - +8 range, initiative penalty of 8, blast area of 20, force of 8, with long range.

Modifications

The following modifications can be added to drones. Each requires an installation action to initially apply. This requires an extended Intelligence + Crafts roll, with -1 for each modification already on the drone, and an additional -2 if the modification is the same Size as the drone. Each roll requires an hour of work, and the action requires total successes equal to five plus the total number of modifications already on the drone. Drones cannot support greater Size modifications than their own Size ratings.

Drones can have more specific modifications, some of which are detailed below. But the most basic modifications are as follows:

- +1 to the dice modifier (up to five times)
- +2 to the secondary dice pool, or a new secondary pool starting at 3 dice. The third die is considered a Specialty, chosen when the modification is taken.
- +0.5 Size (+1 Size, +1 Structure requires 2 effective modifications)
- +0.5 Durability (+1 Durability requires 2 effective modifications)
- +2 Speed, or +5 Speed for a drone with a base 20+ Speed
- Remove Slow tag from drone (requires 3 modifications)

Generic modifications should be explained in-play. Adding a secondary dice pool doesn't just happen; it has to make sense within the scope of the drone's build and capabilities. For example, an RC car is highly unlikely to be used for expert surgery.

Additionally, most of the following modifications can be further modified, reducing their effective Size by 1. This increases Availability by 1. Additionally, they require two hours' work per roll to install, due to finer components.

Audio/Visual Feedback

Availability: 3, Size: 1

This modification adds a live camera and recording capabilities to the drone. This allows the pilot a more direct connection to the drone's position, and allows for more complex interactions. Additionally, assume any normally visible and audible cues are recorded by the drone. For an additional Availability, the sensors go beyond normal human ability, and pick up whispers, can see in darkness, or otherwise can go above and beyond. An Availability 2 version of this modification exists, which uses substandard equipment, like grainy, black and white footage, and only minimal sound or no sound at all.

Fine Manipulator

Availability: 3, Size: 2

This modification adds a claw arm, probe, or other manipulator to emulate more human interaction. The drone pilot can take complex, creative manual actions with the drone. Use the drone operator's Dexterity + Larceny, applying the drone's dice pool modifier. Without a Audio/Visual Feedback modification (above), apply an additional -2.

Signal Extender

Availability: 2, **Size:** 1

This modification extends the drone's effective Range trait. The drone operates at double normal range. Beyond that and up to four times its normal range, it operates at a -2 penalty and half Speed.

Note that this is civilian available equipment that won't draw immense scrutiny from regulating commissions. Military drones operate at remarkable distances, thanks to extensive infrastructure to support long-distance covert signals. They're beyond the scope of this modification.

Virtual Interface

Availability: 3, **Size:** 1

This installation adds a virtual reality interface to the drone's controls. The pilot can use Dexterity + Drive instead of Wits + Computer to operate the vehicle, and mitigates one die of the drone's base dice pool modifier, as the interface is much less awkward for the pilot. Additionally, she can use her own relevant dice pools instead of the drone's secondary dice pool. The interface itself is Size 2, but the installation is only Size 1.

With Availability 5, the interface is fully immersive, requiring a Size 7 space, but still operates as a Size 1 installation. This style of interface allows Dexterity + Athletics to operate, and mitigates the drone's basic dice penalty.