



Manipulators

Sophonts need to manipulate their environment; most do so with hands or hand-like manipulators. The common forms of manipulators are hands, paws, tentacles, gripper, graspers, and sockets.

Sophont-13 Manipulators



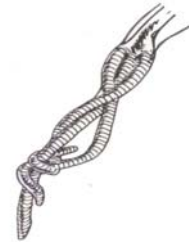
Hands

The termination of a limb consisting of two opposed groups of one or more moderately flexible digits, capable of holding an object.



Paws

The termination of a limb consisting of several unopposed moderately flexible digits which can grasp and hold an object.



Tentacles

The termination of a limb capable of entwining or coiling. The termination may be one tentacle, or it may be more than one working together.



Graspers

The termination of a limb consisting of three or more mutually opposed flaps or digits capable of clamping an object between them.



Grippers

The termination of a limb consisting of two opposed groups of relatively inflexible flaps or digits capable of clamping an object between them.



Sockets

The termination of a limb consisting of a hollow rimmed with muscle capable of holding an object within it. It may have an internal tentacle-like manipulator.

USING MANIPULATORS

Manipulators determine precisely how a sophont handles objects and operates mechanisms.

Grip. Grip is the strength which a manipulator adds (or doesn't add) when holding an object. Grip is a mod for tasks using Strength and involving manipulators.

USING CONTROLS WITH MANIPULATORS

Controls are the interface between a sophont and an object. They range from simple handles to keypad inputs.

CONTROLS

	Grip	Preferred	Optimized	Alien	Touch
Hand	0	0	0	-1	0
Paw	-2	0	-1	-3	-1
Tentacle	+1	0	0	-1	0
Grasper	0	0	0	-2	-2
Gripper	+2	0	-1	-3	-1
Socket	-1	0	0	-2	-3

The Mod shown applies when using the manipulator with the control type shown.

Touch Mod is used with the Touch Sense Action

Typical Controls

The grip or handle and trigger mechanism on a weapon.
The adjusting knobs on a communicator.
The operating levers and mechanism on a vehicle.
The input devices on computers and equipment.

Preferred Controls. Controls adapted to a specific manipulator (for example, Paw Controls, Tentacle Controls). Properly used Preferred Controls have no mods.

Optimized Controls. Controls specifically designed to be used by all possible manipulators. Optimized Controls have fewer disadvantageous mods. Many vehicles have Optimized Controls.

Alien Controls. Non-optimized controls not adapted for the manipulator being used (for example Paw controls being used by Hands). Alien Controls are subject to disadvantageous mods.

Configurable Controls

Controls capable of being adjusted to Preferred Controls. Configuration time varies, as does the actual effectiveness of the configured format.