giant vehicle-mounted sensors can have a Signal as high as 8 or 9. Sample Signal ratings and ranges are listed on the Signal Rating Table.

Note that for two devices to communicate with each other (as opposed to one-way communication), the devices must be within the range of the weakest signal rating involved.

Firewall (Software)

Firewall is the OS's built-in security. It protects against unauthorized access. The better a device's Firewall rating, the more likely it is to fend off hostile access attempts and exploits. Firewall is also used to defend against Matrix attacks in cybercombat (see p. 230).

System (Software)

System is the capability of the OS—its stability, multitasking properties, ability to control hardware, resources, and the general quality of it code. System also measures the OS's ability to run other programs—an OS cannot run a program with a rating higher than the OS rating.

A System program is limited by the Response rating of the device it is on; a System run on a device with a lower Response rating functions at the Response rating instead.

System serves as the limiter for the maximum rating a program can be run on that node (a higher rating program functions at the System rating instead), as well as the number of subscriptions allowed (System x 2, see *Linking and Subscribing,* p. 212). System also determines the number of programs that may

be run before the system is overloaded and Response is affected (see *Response*).

Matrix Condition Monitor: System is also a reflection of the OS's ability to hold up against hostile code and errors—in other words, it determines the how much Matrix damage the device can take. The Matrix Condition Monitor is equal to System ÷ 2 (rounded up), plus 8. This is how many boxes of Matrix damage the device can take before its system crashes.

Device Rating (Universal)

There are far too many electronics in the world of *Shadowrun* for a gamemaster to keep track of their individual Matrix attributes. Instead, each device is simply given a Device rating. Unless it has been customized or changed in some way, assume that each of the Matrix attributes listed above for a particular device equals its Device rating.

If a particular device plays an important role in an adventure, the gamemaster should assign a full complement of Matrix attributes to it. If the item only plays a passing role, then a simple Device rating will suffice.

The Sample Devices table (p. 214) lists typical Device ratings for common electronics.

PILOT PROGRAMS

Pilot programs represent a special type of OS—a system with specialized functions featuring semi-autonomous decision-making algorithms. Pilot is for devices that must be able to assess situations, make decisions, adapt, and ultimately func-