



## 2011 U.S. ELECTRICAL REQUIREMENT INFO

**WARNING:** *Failure to follow these specifications can cause damage to your product and can void the warranty.*

- Do not modify the plug provided with this product. If the plug will not fit your electrical outlet, have a proper outlet installed by a qualified electrician.
- All video and power outlets must be functional the day of delivery / assembly of the product. The client is responsible for any additional installation charges associated with return visits.
- Electrical supply may fluctuate in your area. To ensure stable performance of the product, we require the following wiring gauges based on the distance between the unit and the panel: 100' or less = 12 gauge wire, 101' or longer = 10 gauge wire must be used.

**NOTE:** *The specifications below are for a basic unit without an add on TV. If a TV is added via a bracket or stand, check the TV power requirements on Page 2.*

**\*\* For units with a TV built into the console like on the 3xe, 7x and 7xe consoles, the power requirements of the TV are included with the overall unit.**

**\*\*\* All units with Virtual Active added MUST be powered.**

**Treadmills** - All Matrix 110V treadmills require the use of a 100-125vac, 50-60Hz, 20amp dedicated circuit (2.5KW maximum). The outlet should be a NEMA 5-20R. The hot, neutral, and ground must all be independently isolated (not looped or tied to other circuits).

**Climb Mills** – All Matrix Climb Mills must be AC powered. Up to 4 units can be daisy chained together on a 20 amp circuit using a Matrix provided daisy chain adaptor (sold separately).

**Bikes & Ellipticals** – All Matrix bikes / EPs can be self powered. A minimum RPM is needed to maintain power to the bike / EP. An optional power cord is available for the 5x, 7x, and 7xe versions of the bike / EP due to a delay of up to 60 seconds needed for the console to load prior to the user starting a program. If a power cord is used, up to 4 units can be daisy chained together on a 20 amp circuit using a Matrix provided daisy chain cord adaptor (sold separately). The cord will power the unit at all times and does not require a minimum RPM for use.

**Steppers (3 & 5 series)** – The 3 and 5 series steppers are designed to be self contained and do not require an external power cord. A minimum of 15 SPM must be maintained, and the unit must be used an average of 3 hours per day. The stepper can be AC powered so no minimum SPM or use is needed. Up to 4 units can be daisy chained together on a 20 amp circuit using a Matrix provided daisy chain adaptor (sold separately).



**Steppers (7x & 7xe series)** – All steppers with a 7x or 7xe console must be AC powered. Up to 4 units can be daisy chained together on a 20 amp circuit using a Matrix provided daisy chain adaptor (sold separately).

**Ascent Trainers** – All Matrix ascent trainers are designed to be self contained and do not require an external power cord though all models can be AC powered. A minimum RPM is needed to maintain power to the ascent trainer. An optional power cord is available for the ascent trainer due to a delay of up to 60 seconds needed for the console to load prior to the user starting a program. If a power cord is used, up to 4 units can be daisy chained together on a 20 amp circuit using a Matrix provided daisy chain cord adaptor (sold separately). The cord will power the unit at all times and does not require a minimum RPM for use.

**Virtual Active** – The 3xe, 7x, and 7xe Matrix consoles installed on each of the models above allow the installation of a Virtual Active board that allows the user to virtually run through different maps. Any unit that has Virtual Active installed *MUST* be AC powered.

## **TV POWER and SIGNAL REQUIREMENTS**

**NOTE:** *The specifications below are for an add on TV installed via a bracket or stand. \*\*For units with a TV built into the console like on the 3xe, 7x and 7xe consoles, the power requirements of the TV are included with the overall unit.*

**NOTE:** *It is the responsibility of the client to run coaxial cable from the video source to the machine to provide a video signal at each unit.*

**Power** - If a TV is being installed via a bracket or stand, separate power must be provided for the external TV. Each TV should have at least 2 amps of power on a 5-20R dedicated circuit (for example, 10 TVs can be daisy chained to one 20 amp circuit). The hot, neutral, and ground must all be independently isolated (not looped or tied to other circuits).

**Signal** – Common sources of video signal are cable, satellite, or over the air antenna systems. These choices will provide signal in analog, digital, or both formats. The Matrix MYE TV will work with both analog and digital signals, but depending on the encryption on the digital signal, a head end system may need to be installed. In order to provide high quality images, a signal strength of 10dBmV (+ or – 2dBmV) should be supplied to each screen when read on analog or unencrypted digital signals. If your cable company broadcasts on an encrypted digital signal, a head end system consisting of a setup of modulators and combiners that converts the digital signal of different channels into 1 coaxial cable to run to the TV may be needed. Contact the business division of your local cable provider or contact a local contractor to be certain you understand your signal needs. The cable provider or contractor can assist in setting up a head end system.