

36. GAME SCALE

Size

1. The “standard scale” for measuring troops and equipment in **LaserGrenadiers** is 1/72. At this scale one inch equals six feet.
2. Vehicle sizes can be determined by measuring models in inches and then multiplying by 6 to give a result in feet. For example, a model tank 5 inches long will represent a vehicle 30 feet long.
3. Personnel sizes can be determined in the same way. The figures most commonly used are 25mm tall, since this is roughly equal to 1 inch, they represent troops that are six feet tall.
4. Since *LaserGrenadiers* was first developed larger figures from 28mm to 30mm in size have proliferated and virtually wiped out the lines of 25mm miniatures. These would seem to destroy the idea of setting a standard scale, but 1/72 is retained due to its ease of use.

Time

1. Each initiative sequence represents a minimum of four seconds of time. However, this scale is used only to set and regulate the rates of movement and weapon fire. It does not mean that a game turn represents only four seconds of elapsed time.
2. Depending on the numbers of troops and vehicles involved, a game turn will seem to represent 10 to 15 minutes or more of elapsed time on the battlefield.

Movement

1. Movement rates are based on a ratio where 1 inch of movement equates to 1 mile per hour.
 - a. This based on the following calculation: when converted to 1/72 scale, a vehicle moving 1 mile per hour will move 0.24 inches per second. Over a period of 4 seconds this will almost equal 1 inch.

- b. Locking in this formula gives players an easy equation: 1 inch of movement equals a speed of 1 mile per hour.

- c. Speeds convert directly to movement rates. For example, a vehicle with a movement rate of 24 miles an hour can move up to 24 inches in a turn.

2. The ratio works well for vehicles, but the base movement rate of 6 inches for infantry requires some comment.

- a. A rate of 6 miles per hour is equal to a ten minute mile: slow for a running man, but tough to sustain for a man bearing arms and equipment.

- b. Two factors must be considered. First, if infantry are assigned more restrictive rates they will play very little role in battle, spending most of their time out of range and unused. Second, if infantry are assigned more liberal rates they will move too quickly in relation to vehicles.

- c. A movement rate of 6 inches represents the most realistic compromise. Players will find that infantry will have to move most of the game if they are to play a role, unless they are in defensive positions. Players will learn the value of armored personnel carriers and how to utilize them to provide transportation for the relatively slow infantry. Infantry equipped with jetpacks and gravpacks will prove their value and justify their extra cost.

3. The movement scale does relate directly to the size scale. For example, a piece moving 1 mile per hour would move 900 inches (5400 scale feet), roughly a scale mile (1.02 miles; but close enough).

1 turn [4 seconds] x 15 [to equal a minute] x 60 [to equal an hour] x 6 [scale feet per inch] = 5400

Weapon ranges

1. Weapon ranges are not equated to any one scale. While many modern firearms can shoot

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accurately one mile or more, at 1/72 scale one mile equals 73 feet (greatly exceeding the size of most wargame tables). Futuristic weapons could be expected to have even greater capabilities.

2. Every wargame has to make some compromises to be playable, in **LaserGrenadiers** the compromise has been made in weapon ranges.

3. The primary goal has been to assure that the weapon ranges are logical in relation to each other. For example, cannon ranges are greater than those of infantry weapons, and heavy artillery ranges are greater than those of direct fire weapons.

4. In a few cases, weapon ranges have been distorted for playability. For example, the ranges of hand grenades are too long, but if they were any shorter grenades would be virtually useless.

Comments

1. Players should not feel restricted by the statement that this game is roughly set in 1/72 scale. This scale is used only to set movement rates and general sizes. In the developer's games of *LaserGrenadiers*, all sizes and scales of vehicle models are used. While most of the troops are 28mm figures, most of the tracked and wheeled vehicles are converted 1/35 scale models, and aircraft range from 1/72 to 1/48 scale. Models with scales ranging from 1/35 to 1/720 were used for battledrones, while models from 1/60 to 1/200 have been used for wardrones.

2. Players who have experience building model kits will know that even some of the best manufacturers have produced different results when creating kits of the same vehicle in the same scale. The best way to approach this issue is from the standpoint of practicality. If a player has a model that he likes and it works in his game, he should use it.

LaserGrenadiers standards

1. The LaserGrenadiers Standards table provides some guidance on determining the sizes of the rockets and missiles on models.

2. To determine the size of a rocket or missile, measure its diameter in millimeters and refer to the first table. For example, a model missile that is 3 millimeters in diameter would represent a heavy missile.

3. To determine the range of a rocket or missile, measure its length in inches and refer to the second table. For example, a model rocket that is 2 inches in length would represent a medium missile.

4. Any weapon pods that are particularly small should be considered mini-rockets.

5. The table also repeats the information on determining the sizes of vehicles and buildings.