



Gramma Indirect Causation

The Torah formulates its prohibition of certain acts on Shabbat as: "*Lo ta'aseh kol melacha*", "Do not perform any *melacha* (the purposeful, creative acts prohibited on Shabbat)". This indicates that only the direct performance of prohibited *melacha* is punishable. Any indirect causative action, known as **Gramma**, is nevertheless rabbinically prohibited, as one achieves the desired *melacha* result.

When situations of great need arise (such as substantial financial loss, or medical or security needs), *melacha* can be performed through **gramma**.

In order for an act to be considered an indirect **gramma it must meet two conditions:**

- **Delayed:** At the moment that the **gramma** action is performed, it may not achieve any immediate result, nor may it even initiate a sequential chain of events.
- **Autonomous Result:** The desired result will ultimately be achieved automatically by an autonomous outside factor.

The Zomet Institute's **gramma devices** are designed exclusively for medical and security needs. A microprocessor checks the position of a mechanical **gramma** switch at scheduled intervals. If the microprocessor detects that the position of the switch has been changed since the previous check, it will activate the desired outcome.



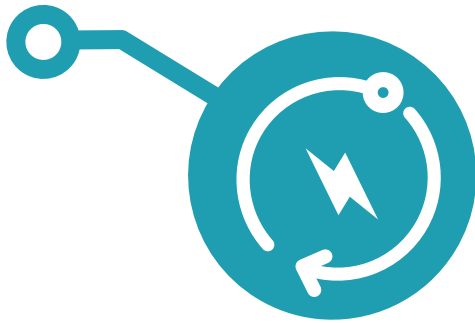
Modulating a Current

Closing an electrical circuit on Shabbat is prohibited on Shabbat as it creates an electrical current, transforming a device from an inanimate, dormant object, to a functional "living device".

The prohibitions involved (either the Biblically prohibited *melachot* of either "building" or "fixing a device"; or the rabbinically prohibited act of creating something new on Shabbat, *molid*, "giving birth to a new flow") only apply when closing a new circuit but not when one merely modulates an already existing current from a previously closed circuit.

The Zomet Institute employs the principle of **modulating an existing current**, *shinuy zerem*, on active devices, whose current is merely modulated in situations of need.

This principle can only be applied when the existing current remains constant, and modulation doesn't involve any electronic sensors.

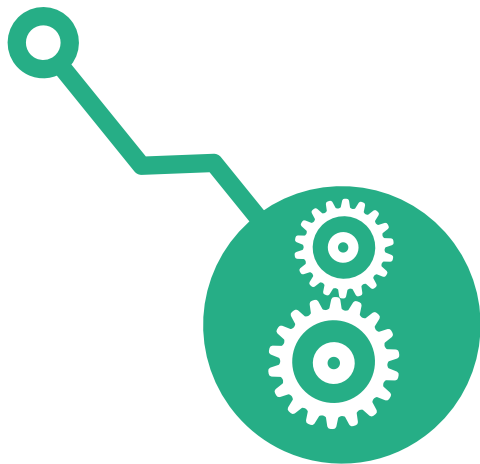


Maintaining an Existing State

The guiding principle regarding what defines an act as a prohibited *melacha* on Shabbat is the involvement of a creative, purposeful element. An action that merely **maintains an existing state**, *hamshachat matzav*, is not classified as a prohibited *melacha*.

For example: Turning on an electric device on Shabbat closes a circuit and is prohibited. If, however, the electric device is already functioning and the circuit is closed; one may take action to prevent it from switching off.

This principle of **maintaining an existing state**, is put into practice in order to enable use of some common and necessary electrical devices.



Automation

In many situations one can employ **automation**, setting necessary electronic devices in advance of Shabbat, to automatically activate at a specific time.

Automation is used to schedule the activation of processes in advance through a preset timer, and is the basis of the "Shabbat Clock". It is also a crucial element in the "Shabbat Elevator", which moves between floors without human intervention at pre-specified intervals.

One important limitation of this principle is in cases where **automation** will tamper with the spirit of Shabbat, either through *avsha milta*, the automated operation of loud equipment on Shabbat, or *marit ayin*, situations where the observer might be suspicious that the act was initiated on Shabbat.

For this reason, **automation** will only be permitted in situations where it is widely known that certain actions are performed through preset timers or "smart systems".