

# EO-Code (Electrical appliances Operating Code)



## - Introduction -

### Do you feel inconvenience while operating a microwave?

Depending on what needs to be heated in the microwave, the strengths and heating times differ, there are things that should not be heated with a microwave, and there are things that need to be transferred into a container.

For most products the information for how to re-heat the product in the microwave is written in fine print on the packaging, but most people find it "troublesome" to read it.

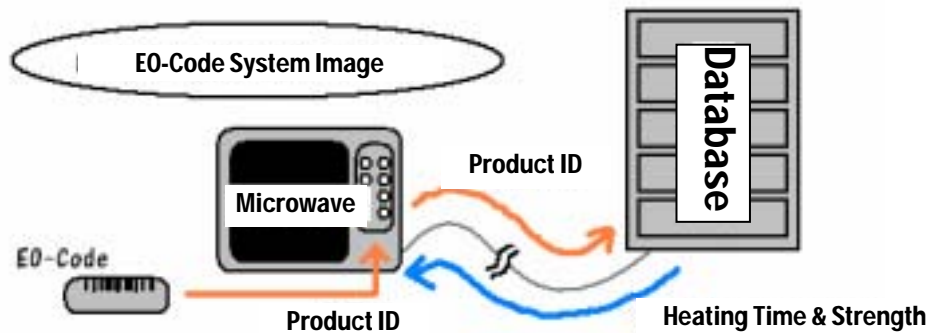
The method that would exterminate this inconvenience is called the **EO-Code system**.

### -What is the EO-Code System?-



For example, on microwavable product such as frozen foods or a ready-made curry product, there would be a barcode or a QR code printed on the packaging of these products.

On the microwave, there would be a device that would scan the EO-Code. The user would then scan the EO-Code into the microwave's device, place the product into the microwave, and push the re-heat button. The microwave would then heat the product with the appropriate heating strength and time from the EO-Code. One could also acquire warnings and whether it would be appropriate to reheat the product from the Code.

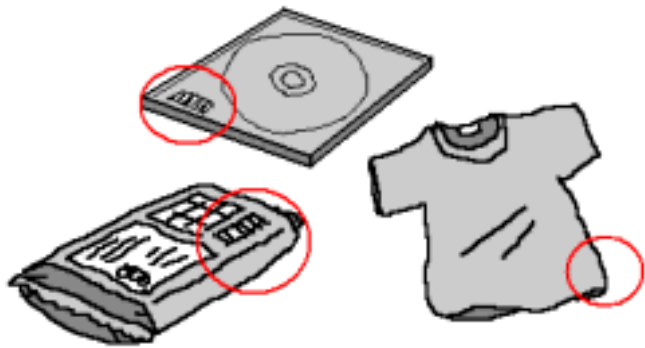


Within the EO-Code, the numeric data for the heating strength and time, warnings, and other such alphanumeric data would be extrapolated through the internet's database simply by a product ID. The product ID would include the

various information from the database, including the heating strength and time.

### - The General Purpose of the EO-Code -

The EO-Code could be used for other electronics other than a microwave. For example, the EO-Code could be printed on a CD cover and cutting-edge, new information regarding the CD (such as artist information and copyright information) could be played on a corresponding music player.



If the code is printed on a clothing tag, a corresponding washer could determine the water temperature and type of detergent that should be used for the item of clothing. **The EO-Code system would not only be for microwaves, but it could be easily applicable for many types of household electronics.**

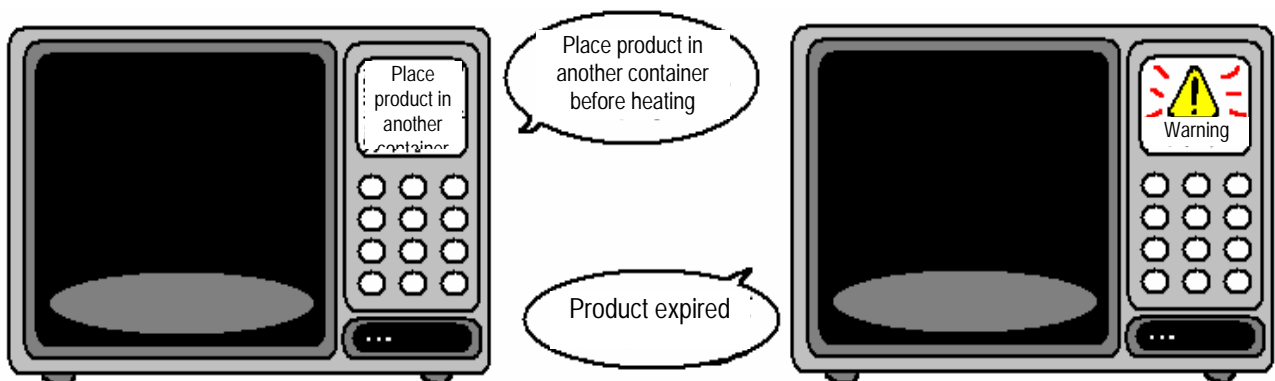
### - Problems and Solutions -

In order to actualize this system, all electronic products that would include the EO-Code would have to connect to the Internet and its database server. The number of hosts (household electronics) that would connect to the Internet would increase dramatically. [This is where the IPv6 comes into play.](#)

With the IPv6, it is possible to allot IP addresses to the massive electronic products that is connected to the internet. If this is utilized, the EO-Code would be even more realistic and would be an even more global system.

### - Why use the Network -

One may ask why would the EO-Code itself simply not include the data and instead, "use the Internet server to download the information from the server."



**The first reason is that there could be more information for the appliance.**

For the example with the microwave data such as, heating strengths and times, and if it is applicable could be simply embedded into the Code.

But, warnings while heating, advice while cooking the product, and other non-numeric data, as well as photographic data and sound data would be incapable on simply the EO-Code. Photographic, and sound data would not be reasonable to implement immediately after the use of the EO-Code, but for future expandability the data should not be directly within the EO-Code, but rather there would be infinite possibilities if the data could be downloaded from a database server.

**The next reason is that if the data is included within the Code itself, it cannot be altered.**

In an extreme example, such as in a certain frozen food production factory, if there is there is an incident where something poisonous accidentally gets mixed into the product, the company must recall the products that were shipped as quickly as possible from the consumer. By the use of the EO-Code, if the customer acquired the information from the database server on the internet in such a situation, the database itself could be altered quickly, and notify the microwave to not cook the product, and a warning could be displayed to the consumer about the recall.

However when smaller data such as heating strength and heating time is downloaded each time the user could simply spend too much time waiting for the data to be downloaded, and therefore smaller amounts of data such as heating strength and time could be encoded in the EO-Code, so that one could reheat the product efficiently.

(In the case that one would want to modify the data for the product, the online database could convey the microwave to change the data.)

**- Finally -**

For the EO-Code to be implemented, one must first begin with the standardization of the EO-code. All products would print the EO-Code, next the appliances must implement the EEO-Code, and it would probably initially take a significant amount of time and cost.

But, when the system is globalized, the appliances would be easier for people to use, and would also eventually become familiar to the general public.