

Motivation

Have you ever had to work with ETS from scratch, transforming the functions desired by the customer into your own group addresses?

The Functional Group Addressing Guidelines (FGAG) offers a pre-defined set of group addresses, which allow you to focus on the custom control design.

FGAG covers functions for lighting, shading, HVAC, security, and energy management.

For novice and experienced ETS users FGAG provides tremendous benefits:

- The novice can rely on a full set of group addresses for his first projects.
- The expert can use the pre-defined group addresses as a standard that may be expanded as required by the individual project.

FGAG Model

The FGAG is based on a simple model for allocation of functions to pre-assigned group addresses.

The model assumes that a residential environment contains spaces and devices, which are called functional entities.

Example:

A residential dwelling may have a front yard, a back yard, the house itself with basement, ground floor, second floor, and attic. There are a number of rooms e.g. living room or kitchen. Each of these rooms are a functional entity. Apart from these spaces the house contains a number of devices like refrigerator, oven, washing machine, and TV.

Spaces and devices contain functions specific to each individual functional entity.

Example:

Date and Time are functions that apply to the whole house. Hence they are functions of the "Whole House" entity.

The duration of the washing cycle is a function of the functional entity "Washing Machine".

The model itself is abstract and has to be mapped to a naming or numbering scheme.

For this purpose the 16 bit address space for group addresses is divided in two: the upper 8 bits are allocated to functional entities, whereas the lower 8 bits represent single functions of these spaces and devices.

The group address space is limited on the higher 8 bits. Main Group 16 is reserved for Konnex Easy. Main Groups 12 to 15 have been used by others for similar applications.

Hence, the unused functional entity number range is 1 to 95. This still leaves enough numbers for single and double dwelling homes.