



KNX Cookbook

2

Introduction

1

Summary

This document is a development help for KNX newcomers.

This document gives an overview and an introduction to the KNX Cookbook.

This document is not part of the KNX Standard approval procedure.

This document is part of the KNX Specifications v2.1

Contents

1	Overview	3
2	Introduction - purpose	3
3	Goal.....	3
4	Concept - disclaimer	3
5	Steps of the development process.....	4
5.1	Overview.....	4
5.2	Step 1: HW development.....	4
5.3	Step 2: AP Development	4
5.4	Step 3: Create an ETS database entry for your product with MT4	4
5.5	Step 4: Certification	4

Document updates

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1.0.0	2011.05.13	Preparation of the final version.
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References

- [01] Chapter 3/1/2 "Glossary"
- [02] Volume 5 "Certification Manual"
- [03] Volume 6 "Profiles"

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1 Overview

This KNX Cookbook is composed of the following documents.

- Part 2/1: Introduction
- Part 2/2: Reading the KNX Specifications
- Part 2/3: Features of KNX and ETS
 - o Chapter 2/3/1: Load Controls
- Part 2/4: Development tools
 - o Chapter 2/4/1: Manufacturer Tool
 - o Chapter 2/4/2: EITT
- Part 2/5: KNX Development on basis of existing system components
 - o Chapter 2/5/1: Components by Opternus
 - o Chapter 2/5/2: Components by TAPKO
 - o Chapter 2/5/3: Components by Weinzierl Engineering

2 Introduction - purpose

The documents of this KNX Cookbook describe the development process of a KNX certified product. This will be done in clear distinct steps and by means of easy and straightforward examples.

3 Goal

The KNX Cookbook does not replace the KNX Specifications. Sure the KNX Cookbook refers to other document of the KNX Specifications. However, in your daily life as KNX developer you will still find yourself in situations, where you need to consult these other documents of the KNX Specifications in order to find the answer to any specific question. Part 2/2 of this KNX Cookbook “How to read the standard”, will however assist you with this task.

The scope of this KNX Cookbook in respect to ETS versions or editions is ETS4 and MT4. All older ETS version and editions will not even be mentioned here. In case you have a question about - or a problem with these versions, please open a support ticket in your KNX Online Shop account (<http://onlineshop.knx.org>).

4 Concept - disclaimer

This entire KNX Cookbook is based on very simple applications, which will be developed from scratch.

In order to keep the examples as simple as possible – though making sure that all common aspects of such projects are present and hence reflect the reality of your daily tasks – the complexity of the parameter structure and number of resources (for instance Group Objects) will be restricted. Or in other words, this document is not about real life devices but about ‘the making of’.

5 Steps of the development process

5.1 Overview

Step 1: Development of the actual HW.

Step 2: Development of the AP that will make the AM work.

Step 3: Create an ETS database entry for your product using MT4.

Step 4: The combination of the device with the AP need to be certified. Only then, your customer will be able to import its ETS database entry into his ETS databases.

5.2 Step 1: HW development

The HW always consists of two major parts.

1. KNX Certified platform

Since any KNX certified platform has a proven compliance with the KNX Specification; this part is limited to a simple overview: see Part 2/5 “KNX Development on basis of existing system components” and Part 2/6 “KNX Development on basis of existing stack solutions” of this volume.

2. The actual AM

The development of the AM is beyond the scope of this Cookbook.

5.3 Step 2: AP Development

The development of the AP depends on the (KNX certified) platform that you have chosen.

- ➔ In general: see [03].
- ➔ For more practical details, please read the individual solutions (in chapter 5 and 6 of this volume)
- ➔ ...

5.4 Step 3: Create an ETS database entry for your product with MT4

It is not necessary to wait with this task until the AP is ready but it is probably the best practice for your very first KNX product.

Preparation

Before you start make sure to have the following.

- The list of all the parameters that you have foreseen in your Application Program, including their exact memory location and length.
- The list of Group Objects that you have foreseen in your Application Program, including the size of the Datapoint Types that they use.

5.5 Step 4: Certification

See Volume 5 “Certification Manual” ([02]) for more details.