

KNX IP BAOS 772
ETS Application with building structure
Technical Documentation

WEINZIERL ENGINEERING GmbH
DE-84508 Burgkirchen
E-Mail: info@weinzierl.de
Web: www.weinzierl.de

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History

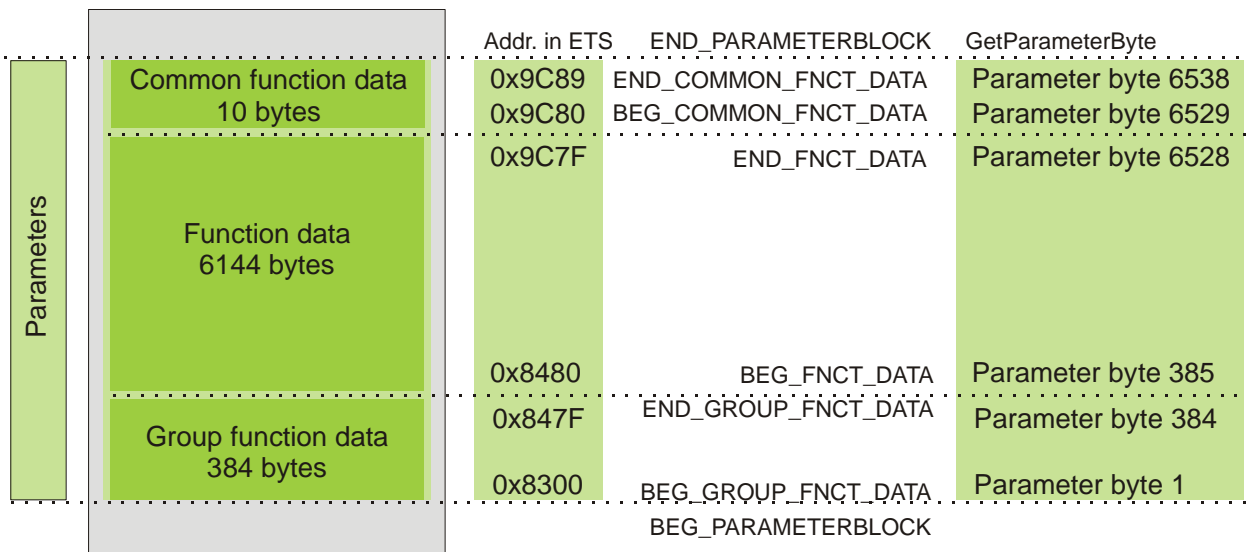
Description	Date	Author
Creation	2011-10-12	Ma
Update group object list	2011-10-19	Ma
Changed: Address	2012-10-08	WzSv
Add memory map Parameter, Add group object assignment,	2013-02-21	Ma

Documentation – BAOS 772 struct

1. Overview

Parameters

- Group function data - Parameter bytes 1 – 384
- Function data - Parameter bytes 385 – 6528
- Common function data - Parameter bytes 6529 – 6538



Group objects

For each of the 192 functions there are five group objects reserved with depending on the function type.

Function	Group object reserved
Function 1 – 1	1, 2, 3, 4, 5
Function 1 – 2	6, 7, 8, 9, 10
Function 1 – 3	11, 12, 13, 14, 15
Function 1 – 4	16, 17, 18, 19, 20
...	...
Function 2 – 1	81, 82, 83, 84, 85
Function 2 – 2	86, 87, 88, 89, 90
...	...
Common functions	961, 962, 963, 964, 965, 966, 967, 968, 969

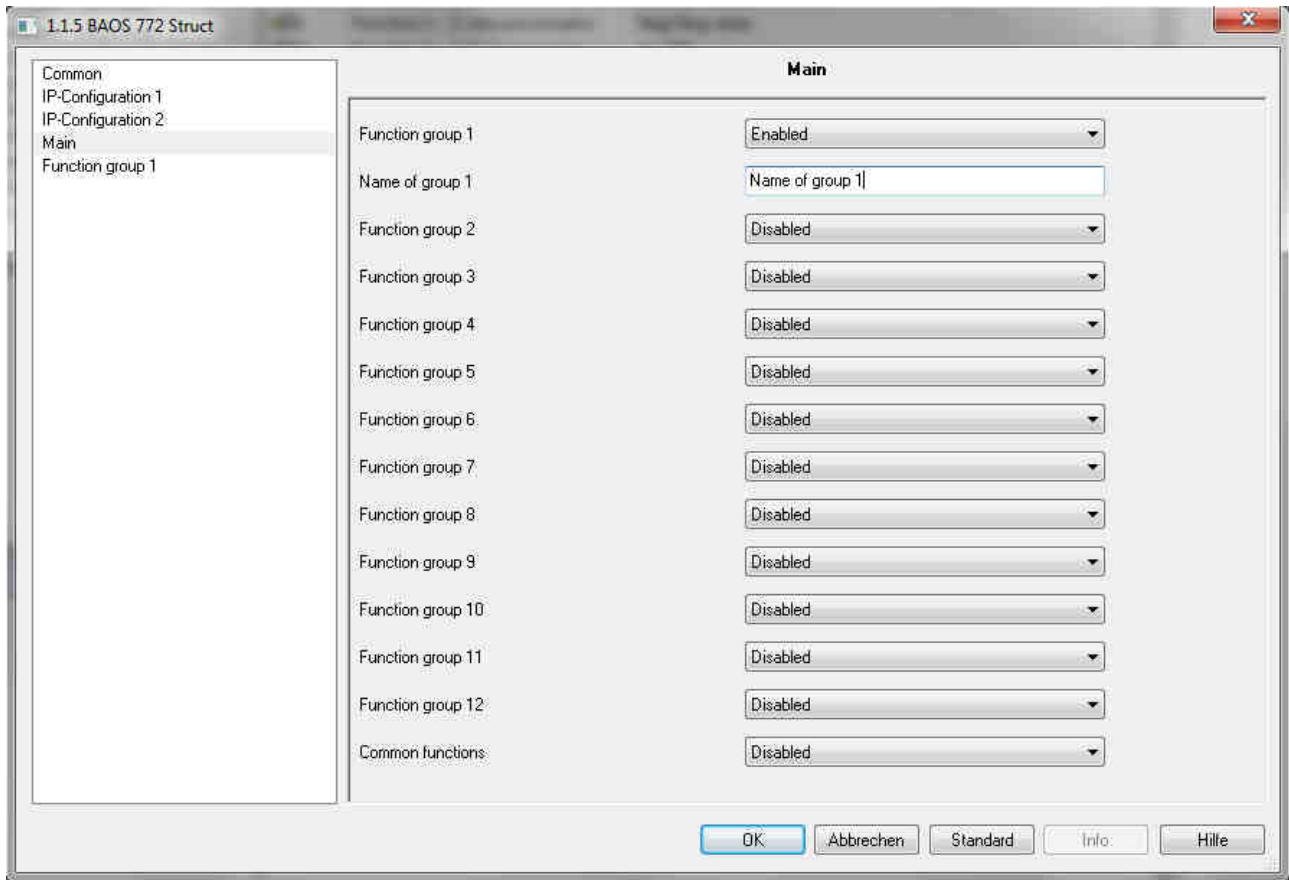
Function		Visible group objects	Direction
• Switch actuator	→	1. Switch on/off	output
• Switch actuator with state	→	1. Switch on/off	output
		2. Switch state	input
• Dimming actuator	→	1. Dimmer on/off	output
		2. Dimmer relative	output
		3. Dimmer value	output
• Dimming actuator with switch state	→	1. Dimmer on/off	output
		2. Dimmer relative	output
		3. Dimmer value	output
		4. Dimmer switch state	input
• Dimming actuator with value state	→	1. Dimmer on/off	output
		2. Dimmer relative	output
		3. Dimmer value	output
		4. Dimmer value state	input

- Jalousie actuator → 1. Jalousie up/down output
2. Jalousie step/stop output
- Jalousie actuator with state → 1. Jalousie up/down output
2. Jalousie step/stop output
3. Jalousie up/down state input
4. Jalousie step/stop state input
- Shutter actuator → 1. Shutter up/down output
2. Shutter stop output
- Shutter actuator with state → 1. Shutter up/down output
2. Shutter stop output
3. Shutter up/down state input
- Temperature → 1. Temperature state input
- Temperature with state → 1. Temperature state input
2. Temperature setpoint output
- Scene → 1. Scene switch output
- Presence → 1. Presence state input
- Window contact → 1. Window contact state input
- Door contact → 1. Door contact state input
- Smoke alert → 1. Smoke alert state input
- Water alert → 1. Water alert state input

For the common functions there is one group object for each function.

- Time → 1. Time state input
- Date → 1. Date state input
- HVAC mode → 1. HVAC mode switch output
- Door bell → 1. Door bell state input
- Door opener → 1. Door opener switch output
- Burglary alert → 1. Burglary alert state input
- Rain alert → 1. Rain alert state input
- Wind alert → 1. Wind alert state input
- Outdoor temperature → 1. Temperature state input

2. Group function data



The group function data is separated in 12 function groups.
Every function group uses 32 bytes.

Formula:

$$nNrFunctGrp * 32 = nLastByteFunctGrp$$

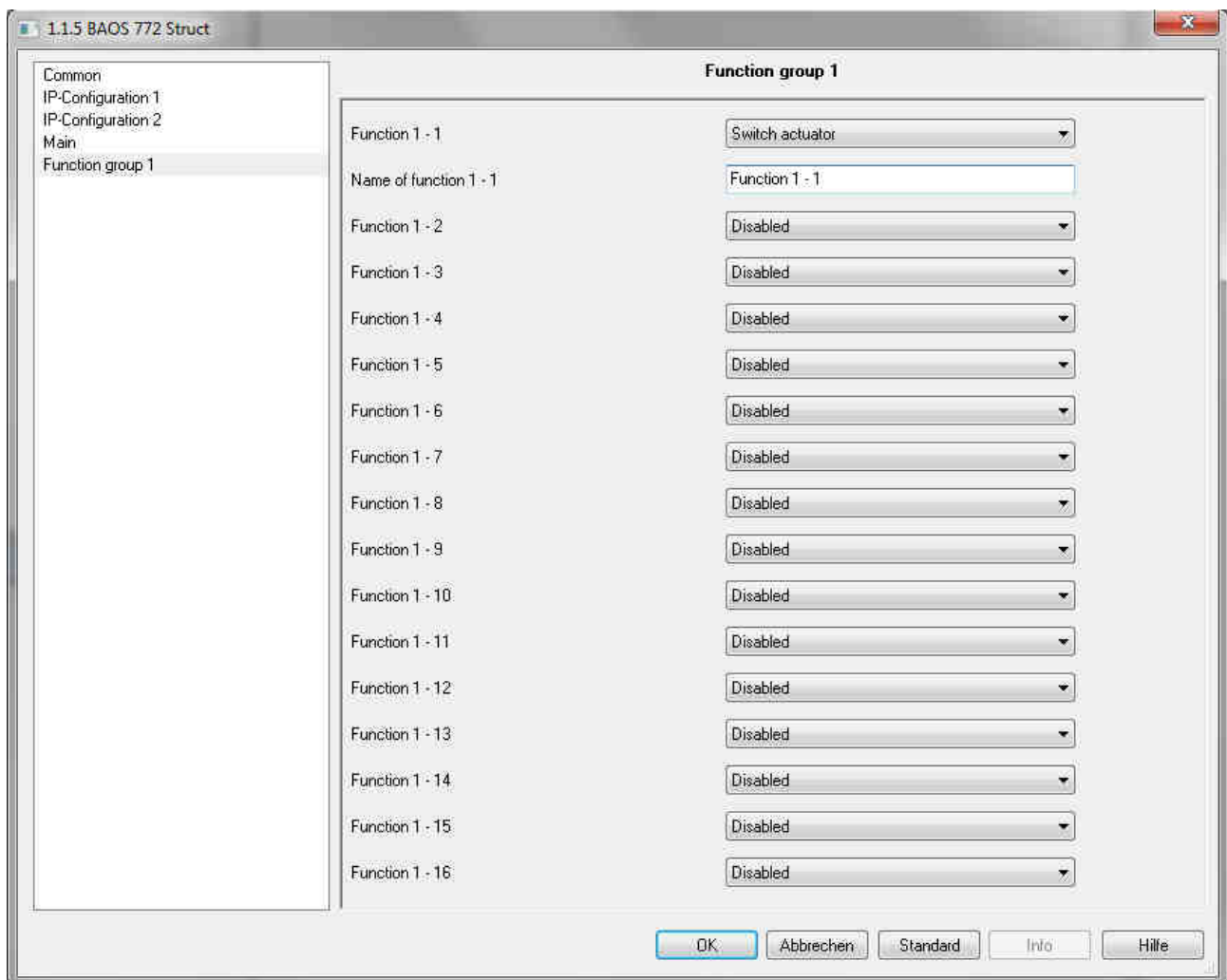
$$nLastByteFunctGrp - 31 = nFirstByteFunctGrp$$

Byte 1 (nFirstByteFunctGrp): Flag for function group “enabled / disabled”

Bytes 2-31: Name of group

Byte 32 (nLastByteFunctGrp): Reserved for further use

3. *Function data*



The function data is separated in 12 * 16 functions.
 Every function uses 32 bytes.

Formula:

$$(nNrFunctGrp-1)*512 + nNrFunct*32 + 384 = nLastByteFunct$$

$$nLastByteFunct - 31 = nFirstByteFunct$$

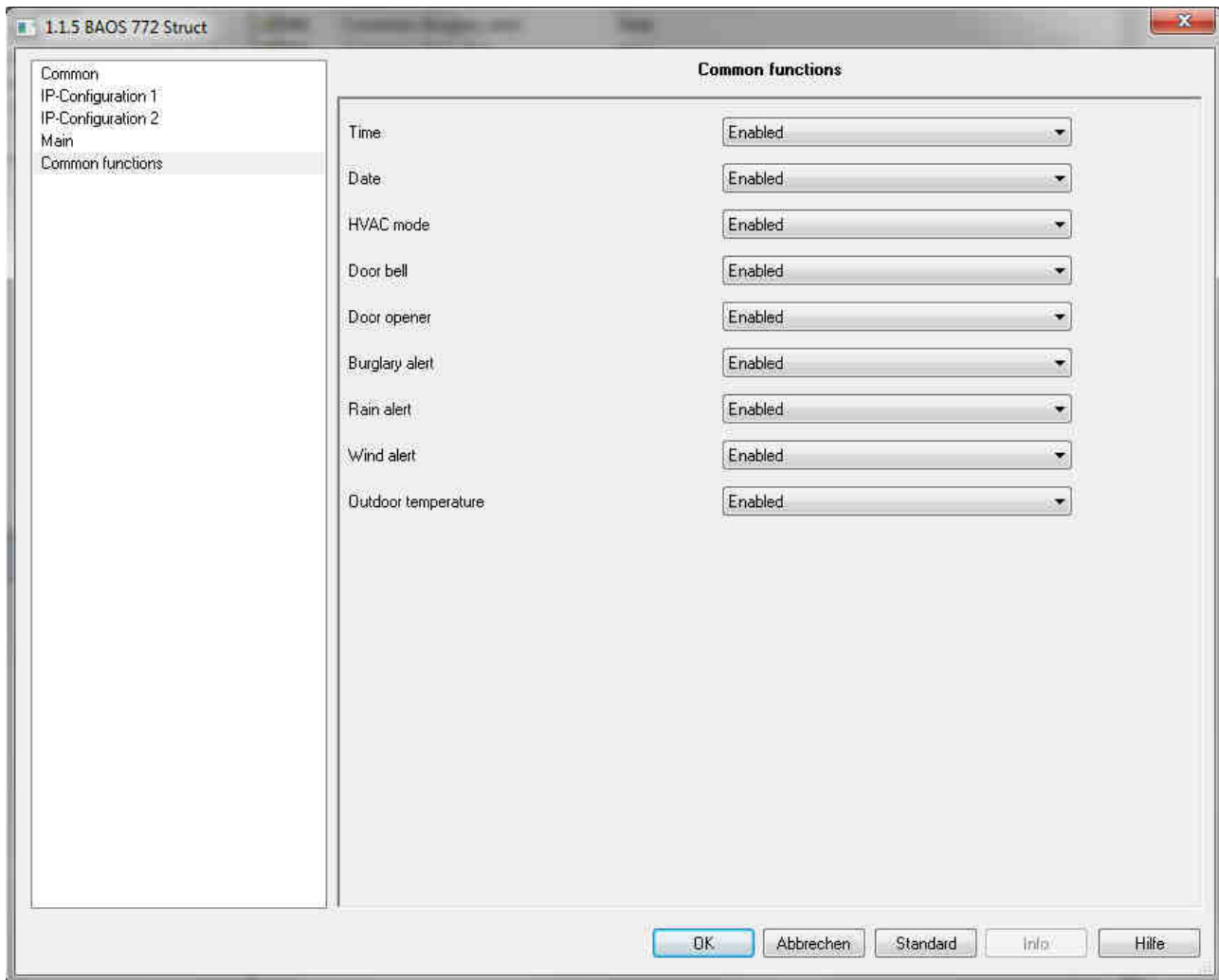
Byte 1 (nFirstByteFunct): Type of function “disabled / switch actuator / ...”

Bytes 2-31: Name of function

Byte 32 (nLastByteFunct): Reserved for further use

Type	Value
Disabled	0x00
Switch actuator	0x01
Switch actuator with state	0x02
Dimming actuator	0x03
Dimming actuator with switch state	0x04
Dimming actuator with value state	0x05
Jalousie actuator	0x06
Jalousie actuator with state	0x07
Shutter actuator	0x08
Shutter actuator with state	0x09
Temperature	0x0A
Temperature with state	0x0B
Scene	0x0C
Presence	0x0D
Window contact	0x0E
Door contact	0x0F
Smoke alert	0x10
Water alert	0x11

4. Common function data



The common function data consists of ten bytes.

Parameter byte 6529: Flag for common functions “enabled / disabled”

Parameter byte 6530 – 6538: Flags for each common function “enabled / disabled”