

MOVE UART Commands



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Introduction

Communication link

Communication with MOVE can be done with an UART link.

Setup parameters:

Baud rate 9600, data 8 bit, parity none, stopbit 1 bit, flow control none

General commands

Get ID

Command: 0x10

Parameters: None

Return: 0x0000 - 0xFFFF (2 bytes, LSB)

Description

Returns the stored ID.

0x0000 indicates there is no ID stored.

Set ID

Command: 0x11

Parameters: 0x0000 - 0xFFFF (2 bytes, LSB)

Return: 0x91

Description

Stores ID in NVM memory.

Get name

Command: 0x12

Parameters: None

Return: byte[0] : (Length in bytes),
byte[1 - length] : UTF8 characters.

Description

Returns the stored name.

If length byte is 0x00 there is no name stored.

Set name

Command: 0x13

Parameters: byte[0] : (Length in bytes),
byte[1 - length] : UTF8 characters.

Return: 0x93 (on success)

Description

Stores name in NVM memory.

Get name index

Command: 0x14

Parameters: None

Return: 0x00 - 0xFF

Description

Returns the name index.

When name is changed in NVM memory, name index is incremented.

Get battery level

Command: 0x15

Parameters: None

Return: 0x00 - 0xFF

Description

Returns the battery voltage level.

Get position

Command: 0x16

Parameters: None

Return: 0x00 - 0xFF

Description

Returns the position between "open position" (0x00) and "closed position (0xFF).

Set position

Command: 0x17

Parameters: 0x00 - 0xFF

Return: 0x97 (on success)

Description

Sets the position between "open position" (0x00) and "closed position (0xFF).

Set open position

Command: 0x18

Parameters: None

Return: 0x98 (on success)

Description

Sets the "home position". Reference position 0 for the system.

Set closed position

Command: 0x19

Parameters: None

Return: 0x99 (on success)

Description

Sets the "end position". Reference position for the system in maximum out movement.

Set open position and sync closed position

Command: 0x1A

Parameters: None

Return: 0x9A (on success)

Description

Resets the "home position" and synchronizes the "end position" to be in same distance as before.

Set closed position and sync open position

Command: 0x1B

Parameters: None

Return: 0x9B (on success)

Description

Resets the "end position" and synchronizes the "home position" to be in same distance as before.

Get speed

Command: 0x1C

Parameters: None

Return: 0x00 - 0xFF

Description

Returns the default speed.

Set speed

Command: 0x1D

Parameters: 0x00 - 0xFF

Return: 0x9D (on success)

Description

Sets the system default speed.

Get firmware version

Command: 0x1E

Parameters: None

Return: 0x00 - 0xFF

Description

Returns the firmware version. (e.g. version 1.0 will return as 0x10)

Get sun level

Command: 0x1F

Parameters: None

Return: 0x00 - 0xFF

Description

Returns power level from the sun panel.

Get temp level

Command: 0x20

Parameters: None

Return: 0x00 - 0xFF

Description

Returns temperature level from the system.

Stop motion

Command: 0x21

Parameters: None

Return: 0xA1 (on success)

Description

Stops motion.

Move to position

Command: 0x22

Parameters: byte[0] : 0x00 - 0xFF, (Position, 0x00: home position, 0xFF: end position)
byte[1] : 0x00 - 0xFF (Speed, system will use default speed if parameter is 0x00)

Return: 0xA2 (on success)

Description

Sets speed and starts motion towards the given position

Move clockwise

Command: 0x23

Parameters: 0x00 - 0xFF (Speed, system will use default speed if parameter is 0x00)

Return: 0xA3 (on success)

Description

Clockwise motion on outgoing shaft.

Move counterclockwise

Command: 0x24

Parameters: 0x00 - 0xFF (Speed, system will use default speed if parameter is 0x00)

Return: 0xA4 (on success)

Description

Counterclockwise motion on outgoing shaft.

Automation commands

Registers

Status reg:

Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
-	-	-	-	Have sun panel	Active temp. automation	Active sun automation	Active time automation

Automation status reg: (Every automation gets one automation status reg)

Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
-	-	-	-	-	Paused	Active	On

Formats

Automation-ID format:

0x01 - 0xFF

bit 7-6: Automation type, bit 5-0: Automation-ID (0x01 - 0x3F)

Automation types

bit 7 and 6 : 00 => Time Automation

bit 7 and 6 : 01 => Sun Automation

bit 7 and 6 : 10 => Temperature Automation

bit 7 and 6 : 11 => Not used

Automation-trigger format:

0x01 - 0xFF

bit 7-6: trigger type, bit 5-0: trigger value (0x01 - 0x3F)

Trigger types

bit 7 and 6 : 00 => Action on lesser (<) than trigger level

bit 7 and 6 : 01 => Action on greater (>) than trigger level

bit 7 and 6 : 10 => Not used

bit 7 and 6 : 11 => Not Used

Get status reg

Command: 0x40

Parameters: None

Return: 0x00 - 0xFF, (Status reg)

Description

Gets general status register

Set status reg

Command: 0x41

Parameters: 0x00 - 0xFF, (Status bits to set)

Return: 0xC1 (on success)

Description

Set bits in general status register.

Clear status reg

Command: 0x42

Parameters: 0x00 - 0xFF, (Status bits to clear)

Return: 0xC2 (on success)

Description

Clear bits in general status register. Set status bits to be cleared, to 1.

Get automation status reg

Command: 0x43

Parameters: 0x00 - 0xFF, (Automation ID)

Return: 0x00 - 0xFF, (Automation status reg)

Description

Get status register for the given atomation.

Set automation status reg

Command: 0x44

Parameters: byte[0] : 0x00 - 0xFF, (Automation ID)
byte[1] : 0x00 - 0xFF, (Automation status bits to set)

Return: 0xC4 (on success)

Description

Set bits in the automation status register.

Clear automation status reg

Command: 0x45

Parameters: byte[0] : 0x00 - 0xFF, (Automation ID)
byte[1] : 0x00 - 0xFF, (Automation status bits to clear)

Return: 0xC5 (on success)

Description

Clear bits in the automation status register. Set status bits to be cleared, to 1.

Get automations

Command: 0x46

Parameters: None

Return: byte[0] : 0x00 - 0xFF, (Length in bytes)
byte[1 - length]: 0x00 - 0xFF, (Automation ID)

Description

Returns a list of automation IDs
0x00 indicates there is no automation ID stored.

Add automation

Command: 0x47

Parameters: None

Return: byte[0] : 0xC7, (on success)
byte[1] : 0x00 - 0xFF, (Automation ID)

Description

New automation stored in NVM memory.

Remove automation

Command: 0x48

Parameters: 0x00 - 0xFF, (Automation ID)

Return: 0xC8 (on success)

Description:

Removes automation.

Get automation name

Command: 0x49
Parameters: 0x00 - 0xFF, (Automation ID)
Return: byte[0] : 0x00 - 0xFF, (Length in bytes)
byte[1 - length]: UTF8 characters.

Description

Returns automation name.
If length byte is 0x00 there is no name stored.

Set automation name

Command: 0x4A
Parameters: byte[0] : 0x00 - 0xFF, (Length in bytes)
byte[1] : 0x00 - 0xFF, (Automation ID)
byte[2 - length]: UTF8 characters
Return: 0xCA (on success)

Description

Stores automation name in NVM memory.

Get automation name index

Command: 0x4B
Parameters: 0x00 - 0xFF, (Automation ID)
Return: 0x00 - 0xFF, (Automation name index)

Description

Returns the automation name index.
When automation name is changed in NVM memory, automation name index is incremented.

Get activation daytime

Command: 0x4C
Parameters: 0x00 - 0xFF, (Automation ID)
Return: byte[0 - 3] : Unix time, 4 bytes LSB

Description

Get daytime when sun or temperature automation will start.

Set activation daytime

Command: 0x4D
Parameters: byte[0] : 0x00 - 0xFF, (Automation ID)
byte[1 - 4] : Unix time, 4 bytes LSB
Return: 0xCD (on success)

Description

Set daytime when sun or temperature automation will start.

Get deactivation daytime

Command: 0x4E
Parameters: 0x00 - 0xFF, (Automation ID)
Return: byte[0 - 3] : Unix time, 4 bytes LSB

Description

Get daytime when sun or temperature automation will end.

Set deactivation daytime

Command: 0x4F
Parameters: byte[0] : 0x00 - 0xFF, (Automation ID)
byte[1 - 4] : Unix time, 4 bytes LSB
Return: 0xCF(on success)

Description

Set daytime when sun or temperature automation will end.

Get activation days

Command: 0x50
Parameters: 0x00 - 0xFF, (Automation ID)
Return: 0x00 - 0xFF, (Mon=bit 0, Tue=bit 1, Wed=bit 2, Thu=bit 3, Fri=bit 4, Sat=bit 5, Sun=bit 6)

Description

Returns 1 byte, bits 0-6 indicate active weekdays if set to 1.

Set activation days

Command: 0x51

Parameters: byte[0] : 0x00 - 0xFF, (Automation ID)
byte[1] : Mon=bit 0, Tue=bit 1, Wed=bit 2, Thu=bit 3, Fri=bit 4, Sat=bit 5, Sun=bit 6

Return: 0xD1 (on success)

Description

Setting bits 0-6 in the byte to 1 will activate the corresponding weekdays.

Get activation action

Command: 0x52

Parameters: 0x00 - 0xFF, (Automation ID)

Return: byte[0] : 0x00 - 0xFF, (Length in bytes)
byte[1 - length]: Command + Parameters

Description

Get action to occur when automation is activated. 0x00 means "no action"

Set activation action

Command: 0x53

Parameters: byte[0] : 0x00 - 0xFF, (Automation ID)
byte[1 - n] : Command + Parameters

Return: 0xD3 (on success)

Description

Set action to occur when automation is activated. Set 0x00 for "no action"

Get deactivation action

Command: 0x54

Parameters: 0x00 - 0xFF, (Automation ID)

Return: byte[0] : 0x00 - 0xFF, (Length in bytes)
byte[1 - length]: Command + Parameters

Description

Get action to occur when automation is deactivated. 0x00 means "no action"

Set deactivation action

Command: 0x55
Parameters: byte[0] : 0x00 - 0xFF, (Automation ID)
byte[1 - n] : Command + Parameters
Return: 0xD5 (on success)

Description

Set action to occur when automation is deactivated. Set 0x00 for "no action"

Get automation clients

Command: 0x56
Parameters: 0x00 - 0xFF, (Automation ID)
Return: byte[0] : 0x00 - 0xFF, (Length in bytes)
byte[1 - length]: client IDs (2 bytes)

Description

Returns a list of client IDs

Add automation client

Command: 0x57
Parameters: byte[0] : 0x00 - 0xFF, (Automation ID)
byte[1 - 2] : Client-ID (2 bytes)
Return: 0xD7 (on success)

Description

Adds a client to the automation client list

Remove automation client

Command: 0x58
Parameters: byte[0] : 0x00 - 0xFF, (Automation ID)
byte[1 - 2] : Client-ID (2 bytes)
Return: 0xD8 (on success)

Description

Remove a client from the automation client list

Get automation trigger

Command: 0x59
Parameters: 0x00 - 0x7F (Automation-ID)
Return: byte[0] : 0x00 - 0xFF, (Length in bytes)
byte[1] : 0x00 - 0xFF, (Trigger)
byte[2 - length] : Command + Parameters

Description

Returns trigger type (> or <), trigger level and command to execute for given automation.

Set automation trigger

Command: 0x5A
Parameters: byte[0] : 0x00 - 0xFF, (Length in bytes)
byte[1] : 0x00 - 0x7F, (Automation-ID)
byte[2] : 0x00 - 0xFF, (Trigger)
byte[3 - length] : Command + Parameters
Return: 0xDA (on success)

Description

Set trigger type (> or <), trigger level and command to execute for given automation.

Get automation trigger timeout

Command: 0x5B
Parameters: 0x00 - 0x7F (Automation-ID)
Return: 0x00 - 0xFF, (Minutes)

Description

Returns the number of minutes that the automation shall be inactive after latest trigger action.

Set automation trigger timeout

Command: 0x5C
Parameters: byte[0] : 0x00 - 0x7F (Automation-ID)
byte[1] : 0x00 - 0xFF, (Minutes)
Return: 0xDC (on success)

Description

Sets the number of minutes that the automation shall be inactive after latest trigger action.

Get automation motion speed

Command: 0x5D

Parameters: 0x00 - 0x7F (Automation-ID)

Return: 0x00 - 0xFF, (Motion speed)

Description

Returns the motion speed. If 0x00, automation will use the system default speed.

Set automation motion speed

Command: 0x5E

Parameters: byte[0] : 0x00 - 0x7F (Automation-ID)

byte[1] : 0x00 - 0xFF, (Motion speed)

Return: 0xDE (on success)

Description

Sets the motion speed. If 0x00, automation will use the system default speed.

Get automation sample time

Command: 0x5F

Parameters: 0x00 - 0x7F (Automation-ID)

Return: 0x00 - 0xFF, (Minutes)

Description

Gets delay period between trigger samples.

Set automation sample time

Command: 0x60

Parameters: byte[0] : 0x00 - 0x7F (Automation-ID)

byte[1] : 0x00 - 0xFF, (Minutes)

Return: 0xE0 (on success)

Description

Sets delay period between trigger samples.

Get trigger hysteresis

Command: 0x61

Parameters: 0x00 - 0x7F (Automation-ID)

Return: 0x00 - 0xFF, (Hysteresis value)

Description

Gets the hysteresis value for automated trigger control.
The hysteresis value adjusts the counteractive trigger point.
0x00 means hysteresis function is disabled.

Set trigger hysteresis

Command: 0x62

Parameters: byte[0] : 0x00 - 0x7F (Automation-ID)
byte[1] : 0x00 - 0xFF, (Hysteresis value)

Return: 0xE2 (on success)

Description

Sets the hysteresis value for automated trigger control.
The hysteresis value adjusts the counteractive trigger point.
0x00 will disable the hysteresis function.

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