





TANGO Device Server

# GalilCoupledAxes User's Guide

# **GalilCoupledAxes Class**

Revision: release\_2\_3\_10 - Author: leclercq Implemented in C++

## **Introduction:**

This class is used to control coupled axes by controlling only the master axis. All the master-slave axis configuration are done by motorists in micro-code itself. Special commands if needed are accessed through MicrocodeDataViewer DS First need: a detector table with 2 motors

## **Class Inheritance:**

- Tango::Device\_3Impl
  - GalilCoupledAxes

# **Properties:**

Device Properties			
Property name Property type		Description	
Master	Tango::DEV_STRING	letter of the master axis, from A to H This axis is the master axis	

## Device Properties Default Values:

<b>Property Name</b>	<b>Default Values</b>
Master	No default value

There is no Class properties.

# **Attributes:**

Scalar Attribut	es		
Attribute name	Data Type	R/W Type	Expert
position: position of the master axis	DEV_DOUBLE	READ_WRITE	No
<b>forwardLimitSwitch</b> : state of the forward limit switch true if Forward LSW present	DEV_BOOLEAN	READ	No
backwardLimitSwitch: state of the backward limit switch true if Backward LSW present	DEV_BOOLEAN	READ	No

# **Commands:**

More Details on commands....

<b>Device Commands for Operator Level</b>			
Command name Argument In Argument Out			
Init	DEV_VOID	DEV_VOID	
State	DEV_VOID	DEV_STATE	
Status	DEV_VOID	CONST_DEV_STRING	
Stop	DEV_VOID	DEV_VOID	
Forward	DEV_VOID	DEV_VOID	
Backward	DEV_VOID	DEV_VOID	

## 1 - Init

Description: This commands re-initialise a device keeping the same network connection.

After an Init command executed on a device, it is not necessary for client to re-connect to the device.

This command first calls the device <code>delete\_device()</code> method and then execute its <code>init\_device()</code> method.

For C++ device server, all the memory allocated in the <code>nit\_device()</code> method must be freed in the <code>delete\_device()</code> method.

The language device descructor automatically calls the <code>delete\_device()</code> method.

• Argin:

 $\boldsymbol{DEV\_VOID}$  : none.

Argout:

DEV\_VOID: none.

Command allowed for:

## 2 - State

- **Description:** This command gets the device state (stored in its *device\_state* data member) and returns it to the caller.
- Argin:

DEV\_VOID: none.

• Argout:

**DEV\_STATE**: State Code

Command allowed for:

## 3 - Status

- **Description:** This command gets the device status (stored in its *device\_status* data member) and returns it to the caller.
- Argin:

DEV\_VOID: none.

Argout:

**CONST\_DEV\_STRING**: Status description

Comm	and allowed for:
4 - \$	Stop
Descri	otion: stops the movement
Argin: DEV_	/OID:
Argout DEV_V	
Comm	and allowed for:
5 - 1	Forward
Descri	otion: initiates a jog forward continuous forward movement, stopped with Stop command
Argin: DEV_\	OID:
Argout DEV_V	
Comm	and allowed for:
6 - I	Backward
Descri	otion: initiates a jog backward continuous backward movement, stopped with Stop command
Argin: DEV_V	OID:
Argout DEV_V	
Comm	and allowed for:
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• Argin:

 $\boldsymbol{DEV\_VOID}$  : none.

Argout:

DEV\_VOID: none.

Command allowed for:

## 2 - State

- **Description:** This command gets the device state (stored in its *device\_state* data member) and returns it to the caller.
- Argin:

DEV\_VOID: none.

• Argout:

**DEV\_STATE**: State Code

Command allowed for:

## 3 - Status

- **Description:** This command gets the device status (stored in its *device\_status* data member) and returns it to the caller.
- Argin:

DEV\_VOID: none.

Argout:

**CONST\_DEV\_STRING**: Status description

Comm	and allowed for:
4 - \$	Stop
Descri	otion: stops the movement
Argin: DEV_	/OID:
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Comm	and allowed for:
DOD	
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# GalilCoupledAxes Device Commands Description GalilCoupledAxes Class

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• Argin:

DEV\_VOID: none.

• Argout:

**DEV\_VOID**: none.

Command allowed for:

#### 2 - State

- **Description:** This command gets the device state (stored in its *device\_state* data member) and returns it to the caller.
- Argin:

**DEV\_VOID**: none.

• Argout:

**DEV\_STATE**: State Code

• Command allowed for:

## 3 - Status

•	<b>Description:</b> This command gets the device status (stored in its device_status data member) and
	returns it to the caller.

• Argin:

**DEV\_VOID**: none.

• Argout:

**CONST\_DEV\_STRING**: Status description

• Command allowed for:

## 4 - Stop

- **Description:** stops the movement
- Argin:

**DEV\_VOID**:

• Argout:

 $DEV_VOID:$ 

Command allowed for:

## 5 - Forward

- Description: initiates a jog forward continuous forward movement, stopped with Stop command
- Argin:

**DEV\_VOID**:

• Argout:

**DEV\_VOID**:

• Command allowed for:

## 6 - Backward

- **Description:** initiates a jog backward continuous backward movement, stopped with Stop command
- Argin:

**DEV\_VOID**:

• Argout: DEV_VOID:	
• Command allowed for:	
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