



**TANGO**  
Device  
Server

# **Booster Sextupoles master User's Guide**

## **SySextupoles Class**

**Revision: SySextupoles-Release\_1\_1 - Author: bourtemb**  
**Implemented in C++ - CVS repository: ESRF**

### **Introduction:**

This class will control the 2 sextupoles channels (On, Off, Reset commands), will manage the operation files and will update the period value of the sextupole driver (read on BPSS).

### **Class Inheritance:**

- Tango::Device\_4Impl
  - SySextupoles

### **Class Description:**

This class will control the 2 sextupoles channels (On, Off commands), will manage the operation files and will update the T0 period value of the sextupole driver (read on BPSS).

## Properties:

<b>Device Properties</b>		
<b>Property name</b>	<b>Property type</b>	<b>Description</b>
<b>Focusing_device</b>	Tango::DEV_STRING	Name of the focusing device.
<b>Defocusing_device</b>	Tango::DEV_STRING	Name of the defocusing device.
<b>Dirname</b>	Tango::DEV_STRING	The operation files for the booster sextupoles will be loaded and saved in that directory and its subfolders.

## Device Properties Default Values:

<b>Property Name</b>	<b>Default Values</b>
Focusing_device	sy/ps-sext/focusing
Defocusing_device	sy/ps-sext/defocusing
Dirname	/operation/dserver/java/appli/sextupole/settings

**There is no Class properties.**

## Attributes:

<b>Scalar Attributes</b>			
<b>Attribute name</b>	<b>Data Type</b>	<b>R/W Type</b>	<b>Expert</b>
<b>File:</b> operation file loaded.	DEV_STRING	READ	No

## Commands:

More Details on commands....

Device Commands for Operator Level		
Command name	Argument In	Argument Out
<b>Init</b>	DEV_VOID	DEV_VOID
<b>State</b>	DEV_VOID	DEV_STATE
<b>Status</b>	DEV_VOID	CONST_DEV_STRING
<b>Start</b>	DEV_VOID	DEV_VOID
<b>Stop</b>	DEV_VOID	DEV_VOID
<b>Reset</b>	DEV_VOID	DEV_VOID
<b>LoadFile</b>	DEV_STRING	DEV_VOID
<b>ReadDirName</b>	DEV_VOID	DEV_STRING
<b>SaveFile</b>	DEV_STRING	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 *delete\_device()* method and then execute its *init\_device()* method. For C++ device server, all the memory allocated in the *nit\_device()* method must be freed in the *delete\_device()* method. The language device desctructor automatically calls the *delete\_device()* method.
- **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

- **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
- **Command allowed for:**

### 4 - Start

- **Description:** switch on the 2 booster sextupoles power supply channels.
- **Argin:**  
DEV\_VOID :
- **Argout:**  
DEV\_VOID :
- **Command allowed for:**

### 5 - Stop

- **Description:** switch off the 2 booster sextupoles power supply channels.
- **Argin:**  
DEV\_VOID :
- **Argout:**  
DEV\_VOID :
- **Command allowed for:**

### 6 - Reset

- **Description:** Reset the booster sextupoles power supply channels.
- **Argin:**  
DEV\_VOID :

- **Argout:**  
**DEV\_VOID :**

- **Command allowed for:**

## 7 - LoadFile

- **Description:** Load the configuration file given in argument.

- **Argin:**  
**DEV\_STRING :** File name (with full path)

- **Argout:**  
**DEV\_VOID :**

- **Command allowed for:**

## 8 - ReadDirName

- **Description:** Command to retrieve the name of the directory under which the sy sextuples configuration files are loaded and saved.

- **Argin:**  
**DEV\_VOID :**

- **Argout:**  
**DEV\_STRING :** The name of the directory under which the files are load and saved.

- **Command allowed for:**

## 9 - SaveFile

- **Description:** This command will save all the present settings in a file. The argin is the name of the file. It's a relative pathname. For example, if 'test/economy' is given in argin, the file will be saved in dirname/test/economy. dirname is the dirname property of the server. You can use the command readDirName to know the value of dirname.

- **Argin:**  
**DEV\_STRING :** Name of the file (relative to dirname property)

- **Argout:**  
**DEV\_VOID :**

- **Command allowed for:**

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