

# PJLink Installation and Usage Guide



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## Overview

PJLink is a new unified standard designed to make communication interfaces and communication protocols that have been different from one projector manufacturer to another uniform and common. Several Japanese manufacturers have adopted the PJLink standard for their projectors.

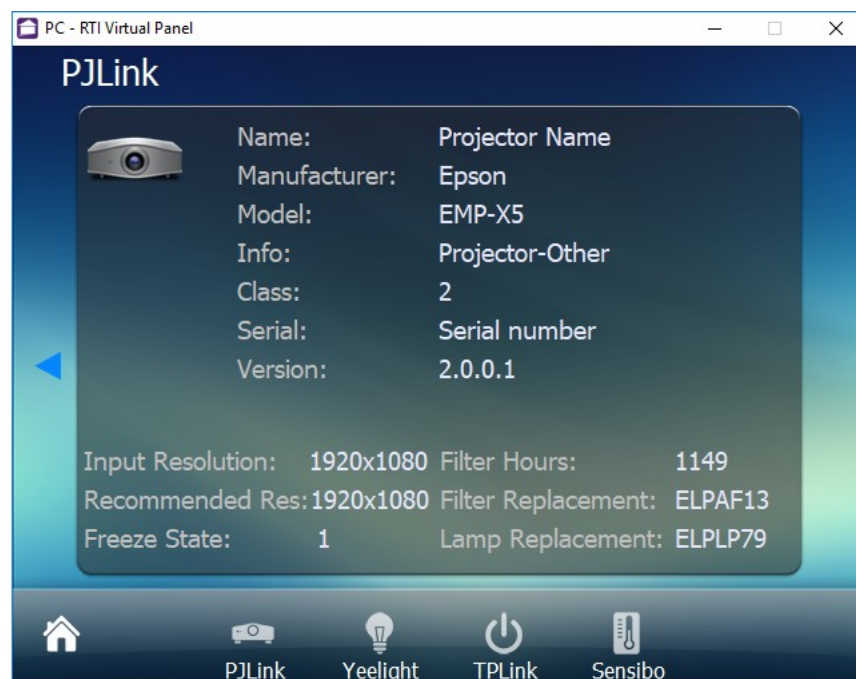


With this PJLink driver for RTI you can control multiple projectors via IP with 2 way feedback. Supported manufacturers include (but not limited to) BenQ, Mitsubishi Electric, InFocus, NEC, Casio, Canon, Sharp, Sky, Seiko Epson, Sony, Panasonic, Hitachi and Ricoh.

In addition to control over the projector it is possible to fetch lamp hours (for multiple lamps on supported models), filter hours (for multiple filters on supported models), recommended resolutions, error statuses and details on make, model, serial, replacement part numbers and firmware versions.

## Features

- Full IP Control, load the module multiple times if you are controlling more than one projector (the licence is only required per processor, you can control as many projectors as you need).
- Control for Power On/Off, Input switching, Volume and Mute, Freezing and Unfreezing the image and Audio and Video muting.
- Feedback for a wide variety of projector information - the specific type of feedback varies from projector to projector so you will need to check the manual to see what applies. The types of feedback available are..
  - Lamp Hours for up to 2 lamps
  - Current state of up to 2 lamps
  - Current Input type and number
  - Projector Name, Make and Model number.
  - Serial number and Software version
  - Error status for Fan, Lamp, Temperature, Cover, Filter and other general errors (dependant on projector)
  - Current resolution and the recommended resolution
  - Filter usage
  - Lamp and filter replacement model numbers (can be used in an email for replacement purposes)



## Installation

The zip file that included this documentation has the rtidriver file you will need to add. The first step is to download and extract the driver from the zip file. It doesn't matter where you store the file but we advise keeping them together.

The default location is Documents\Integration Designer\Control Drivers

Select your processor from the System Workplace sidebar and select the Drivers tab at the bottom of the window (If you are using a KX3 in control mode then you might need to select 'Switch UI / Control Processor Mode' from the Device menu).

### Add the driver

Click the Add button at the top of the driver window. The driver is now ready to configure or use.

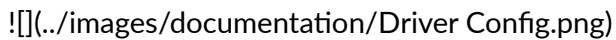
Find the rtidriver file that you extracted from the zip file above. Click on Open when you have found the correct file.

The driver is now ready to use

## Configuration

### Add your licence to the driver

The driver will work without a licence for several days, automatically entering the trial phase if you don't enter a licence key. To keep using the driver after the trial has expired you will need to purchase a licence key.

A screenshot of the driver configuration interface, showing a field for entering a licence key.

Once you have your key it should be entered in to the Licence field of the config settings for the driver.

Enter the licence into the field shown above.

### Device Configuration

The PJLink driver requires only two configuration settings, the ip address and the port of the projector you wish to control. Each device is different you may need to refer to the manual of the projector for details on how to find the correct details. If it is not listed the default port for PJLink is 4352.

## Driver Variables

The driver variables represent the state of the projector and in addition to the typical state values like power and input include resolution details, filter state, error reporting and lamp usage. Please note that the state of the projector is polled and may take up to 5 seconds to update.

### State

The state variables cover the primary state values for the projector, including power and input.

#### Power [TAG: Power]

The Power variable will be true if the power is on or false if the power is off.

#### Input Type [TAG: Input]

The Input Type variable returns an integer that represents the current input type. The actual types vary from projector to projector so you will need to consult the projector manual for specific details. Valid values are listed below

Index	Type
1	RGB
2	Video
3	Digital
4	Storage
5	Network

#### Input Number [TAG: Input Number]

The Input number variable returns a string that represents the current input number. The actual types vary from projector to projector so you will need to consult the projector manual for specific details.

#### Mute Type

The Mute setting can affect audio video or both. This variable will return an integer that indicates which type is currently selected.

Index	Type
1	Audio
2	Video



Index    Type

3        Both

## Mute State

The Mute State variable indicates the current state of the mute function. It will be true if mute is active and false if it is inactive.

## Lamp Usage

### Lamp 1 Hours [TAG: Lamp Hours]

The Lamp 1 Hours variable is a number that represents the number of hours the lamp has been used for.

### Lamp 1 State [TAG: Lamp State]

The Lamp 1 State variable is a boolean value that indicates if the lamp needs to be changed. The value will be true if the lamp needs to be changed or false if it doesn't need to be changed

### Lamp 2 Hours [TAG: Lamp 2 Hours]

The Lamp 2 Hours variable is a number that represents the number of hours the lamp has been used for.

### Lamp 2 State [TAG: Lamp 2 State]

The Lamp 2 State variable is a boolean value that indicates if the lamp needs to be changed. The value will be true if the lamp needs to be changed or false if it doesn't need to be changed

## Projector Details

### Name [TAG: Name]

The Name variable contains the name given to the projector

### Manufacturer [TAG: Manufacturer]

The Manufacturer variable contains the manufacturer of the projector

### Model [TAG: Model]

The Model variable contains the model of the projector

### Info [TAG: Info]

The Info variable contains general information about the projector

**Class [TAG: Class]**

The Class variable contains the class of the projector. There are 2 classes and they determine the functionality available

**Is Class 2 [TAG: Is Class 2]**

The Is Class 2 variable is set if the projector is a Class 2 device

**Serial Number [TAG: Serial Number]**

The Serial number variable contains the serial number of the projector

**Software Version [TAG: Firmware]**

The Software Version variable contains the serial number of the projector