

## How to Use Additional Macro Engines in Processors

### Content

A. Overview .....	1
B. Remotes and Shared Hardware .....	1
C. Workaround .....	1

### A. Overview

RTI's XP processors have six macro engines and can run a maximum of six macros at the same time.

### B. Remotes and Shared Hardware

1. Any remote, keypad or RTiPanel app can use only one macro engine at a time.  
Buttons pushed on a controller will behave as so:
  - If you press "1" "2" "3" on the remote to switch to TV channel 123, the commands will be queued up and run sequentially and e.g., switch the TV channel "123".
  - If a remote had multiple macros running simultaneously there is no guarantee that they would finish in the same order you started them so this is not allowed.
2. Some of the processor's hardware is shared by all the macro engines.  
An example is the IR output: Even though there are multiple IR ports, there is only one IR generator inside the processor that is routed to the selected port. This means only one macro at a time can send an IR code.

### C. Workaround

Using the call macro function and its schedule function set to a delay of zero will allow a controller to use multiple macro engines at once as the "called Macro" gets assigned to a different macro engine. This then frees the controller up to do other tasks.