



ESA Pro 2.3

Trigger, Condition, Action Functions




ESA Pro 2.3 gives you access to a powerful triggering engine which uses TCA triggers (Trigger, Condition, Action) described in the table below. Some TCA functions are only available on specific controllers which are indicated in the left column.

TCA triggers are available on the following models only:

- DINA DR1 & Lite
- DINA DR2 & DR2 Lite
- SLESA-U11 (and other SIUDI11 based controllers)
- DINA SR1

<u>Trigger/Condition</u>		<u>Function</u>
Time Trigger		<p>Trigger an event at a specific time, day or date. Use <i>HardwareManager</i> > <i>Clock</i> page to check and set time and location settings.</p> <p>1. Day time</p>

		<ul style="list-style-type: none"> - hh:mm - set a specific time of day - Trigger at Sunset or Sunrise based on location settings (longitude/latitude) of Country and City stored in device memory. Astronomical clock. <p>2. Date</p> <ul style="list-style-type: none"> - Every Day - Specific date - Every week (on 1 day of the week) - Every week between 2 days of the week. E.g. Mon - Fri - Every month 1 date every month calculated from <ul style="list-style-type: none"> > 1st, 2nd, 3rd, 4th, Last (month) > Day of the week (Sun, Mon etc.) - Every month between 2 dates every month calculated from <ul style="list-style-type: none"> > 1st, 2nd, 3rd, 4th, Last (month) > Day of the week (Sun, Mon etc.) <p>3. Options</p> <ul style="list-style-type: none"> - Date Range from one specific date to another. - Repeat Every hh: mm E.g. 00:10 will repeat every 10mins Stop hh : mm This is a specific time-of-day. It is not an amount of time. E.g. 12:00 will stop at midday.
Port		You can use a single port or combinations of ports to create a <i>condition</i> which is tested by

		<p>a port trigger. You can choose from different port trigger behaviours described below: Changed, pressed, released or held.</p> <p>Port states</p> <p> - Port pressed (closed)</p> <p> - port released (open)</p> <p> - ignore the state of this port</p> <p>Note: The ports are checked (polled) by default every 100ms. This timing can be changed in ESA Pro 2 on the Standalone screen. Go to Device Properties and change the <i>Port Sensitivity timing</i>, if required.</p>
	Port : Changed	<p>This trigger happens only once when a condition is met, no matter when the ports were activated/deactivated.</p> <p>This is the recommended port trigger behaviour if using multiple ports and manual buttons or when using multiple relays which may have a small delay.</p>
	Port : Released	Trigger if all the specified ports are released (opened) at the same time.
	Port: Pressed	Trigger if all the specified ports are pressed (closed) at the same time.
	Port : Held	The trigger happens multiple times while the condition is met based on the <i>Port Sensitivity timing</i> (default 100ms). Trigger happens as soon as the condition is met, no matter when the ports were activated/deactivated.
Button (SLESA-UI1 buttons, DINA DR2 < > & Z	Released	Trigger when a button is ... released.
	Pressed	... pressed

connections)		
Variable (DINA DR1 and SR1 only)	Value	Trigger when a variable equals a specific value
	Changed	Trigger when a variable changes
Scene	Started	Trigger an event when a scene is ... started
	Resumed	... resumed.
	Paused	... paused.
	Restarted	... restarted.
	Stopped	This trigger happens when a scene is stopped while playing. For example, a user stops it via an app or it is stopped by another TCA trigger (port, time etc).
	Ending	<p>Trigger when a scene is about to stop naturally. i.e. It has reached the end of the scene and loop number, if playing multiple times.</p> <p>For a scene to end naturally, 2 things must be configured in the scene properties on the Standalone Screen:</p> <p>1) Loop number must not be set to <i>infinite</i>. 2) <i>Release at end</i> must be set to <i>stop</i></p>
Blackout	On	Trigger when a blackout turns on
Audio : Beat (DINA DR1 and SR1 only)		Trigger when an audio beat is detected. Useful for sound-to-light.
Variable	Changed	Triggers if the value of the variable changes.
	Value	Triggers if the value of the variable equals that given in the empty field.

		Note : Variables are beyond the scope of this document.
Zone Stopped		Triggers when all scenes in the specified zone are stopped.
Show	Loaded	Trigger when a show is first loaded. You could use this to start specific scenes in each zone when the device starts.
	Unloaded	Trigger an event when a show is unloaded. This happens when swapping shows through the Nicolaudio Cloud website; one show is unloaded and another is loaded.
DMX In (DINA DR1 & SR1 only)	Value	Triggers when value on DMX universe and channel matches a target DMX value.
	Changed	Triggers when value on specified channel changes

* The ports are checked (i.e. polled) every x number of milliseconds. This setting can be changed from the default 100ms in the Device Properties panel on the Standalone screen.

Action		Function
Scene	Start Scene	Start the specified scene
	Resume Scene	Resume a paused or stopped scene
	Pause Scene	Pause the specified scene
	Stop Scene	Stop the specified scene
	Restart Scene	Restart the specified scene.

	Start Next Scene	Starts the next scene in the zone.
	Start Previous Scene	Starts the previous scene in the zone.
	Start First Scene	Starts the first scene in the zone.
	Start Last Scene	Starts the last scene in the zone.
Stop All Scenes		Stops all scenes currently playing in all zones
Start Random Scene		Starts a random scene in the specified zone
Next Step in a Scene		Jump to the next step in a specified scene
Dimmer	Increase	Increases the dimmer by a percentage value, variable value, or dmx in value.
	Decrease	Decreases the dimmer by a percentage, variable value, or dmx in value.
	Set Value	Set the dimmer using a percentage, variable value or dmx in value.
Saturation	Increase	Increases the saturation by a percentage, variable value, or dmx in value.
	Decrease	Decreases the saturation by a percentage, variable value, or dmx in value.
	Set Value	Set the saturation using a percentage, variable value or dmx in value.
Hue	Increase	Increases the hue by a percentage, variable value, or dmx in value.
	Decrease	Decreases the hue by a percentage, variable value, or dmx in value.
	Set Value	Set the hue using a percentage, variable

		value or dmx in value.
Speed	Increase	Increases the speed by a percentage, variable value, or dmx in value.
	Decrease	Decreases the speed by a percentage, variable value, or dmx in value.
	Set value	Set the speed by a percentage, variable value or dmx in value.
Extra Colour (affects neutral white, warm white, cold white, amber, UV)	Increase	Increases the level of an extra color channel by a percentage
	Decrease	Decrease the level of an extra color channel by a percentage
	Set value	Set the level of an extra color channel
Color		Create a static color that will override your scene
Reset		Resets a scene. Will clear overrides for color, extra-color, speed, and dimmer.
Blackout	On	Activate a blackout which sends 000 on all channels. Careful with Blackout mode! Triggering a scene does not turn it off as it overrides all. Only turning the blackout <i>off</i>
	Off	Deactivate a blackout
	Toggle	Inverts the current blackout mode between on and off
DALI command (DINA DR1 and SR1 EP 2.3+ only)		Send a DALI command using the command builder
System (DINA DR1 and SR1)	Text	For information, contact support.

Network	UDP UDP Hex	<p>Send a UDP or UDP Hex command to another networked device.</p> <p>You can trigger other Nicolaudio devices using UDP Hex mode on port 2430. Refer to the remote protocol sheets at nicolaudio.com/download</p>
	RS232 RS232 Hex	<p>Send an RS232 or RS232 Hex commands from the outputs on the DINA DR1 and SR1.</p> <p>For protocol, refer to the device technical datasheet at nicolaudio.com/download</p>
Variable (DINA DR1 and SR1 only)		<p>Call a variable to, for example, update a value. You can then use this variable in other actions. Variables are beyond the scope of this document.</p>