Tutorial Manual

For Tango Series Smart Consoles

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INTRODUCTION

Welcome to Tango!

Tango is a unique console – a mix of tradition and new ideas. A console intended not just for mixing but also for every aspect of audio production – including a number of musical features never implemented before.

In the tradition of other SmartAV manuals – this is also a manual for people who don't like them. We will approach each section of Tango through a series of short tutorials that will highlight Tango's unique functionality in each area.

WARNING:

Do not adjust the BIOS or install any other software of any kind on Tango. Adjusting the BIOS or installing other software will invalidate the warranty and may cause Tango to fail to boot or the screen to go blank requiring the return of the unit to the factory.

WARNING:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

IMPORTANT:

Your Tango Smart Console utilises an Acoustic Wave Touchscreen. This touchscreen is a sensitive part of the system and needs to be treated carefully and kept clean. If the screen is allowed to get dirty it could result in false or inaccurate touch detections. Do not excessively wet the screen whilst cleaning.

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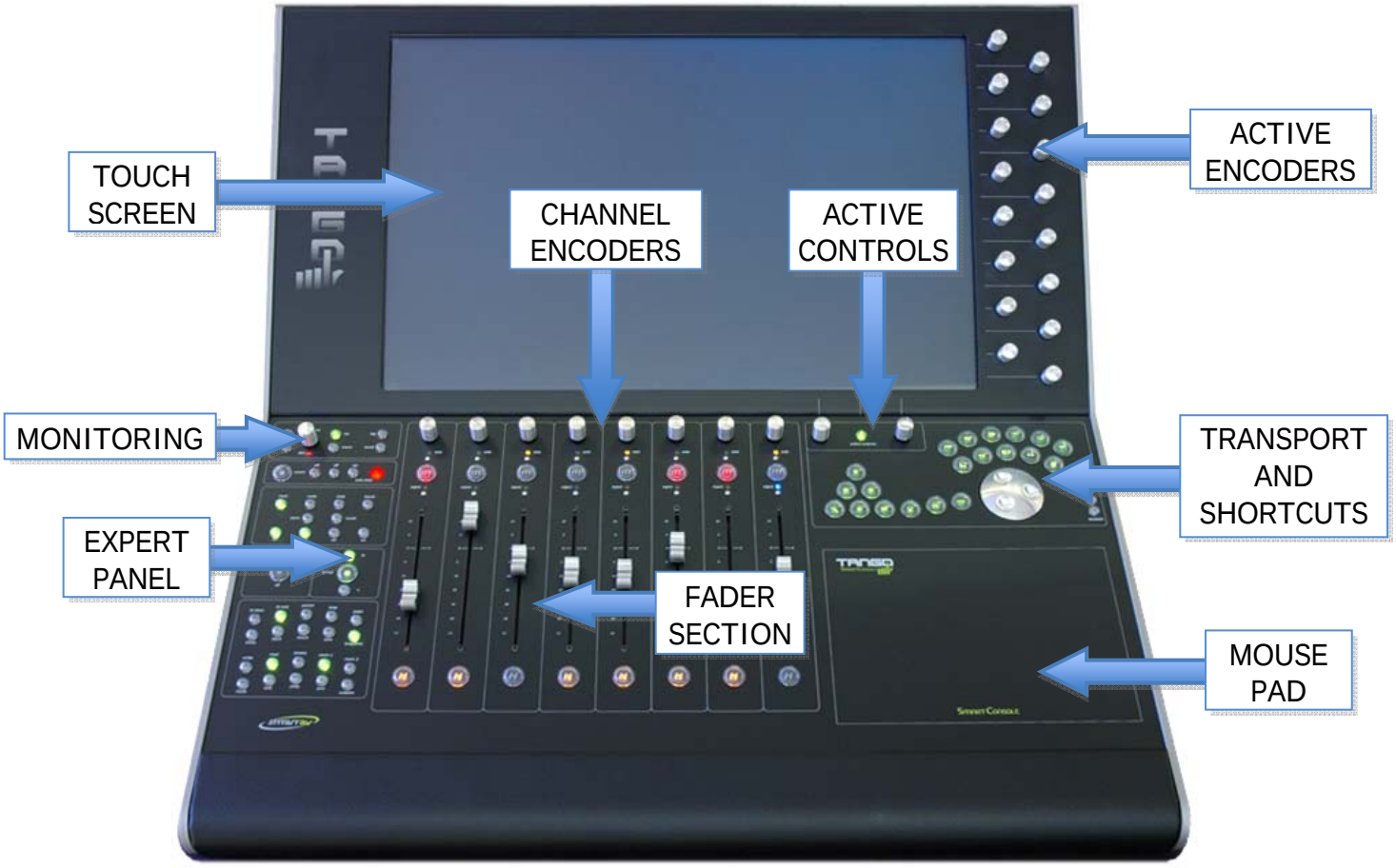
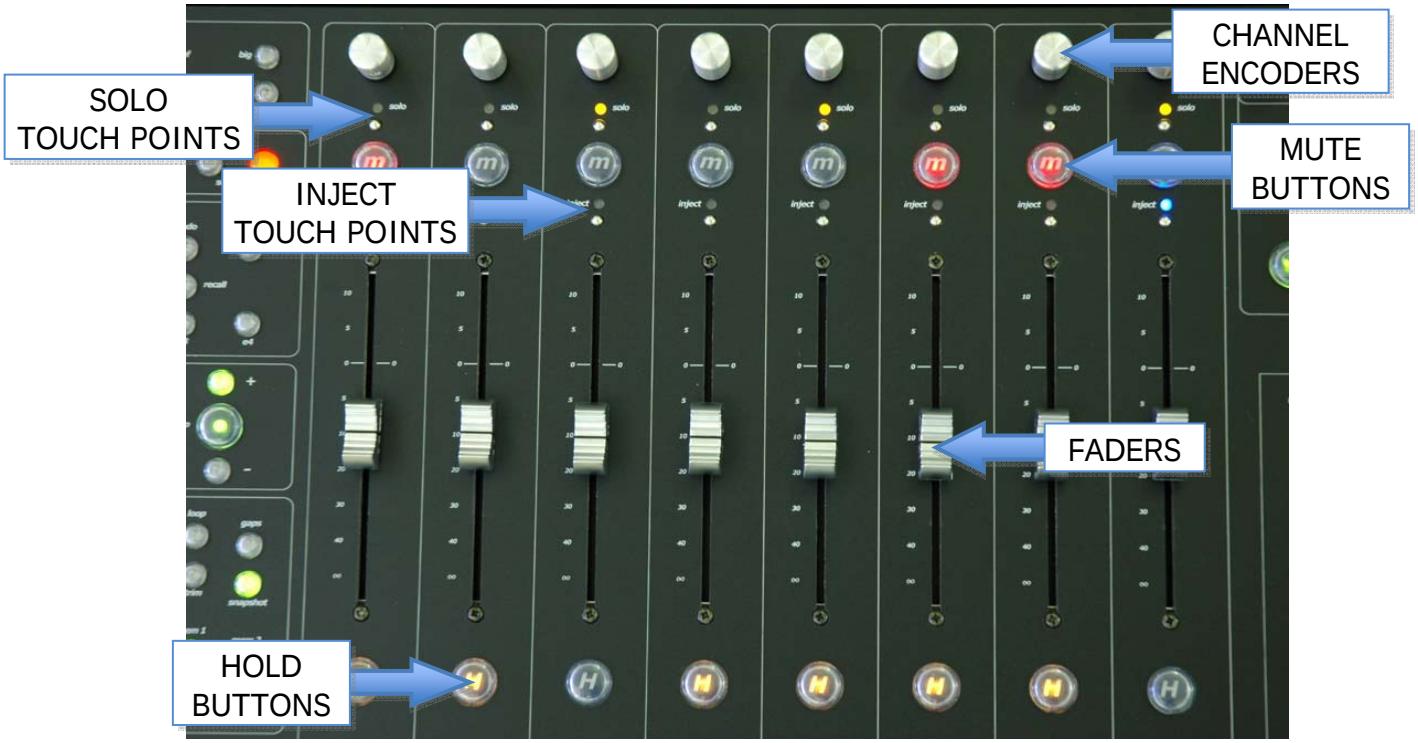
OVERVIEW

The image below outlines the various sections of the Tango Smart Console. The operation of the various sections will be detailed in the following sections of this manual.



FADER SECTION



A fader on Tango also acts as a channel selector. When you touch any fader its track is selected in the workstation and also on the MonARC where the selected Channel name and number is colored white when selected.

SOLO TOUCH POINTS
You will find the solo button under the channel encoder and above the mute button on the channel strip. Pressing it solos the track. You will be able to see that a track is soloed in many places – in the main channel area in the active channel area and on the MonARC and of course on the yellow SOLO LED above the touch point and the workstation screen.

MUTE BUTTONS
You will find the mute button below the solo and above the inject touch point on the channel strip. Pressing it mutes the track. You will be able to see that a track is muted in many places – in the channel area in the active channel area and on the MonARC and of course on the mute button its self.

INJECT TOUCH POINTS
Inject allows you to quickly select a single channel into any available slot and it also performs a variety of *smart* functions which will be described in detail later.

To use the inject point, simply hold your finger on the Inject touch point on a channel, and touch a Channel on the MonARC. The channel you touched on the MonARC is now 'Injected' into that channel slot.

Smart Tip #1: *While holding down inject you can also wipe your finger along the MonARC quickly zooming through multiple channels. This is good way of quickly interrogating the system as to the state of certain parameters. For example: If you're concerned about the bottom end of your mix – look at the LF EQ encoder on a channel strip, hold your finger on the inject point and now wipe your finger along the MonARC. In this way you can interrogate dozens of channels quickly while never moving your eye.*

Smart Tip #2: *Depending on the setting of the "Inject range rather than swap" parameter in SYSTEM -> CONFIG -> USER INTERFACE, you can do nice things with the inject points.*

If True: You can expand the channels in the channel slots to the left or right of the inject point by touching the first inject point and then touching a second inject point to expand the channel range to that slot.

If False: You can swap channels in the channel slots by touching any two inject points at the same time - the channels touched will swap positions.

Latched Inject

To use the latched inject feature, hold your finger on the ***inject*** touch point and press the ***hold*** button on the same channel. Now you can release the ***inject*** touch point and the channel will remain in inject mode. This allows you to select channels on the MonARC with one hand and tweak parameters in real time with the other, a powerful interrogation and control feature!

HOLD BUTTONS

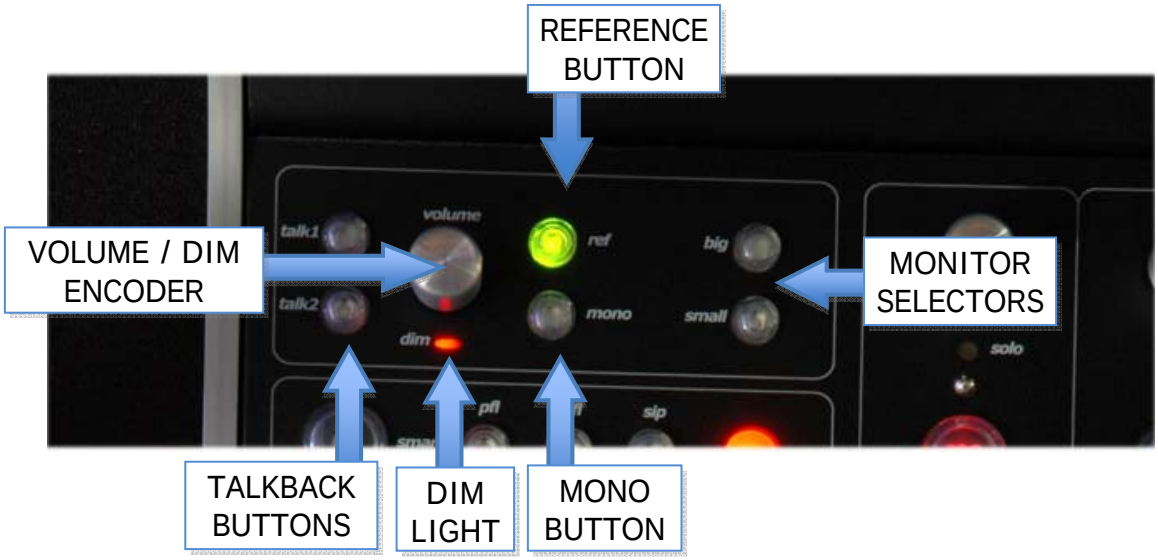
The Hold buttons at the bottom of each channel strip allow channels to be locked into the channel slot. Press a Hold Button (or wipe across it with the heel of your palm) and now the channel selected will NOT change! It will stay selected to that slot regardless of any other action such as Chair, Recalling an Ergonomic Spread, Undo etc (more on these other actions coming up soon). This is very useful for master busses, or keeping your main vocal or whatever else you want in front of you!

Note: Holding channels affects such functions as selecting channels in Chair Mode. If you only have a few channels not held – the 'window' that you move around when wiping the MonARC will be correspondingly smaller.

For example if you want to keep channel 1 locked to fader 1 no matter where you move around in your mix, then press the Hold button and fader 1 will remain as channel 1 until you make a selection without the Hold button enabled.

NOTE: It is possible to end up with the same channel in multiple slots.

MONITORING



How to turn the volume of the monitors up or down
Turn the Monitor Volume Encoder.

How to Dim the speakers
Press down on the Master Volume Encoder.

How to set the Dim level
After engaging Dim, turn the Master Volume Encoder.

How to select a different speaker set
Press either the Big or Small Buttons.

How to fold-down the current Monitor set to mono
Press the mono button.

How to switch the monitors to a predetermined reference level
Press the REF button.

NOTE: until the reference volume is set, the reference is off.

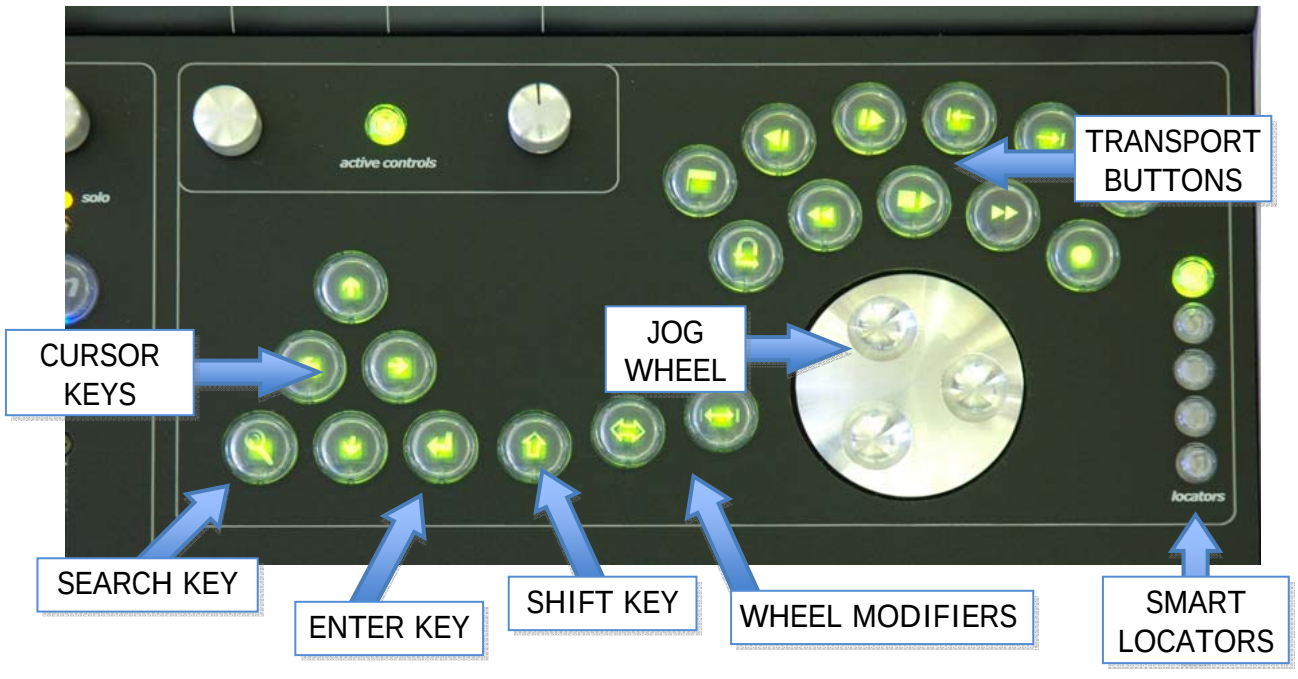
How to set the reference level for your monitors
Set the desired reference level with the Monitor Volume Encoder. Hold down the REF Button until the current speaker set buttons flashes. You can set a reference level for each of the speaker sets. Once you set the reference levels, they are remembered by Tango.
How to talk via the talkback system of your workstation
Press the Talk 1 or Talk 2 buttons – currently they are tied together and do not function separately.

The Monitor Screen Display
The area at the top of the active channel is dedicated to monitoring functions. Monitor Volume and Dim level are shown, along with External and Source Select buttons and 6 Monitoring Meters along with Speaker Mute indicators.

Monitor Section Screen shot here

The Monitor Screen Controls
Touching the Monitor Section will open a large Monitor Section window, identical to the small display, allowing control of all of the button parameters via the touch screen, selecting the monitoring source, speaker mutes etc. is as simple as touching the desired button. Press the Close button in the bottom right corner to close the window.

TRANSPORT AND SHORTCUTS



THE JOG WHEEL
Use Tango's jog wheel to navigate backwards and forwards through your project. For Nuendo we currently only support non-audio jogging. For Logic default jogging is non-audio, however if Logic is put into pause, the wheel will jog with audio on the selected track.

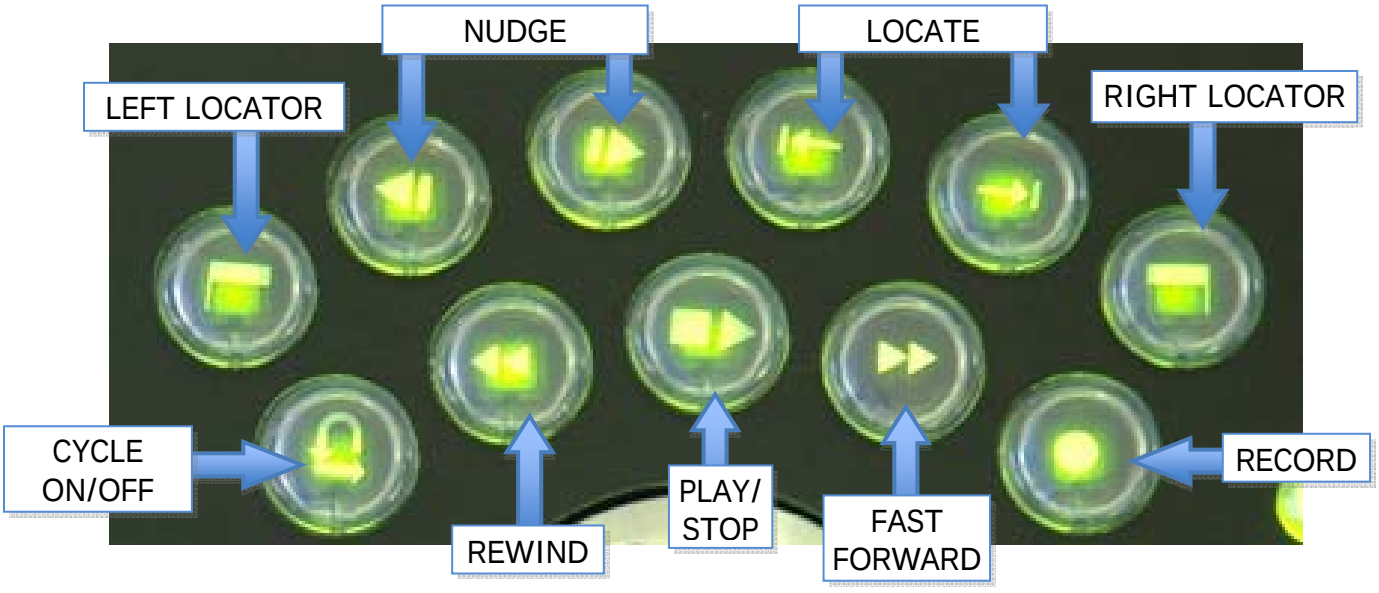
WHEEL MODIFIERS
Press and hold the wheel modifiers to execute alternate functions for the jogger wheel. For Nuendo, ⇔ is assigned to the group E button 2 "Wheel Locate" edit key. This function is not currently user programmable. It executes a 1 minute increment locate with the wheel which allows fast navigation of the project with the wheel, while ⇤⇥ is assigned to the group E button 3 "Wheel Track" edit key and scrolls the selected track up and down with the wheel. For Logic both of these modifier keys must be programmed before they will function (see *virtual EDIT*).

CURSOR KEYS AND ENTER KEY
These keys are mapped to the cursor keys on the Virtual Keyboard application (described in the setup manual). They will not function unless the application is installed and connected on the workstation computer.

SEARCH KEY
This key is linked to group 5 button 3 "Search" edit key in the *virtual EDIT* panel. It can be programmed to execute any function – see the transport keys and *virtual EDIT* section below.

SHIFT KEY
Press and hold the shift key to select alternate functions for the top row of transport buttons as well as the search key. This is mapped to the shift key in the *virtual EDIT* panel.

TRANSPORT BUTTONS



The lower row of transport buttons (cycle, rewind, play/stop, fast forward and record) are dedicated controls. The top row buttons are currently mapped to EDIT panel buttons and the functions executed by the workstation can be changed by the user. The top row of transport buttons can also have a secondary function if the SHIFT (⇧) key to the left of the transport keys is held when the button is pressed.

Left Locator is mapped to edit button group 8, button 2 - “Set Left” edit key.
Nudge Left is mapped to edit button group 9, button 1 - “Nudge Left” edit key.
Nudge Right is mapped to edit button group 9, button 2 - “Nudge Right” edit key.
Locate Left is mapped to edit button group 8, button 0 - “Loc Prev” edit key.
Locate Right is mapped to edit button group 8, button 1- “Loc Next” edit key.
Right Locator is mapped to edit button group 9, button 0 - “Set Right” edit key.

See ***virtual EDIT*** for more information on these buttons and how to program them.

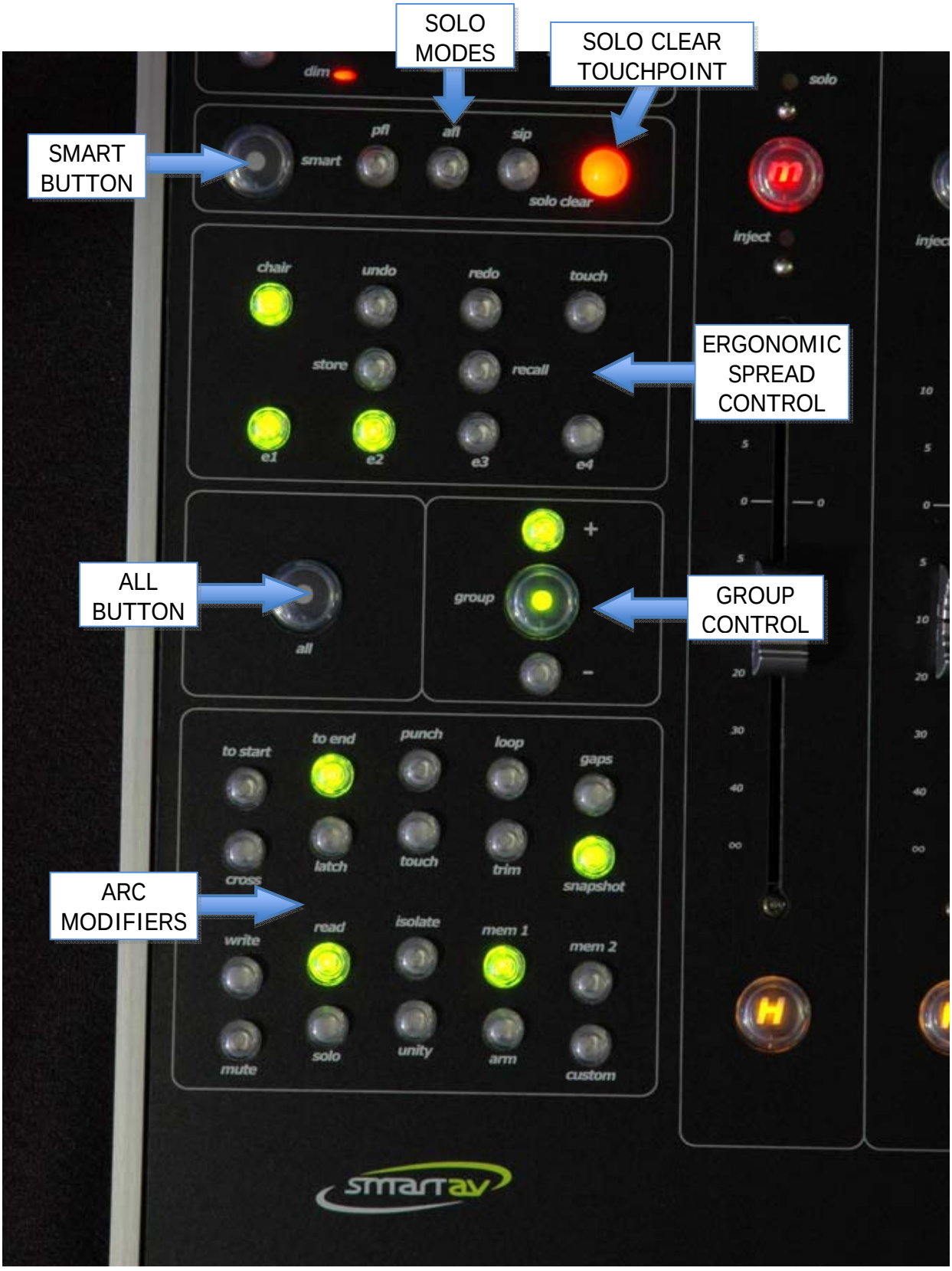
NOTE: For Nuendo 4, these buttons have a default functions assigned. For Logic Pro 8, no defaults are defined, and the user MUST program them in Logic before they will function.

LOCATORS
The smart locators feature five Smart Locators. The Smart Locators are designed to give you instant access – one button press - to the most important locations in your project.

How to store a Timecode location into a Smart Locate memory button
Press any Memory button 1-5 and hold it until the button lights up. The Timecode location at which the button was first pressed is now stored into that button.

How to locate to a Timecode location stored in a Smart Locate Button
Press and release the button. If you were in play, the transport will continue to play after relocating, if in any other mode, the transport will stop after locating.

EXPERT PANEL



THE SMART BUTTON
The smart button is used as a global modifier or shift key for various functions on the console. It is always used in conjunction with other buttons or touch-points and so will be described in those function descriptions.

SOLO MODES
There are three possible solo modes, ***pfl*** (pre fade listen), ***afl*** (after fader listen) and ***sip*** (solo in place). For Nuendo, all of these modes are supported (***pfl*** and ***afl*** change the Tango solo buttons to control the Listen butons, while in ***sip*** the Tango solo buttons control the solo buttons. For Logic, the only mode supported is ***sip***.

SOLO CLEAR TOUCHPOINT
The large red ***solo clear*** led lights up to indicate that a solo is presently on somewhere in your project. Touching the led will turn solo off on all tracks.

In addition to clearing solos the touch point also acts as a general escape or clear key.

For example, if you want to abort the creation of a group, you can touch the clear led and the group you are creating will be aborted and you will be removed from group mode. Or if you want to clear an arc modifier memory location, press and hold the memory button and then touch the clear led.

If a function can use the clear led, it will be described in those function descriptions.

ERGONOMIC SPREAD CONTROL
At any time, the selection of channels called to console channel 'slots' is referred to as an 'Ergonomic Spread'.

There are several ways of getting the channels you need to in front of you. The main two modes of channel selection are Chair mode and Wipe mode. This mode is controlled using the chair button on the Expert Panel.

When the ***chair*** button is lit, Tango is in chair mode, otherwise it is in wipe mode.

Chair Mode
When the console is in Chair mode, touching the MonARC is equivalent to moving your chair to in front of that particular channel on a long console. Try it!

A single touch of channel 16 on the MonARC makes channels 13 through 20 appear in the 8 channel slots of your console. Wiping your finger up and down the MonARC allows you to quickly move around your channels as well giving you an overview of your entire project.

Wipe Mode
Use Wipe mode to select non-sequential arrangements of channels. Here, touching the MonARC Segments (in any order) on the MonARC fills in individual channels sequentially from the left most available channel slot through to the right most.

You may be wondering, how does the console know when to restart filling up the channels again from the left when I'm in wipe mode? Introducing the ***timommeter*** **-** a

timer which counts down whenever you touch a MonARC channel in wipe mode. Once the timer reaches zero, the channels will again fill from the left most channel slot. The timer is displayed in a small deep red vertical bar to the left of the Timecode display

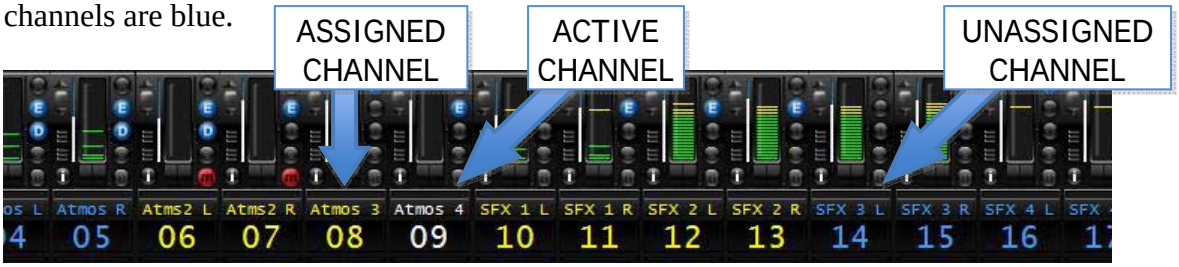
When this bar is at the bottom, the channels will fill from the left most channel slot. The timommeter time cannot be adjusted at the moment (coming soon!).

TOUCH BUTTON

When the ***touch*** button is lit, it indicates that one or more parameters without touch sensitivity have been touched. Simply press this button to "un-touch" any touched controls. This button is used when automating to stop writing all "touched" parameters.

Which Channels am I Controlling?

You can always tell which channels are assigned to the slots as the name and number are yellow on the MonARC while the current Active Channel is white and unassigned channels are blue.



On the main Tango screen the channel numbers and names are indicated near the bottom of each work channel area.

Undo/Redo

The Undo/Redo buttons refer only to Ergonomic Spreads. They are NOT related to actual mixer parameters. Pressing Undo goes back through the previous Ergonomic Spreads you had in front of you, while Redo goes forward through the remembered

Ergonomic Spreads. There are 100 levels of Undo and Redo.

Use this to quickly get back to the channels you had in front of you a second ago.

Note: ***Hold*** buttons over-ride the Undo/Redo and Recall of Ergonomic Spreads.

Storing Ergonomic Spreads
If you have an Ergonomic Spread in front of you that you like and wish to recall at will, you can either save it into one of the four Hotkeys on the Expert Panel (for one touch recall), or into any MonARC "Segment" (for two touch recall).

How to store an Ergonomic Spread into a Hotkey
Press the Store button and it will start to flash. Now press the ***e1*** to ***e4*** key you wish to store the Spread into. You can tell which Hotkeys contain Spread information since any Hotkey with an Ergonomic Spread Stored will be illuminated. If you change your mind, simply press the ***clear*** led to exit ***store*** mode.

How to Recall an Ergonomic Spread from a Hotkey
Simply press the e1 – e4 hotkey. Remember – any ***held*** channels will not be changed.

How to Clear an Ergonomic Spread from a Hotkey
Simply press and hold the e1 – e4 hotkey and then touch the ***clear*** led. The light in the hotkey will be extinguished.

How to store an Ergonomic Spread into a MonARC Segment
Press the ***store*** button and it will start to flash. Any MonARC Segment which already contains an ergonomic spread will now have its UPO indicator lit.

Now touch the MonARC segment you wish to store the spread into. The UPO will remain lit for two seconds to indicate it has stored the Spread, and then extinguish.

How to recall an Ergonomic Spread from an MonARC Segment
Press the ***recall*** button and it will start to flash. Any MonARC Segment which contains a Spread will now have its UPO indicator lit. Now, simply touch any MonARC segment that contains a Spread and it will be recalled. Remember – any ***held*** channels will not be changed. If you change your mind, simply press the ***clear*** led to exit ***recall*** mode.

GROUP CONTROLS

Grouping on Tango is simple, fast and flexible. We can currently create fader groups, mute groups and solo groups. Press the ***group*** button to enter group mode. The ***group*** button will be lit. Once in group mode you can quickly create a new group or modify an existing group.

How to make a new fader group

NOTE: this description assumes no current groups exist, if you want to change the group a fader is in, see "How to add/remove members from a group" below).

Enter group mode by pressing the ***group*** button. The ***group*** button will light up. Now, touch the first fader you wish to add to the group. The console knows that the fader is not in any group and so it automatically enters 'add to group mode' and the **+** Button will illuminate. Now simply touch any other fader you wish to add to the group, or touch any MonARC Segments to add those channels to the fader group. Each fader touched is immediately added to the group. The channels in the group have their UPO lit up on the MonARC display. When all the channels are added to the group, press ***group*** to exit grouping mode and create the group. If you change your mind and no longer wish to create this group, you can touch the ***clear led*** at any time to abort the group creation and exit group mode.

How to update the relationship between fader levels of group members

Simply touch and hold any one fader belonging to the group and then adjust any other fader in the group. As long as more than one fader in the group is touched, you can adjust the fader relationships at will. You do not have to be in Group mode to do so. NOTE: automation received from the workstation will also adjust the fader relationships; this allows individual faders to "break" the group relationship using automation.

How to find out what channels are grouped

Press the Group button. You are now in Group mode and the UPO indicators on the MonARC are lit of ALL members of ALL groups. To exit Group mode – press the ***group*** button again or touch the ***clear*** led.

Touching either a grouped fader or MonARC segment after entering group mode, will select that group as "active". The UPO's will now ONLY show members of that group. To select a different group, exit and reenter group mode and select the desired group.

How to add/remove members from a group

Once a group is selected (see "How to find out what channels are grouped") press either the **+** button to add members to the group or the **–** button to remove members from the group. The button will light up to indicated which mode you are in.
Once in Group – or + mode, simply touch any fader, or MonARC Segment to add or remove this channel from the group. You can change back and forth between + and – modes simply by pressing the – and + buttons. When complete, press the Group button to exit Group mode.

Temporarily disabling grouping

At any time when not in Group mode, pressing and holding the group **–** button will

disable all groups. This allows individual moves (either automated or real-time). When the – button is released one of two things will happen.

If you are holding a grouped fader, the rest of the faders in that group will instantly snap to their positions relative to the held fader.

If you are not holding a grouped fader, any moved faders will return to their grouped positions.

How to escape Group mode discarding any changes you have made since entering Group mode
At any time to discard your changes and exit group mode, simply touch the ***clear led***.

SUPER FAST GROUPING MOVE FOR STEREO CHANNELS
To group two faders together (providing they are not already in a group), simply hold the two faders you wish to group – and tap the GROUP Button twice. The faders are now grouped.

NOTE: This move simply follows the rules outlined above – any fader touched on entering grouping mode, if not already a member of a group, automatically enters the console into 'add to group' mode and then any other fader touched will be added to that group.

How to make a mute or solo group
Grouping other elements in the console follows all of the same rules described above for faders. The only difference is that you must tell the console what elements it should be grouping.

Enter Group mode by pressing the ***group*** button, then tap the first fader, mute or solo button you wish to group. This changes the grouping mode to either faders, mutes or solos.

To change to a different grouping mode, exit and reenter group mode and then touch the type of control you wish to group (fader, mute or solo).

Use the methods described above to create, add or subtract channels from the selected group type.

NOTE: Next time you enter group mode, you will have the last selected group mode. So if you grouped Mutes last time, you will be in mute grouping mode. Tango does not currently have a group mode display indicator.

THE ALL BUTTON
The all button can be used in a variety of situations. It does (as the name suggests) apply the current function to ALL channels. Pressing the ***all*** button by itself will not do anything. To use it you must be in a mode where pressing a MonARC segment will have an effect. It is the same as running you finger across the MonARC from the first channel to the last. There are an innumerable number of cases where the ***all*** button can be used. Here are a couple of examples.

Example 1: To clear all the elements in a group, enter group mode and select a group (described above) and press the group **–** button, then press the ***all*** button. This will remove all channels from the current group.

Example 2: To set all faders to unity. Press and hold the ***unity*** arc modifier (see below) and then press the ***all*** button. This will instantly set all channels to unity gain.

ARC MODIFIERS
The ARC modifiers allow you to change any channel's settings without having that channel physically present in front of you in a slot. They modify what happens when you touch the MonARC ***segments*** or ***inject*** touch points. Not all of the ARC modifiers are currently implemented and the automation modifiers vary depending on the workstation.

POSITIVE ASSERTION
Using the ARC Modifier to mute or solo channels uses what we call 'positive assertion'. When you press and hold the modifier button, the console will read the first change of state that is performed when touching the MonARC ***segment***. This change of state is then applied to all other MonARC ***segments*** touched while still holding the ARC modifier down.

So for example, if the first ***segment*** you touch un-mutes the channel, wiping your finger along the MonARC will now ONLY un-mute channels, and vice versa – the channels do NOT have their mutes toggled. Thus un-muting a selection of channels involves one wipe over them – rather than several discreet moves to toggle them from their current state. So much faster!

mute
The ***mute*** modifier allows any channel to be muted or un-muted. Hold down the Mute button and touch any MonARC ***segment***. Muting and un-muting using the MonARC modifiers uses "positive assertion" described above.

solo
The ***solo*** modifier allows any channel to be soloed or un-soloed. Hold down the ***solo*** button and touch any MonARC ***segment***. Soloing and un-soloing using the MonARC modifiers uses "positive assertion" described above.

unity
The ***unity*** modifier will set any fader to unity gain. Hold down the ***unity*** button and touch any MonARC ***segment*** or ***inject*** touch point. When the ***unity*** modifier is held down, the UPO indicators show which (if any) channel faders are currently at unity gain.

arm
The ***arm*** modifier will arm and un-arm any channel for record. Hold down the ***arm*** button and touch any MonARC ***segment*** or ***inject*** touch point. When the ***arm*** modifier is held down, the UPO indicators show which (if any) channels are currently armed for record.

custom

Currently the ***custom*** button is hardcoded.
For Nuendo, the ***custom*** button will toggle the Automation Panel window.
For Logic, the ***custom*** button is not currently implemented.

write, read, isolate
These modifiers change the automation states of the channels.

For Nuendo, ***write*** puts the channel into "write+read", ***read*** puts the channel into "read", and ***isolate*** turns off automation for that channel.

For Logic, ***write*** puts the channel into "touch", ***read*** puts the channel into "read", and ***isolate*** turns off automation for that channel.

m1, m2
These modifiers are not currently implemented on Tango.

cross, latch, touch, trim, snapshot
These modifiers are not currently implemented on Tango.

to start, to end, punch, loop, gaps
These modifiers control various automations functions.

For Nuendo, ***to start, to end, punch and loop*** toggle those functions in the Automation Panel (use the custom key to open/close the Automation Panel). Tango cannot currently read the state of these parameters, so refer to the Automation Panel to see the state of each parameter).

For Logic, none of these buttons are implemented yet.

TOUCH SCREEN

IMPORTANT:

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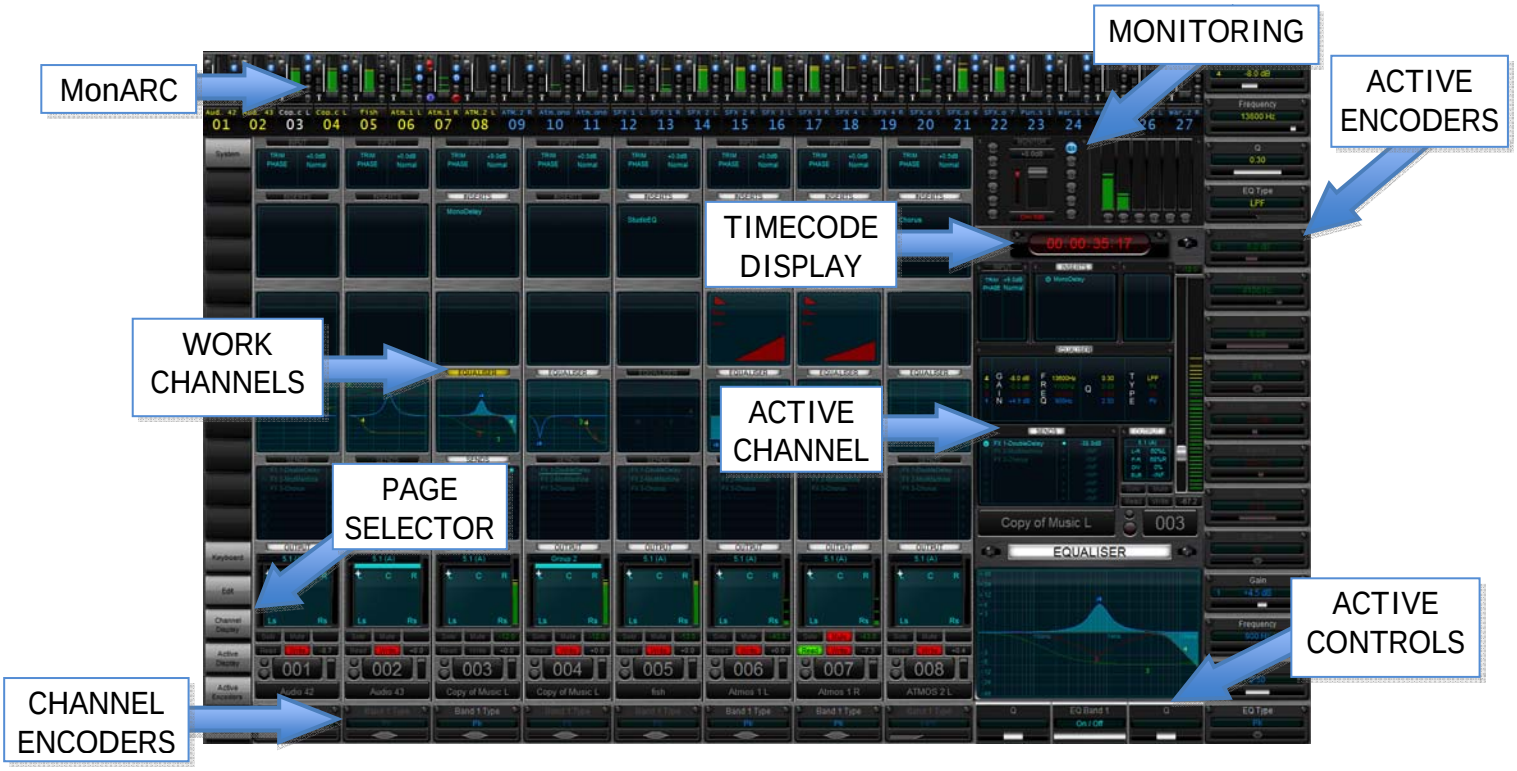
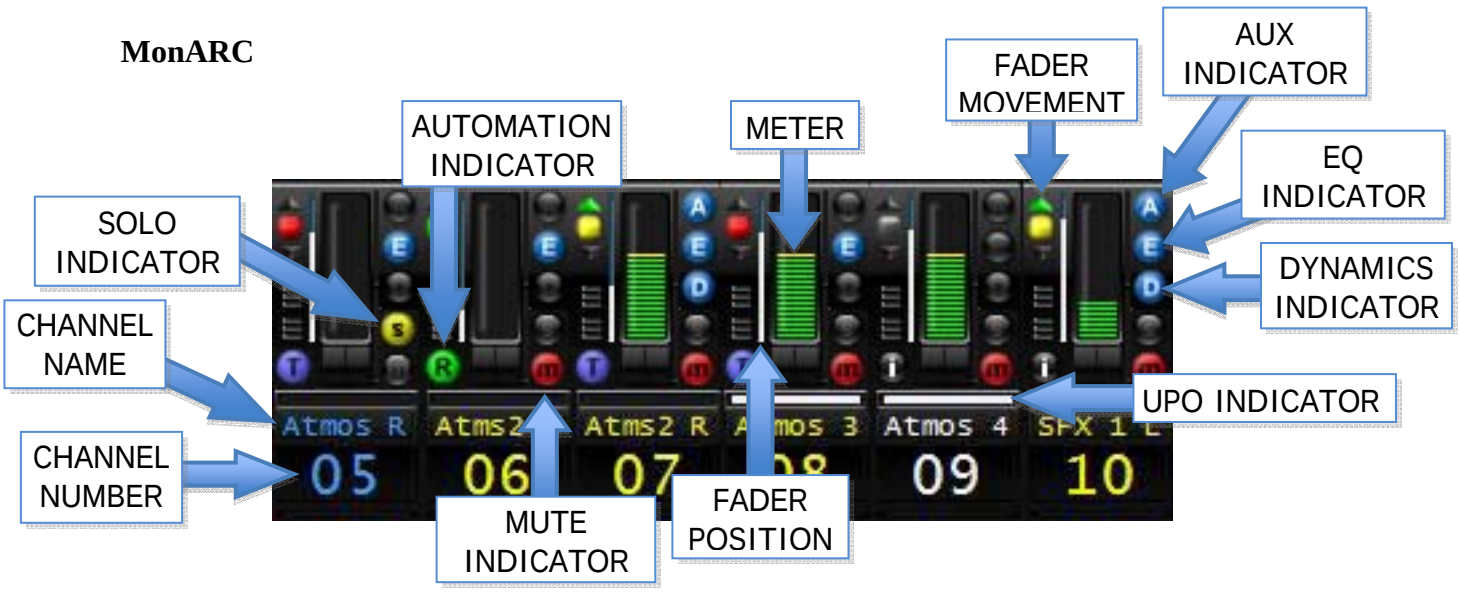


MonARC



FADER POSITION and MOVEMENT
The vertical white line shows the fader position, while the up and down triangles show fader movement, and the central rectangle shows when the fader is touched.

AUTOMATION INDICATOR
The automation mode is shown here. Blue T = touch (read+write), Red W = write, Green R = read, dark i = isolate, Yellow Tr = trim.
NOTE: not all workstations support all automation modes.

METER
26 segment channel meter with instantaneous and permanent peak hold.

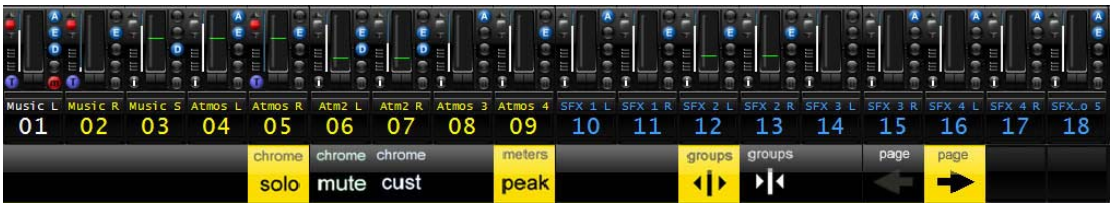
AUX, EQ and DYNAMICS INDICATORS
These blue indicators are on if any of the aux sends, EQ or dynamics processors are on.

SOLO and MUTE INDICATORS
These indicators are on if the channel is in solo or muted.

CHANNEL NAME AND NUMBER
The channel name and number are displayed here. When in group compact mode (see below), the number and name of the first channel in the group is displayed.

UPO INDICATOR
The Universal Programmable Overview indicator is a light that changes its meaning depending on what you are currently doing. For example, in group mode, it will show you which channels are currently grouped. When an arc modifier is held, it shows all the channels that are in the same state. When storing or recalling ergonomic spreads, it shows which MonARC segments are being used for storage.

MonARC Options
The MonARC options are accessible by first touching the MonARC (this gives the MonARC focus), then pressing and holding the SMART button which will display the MonARC Options window as shown below.



The options are simply selected by touching them.

The ***chrome*** modifier functions are not currently implemented on Tango.

The ***groups expand*** option if the default view and will make all channels visible and selectable on the MonARC display.

The ***group compact*** option will compact the MonARC display combining any channels that have their faders grouped.

NOTE: the other parameters on the channels may not be grouped and hence the various indicators may show ½ icons indicating that the parameters in the group are not the same. If a large number of channels are grouped together, the metering will only show up to 6 channels.

The ***page left*** and ***page right*** options moves the MonARC display by page of 27 channels.

PAGE SELECTOR
Running down the left hand side of the touch screen are 18 Page Selector buttons. Many are empty at the moment; these will be used for a variety of functions in the future. The current pages are:

SYSTEM
This button opens the SYSTEM menu for Tango. The system menu then appears on the right hand side of the Tango screen (replacing the Active Channel and Active Encoder display areas). See the System Page description below.

KEYBOARD
This button opens the Virtual Keyboard which is used for text entry on your workstation computer (so you don't have to waste precious space for a keyboard when you are mixing and editing!). See below for a full description.

EDIT
This button opens the Virtual Edit Panel which is used to control virtually any workstation function. For example, instead of having to type <Ctrl> + <Shift> + "Z" on a keyboard for Edit Redo, simply press the Edit Redo button in the Edit Panel! See below for a full description.

CHANNEL DISPLAY
This button toggles the work channel display.
Currently, there is only a single layout and so this button will not do anything.

ACTIVE DISPLAY
This button toggles the active channel display.
Currently, only the Panner and Dynamics have alternative channel display layouts.

ACTIVE ENCODERS
This button toggles the active encoders display.
Currently, only the EQ in Nuendo has an alternative active encoder layout.

CHANNEL ENCODERS
This button locks and unlocks channel encoder parameters.
Currently, this feature is not implemented.

WORK CHANNELS,
The main channel area consists of 8 work channel strips that display various channel parameters. These are aligned with the faders below the screen.

Each of these strips is divided into sections which can be touched to assign their controls to the active and channel encoders. This also changes the active channel display to show the selected section in detail.

If a section is blank, this indicates it is not present in the workstation channel strip. If all sections are blank, this indicates that the channel is not present in the workstation.

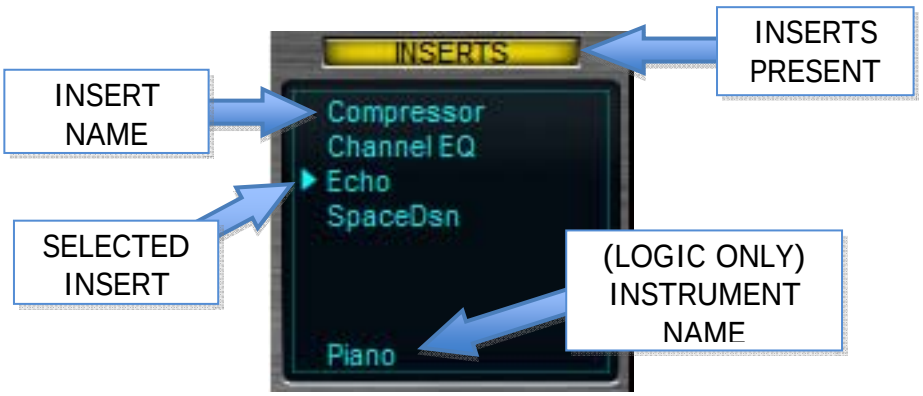
NOTE: Tango uses an empty name to determine if a channel exists, so if you have a track in your workstation that does not appear in Tango, check that it has at least one character in its name!

NOTE: Nuendo can hide channels in its mixer interface screen. If a track is hidden in this screen, it is also hidden from Tango.

INPUT

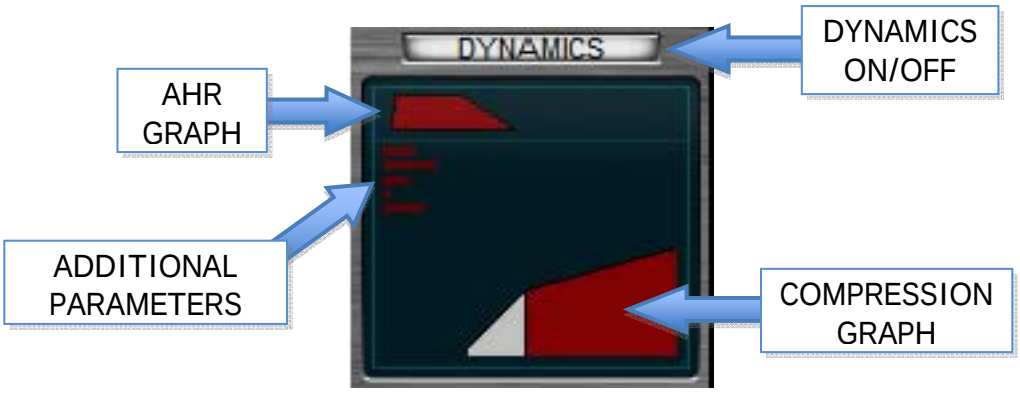
For Nuendo, this shows the Trim and Phase of the channel.
For Logic, this section is empty.

INSERTS



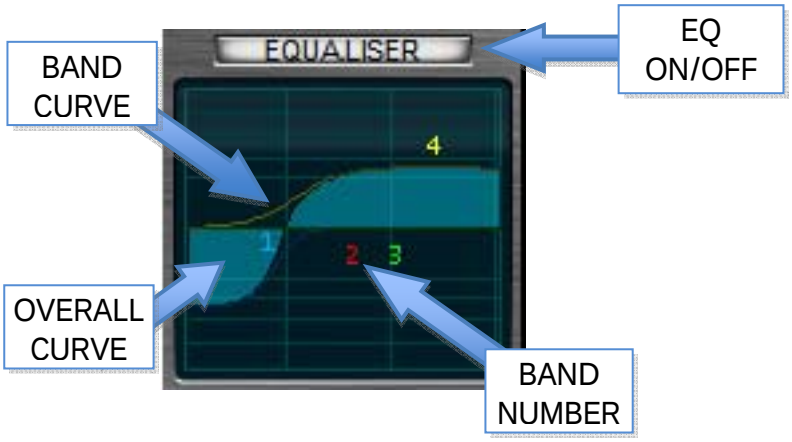
For Nuendo, this shows the 8 inserted effects of the channel.
For Logic, this shows the first 7 inserted effects of the channel plus the inserted instrument (if it is an instrument channel).

DYNAMICS



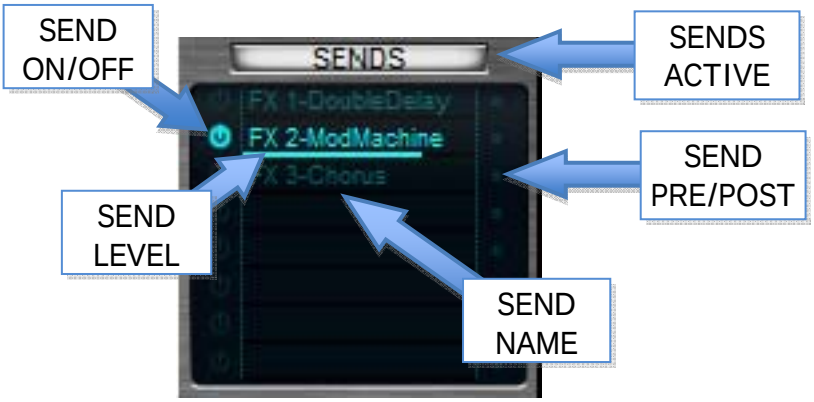
For Nuendo, this is a graphical representation of the VS3 COMPRESSOR plug-in (if it is inserted in this channel).
For Logic, this is a graphical representation of the COMPRESSOR plug-in (if it is inserted in this channel).

EQUALISER



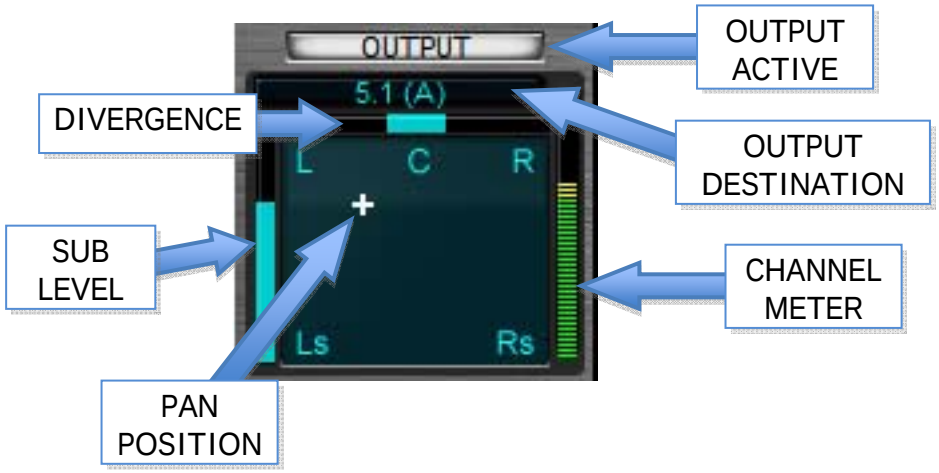
For Nuendo, this is a graphical representation of the 4 band equalizer which is always present for every channel.
For Logic, this is a graphical representation of the 8 band Channel EQ plug-in (if it is inserted in this channel).

SENDS



For both Logic and Nuendo, this is a graphical representation of 8 auxiliary send slots.

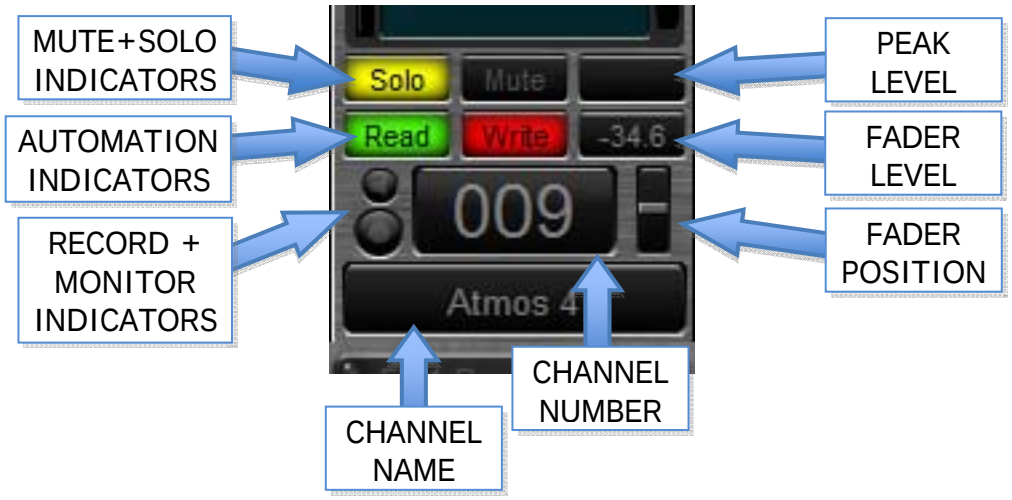
PAN



For Nuendo and Logic, this is a graphical representation of the panner (either stereo or surround). The name of the channel destination is displayed above the panner. The divergence and sub level are also displayed, as is a 53 segment channel meter.

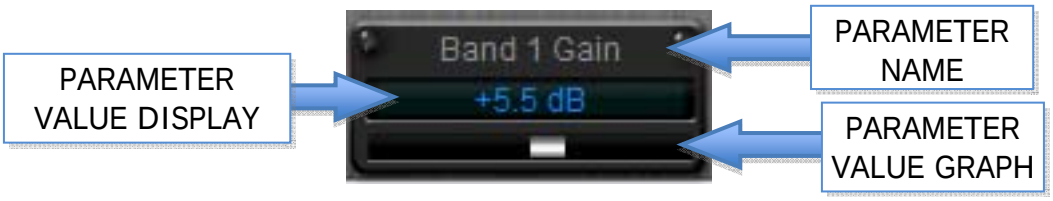
CHANNEL INFORMATION

This section contains indicators that describe the state of the channel in that slot.



CHANNEL ENCODER DISPLAY

The Channel Encoder display is at the bottom of each channel strip and shows the parameter currently assigned to each of the Channel Encoders that run under the Touch Screen.



These parameters change depending on what section of the Main Channel Area has been touched or last controlled.

Depending on the function, the Channel Encoders may also be pressed to toggle parameters (such as aux on/off or phase).

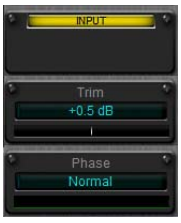
ACITVE ENCODERS

Like the Channel Encoders, the Active Encoder Display shows the state of the parameter currently assigned to each of the encoders that run down the right hand side of the Touch Screen.

These parameters change depending on what section of the Main Channel Area has been touched.

Depending on the function, the Channel Encoders may also be pressed to toggle parameters (such as aux on/off or phase).

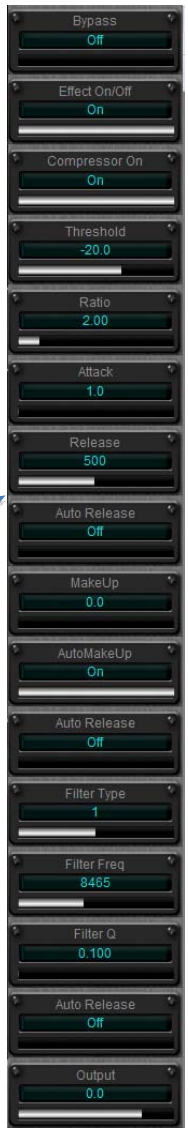
INPUT



DYNAMICS

The Active Encoder Display shows the currently controllable parameters, depending on the selected section and workstation

INSERTS



Insert Parameters change for each selected plug-in. The number of plug-in parameters depends completely on the plug-in itself

MULTIPLE ACTIVE ENCODER DISPLAYS

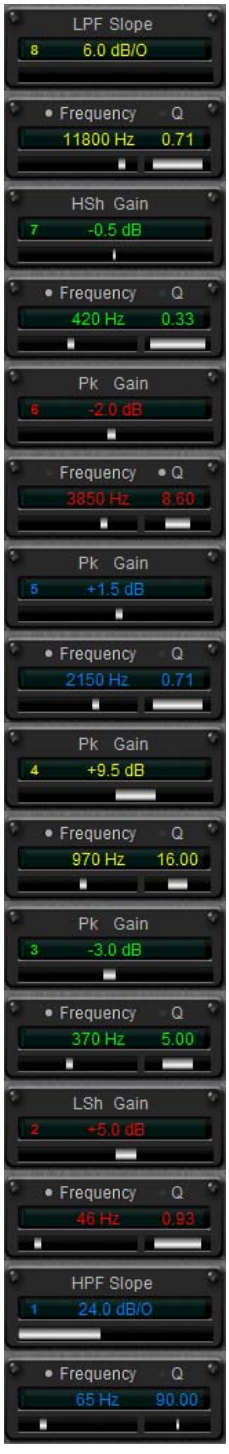
Some channel sections may have multiple active encoder displays available. Press the "Active Encoders" button on the Page Selector (left hand side of the touch screen), to change the active encoder display between available layouts.

For example, Tango has two active encoder display screens for the EQ when connected to Nuendo and Logic has its own as well!

NUENDO 4
DEFAULT EQ

NUENDO 4
ALT EQ

LOGIC PRO 8
DEFAULT EQ



CHANGING THE PARAMETER BEING CONTROLLED

Some active encoder displays have more than one parameter displayed for each encoder. In this case the parameter being controlled will have an indicator. The parameter being controlled can be toggled by pressing the encoder.

For example, the Logic Pro 8 EQ has 8 bands of EQ and therefore only has 2 encoders per band. This means that the Frequency and Q parameters are on the same encoder. Pressing this encoder will toggle control between Frequency and Q while pressing the gain encoder will toggle the EQ band on and off.

ACTIVE CONTROLS

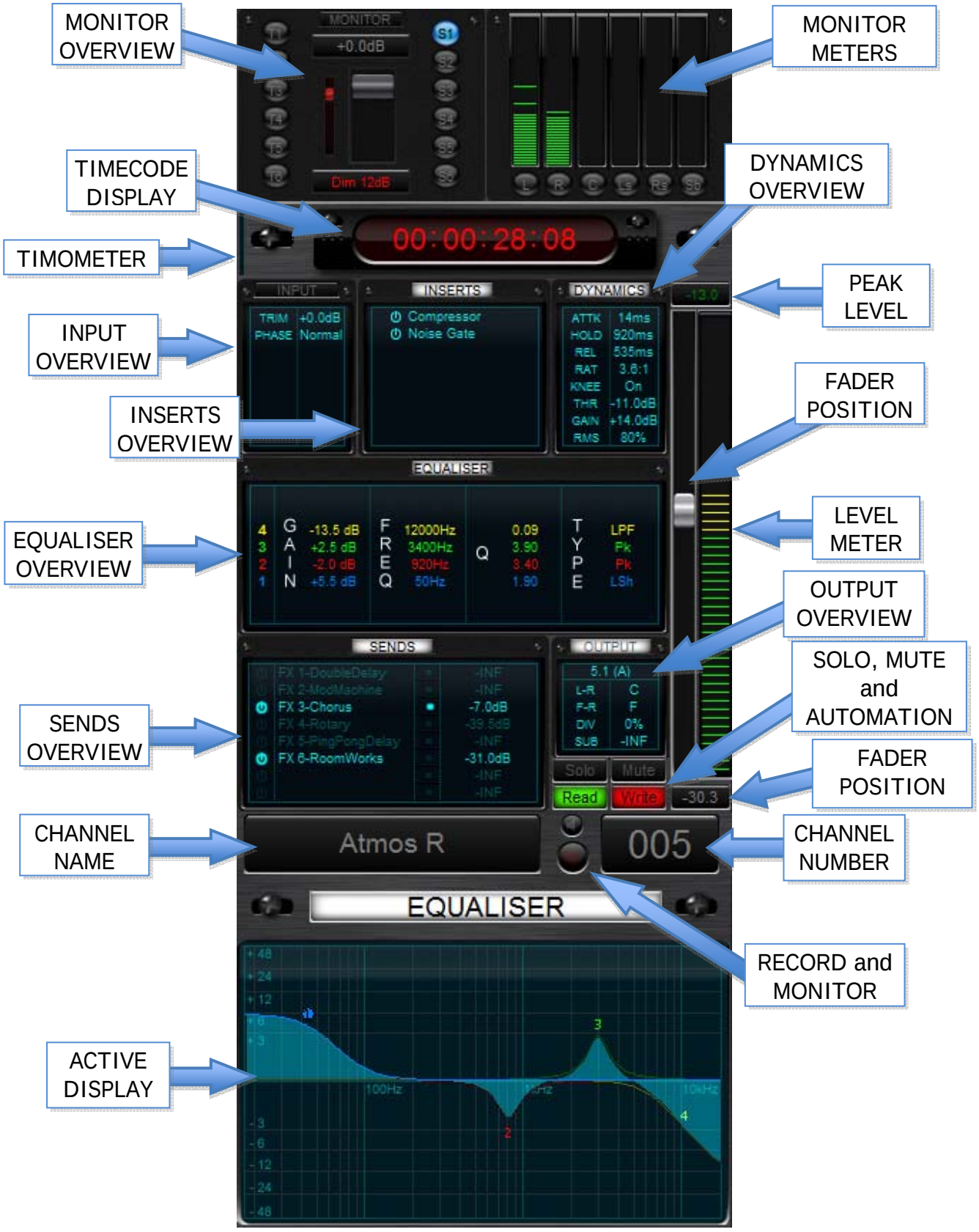
Like the Channel and Active Encoders, the Active Control Display shows the state of the parameter currently assigned to each of the Active Controls below them.

These controls follow the currently controlled parameter. You can also touch the Active Encoder Display to assign a parameter directly. The parameter will also automatically change when a new section is selected.

There are three active controls:
The left most control is an encoder whose sensitivity is set to be the finest possible control of the selected parameter.
The middle control is a lit button which can be used to control toggle parameters.
The right most control is a motorised pot with end stops which allows direct positioning of any parameter for super fast control.

ACTIVE CHANNEL AREA

The active channel area displays a detailed overview of every parameter available on a channel strip. The main area is shown here.



MONITOR OVERVIEW
Overview of the monitor controls including external and internal monitoring sources, graphical and numerical volume and dim displays

MONITOR METERS
5.1 Monitor metering including individual speaker solo/mute

TIMECODE DISPLAY
SMPTE time code display

TIMOMMETER
Graphical timommeter display

OVERVIEW DISPLAYS
Detailed numerical overviews of each of the channel sections including; INPUT, INSERTS, DYNAMICS, EQUALISER, SENDS and OUTPUT

METERING
53 segment metering including peak value numeric display

FADER POSITION
Graphical and Numerical fader position

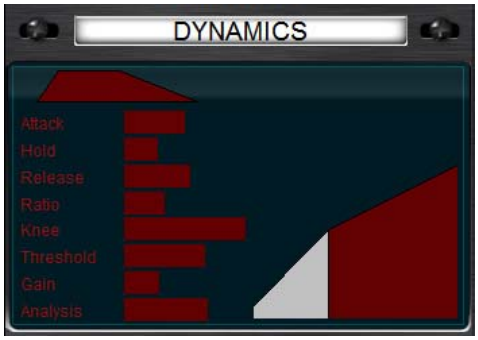
CHANNEL STATUS
Channel status indicators including; SOLO, MUTE, AUTOMATION, RECORD, MONITOR, CHANNEL NAME and NUMBER

ACTIVE DISPLAY
A large display area which changes according to the section being interrogated or controlled

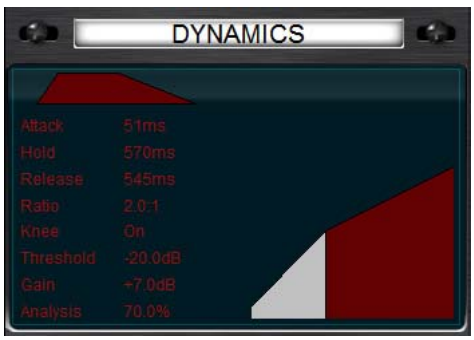
MULTIPLE ACTIVE CHANNEL DISPLAYS
Some channel sections may have multiple active channel displays available. Press the "Active Display" button on the Page Selector (left hand side of the touch screen), to change the active channel display between available layouts.

For example, Tango has two layouts for the dynamics and two for the panner.

DYNAMICS WITH GRAPHICAL PARAMETERS



DYNAMICS WITH NUMERIC PARAMETERS



PANNER WITH ROUTING DISPLAY

PANNER WITH STANDARD DISPLAY

Tango keeps track of the last layouts used for each section; so if you switch control away from the panner and later return to it, the display will be the remembered!

ROUTING WITH NUENDO

Routing shows and controls the output destination for each channel in Nuendo. Outputs in Nuendo are assigned to one of 6 Mix Stems in Tango while Groups and Effects are assigned to one of 24 Groups in Tango. In order for Tango to correctly assign mixes and groups, the following naming rules must be used.

Mix Stems

Tango will order the mix stems in the same order as Nuendo lists them in the VST Connections – Outputs window. So if you have outputs defined as “5.1” then “Stereo” in the outputs page, “5.1” will be assigned to mix stem A and “Stereo” will be assigned to mix stem B.

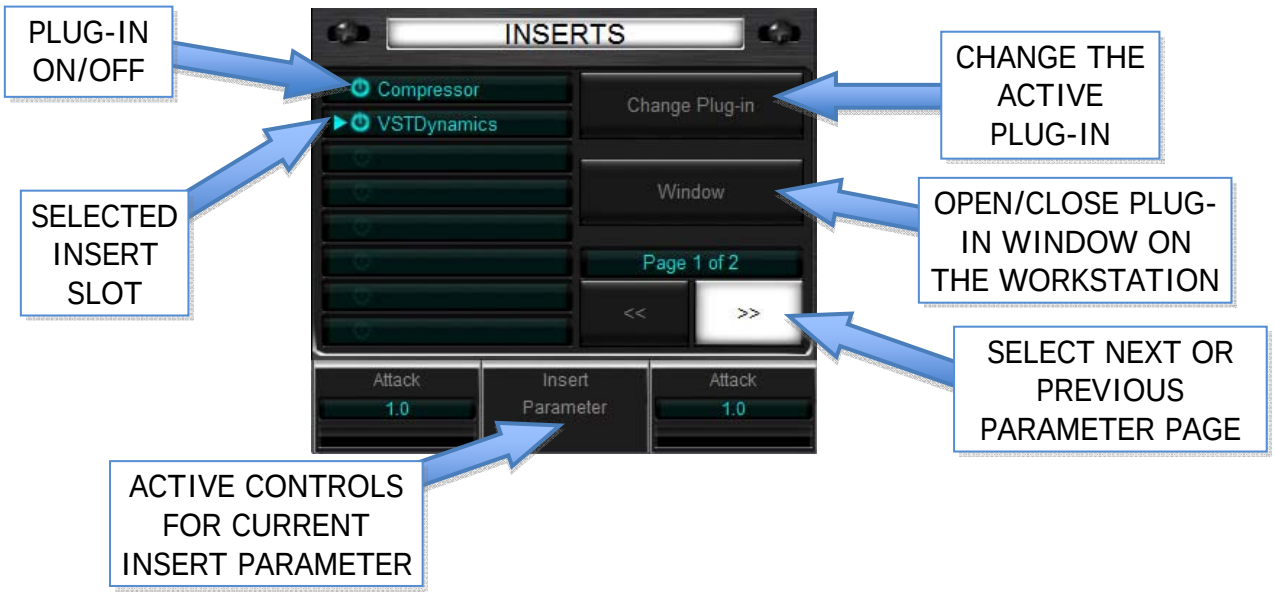
If a particular order is desired, then the output bus names in Nuendo can include (A), (B), (C), (D), (E) or (F) in the name to be assigned to the corresponding mix stem button in Tango. For example “Stereo (A)” will be assigned to mix stem A, and “5.1 (B) will be assigned to mix stem B. The same applies for Groups and FX, so if you want a group to be assigned to a mix stem in tango, simply include the stem letter (in brackets) in the name!

Groups and FX
Tango will assign the groups and FX busses in Nuendo to group buttons in Tango using the default group names and FX names. So “Group 1” will be assigned to Group 1, “Group 2” to Group 2, etc. The FX busses are assigned from Group 17 to Group 24, so “FX 1” will be assigned to Group 17, “FX 2” to Group 18, etc.
If you wish to name your Groups and FX, then you must include a suffix in the name to tell Tango which group button you wish the group or FX to be assigned. For example, if you want to name a group “Vocals” and have it assigned to Group 1, then you must name the group “Vocals (G1)”. The same applies for FX and even Outputs!

NOTE: If Tango discovers that two groups, FX or outputs have been given the same assignment (i.e. two busses both have the (G2) label in their name, then only the first bus will be assigned, and the second bus will not be visible or assignable from within Tango.

ROUTING WITH LOGIC PRO 8
Routing cannot be changed from Tango with Logic. If a Logic Channel is assigned to the default stereo destination “Output 1-2” it will be shown to be assigned to the “Stereo” mix in Tango. If it is assigned to the “Surround” output, it will be shown to be assigned to the “Surround” mix in Tango. If it is assigned to Buses 1 through 24, it will be shown to be assigned to “Group 1” – “Group 24” in Tango. If they are assigned to Buses 25 or higher, they will not appear assigned on Tango.

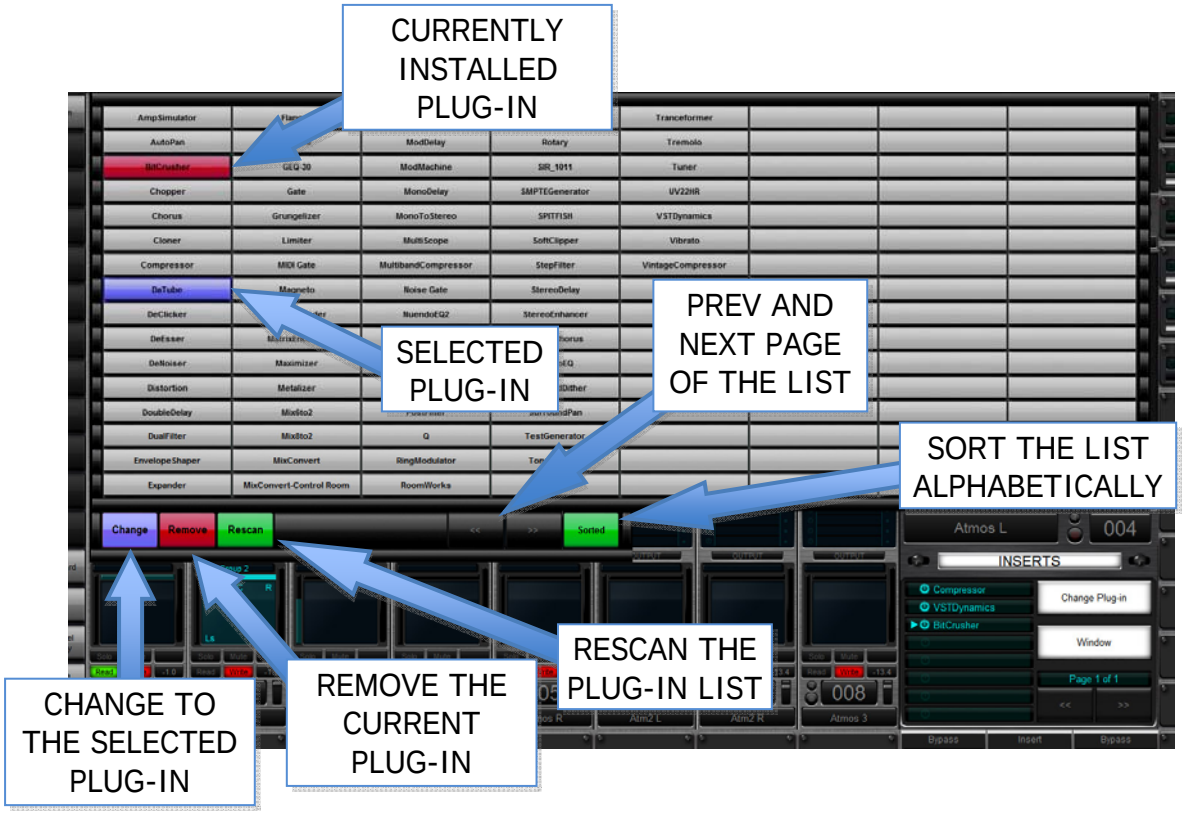
INSERT CONTROL
Tango is able to list, control and change the inserts for the select slot in the selected workstation channel. This function operates the same way for both Nuendo 4 and Logic Pro 8. The only exception is that for Logic, there are only 7 plug-in slots available, as the last slot is reserved for instruments. Nuendo has all 8 slots available for plug-ins as instrument control is not yet available.



The 8 plug-in slots are shown in the Active Display along with touch buttons to change what parameters Tango is controlling as well as changing the plug-in and opening and closing the plug-in window on the workstation.

CHANGING THE INSERT FROM TANGO

Press the “Change Plug-In” touch button on the Tango Screen to bring up the Plug-In Add window.



To change to a new Plug-in, simply touch the desired plug-in button and touch the “Change” button.

To remove an existing Plug-in, simply touch the “Remove” button.

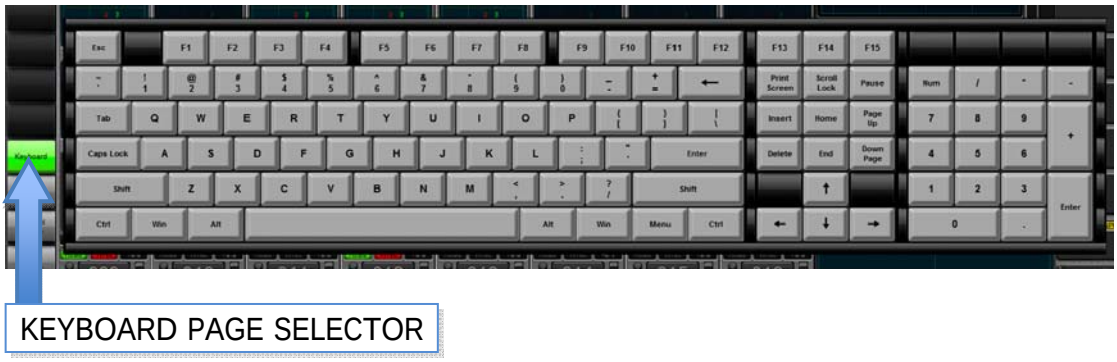
To Rescan the list, simply touch the “Rescan” button.

NOTE: Nuendo 4 will only scan the list once (the first time you go into the change page), if you get an incomplete list, or need to rescan it, use the Rescan function. Logic Pro 8 will rescan the list whenever you change slots of channels. Logic Pro 8 has different lists depending on which channel types, and which plug-ins are installed in the various insert slots.

To Alphabetically sort the plug-in list, simple touch the “Sorted” button.

If you have more than 128 plug-ins installed, then use the Prev and Next Page buttons to move though the list.

VIRTUAL KEYBOARD



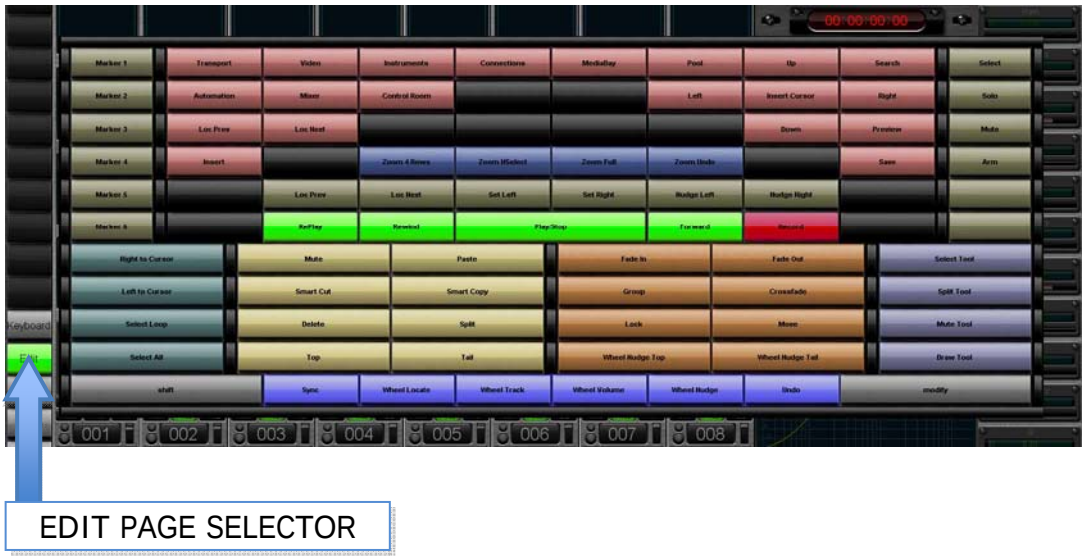
Tango features an on screen keyboard utilizing its touch screen technology. To access the keyboard, press the “Keyboard” button on the Page Selector (left hand side of the touch screen).

It functions just like a regular keyboard, but only one key can be pressed at any one time. You must have the Smart AV Virtual Keyboard software installed on your DAW for this on screen keyboard to function (see Tango Install Guide).

The “Shift”, “Ctrl”, “Win” and “Alt” keys will all latch when touched and will un-latch when touched a second time. The latched state will be displayed on the screen as the button staying depressed.

NOTE: the latched keys will remain on even if the keyboard window is closed on Tango, if you also have a normal keyboard attached to your workstation, the latched key will remain in effect. So if you are typing on your workstation and it is doing strange things, check that no modifier keys are held down on the Tango Virtual Keyboard!

VIRTUAL EDIT PANEL



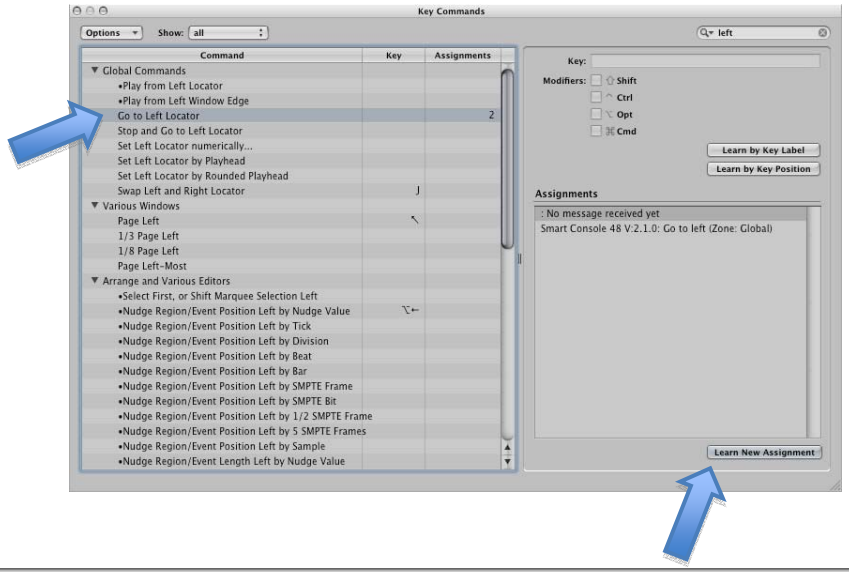
Tango also features an on screen Edit Panel utilizing its touch screen technology. This panel access many commonly used edit features within Logic or Nuendo. To access the Edit Panel, press the “Edit” button on the Page Selector (left hand side of the touch screen).

LOGIC PRO 8

You can assign these keys to be any key command you like within Logic by using the Key Commands window and the “LEARN NEW ASSIGNMENT” button.

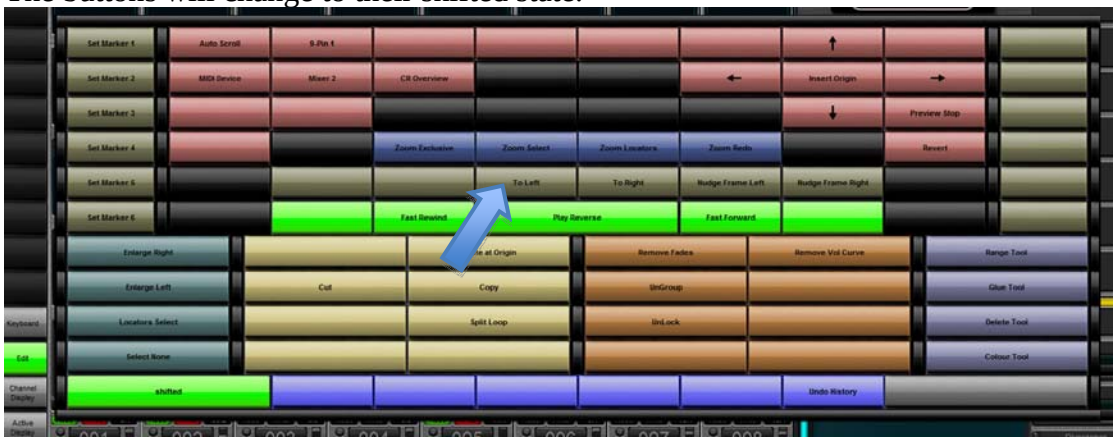
For example: to assign the “Shift” + “To Left” button in the Edit Panel to the “Go to Left Locator” function in Logic, do the following:

1. On Tango, Open the Edit Panel by pressing the “Edit” button on the Page Selector.
2. On Logic, Open Preferences - Key Commands...
3. Find the “Go to Left Locator” command and select it

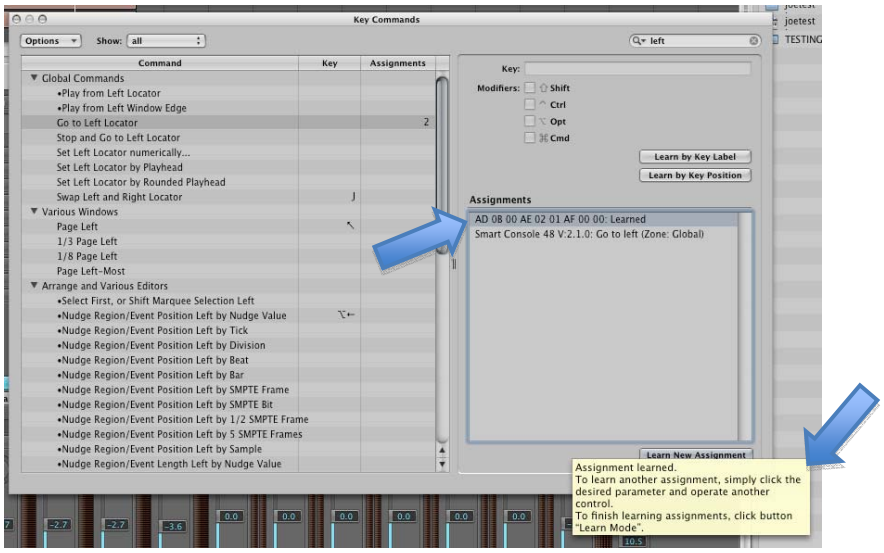


4. Click on the “Learn New Assignment” button.
5. On Tango, Press the SHIFT button in the lower left corner of the Edit Panel –

The buttons will change to their shifted state.



6. Now press the “To Left” button on the Edit Panel. You should briefly see the following message in Logic and the assignment should be made.

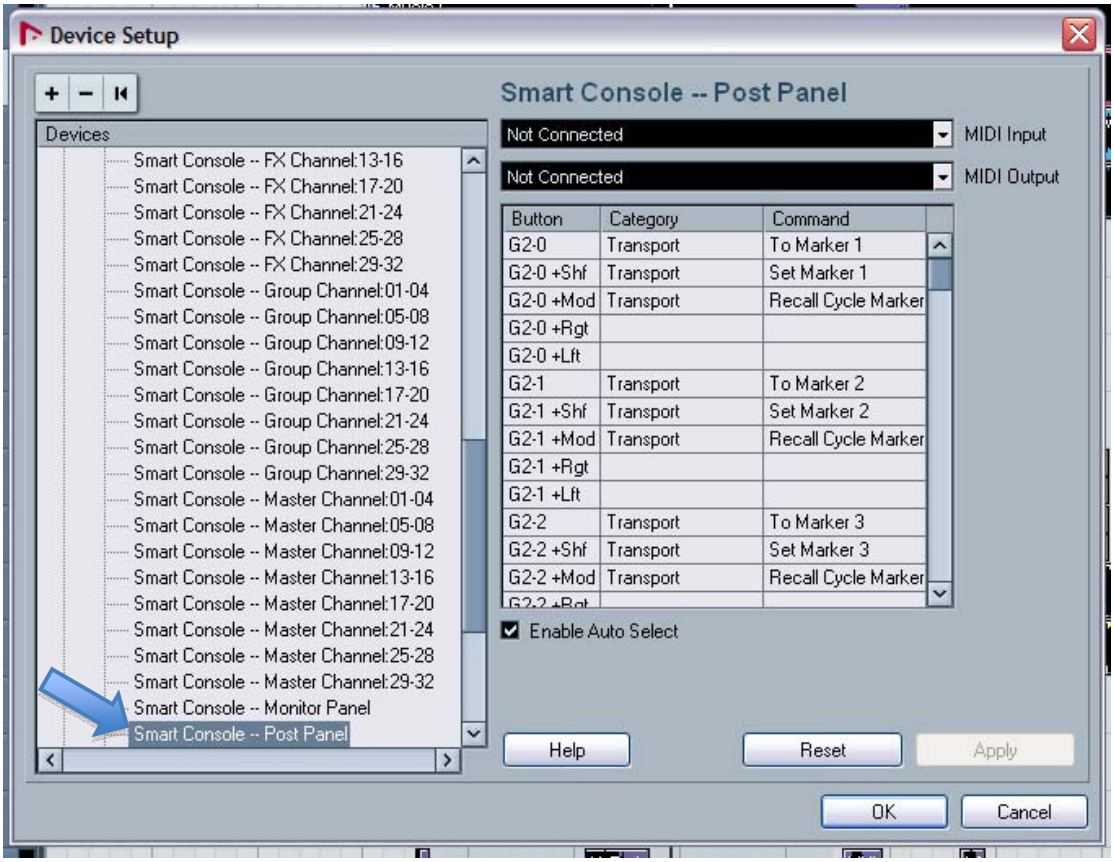


7. You can repeat the steps to assign the remainder of the keys.

Assigning the keys in the Edit Panel will ALSO assign them to the transport buttons on the Tango Console. See the “TRANSPORT BUTTONS” section above to determine which keys are mapped to which edit panel buttons.

NUENDO 4
There is a default mapping already setup in Nuendo 4 for the Edit Panel.

You can re-assign these keys to be any key command you like within Nuendo by using the Devices > Device Setup... window. Select the Smart Console -- Post Panel device and you will see the following window.

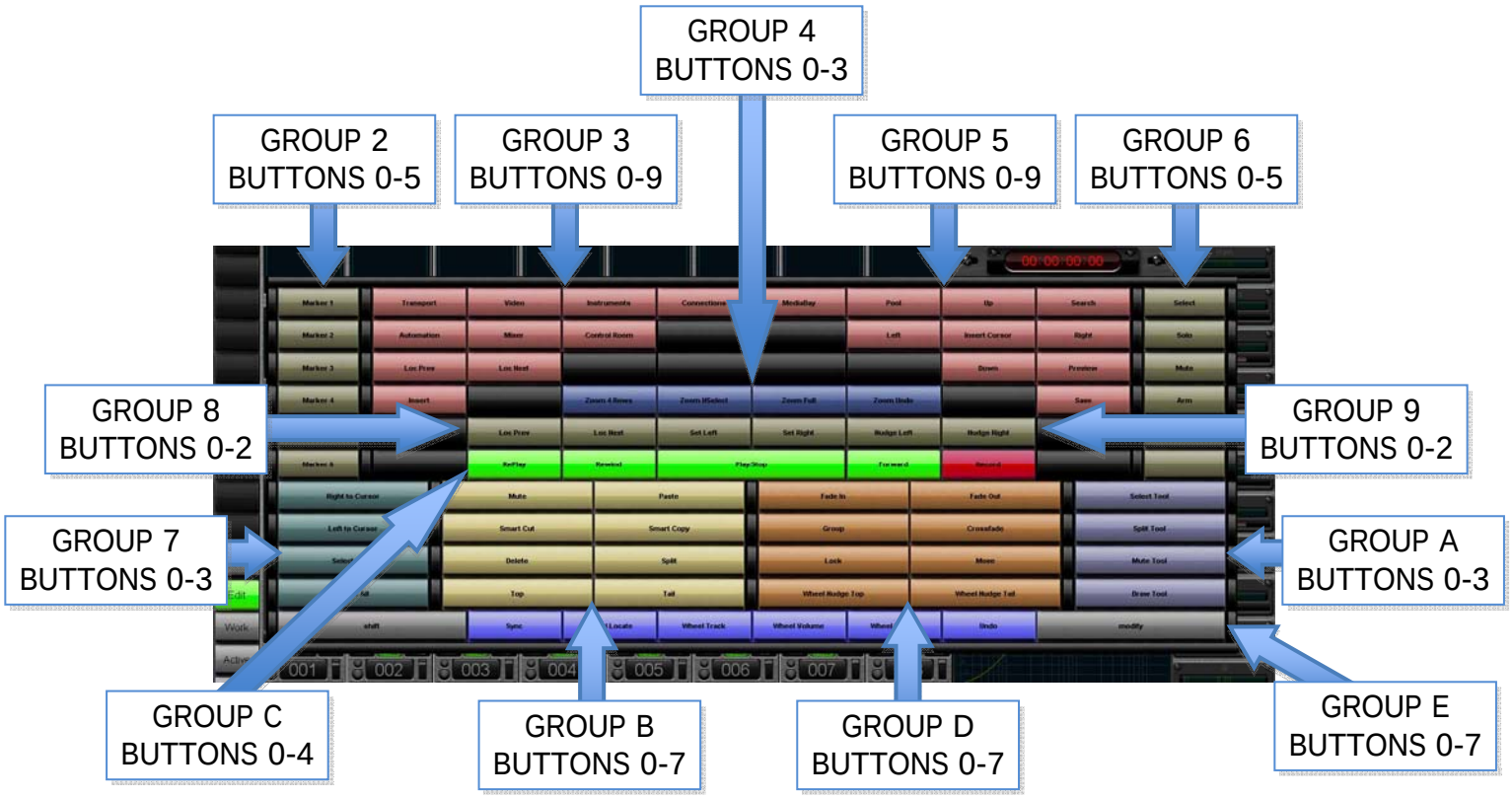


In the window you can select the Category and Command to assign for each button.

The buttons are defined in groups and allow assignment of 5 states for each button.

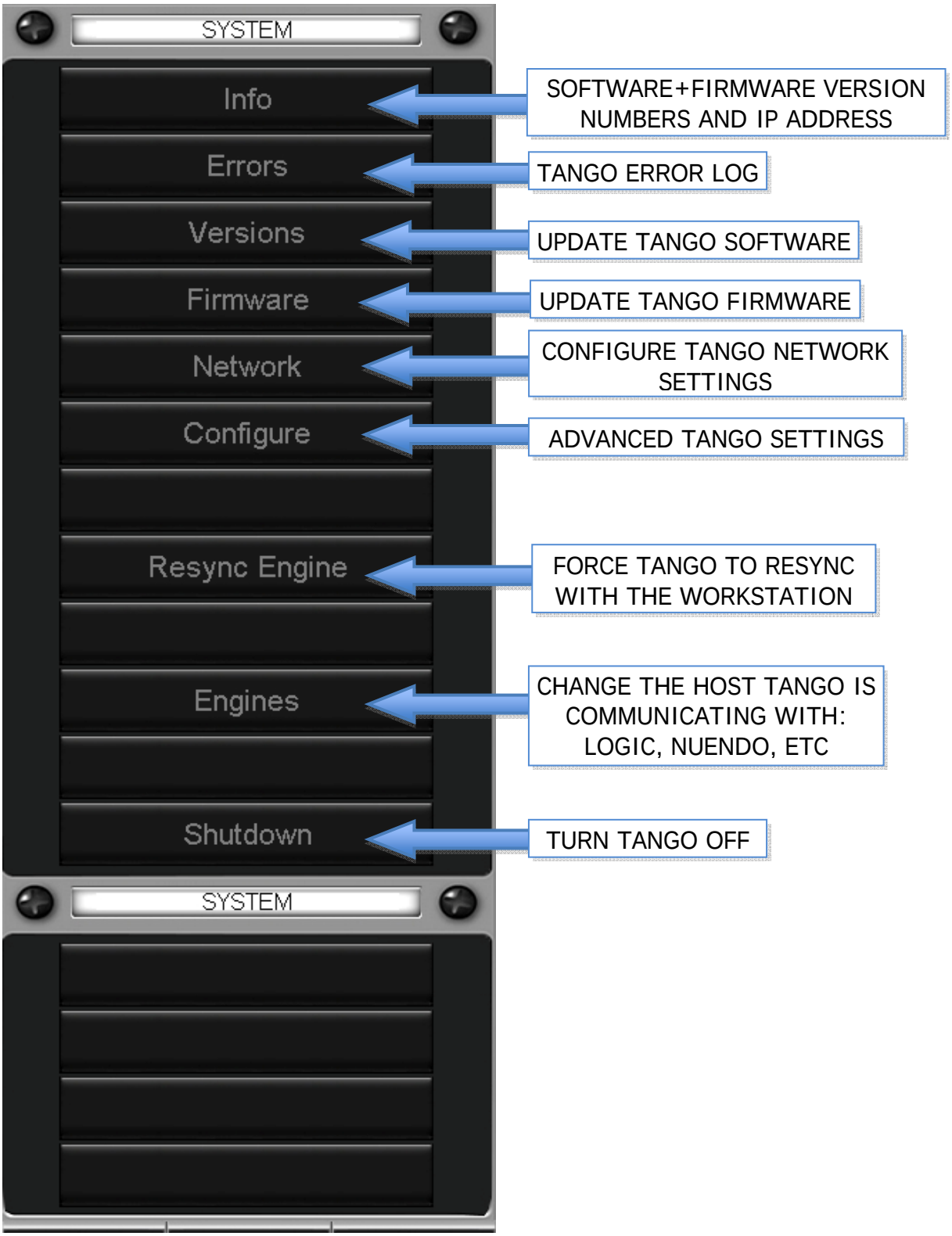
G2-0	assigns group 2 button 0 directly
G2-0 + Shf	assigns group 2 button 0 with the shift button held
G2-0 + Mod	assigns group 2 button 0 with the modify button held
G2-0 + Rgt	assigns group 2 button 0 with turning the wheel right
G2-0 + Lft	assigns group 2 button 0 with turning the wheel left

The buttons are assigned to groups shown below



SYSTEM MENU

To access the System Menu – press the System button on the Page Selector on the left of the Touch Screen.



TOUCHSCREEN CLEANING

Your Tango Smart Console utilises an Acoustic Wave Touchscreen. These units provide a sharp image and the glass surface has a high level of durability, and proven reliability in a professional environment.

The Touchscreen is a sensitive part of the system which needs to be treated carefully and kept clean. If the screen is allowed to get dirty it could result in false touch readings.

The surface of the screen is glass and can be kept clean using any normal glass cleaner. Enclosed with Tango is a micro-fibre cloth suitable for cleaning the Touchscreen surface. To remove stubborn marks the cloth may be dampened with water.

> **WARNING:**
>
> Do not excessively wet the screen whilst cleaning as it may damage the sensitive electronics around the screens perimeter and will invalidate your consoles warrantee.

TROUBLESHOOTING

Tango won't turn on?
Please check that Tango's power supply is turned on.

Tango won't connect with your host?
Please check that Tango's host IP matches the IP of your host.

If it does match and still Tango doesn't connect please ensure that your host software has been correctly setup as described in the Software Setup By Host section.

Tango won't shut down?
Should Tango experience any problems shutting down, you can force shut it down by holding down the On switch for a few seconds.

Tango's Faders behave erratically or don't move?
Please shut Tango down and restart it.

For advanced troubleshooting please refer to the Tango Service Manual.