

Subject: Yamaha Tio1608-D2 Update

Dear Project Managers,

The Yamaha Tio1608-D2 I/O racks are now live. Below are the key points you need to know:

Overview:

- **Dante Integration:** Fully operational with TF, CL, & QL series; supports remote head-amp control.
- **I/O:** 16 mic/line inputs, 8 line outputs per unit.
- **Quick Config:** Simplifies setup on TF consoles.
- **Audio Quality:** 24-bit/96kHz.
- **Network Redundancy:** Both primary and secondary Dante ports active.
- **Rack Mount:** Installed in standard 2U racks.

Comparison: Tio1608-D2 vs. Rio 3224 Series

- **I/O Count:** Tio – 16/8 vs. Rio – up to 32/24.
- **Sampling Rate:** Both support up to 96kHz.
- **Control & Network:** Both offer remote head amp control and Dante with redundancy.
- **Compatibility:** Tio supports TF, CL, QL; Rio supports CL, QL, RIVAGE PM.
- **Size:** Tio=Less IO; Rio=More IO

DIP Switch Configuration (Rear Panel):

- **Unit ID (SW1 & SW2):** Assigns device ID when not using Quick Config.
- **Compatibility Mode (SW3, SW7, SW8):** Required for QL series; limits sample rate to 48kHz and presents as a D1 model.
- **Factory Reset (SW3):** ON during power-up resets to defaults.
- **Secondary Port Mode (SW4):** Selects redundancy vs. daisy-chain.
- **IP Mode (SW5 & SW6):** Choose Auto IP, DHCP, or Static.
- **Startup Mode (SW7 & SW8):** Choose Resume (retain previous settings) or Refresh (load mixer settings).





Attached are screenshots of the DIP switch settings for your reference.

Please let me know if you have any questions.

• **Switches 1 and 2 (unit ID)**

These DIP switches, along with the [UNIT ID], determine the unit's UNIT ID when Quick Config is not used.

The UNIT ID is determined as follows.



Switch position	[UNIT ID] = 1	[UNIT ID] = 2	[UNIT ID] = 3
 1 2	01	02	03
 1 2	04	05	06
 1 2	07	08	09
 1 2	0A	0B	0C

When Quick Config is used, these switches are disabled.

• **Switch 3 (initialize mode)**

This DIP switch is used to reset the unit to its factory default settings.

After the unit is reset, it starts up using the system mode that corresponds to the position of switches 7 and 8.

Switch position	Initialize mode
 3	Initialize mode is off (unit will not be reset when it is turned on)
 3	Initialize mode is on (unit will be reset when it is turned on)



NOTE

If switches 7 and 8 are set to the "update mode" or "diagnostic mode" positions, the unit will not be reset.

• **Switches 3, 7 and 8 (Tio1608-D compatibility mode)**

This mode is used to connect to older models that are not compatible with the Tio1608-D2.

In the compatibility mode, the sampling frequency is set to the maximum 48 kHz and external devices recognize Tio1608-D2 as Tio1608-D.

Switch position	Operating mode
 3 7 8	Tio1608-D compatibility mode
 3 7 8	Cancel the Tio1608-D compatibility mode (initialize mode)

- **Activating the Tio1608-D compatibility mode**



Configure the dip switches as shown above for "Tio1608-D compatibility mode" and then switch the power ON. When the red indicators on the front panel stop flashing and only the green indicators are flashing, that indicates the compatibility mode has been successfully activated. Then switch the power OFF, reconfigure the dip switch settings appropriately, and switch the power back ON before using the system. The green [SYSTEM] indicators will flash for about 20 seconds only after switching to the Tio1608-D compatibility mode.

- **Canceling the Tio1608-D compatibility mode**

Configure the dip switches as shown above for "Cancel the Tio1608-D compatibility mode" and then switch the power ON. When the red indicators on the front panel stop flashing and only the green indicators are flashing, that indicates the compatibility mode has been successfully canceled. Then switch the power OFF, reconfigure the dip switch settings appropriately, and switch the power back ON before using the system.

• **Switch 4 (Dante SECONDARY port mode)**

This switch determines the operating mode of the Dante [SECONDARY].

Switch position	[SECONDARY] operating mode
 4	Daisy chain connection
 4	Redundant connection





When Quick Config is used, these switches are disabled.

NOTE

When the Switch 4 is set to "Redundant connection", the head amp control function (→page 15) is only available via the Dante [PRIMARY].





• **Switches 5 and 6 (IP address mode)**

These switches determine how the unit's IP address is set.

Switch position	IP address mode
 5 6	Auto IP (link local)
 5 6	DHCP
 5 6	Static IP Auto (192.168.0.ID)
 5 6	Static IP Manual The IP address is specified from an external device such as R Remote V3.

• **Switches 7 and 8 (start up mode)**

These switches determine how the unit starts up during start up mode. When set to "refresh" mode, the settings of the mixer are applied when the unit starts up. When set to "resume" mode, the unit returns to the same state as the last time it was used.

Switch position	Start up mode
 7 8	REFRESH mode (normal operation)
 7 8	RESUME mode (normal operation)
 7 8	Update mode
 7 8	Diagnostic mode

When Quick Config is used, the "normal operation" mode settings are disabled.

NOTE

- Update mode and diagnostic mode are used when performing maintenance on the unit. Normally you will not use these modes.
- Update mode and diagnostic mode can be enabled even when using Quick Config. Normally you will not use these modes.