# **Tn Series**

## **Power Amplifiers**





**T5n Rear Panel** 

### Defining the standard for a new generation of large-scale live sound systems.

- High power for tour applications: T5n = 2500W, T4n = 2200W, T3n = 1900W (stereo, into 2 ohms).
- Exhaustive vibration-reduction measures have resulted in unprecedented sound quality.
- Extraordinary midrange and high-end detail with solid, commanding bass.
- Stable 2-ohm drive capability is ideal for line array speaker systems.
- Reliability achieved thorough verification of circuits and internal components with carefully selected and test parts.
- A durable exterior, large cooling fans and fan guards, replaceable filters, and other reliability features deliver dependability even under demanding tour conditions.
- Original Yamaha EEEngine amp drive technology achieves drastic reduction in power consumption compared to conventional amplifiers.
- Remote amplifier control and monitoring via the ACD1 or the ACU-16C amplifier control devices.
- Dual mono amplifier configuration with independent power supplies for each channel.
- A variety of input terminals, removable handles, and other features for maximum installation and handling versatility.
- Reliable protection circuit for sure operation.

Tn series amps meet Underwriters Laboratories Inc.'s safety requirements UL60065, 7th ed and CSA C22.2 No. 60065-03 at 2 ohms.

Tn series amps are also certified for safety by Intertek ETL SEMKO to comply with standard EN60065:2002 at 2 ohms.

### **Tn Series**

### **GENERAL SPECIFICATIONS**

Model			T5n	T4n	T3n	T5n	T4n	T3n	T5n	T4n	T3n
			120V			240V			230V		
Output Power	1kHz, THD+N = 1%	2Ω	2500W x 2	2200W x 2	1900W x 2	2500W x 2	2200W x 2	1900W x 2	2500W x 2	2200W x 2	1900W x 2
		4Ω	2200W x 2	1950W x 2	1400W x 2	2500W x 2	2150W x 2	1500W x 2	2350W x 2	2050W x 2	1400W x 2
		8Ω	1350W x 2	1150W x 2	790W x 2	1400W x 2	1250W x 2	850W x 2	1350W x 2	1150W x 2	750W x 2
		4Ω bridge	5000W	4400W	3800W	5000W	4400W	3800W	5000W	4400W	3800W
		8Ω bridge	4400W	3900W	2800W	5000W	4300W	3000W	4700W	4100W	2800W
	1kHz, 20ms burst	2Ω	3400W x 2	2900W x 2	2200W x 2	3600W x 2	3300W x 2	2350W x 2	3400W x 2	3100W x 2	2150W x 2
		4Ω bridge	6800W	5800W	4400W	7200W	6600W	4700W	6800W	6200W	4300W
	Constant voltage	100V Line	1250W x 2/8Ω	-	-	1250W x 2/8Ω	-	-	1250W x 2/8Ω	-	-
	line	70V Line	-	-	625W x 2/8Ω	-	-	625W x 2/8Ω	-	-	625W x 2/8Ω
Voltage Gain	RL=8Ω		26dB/32dB		26dB/32dB			26dB/32dB			
Input Sensitivity	RL=8Ω	26dB position	+16.6dBu	+15.9dBu	+14.2dBu	+16.7dBu	+16.2dBu	+14.5dBu	+16.6dBu	+15.9dBu	+14.0dBu
		32dB position	+10.6dBu	+9.9dBu	+8.2dBu	+10.7dBu	+10.2dBu	+8.5dBu	+10.6dBu	+9.9dBu	+8.0dBu
SN Ratio	20Hz~20kHz, DIN	I AUDIO	107dB	106dB	105dB	107dB	106dB	105dB	107dB	106dB	105dB
Power Consumption	1/8 power (2Ω pink noise)		1600W	1400W	1200W	1600W	1400W	1200W	1600W	1400W	1200W
	Idle		70W	70W	70W	70W	70W	70W	70W	70W	70W
	Standby		5W	5W	5W	5W	5W	5W	5W	5W	5W
THD+N	20Hz~20kHz, 1/2 power, RL=4Ω		Less than 0.1%								
$ \begin{tabular}{ll} \textbf{Frequency Response} & RL=8\Omega, Po=1W, 20Hz-20kHz \\ \end{tabular}$		+0dB, -0.5dB									
Crosstalk	1kHz, half power, $8\Omega$ Att. max, input $600\Omega$ shunt		Less than -67dB								
Damping Factor RL=8Ω, 1kHz		More than 800									
Maximum Input Level			+24dBu								
Input Impedance			20kΩ (balanced), $10$ kΩ (unbalanced)								
Controls	Front panel		POWER switch x 1 (push on/push off), Attenuator x 2 (31position)								
	Rear panel		MODE switch x 1 (STEREO/BRIDGE/PARALLEL), Gain switch x 1 (32dB/26dB), AMP ID switch x 1 (6P DIP)								
Connectors	Input		XLR-3-31 type x 2, Euroblock connector x 2 pairs (balanced)								
	Output		Neutrik® SPEAKON® NL4 x 2, 5-way binding post x 2 pairs								
	Data Port		RJ45 x 2								
Indicators			POWER/STANDBY x 1 (Green/Orange), PROTECTION x 1 (Red), TEMP x 1 (Red) heatsink temp $\geq$ 85°C, REMOTE x 1 (Green), SIGNAL x 2 (Green), MUTE x 2 (Red), CLIP x 2 (Red)								
Load Protection			POWER switch on/off mute, DC-fault: Amplifier shuts down automatically, Clip Limiting: THD ≥ 0.5%								
Amplifier Protection			Thermal: Output Mute (heatsink temp $\geq 90^{\circ}$ C) (Restored automatically), VI limiter (RL $\leq 1\Omega$ ): Limit the output.								
Power Supply Protection			Thermal: Amplifier shuts down automatically (heatsink temp ≥ 100°C)								
Cooling Fan			Variable-speed fan x 2								
Power Requirements			120V, 220V-240V; 50Hz/60Hz (120V models use 30A twist lock connector)								
Dimensions (W x H x D)			480 x 88 x 447mm (18-7/8" x 3-7/16" x 17-9/16")								
Weight			14kg (30.9lbs)								
Included Accessories			Handle x 2, Flat-head screw x 4, Euroblock connector x 2 (3P), Owner's Manual								

<sup>\*</sup> Half power = 1/2 power output level

#### DIMENSIONS

unit : mm

