

Replacing Hitachi E-Compact BB Amplifiers BB & BB2 (BB = BroadBand)

The E-Compact amplifier modules are hot-swappable and do not require the transmitter to be shutdown before replacing or swapping amps. However, the amps themselves need to be turned off while being replaced or swapped.



BB & BB2 BroadBand Series Power Amplifier

Procedure

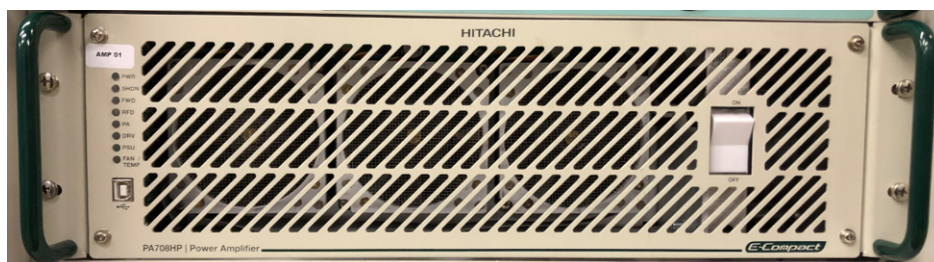
1. Shut off the three power switches on the front of the amplifier chassis.
2. Remove the four rack mount screws securing the amplifier.
3. Pull the amplifier forward to slide it out.
4. Remove the defective amp, supporting the amp as you pull it out to avoid damaging the connectors on the rear of the transmitter.

Warning: Verify that all three of its power switches on the front are set to OFF before performing the following steps.


5. Gently but firmly insert the replacement amplifier into the slot, pushing the amp completely into the shelf so that it seats properly into the transmitter.
6. Reinstall the four rackmount screws.
7. Set the three power switches on the front panel of the replacement amp to ON. The amplifier powers on and the transmitter returns to full power.
8. After the transmitter is operating, it is recommended to go into the Control Module or the Control Module's Power Amplifier Measurements web page and check operating parameters for any abnormalities. In particular, the current readings on pallets PA1-PA8 should be checked.

Non BroadBand E-Compact amplifiers


While similar looking to BB series amps, the original, non-broadband amps have a single power switch on the front. A single power supply is in the same location but is removed from the rear and has a handle on the rear for its removal.



Power Amplifier Measurements Page



Control Module



Alarms
Setup
Measurements
Power
Remote
User

POWER AMPLIFIER 1

Power 01
Power 02

Measurement
Cur. Alarms
Post Alarms

Celsius
Fahrenheit

Power Supply 1 Measurements

Input Voltage	218.5 [Vac]	Temperature	100.0 [°F]	Software Version	PAM30002v1.00
Output Voltage	50.7 [Vdc]	Output Current	14.24 [A]		

Power Supply 2 Measurements

Input Voltage	223.0 [Vac]	Temperature	98.6 [°F]	Software Version	PAM30002v1.00
Output Voltage	50.6 [Vdc]	Output Current	14.17 [A]		

Power Supply 3 Measurements

Input Voltage	221.6 [Vac]	Temperature	97.7 [°F]	Software Version	PAM30002v1.00
Output Voltage	50.4 [Vdc]	Output Current	14.27 [A]		

Driver Measurements

Input Voltage	50.6 [V]	Pre Driver Curr.	0.24 [A]	RF Input Level	+7.1 [dBm]
Temperature	124.0 [°F]	Driver Current	2.81 [A]	RF Output Level	+42.8 [dBm]
Software Version	PAM30002v1.00				

Power Amplifiers Measurements

Module	Current [A]	Temperature [°F]	Vgs Peak [V]	Vgs Carrier [V]	Software Version
PA1	5.38	119.8	0.324	1.625	PAM30002v1.00
PA2	5.96	120.2	0.324	1.654	PAM30002v1.00
PA3	5.58	119.8	0.324	1.682	PAM30002v1.00
PA4	5.70	117.3	0.322	1.661	PAM30002v1.00
PA5	5.94	117.9	0.320	1.632	PAM30002v1.00
PA6	5.76	118.9	0.327	1.656	PAM30002v1.00
PA7	5.87	118.6	0.324	1.632	PAM30002v1.00
PA8	5.82	117.9	0.320	1.651	PAM30002v1.00

General Measurements

Input Air Temp.	71.6 [°F]	FAN1 Rotation	5880 [rpm]	VGS Peak	0.30 [V]
FWD Power	861 [W]	FAN2 Rotation	5820 [rpm]	Current Carrier	0.30 [A]
RFD Power	25 [W]	FAN3 Rotation	5880 [rpm]	Software Version	PAM40005v1.00
FAN Rotation [%]	21%				