



## Equi=Tech Balanced Power Wall Panel Systems

Award winning Equi=Tech Wall Cabinet Systems are factory pre assembled power distribution centers for hard wiring balanced AC power into a facility – a complete balanced power distribution system built into a wall cabinet. Only minimal installation is required eliminating many expensive hours of labor and hard to find electrical parts. All the necessary components such as transformer, breakers, GFCIs, surge protectors and line filters are factory assembled using the highest quality materials and components.

Wall systems are designed to blanket an entire facility with clean and phase coherent balanced AC power that remains stable regardless of how they are loaded down. 5, 7.5, 10, 15 and 20 kVA sizes provide 50, 75, 100, 150 or 200 amps respectively – ideal capacities for most studios and modestly sized theaters or auditoriums.

Wall system's components are housed in a sturdy NEMA 12 steel cabinet and feature a rugged industrial-duty AC distribution panel board with commercial grade circuit breakers, ground fault circuit interrupters and optional EMI/RFI line filters for each circuit per request. Two models, the 15WQ and 20WQ have a 2-part cabinet with an additional lower section that houses a massive toroid transformer. The cabinets are available in black or light gray with a chrome latching handle and an enamel white interior. Wall cabinet systems have been tested safe and are built in standard compliance for power distribution equipment.

All Equi=Tech Wall Cabinet Systems are built around revolutionary Equi=Tech Q-type isolation transformers. Q-type toroid transformers are designed with extremely low impedance. They are wound with double Faraday shields that provide superior isolation (>100dB CMR) from high frequency RF, EMI and nuisance harmonic currents. "Q" transformers are designed to run acoustically silent even in locations where there is considerably high utility line distortion and very poor power quality. They are much larger than standard toroids with an equivalent power rating and they run just slightly warm when operated near their rated current limit. A proprietary winding design eliminates high inrush current issues that are common with most toroid transformers. They also provide the widest possible broad band noise attenuation and distortion-free playback under the most trying of conditions. Their performance is exceptional where power hungry amplifiers might otherwise choke during periods of high peak current demand when powered by a conventional AC supply. "Q" transformers add tightness and startling definition to low frequency music. In rooms with less than ideal acoustical features that are known to have a negative impact on low frequency sonic quality, they will restore the tightest bass with astonishing never-before-heard clarity and they will do it with ease. They are a must for recording studios that do mastering work and for high definition audiophile stereo systems.

### Model 5WQ Specifications

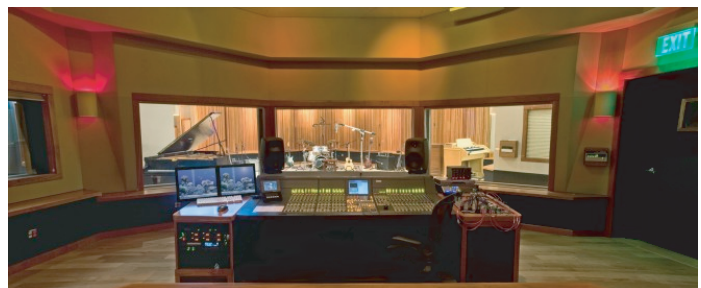
KVA	5
Phase	1
Primary Voltage	208/240
Secondary Voltage	120
Frequency	60Hz
Impedance	2.8%
Leads	TEW/UL1015
Windings	Copper
Temp. Rise/Insulation	50C/105C
Shields	2-Electrostatic
Isolation (CMMR)	>100dB
Voltage Reg. (NL/FLA)	+/- 2.5%
Cont. Duty	42 Amps
Circuits*	6-20a
Enclosures	NEMA
Dimensions:	42HX30WX8D
Weight	325lbs.

\*Additional EMI/RFI Digital Filtered Circuits are also available

**Note: A current listing of recording facilities using Equi=Tech balanced power wall panel systems is available upon request.**



*Beatstreet, NYC*



*Sony Recording Studio, NYC*

# Wall System Wiring Instructions

The following instructions are intended to be used only as a guide and are not intended to supersede or replace any local building code ordinances.

1. Run a feeder circuit (208V or 240V) with a grounding conductor to the lower section of the wall cabinet and connect the two circuit conductors as follows: **Black** - always used and **Orange** for 208V or **Red** for 240V. **No neutral wire is required.** It is recommended that the feeder circuit for the wall system be protected by dual element time delay fuses (Class N or equal) or a 2-pole HACR type circuit breaker. Use the table below to determine minimum conductor sizes.

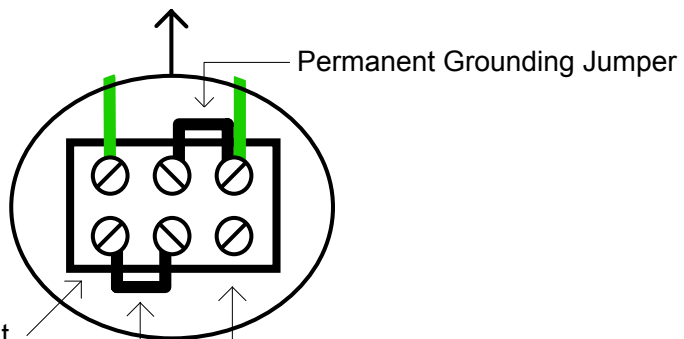
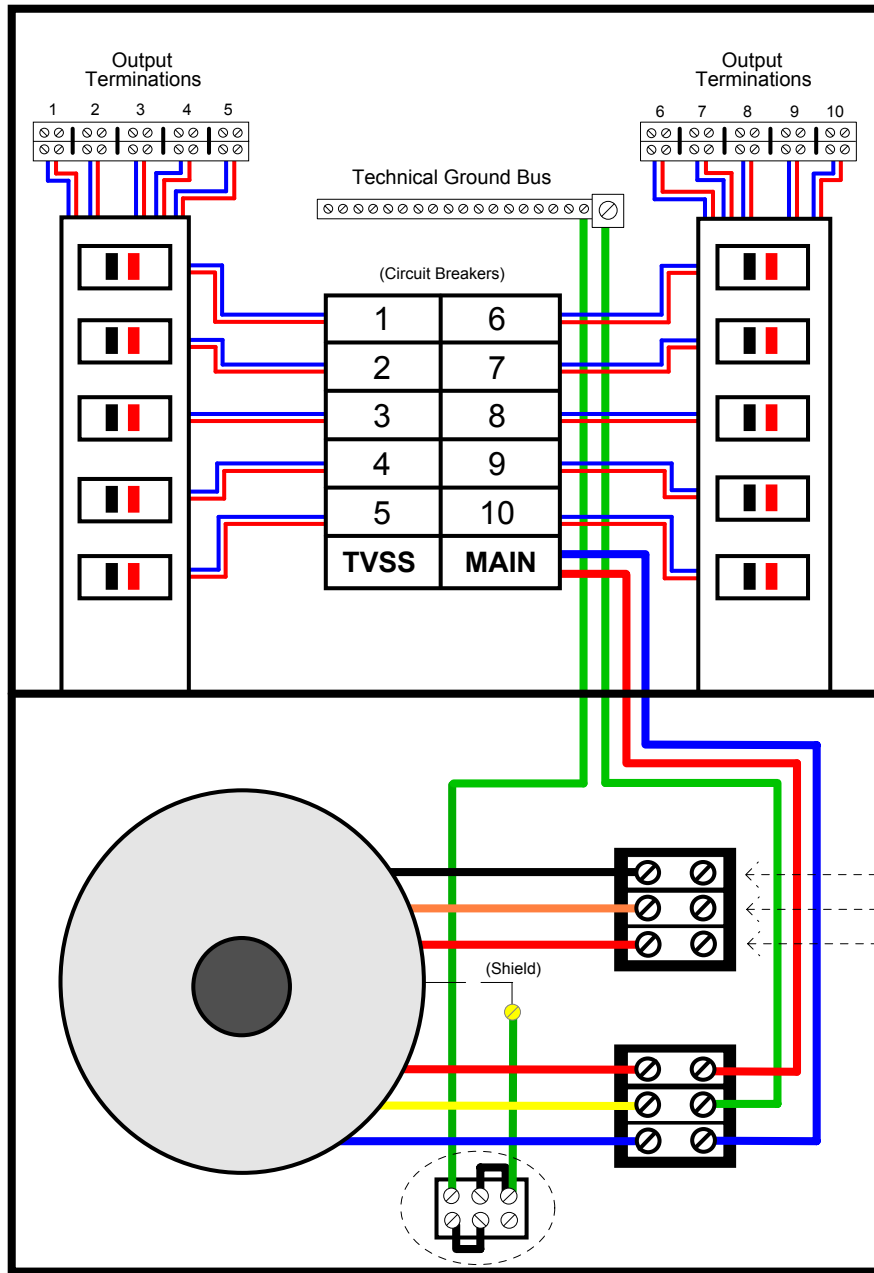
*Note: All conductors entering the wall system must be rated at 90 deg. C or higher*

2. Connect the feeder circuit's grounding conductor to the electrical equipment grounding terminal in the lower compartment of the wall system cabinet. (See illustration).
3. If you are setting up an isolated grounding system, remove the jumper shown in the attached illustration and run an additional insulated grounding conductor to the "Isolated Equipment Grounding Terminal" in the wall cabinet system. See the Equi-Tech Technical Support Bulletin: "Installing a Technical Grounding System" for additional grounding information. Also refer to the National Electrical Code Article 530 Part "G" for more general wiring information.
4. Connect all of the branch-circuit conductors that feed the technical power outlets to the output terminals in the wall system. These are located near the top of the cabinet. (See illustration). **EMI/RFI filtered circuits are indicated with a colored dot on the GFCI device.** Filters are not recommended for circuits used with power amplifiers and analog preamps because the filter's choke may limit current transients which affect sound quality and equipment performance.

*Note: On some models, if a 30-amp circuit has been provided, there is no GFCI device used on that circuit.*

5. Connect the branch-circuit isolated ground wires to the "Technical Ground Bus" in the wall system. If conduit or MC cable is used for branch circuit wiring, be sure to use an insulated grounding conductor.
6. For safety, all GFCI devices in the wall system must be tested monthly. This is done by pressing the black "test" button on the GFCI device. When pressed, power on that circuit should be interrupted. If this fails, the GFCI device must be replaced. (Leviton Part #6490-W or equiv.) To reset the GFCI and restore power, press in the red button.

Model No.	Continuous Load Cap.	Feeder Size	Feeder Wire (Cu)	Grounding Wire (Cu)
5WQ	40A	30A	#10 ga.	#8 ga.
7.5WQ	60A	40A	#8 ga.	#8 ga.
10WQ	83A	50A	#6 ga.	#8 ga.
15WQ	112A	70A	#4 ga.	#6 ga.
20WQ	168A	80A	#2 ga.	#2 ga.



Isolated Equipment Grounding Terminal

Electrical Equipment Grounding Terminal

When installing an isolated grounding conductor, remove this jumper.

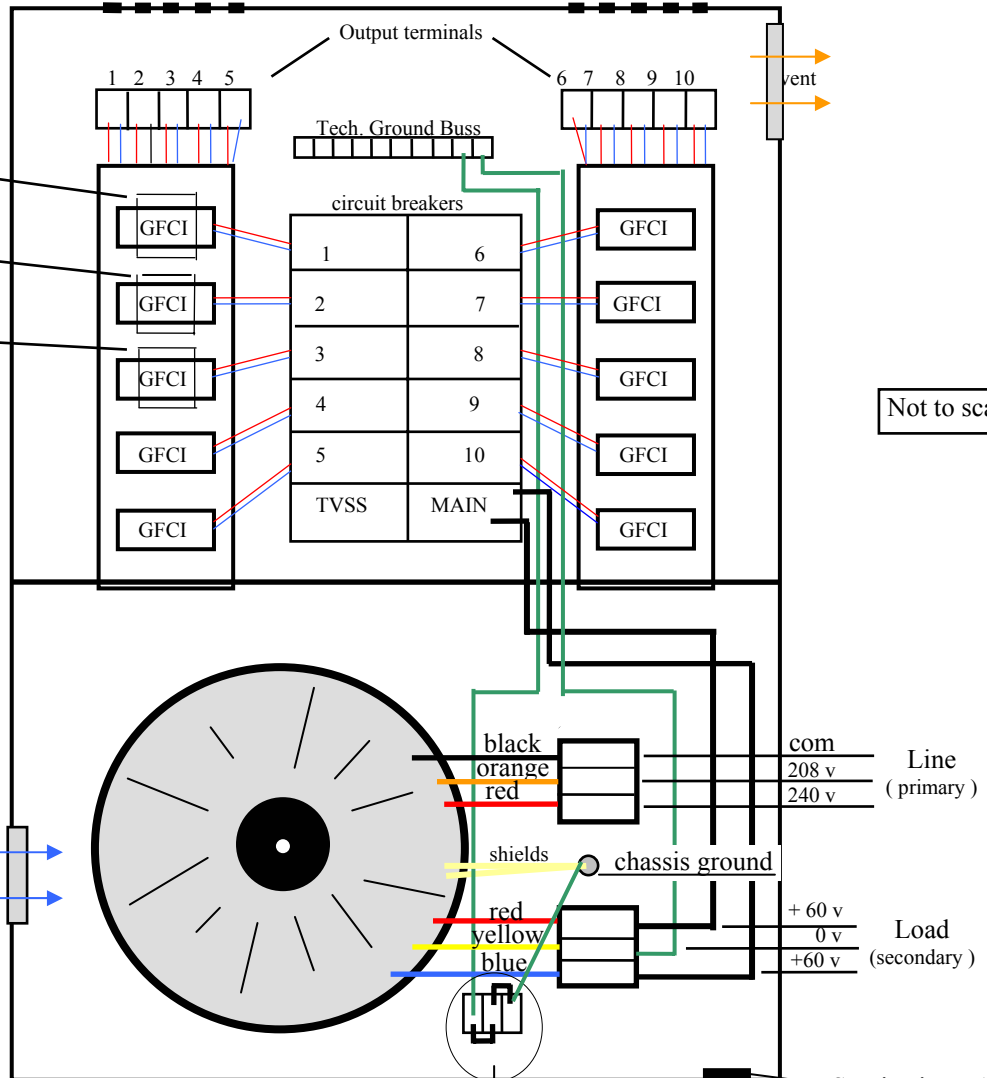
# Equi=Tech wall wiring diagram .....

— 42" x 30" x 8" —

Remember, balanced power always has two "hot" output conductors

"knock outs" for output wiring are located at the top of the unit directly above each output terminal.  
5 K.O.'s per side. 1 per available circuit.

If EMI/RFI filtration for digital outlets are desired, a filter is mounted under each GFCI. 1 filter per circuit. Up to 10 filters max. (20 amp circuitry)

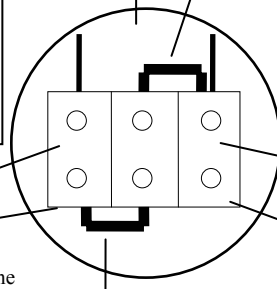


Not to scale

Wall units come with 4, 6, or 10 circuits, depending on custom specs, transformer size and or main breaker size. Wall units with 4 circuits will utilize only the left side of the breaker tray and GFCI mounts. Units with 6 circuits will use filler blanks on the upper 4 circuit breaker and GFCI spaces. Standard transformer sizes available for Equi=Tech wall units are the 5 kVA, 7.5 kVA, 10 kVA, and 12.5 kVA. The 5, 7.5 and 10 are also available in the Q series transformers. The 12.5Q is currently available only in the (transformer in a box) line of Equi=Tech products.

Service input "knock out"

isolated equipment grounding terminal

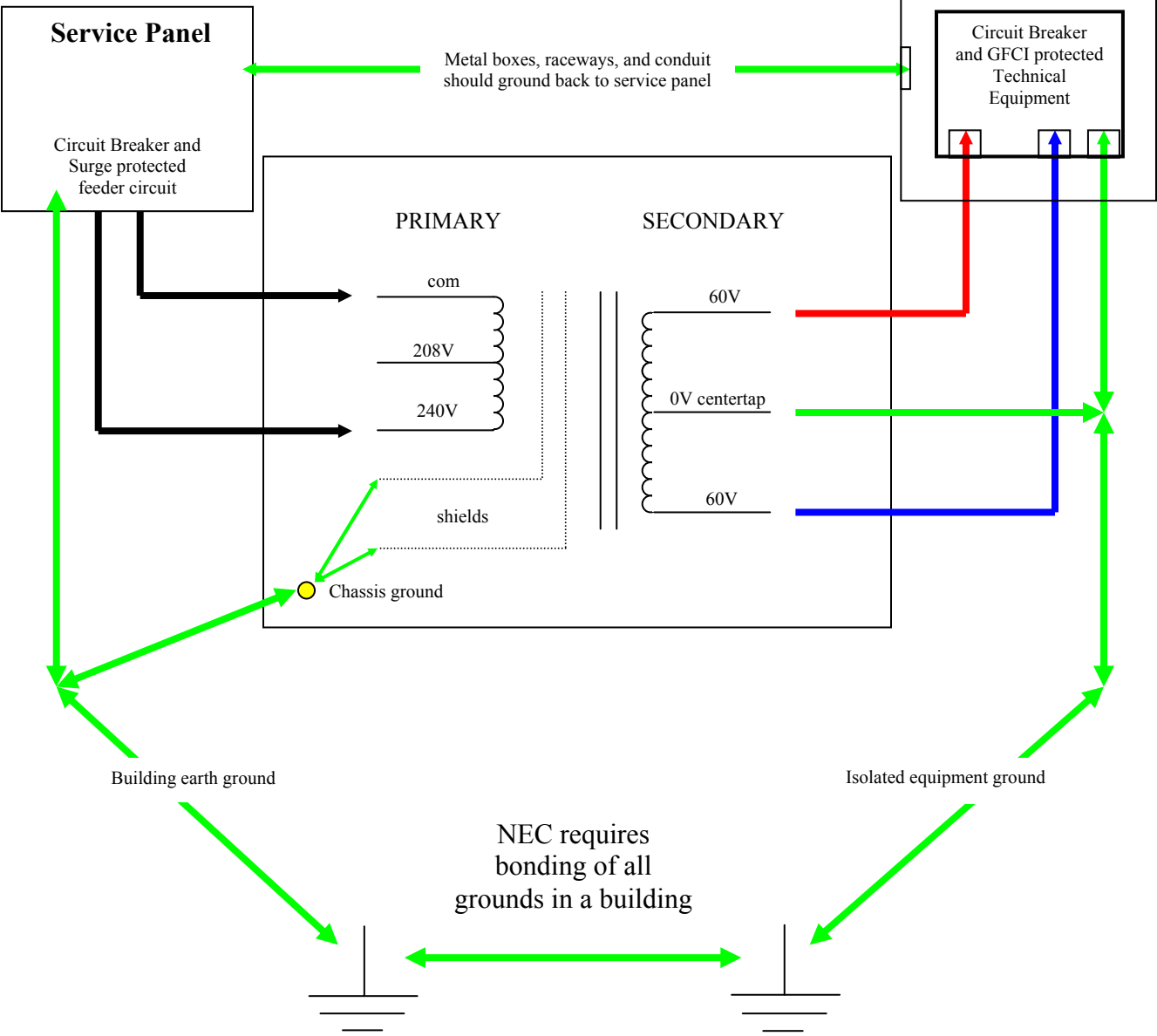


Electrical equipment grounding terminal (chassis ground) (service input ground)

The isolated ground is basically a dedicated ground going from the technical equipment ground bus to an earth ground. (See Equi=Tech article-Installing a Technical Grounding System For Balanced Power.) The Equi=Tech chassis ground and the service ground still tie together at the appropriate places. For tech support go to [www.equitech.com](http://www.equitech.com)

**When installing an isolated grounding conductor, remove this**

The isolated ground is basically a dedicated ground going from the technical equipment ground buss to an earth ground. ( See *Equi=Tech* article-**Installing a Technical Grounding System For Balanced Power.**) The Equi=Tech chassis ground and the service ground still tie together at the appropriate places. For tech support go to [www.equitech.com](http://www.equitech.com)



# Our client list speaks for itself...



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Eminem  
Norah Jones  
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Bob Dylan  
Aerosmith  
Sheryl Crow  
BB King  
Ricky Skaggs  
Harry Connick, Jr.  
Ricky Martin  
Steely Dan  
Ozzy Osbourne  
Lenny Kravitz

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In Touch Ministries  
Crystal Cathedral  
Hearts of space  
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John Storyk  
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Christopher Huston  
Westlake Audio

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KHON (ABC Honolulu)  
Hughes Satellite Comm.  
FOX Broadcasting  
ABC Sports

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Glenwood Place  
Ocean Way Recording  
Avatar Studios  
Wonderland Studio  
Sony Recording Studios (NYC)  
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NRG Studios  
Hacienda Studios  
Hollywood Records  
A&M Records  
OZ Audio and Post  
Atlantic Records

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Warner Foley Studios  
Warner Sound Dept.  
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Mike Post Studios  
Sony Post Productions

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Mackie  
Manley Labs  
Mesa Boogie Amplifiers  
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Royer Labs  
Apogee  
Audio Technica  
Crown

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Lawrence Livermore NL  
Upjohn Laboratories  
Oakridge National Laboratory  
FAA (Air Traffic Control)  
Ligo Observatory (Cal Tech/MIT)  
US Navy Research Lab (DC)  
Library of Congress

*A more comprehensive client list is available upon request*