Quick Install Guide
Universal Transfer Switch (UTS)

✓	Complete the UTS Wiring Plan
	Determine the location for the UTS installation. Environmental and physical specifications for the installation site are outlined in the *Specifications* section of the **Site Preparation and Installation Guide**.
	Complete the **Backup Power Source Configuration** table. Enter the generator wattage for **BACKUP1** and **UPS**, or an alternative power source wattage for **BACKUP2**. Refer to individual product documentation for this information.
	Select the circuits that are to be connected to a backup power source. Enter the circuit breaker panel load description, voltage, and assigned circuit breaker information in the UTS Wiring Plan table below. **NOTE: Utilizing all of the UTS circuits is not necessary. However, Circuits 5 and 6 on UTS6/UTS6H and the dedicated 240 V circuits on UTS6BI/UTS10BI must be connected to the circuit breaker panel and must receive power for the UTS to function.**
	Enter the wattage values for each circuit. Refer to the **Typical Residential Loads and Power Consumption** table on the reverse side of this sheet for estimated values.
	Assign load types in the *Even* and *Odd* columns of the **UTS Wiring Plan** table. For optimum performance from the generator, assign UTS circuits so that the total power of *Odd* circuits is within 10% of the total power of *Even* circuits. Refer to the **Site Preparation and Installation Guide** for more information on generator load balance.
	For optimum performance from a UPS, the smallest load that does not require UPS backup should be assigned to UTS **Circuit1.** Refer to *Determine circuit usage* in the **Site Preparation and Installation Guide** for details.
✓	**Install the Universal Transfer Switch**
Detailed instructions for each step, can be found in the Site Preparation and Installation Guide on the pages cited below.	
	Mount the UTS on the wall, pages 7 & 8.
	Secure the UTS flexible conduit to the circuit breaker panel, page 8.
	Using the **UTS Wiring Plan** table as a guide, connect circuit breaker panel circuits to UTS circuits, pages 9-13.
	Complete the initial setup procedure using the **UTS Setup Wizard**, page 16.
	Connect UTS to backup power sources, page 19.

Backup Power Source Configuration

	Type	Power	Make/Model	Overload Delay[1]	Start Relay[2]	Stop Relay[2]	Start Delay[2]	Stop Delay[2]
	UPS/Gen/Other	Watts	--	Seconds	Normally Open/Closed		Seconds or Minutes	
BACKUP1								
BACKUP2								

Note[1]: Refer to the *System Configuration and Setup* section in the **Operation Manual.**
Inverter generators should have this entry set to zero seconds

Note[2]: These entries apply only to auto start generators.

UTS Wiring Plan

Circuit Breaker (CB), Panel Load Description	CB panel Load Voltage 120 V / 240V	Breaker Number	CB panel Load Power Watts	UTS Circuits		Notes
				Even	Odd	
		Even Circuits Total Power				
		Odd Circuits Total Power				
		Total Power				

Load Types & Factory Default Settings

Circuit Load Type	Load Description	Source	Delayable	Maximum Minutes Off	Minimum Minutes On
air conditioner	air conditioner, room size	generator	yes	30	30
computer	personal computer with monitor and UPS	uninterruptible	no	5	5
freezer	thermostat controlled	generator	yes	30	30
furnace, hot air	furnace with forced hot air blower fan	generator	no	30	30
furnace, hot water	furnace with forced hot water pump	generator	yes	30	30
garage door	garage door opener	either	no	30	30
home theater	audio/visual equipment with UPS	uninterruptible	no	5	5
lights	lights, incandescent	either	no	5	5
microwave oven	short term usage	generator	no	5	5
refrigerator	thermostat controlled	generator	yes	30	30
security system	security system timer controlled	generator	yes	60	60
sprinkler system	sprinkler system timer controlled	generator	yes	60	60
sump pump	motor load	generator	no	5	5
well pump	motor load	generator	yes	5	5
other		generator	yes	30	30
none		none	yes	5	5

Typical Residential Power Consumption

Load Description	Continuous Watt[3]	Surge at Startup Watts[2]	Delayable[3]	Sensitive[4]	Notes
air conditioner, 10000 BTU	1500	2200	yes	no	
clothes washer, automatic	1200	1200	yes	yes	
coffee maker	600	600	yes	yes	
dish washer, cool/dry	200	540	yes	yes	
electric heater, portable	1500	2200	yes	no	
electric stove, 8 inch element	2100	2100	yes	no	
fan, box	200	200	yes	no	
furnace, 1/6 HP blower fan	500	750	yes	no	
furnace, 1/4 HP blower fan	600	1000	yes	no	
freezer, Energy Star	130-200	1200	yes	no	
garage door opener	350	700	no	no	
hair dryer	1500	2000	no	no	
home theater	150-1000	300-2000	no	yes	should be used with a UPS
lights, incandescent	value on bulbs	on bulb	no	no	
microwave oven	1000	1000	no	yes	
oil burner or stoker	300	300	yes	no	
personal computer with monitor	150-300	150-300	no	yes	should be used with a UPS
refrigerator, Energy Star	130-400	1200	yes	no	
security system	50	50	yes	yes	
sump pump, 1/2 HP	875	2350	no	no	
television	300-600	600-900	no	no	should be used with a UPS
toaster & toaster oven	1100-1500	1100-1500	no	no	
well pump	300-1100	600-2200	no	no	

Note[1]: **Continuous Watts** are the total Watts required to support the specified load under continuous running conditions.

Note[2]: **Surge** or **high inrush** refers to circumstances when a load draws 150% or more (up to 3x), the rated power for more than one second.

Note[3]: **Delayable** refers to loads that can be turned off temporarily allowing another load to run in order to prevent an overload condition. Refer to the Operation Manual for details concerning **ALM** and **Delayable** circuits.

Note[4]: **Sensitive** refers to the susceptibility of a load to fluctuations in voltage. Refer to the Operation Manual for details concerning circuit sensitivity settings.

Customer support and warranty information is available at the APC Web site, **www.apc.com**.

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