Wallbox to iPod Adapter

It's the rockin' 50's and 60's all over again ...

WALLBOX MODELS

- AMI W-40
- AMI W-80
- AMI W-120
- AMI WQ-200
- Rock-Ola 500
- Rock-Ola 1555
- Rock-Ola 1558
- Rowe WRA
- Rowe WRB
- Rowe WRC
- Seeburg 3W1
- Seeburg 3W100
- Seeburg 3W160
- Seeburg 3WA
- Seeburg SC1-4
- Seeburg SCH1-4
- Wurlitzer 3020
- Wurlitzer 5207
- Wurlitzer 5210
- Wurlitzer 5220
- Wurlitzer 5225
- Wurlitzer 5250

IPOD MODELS

- 4th Generation iPod with Click Wheel
- iPod Mini
- iPod Photo
- iPod Nano 1st, 2nd & 3rd Generation
- 5th Generation iPod with Video
- Newer iPods need 12V/5V charge adapter

Seeburg 3W1 Wallbox and Apple iPod Nano 2nd Generation, 2GB

This wallbox adapter connects a vintage jukebox wallbox to an Apple iPod and plays music selections, same way as it was back in the 40's, 50's, 60's and 70's. Make selections on the wallbox and instantly your songs are played, one by one, in the order received. Any number of the same wallbox models can be connected to the adapter. Setup is easy, create a playlist, insert your wallbox song selections, connect up your iPod and your ready to go. Enjoy the excitement of having your own real working wallbox. Great addition for you bar or add a touch of the fifties to your rec room.

Features

- Connects to the iPod 30-pin dock connector
- iPod audio formats: AAC, MP3, MP3 VBR, Apple Lossless, WAV & AIFF
- iPod video formats: M4V, MP4, MOV & H.264 (5th Gen video iPod required)
- Capable of up to 100 video play selections (5th Gen video iPod required)
- Fast song changes between selections
- Programmable autoplay: off, 4-minutes, 20-minutes or continuous
- Powered from an AC wall adapter which also charges the iPod
- Line-out RCA plugs to your stereo amplifier or amplified speakers
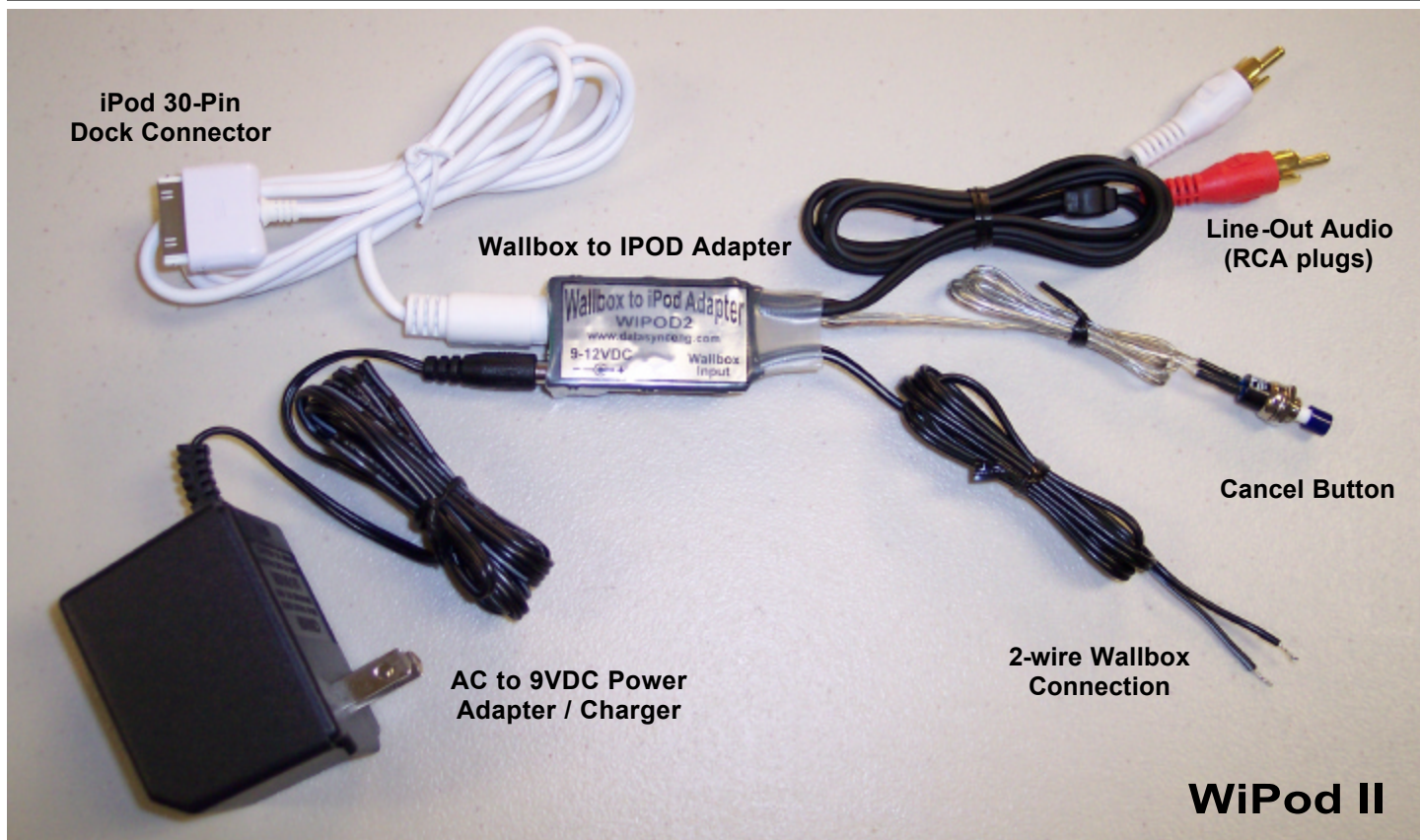- Push-button to cancel song or video plays

Data Sync Engineering
P.O. Box 539, 2 Footbridge Lane
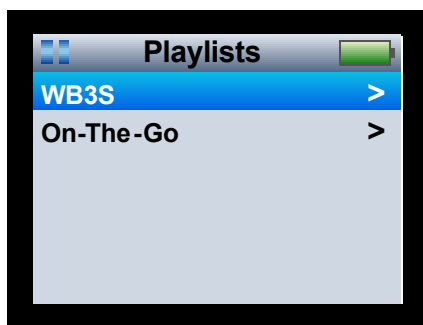Blairstown, New Jersey 07825

TEL: (908) 362-6299
FAX: (908) 362-5889

www.datasynceng.com

iPod 30-Pin Dock Connector

Wallbox to IPOD Adapter

Line-Out Audio (RCA plugs)

Cancel Button

AC to 9VDC Power Adapter / Charger

2-wire Wallbox Connection

WiPod II

CREATING THE WALLBOX PLAYLIST

Playlists	
WB3S	**>**
On-The-Go	**>**

The Wallbox Adapter uses a playlist for song selections. The name of the playlist also contains the wallbox type and options. The first two letters of the playlist name start with '**WB**", then from the Wallbox List, enter the digit or letter type for your wallbox model. Follow with any features or options from the Option List.

In the example, the playlist name "WB3S" indicates a Seeburg 3W1 wallbox is attached and the Short period (4-minute) Autoplay feature is turned on.

To create a playlist using iTunes, click File then New Playlist. "**Untitled playlist**" will appear, rename to your wallbox type and preferred features and options. If you make a mistake, double-click the playlist name and retype.

WB3S
All Night Long, (All Right)
Wandering Strangers
That's Life
My Kind Of Town
Rock Around The Clock
See You Later Alligator

The order of songs in the playlist are the same order used for the wallbox title strips. The first song is the top of the first title strip, usually A1 or song #1, the 2nd song is the bottom. The 3rd song is the top of the 2nd title strip and so on. In other words, odd numbered songs are at the top, even numbered songs at the bottom.

Some wallboxes use title strips with sequential letters such as A1, B1, C1 & D1. Others use sequential numbers as A1, A2, A3 & A4 or buttons and pages with song numbers. The wallbox adapter automatically translates the wallbox selection to the playlist and title strip order.

Wallbox Type (required)

or T for test

Features & Options

W	B						
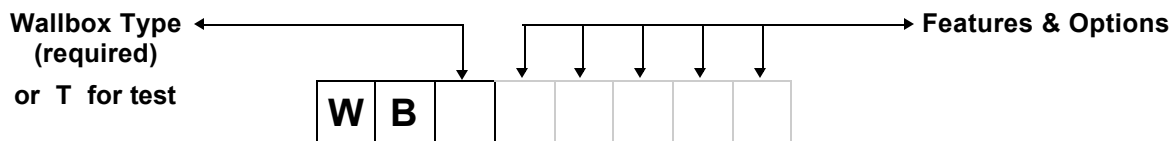
WALLBOX LIST

Type	Mfg Yrs	Sel	Wallbox Model
6	1951-1954	40	AMI W-40
6	1951-1955	80	AMI W-80
6	1953-1955	120	AMI W-120
6	1956-1965	200	AMI WQ-200
0	1964-1967	160	Rock-Ola 500
0	1963	160	Rock-Ola 1558
0	1958-1962	200	Rock-Ola 1555
5	1966-1967	200	Rowe WRA & WRB
5	1968-1976	200	Rowe WRC
3	1949-1958	100	Seeburg Wall-O-Matic 3W1
4	1955-1959	200	Seeburg Wall-O-Matic 3WA
A	1958-1962	160	Seeburg Wall-O-Matic 3W160
3	1960-1967	100	Seeburg Wall-O-Matic 3W100
1	1962-1965	160	Seeburg Consolette SC-1, SC-2, SC-3 & SC-4
1	1966-1968	160	Seeburg Consolette SCH-1, SCH-2, SCH-3 & SCH-4
9	1946-1950	24	Wurlitzer 3020
7	1955-1961	104	Wurlitzer 5207
2	1956-1957	200	Wurlitzer 5210
2	1958-1964	200	Wurlitzer 5250
2	1965-1970	200	Wurlitzer 5220
8	1965-1969	100	Wurlitzer 5225

OPTION LIST

Letter	Function Description
C	**Continuous Autoplay** If no songs have been selected to play, the wallbox adapter will automatically select a random song. If songs are selected while the autoplay song is playing, those selections will be played after the end of the autoplayed song.
D	**Debug Mode** When a wallbox selection is made, the iPod remains in user control mode and starts the song play. This is used to manually check what song number is being played for a wallbox selection number. Song plays are not stopped.
H	**50Hz Operation** This is used in some countries where the power line frequency is 50 hertz. This usually causes the 60 hertz wallbox selectors motor to run a little slower.
L	**Long Autoplay** If no wallbox selections have been made for a period of 20-minutes, the wallbox adapter will automatically select a random song to play.
S	**Short Autoplay** If no wallbox selections have been made for a period of 4-minutes, the wallbox adapter will automatically select a random song to play.
1st Digit	**First Numeric Digit** The first digit is the position in the main "iPod" menu to the Videos menu. (Sets up video selection positions on video supported iPods.)
2nd Digit	**Second Numeric Digit** The second digit is the position in the "Videos" menu to the Movies list. (Sets up video selection positions on video supported iPods.)

IPOD SONG NUMBER POSITION FOR LETTER & NUMBER WALLBOXES

A1 — "ALL NIGHT LONG, (ALL RIGHT)" HIT — LIONEL RICHIE — POP
B1 — "WANDERING STRANGERS"
C1 — "THAT'S LIFE" HIT — FRANK SINATRA — OLDY
D1 — "MY KIND OF TOWN"

A1 — "ALL NIGHT LONG, (ALL RIGHT)" HIT — LIONEL RICHIE — POP
A2 — "WANDERING STRANGERS"
A3 — "THAT'S LIFE" HIT — FRANK SINATRA — OLDY
A4 — "MY KIND OF TOWN"

"Sequential Letter" Wallboxes
Rock-Ola 500, 1558 & 1555
Rowe WRA, WRB & WRC
Seeburg 3WA
Seeburg 3W160
Seeburg Consolette SC-1/2/3/4 & SCH-1/2/3/4

"Sequential Number" Wallboxes
Seeburg Wall-O-Matic 3W1 & 3W100
Wurlitzer 5210, 5220, 5225 & 5250

	1	2	3	4	5	6	7	8	9	0
A	1	21	41	61	81	101	121	141	161	181
B	2	22	42	62	82	102	122	142	162	182
C	3	23	43	63	83	103	123	143	163	183
D	4	24	44	64	84	104	124	144	164	184
E	5	25	45	65	85	105	125	145	165	185
F	6	26	46	66	86	106	126	146	166	186
G	7	27	47	67	87	107	127	147	167	187
H	8	28	48	68	88	108	128	148	168	188
J	9	29	49	69	89	109	129	149	169	189
K	10	30	50	70	90	110	130	150	170	190
L	11	31	51	71	91	111	131	151	171	191
M	12	32	52	72	92	112	132	152	172	192
N	13	33	53	73	93	113	133	153	173	193
P	14	34	54	74	94	114	134	154	174	194
Q	15	35	55	75	95	115	135	155	175	195
R	16	36	56	76	96	116	136	156	176	196
S	17	37	57	77	97	117	137	157	177	197
T	18	38	58	78	98	118	138	158	178	198
U	19	39	59	79	99	119	139	159	179	199
V	20	40	60	80	100	120	140	160	180	200

	1	2	3	4	5	6	7	8	9	0
A	1	2	3	4	5	6	7	8	9	10
B	11	12	13	14	15	16	17	18	19	20
C	21	22	23	24	25	26	27	28	29	30
D	31	32	33	34	35	36	37	38	39	40
E	41	42	43	44	45	46	47	48	49	50
F	51	52	53	54	55	56	57	58	59	60
G	61	62	63	64	65	66	67	68	69	70
H	71	72	73	74	75	76	77	78	79	80
J	81	82	83	84	85	86	87	88	89	90
K	91	92	93	94	95	96	97	98	99	100
L	101	102	103	104	105	106	107	108	109	110
M	111	112	113	114	115	116	117	118	119	120
N	121	122	123	124	125	126	127	128	129	130
P	131	132	133	134	135	136	137	138	139	140
Q	141	142	143	144	145	146	147	148	149	150
R	151	152	153	154	155	156	157	158	159	160
S	161	162	163	164	165	166	167	168	169	170
T	171	172	173	174	175	176	177	178	179	180
U	181	182	183	184	185	186	187	188	189	190
V	191	192	193	194	195	196	197	198	199	200

WALLBOX SELECTOR

SIG

25VAC

COM

(YELLOW)

(YELLOW)

WALLBOX ADAPTER

Wallbox to iPod Adapter

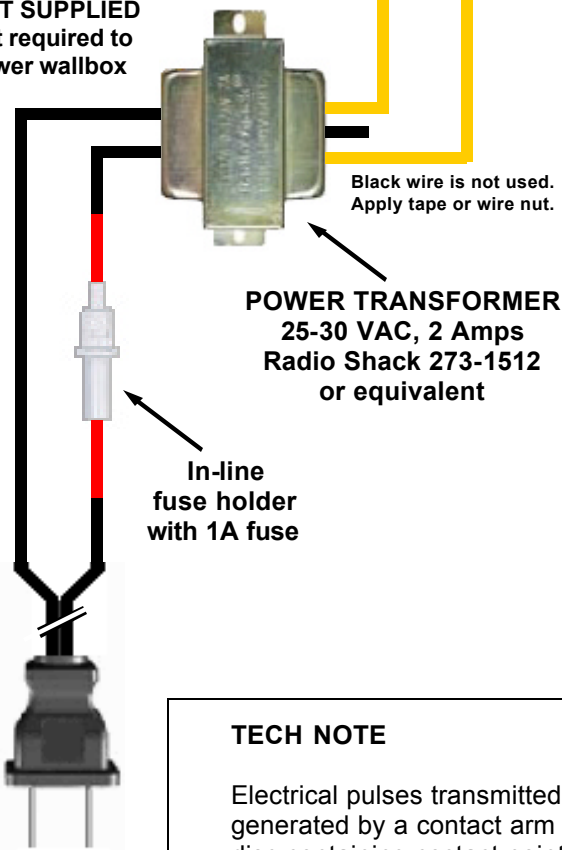**2-wire Wallbox Connection**

The 2-wire zipcord receives the signal from the wallbox. You can extend the length of the wallbox signal wires, using 22AWG, to a distance of up to 2,000 feet (609.6 meters).

The wallbox signal is 25VAC and has no specific wire polarity. You will need a 25-30 Volt, 2 Amp power transformer to power the wallbox

Locate your wallbox model in the following pages for wiring detail.

WALLBOX POWER

NOT SUPPLIED But required to power wallbox

Black wire is not used. Apply tape or wire nut.

POWER TRANSFORMER 25-30 VAC, 2 Amps Radio Shack 273-1512 or equivalent

In-line fuse holder with 1A fuse

Wallbox Wiring Diagrams

CAUTION: Do not attempt to hook up a wallbox power supply if you are not familiar with electrical wiring, consult with a qualified person or an electrician. Do not leave any wires exposed, always use wire-nuts or electrical tape on all connections. Improper wiring can result in a fire or shock hazard.

TECH NOTE

Electrical pulses transmitted by the wallbox are generated by a contact arm rotating on a selector disc containing contact points. When these contacts become gummed up and corroded, the wallbox may not make the proper selection.

Occasionally, these contacts require cleaning. They can be cleaned with a cloth saturated with isopropyl alcohol. Do not use emery cloth or sandpaper as this may remove the plating.
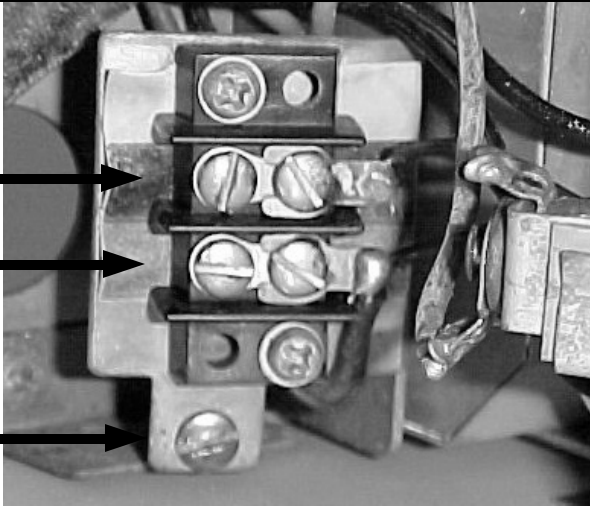
On really worn wallboxes, where basic cleaning doesn't seem to cure the problem, you may have successful results by using a low abrasive polish, such as "Scratch Out" or "Brasso". This will make the contact surfaces shiny and smooth.
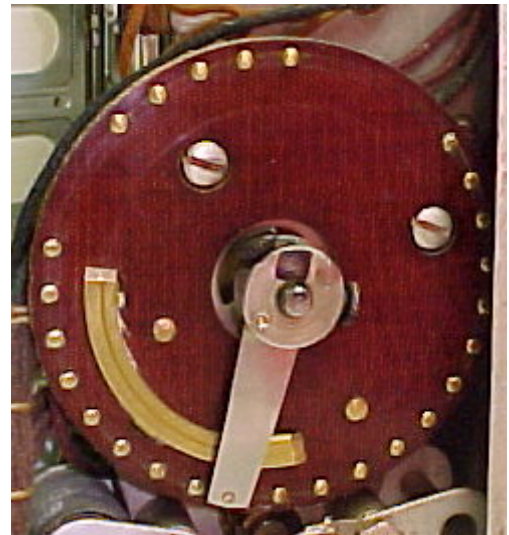
TROUBLESHOOTING

Symptom	Possible Cause
After the wallbox adapter is powered up, the iPod seems to be continuously changing screens.	The wallbox playlist was not found. The playlist name letters are not in upper-case.
When selections are made on the wallbox, no songs are played.	Wrong wallbox type was selected. No wallbox signal is being received. Defective adapter. (*see ADAPTER TEST on next page*)
After a wallbox selection was made, the wrong song was played.	Wrong wallbox type was selected. Wallbox signal is erratic. (*see TECH NOTE on previous page*) Use the (D)ebug option in the playlist name to verify.
Videos do not play. (Applicable to the 5th Generation video iPod only)	Wrong digit numbers to the Movies list in playlist name. No videos in the Movies list. Song name was not $nn. (nn = video position # in Movies)
Videos do not start from the beginning. (Applicable to the 5th Generation video iPod only)	The "Remember playback position" box is checked. Using iTunes, click on **Movies** in library, right click the video name, click **Get Info** then the **Options** tab. Uncheck the box.

iPod Compatibility Chart

iPod 4G with Clickwheel	iPod Mini	iPod Photo	iPod nano 1st Gen
20GB 40GB Hard Disk	2GB 4GB Hard Disk	20GB 30GB 40GB 60GB Hard Disk	1GB 2GB 4GB Flash
iPod nano 2nd Gen	iPod 5G with Video	iPod nano 3rd Gen	Newer iPod Models may require a **12V to 5V Charge Adapter** **Call for details ...**
2GB 4GB 8GB Flash	30GB 60GB 80GB Hard Disk	4GB 8GB Flash	

**Seeburg Wall-o-matic
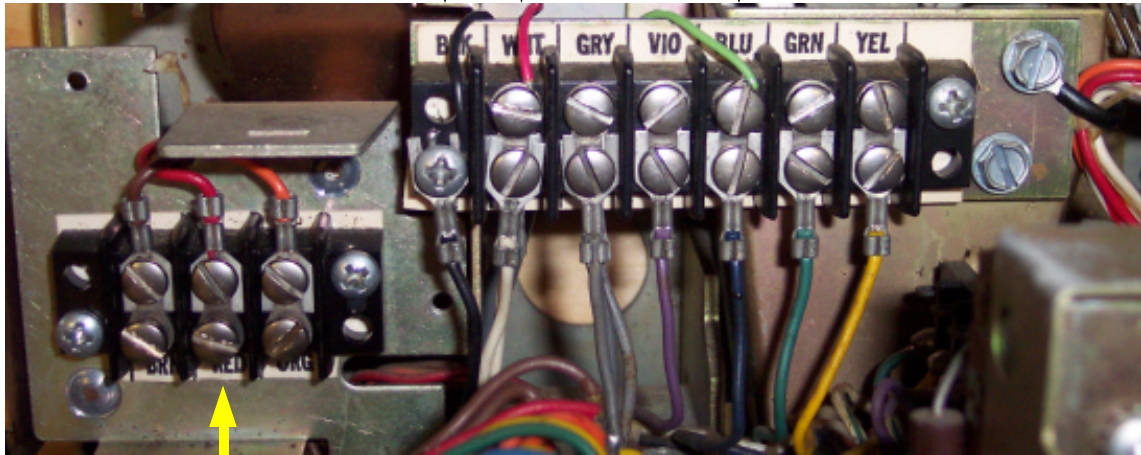3W1 / 3W100
100 select**

SIGNAL

25VAC

COMMON

**Seeburg Consolette
SC1-4 / SCH1-4
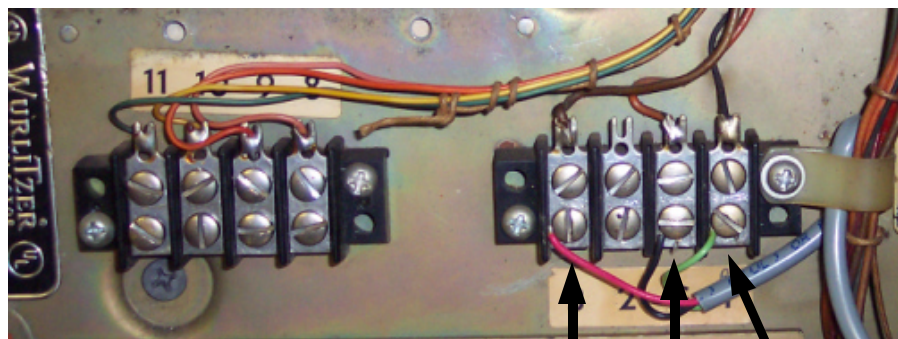160 select**

BLK   WHT   BLU

COMMON   25VAC   SIGNAL

To enable coin operation, the BRN / RED / ORG
terminals must be shorted together and connected
to the 25VAC terminal (WHT) using a 40-50 Ohm,
10 Watt power resistor (solenoid current = 400mA).

**Wurlitzer 5220
200 select**

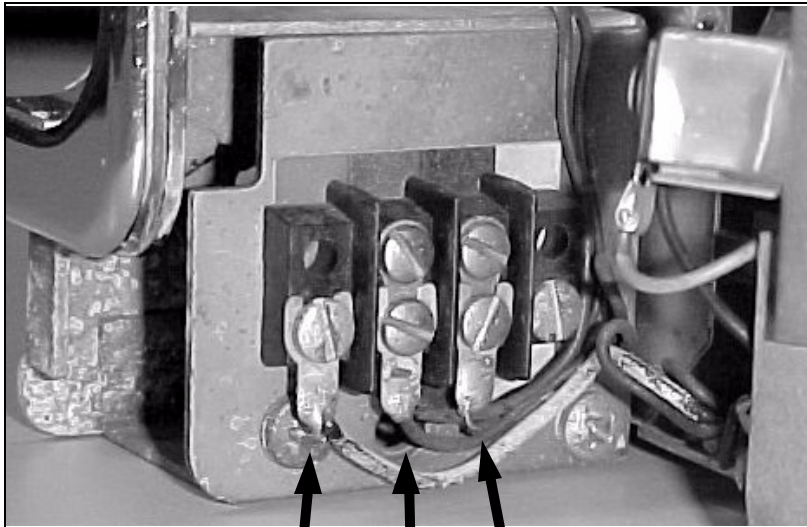**Wurlitzer 5225
100 select**

25VAC   COMMON   SIGNAL

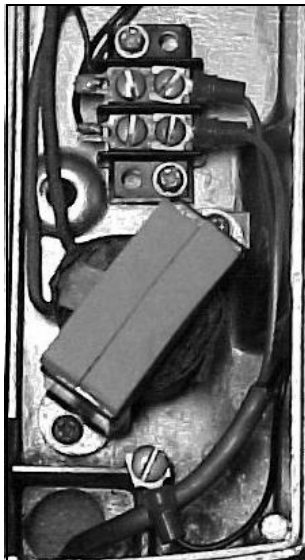3   G   1

ADAPTER TEST

The test mode is used for checking the performance of the wallbox adapter.   To enter test mode …

1) Disconnect the wallbox adapter wires from the wallbox
2) Change the wallbox playlist name to WBT
3) Touch a 9-volt battery across the adapters' wallbox wires
4) Song number 5 should play

Seeburg Wall-o-matic
3WA / 3W160
200 / 160 select

COMMON   25VAC   SIGNAL
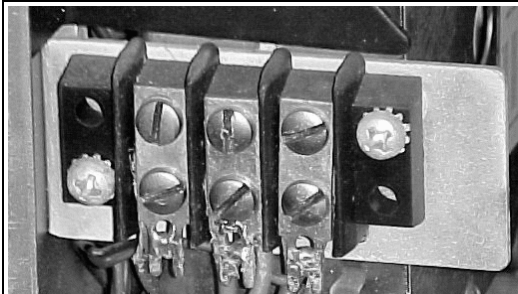
AMI W-40 / W-80 / W-120
40 / 80 / 120 select

25VAC

SIGNAL

COMMON

Rowe WRA / WRB / WRC
200 select

1	2	3	4
COMMON	25VAC	SIGNAL	25VAC*
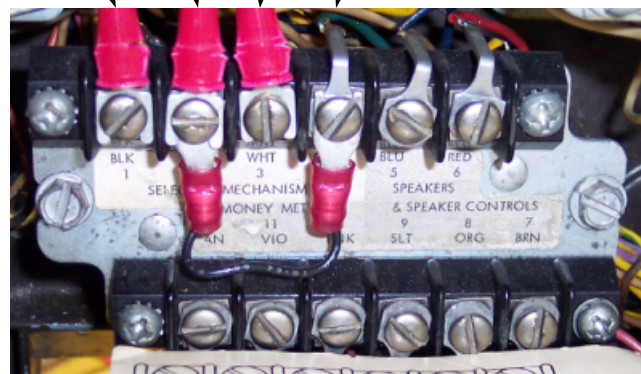
A wire jumper must be inserted from the
25VAC main power terminal (#2) to the
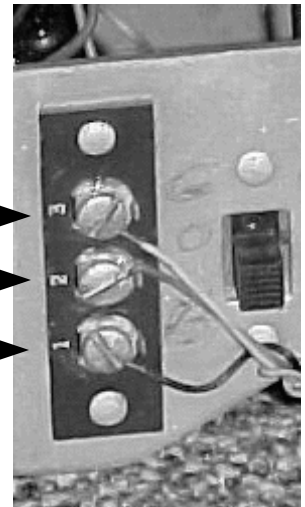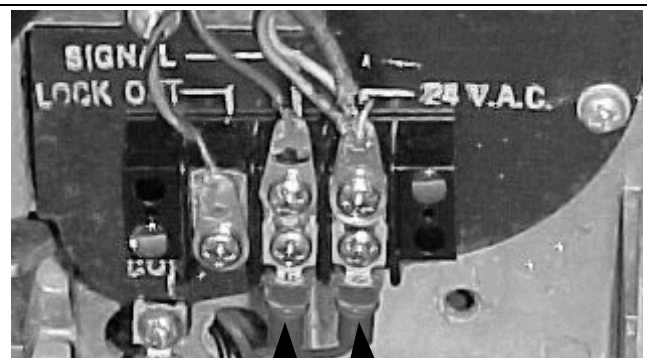25VAC* keypad motor terminal (#4).

Wurlitzer 5210
200 select

25VAC

COMMON

SIGNAL

SIGNAL COMMON 25VAC

Wurlitzer 5250
200 select

SIGNAL

COM

24 V.A.C

COMMON SIGNAL 25VAC

Rock-Ola 1555
200 select

SIGNAL
LOCK OUT

24 V.A.C.

COMMON SIGNAL 25VAC

Rock-Ola 1558
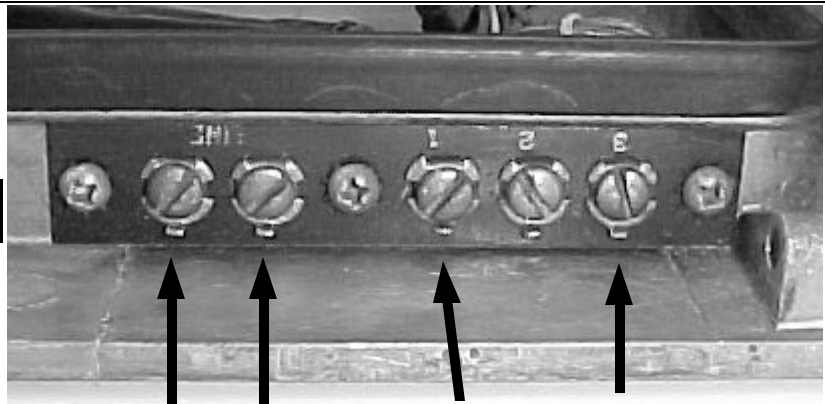**160 select**

Rock-Ola 500
160 select
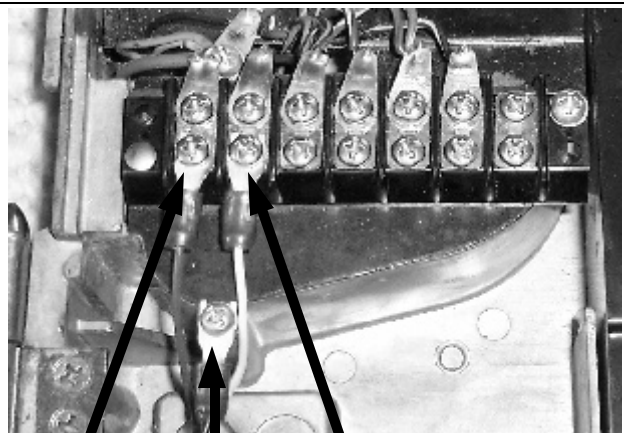
25VAC COMMON SIGNAL

Wurlitzer 3020
24 select

**The Original 1015 Bubbler Wallbox**

120VAC

SIGNAL   25VAC

This wallbox has its own "built-in" transformer and requires a 120VAC power cord. High voltage is used so be very careful when wiring up this wallbox.

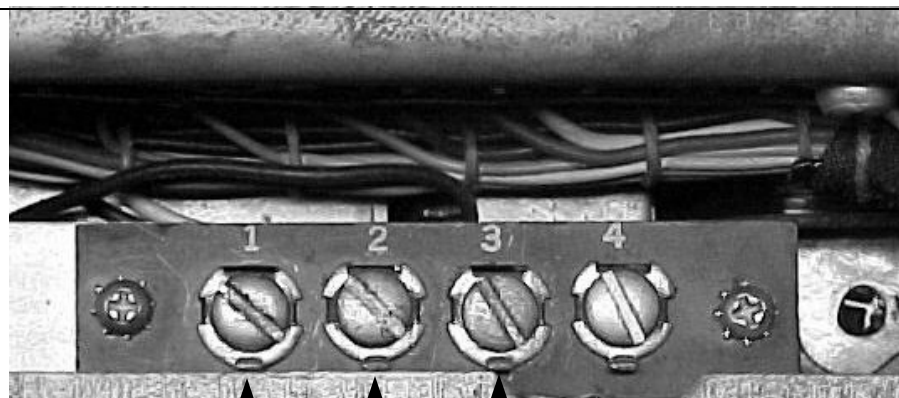The wallbox adapter only requires the two wire connection to terminal #1 and terminal #3.

AMI WQ-200
200 select

COMMON   25VAC   SIGNAL   25VAC*

A wire jumper must be inserted from the 25VAC main power terminal to the 25VAC* lock-out.
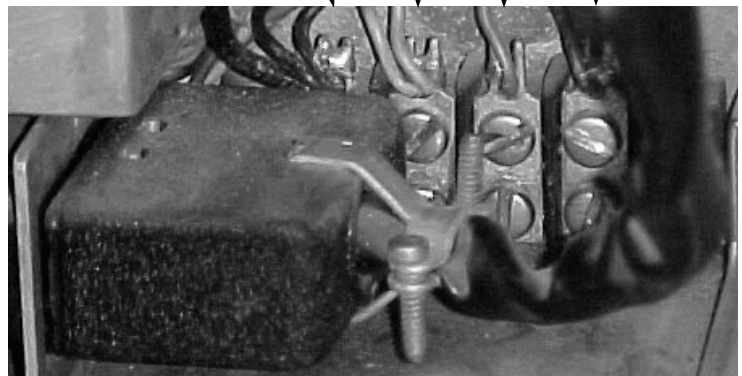
Wurlitzer 5207
104 select

SIGNAL   COMMON   25VAC