Wallbox Music Player
Model "WMP-255"
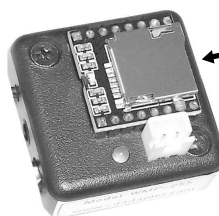
- Micro-SD, up to 32GB capacity
- Supports MP3 or WAV formats
- 99 folders with each to 255 songs

- Worlds smallest player, 35 x 35 x 22mm
- Remote selectable Volume & Equalizer
- Amplifier output for Wallbox Speakers
- Audio out jack for ext Amp or Bluetooth
- LED to show WB Signal & Player Status

Complete wallbox list on following page

Setup Code 0041

Wireless Remote Control

CHAN+	AutoPlay On	CHAN-	AutoPlay Off
VOL+	Volume Up	VOL-	Volume Down
MUTE	Tog Play/Pause	POWER	Cancel Song

Numeric Buttons

001 - 255	Direct 3-digit Wallbox Folder selections
000	Enter Setup Mode (LED On) *See Below*

301 - 399	AutoPlay Folder	401 - 475	Option Modes
500 - 507	AP Interval	600 - 630	Pwr On Volume
700 - 705	EQ Profile	801 - 899	Wallbox Folder
901 - 919	Wallbox Type		

Product Highlights

- No hole drilling or wallbox modifications required
- Allows player usage without being hooked up to a wallbox
- Folder numbers: 01-99, MP3 or WAV audio files: 001-255
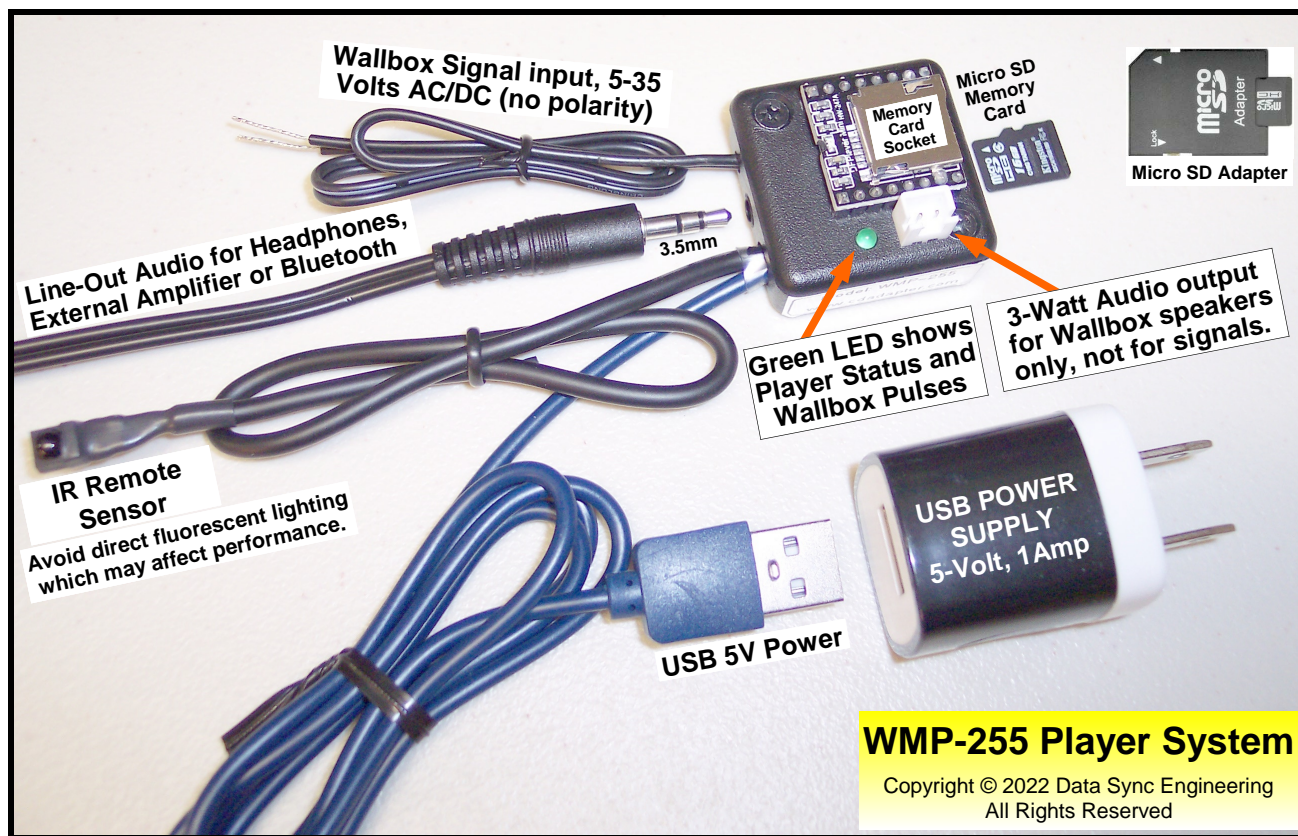- Stores up to 80 wallbox or remote selections to be played

*The SD Memory Card Formatter can be Downloaded here
https://www.sdcard.org/downloads/formatter_4/
To format media above 32GB as FAT32, you can run "guiformat.exe"
which is available here www.ridgecrop.demon.co.uk/guiformat.htm*

Operating Features

- Select individual folders for Wallbox & AutoPlay selections
- Select Random or Sequential AutoPlay mode
- Select AutoPlay Off, On & Time Period Interval
- Built-In Wallbox testing and song preview modes

Wallbox Signal input, 5-35 Volts AC/DC (no polarity)

Micro SD Memory Card

Memory Card Socket

Micro SD Adapter

Line-Out Audio for Headphones, External Amplifier or Bluetooth

3.5mm

Green LED shows Player Status and Wallbox Pulses

3-Watt Audio output for Wallbox speakers only, not for signals.

IR Remote Sensor
Avoid direct fluorescent lighting which may affect performance.

USB POWER SUPPLY 5-Volt, 1Amp

USB 5V Power

WMP-255 Player System

Data Sync Engineering
P.O. Box 539, Footbridge Lane, Bldg 3
Blairstown, New Jersey 07825

**TEL: (908) 362-6299
email: sales@datasynceng.com
Web: www.cdadapter.com**

CONFIGURATION SETUP SUMMARY

The setup mode is entered after pressing the remote 000. When the green LED turns continuously on, enter the 3-digit function value to program your setting. If you changed your mind, and wish to exit, press any non-numeric button such as POWER.

Digit Range		Function	Factory	Comments
001 - 255		User 3-Digit Selection Entry	- - -	Direct 3-digit song selection from wireless remote when not in Setup
301 - 399	☑	AutoPlay Folder Number	301	Set Folder # for AutoPlay selections (*see Op Mode 472/473*)
401 - 477	☑	Set Operating Configuration	- - -	See "*Operating Mode Options*" below
500 - 507		Autoplay Interval Setting	500	See "*AutoPlay Interval Settings*" below
600 - 630		Power-On Volume Level	622	This volume level setting is saved and used at each power up
700 - 705		Equalizer Profile Setting	700	Saved as default, e.g., 700: EQ Off, 703: Bass, 704: Loudness
801 - 899	☑	Wallbox & 3-Digit Folder #	801	Set Folder Number for WB & User 3-Digit (*see Op Mode 474/475*)
901 - 919	☒	Set Wallbox Type Number	906	See "*Wallbox Type Settings*" below

☑ **Some "Operating Mode Option" changes may perform a player reboot.**   ☒ **Player reboots after Wallbox Type Number entered.**

Enter 4nn for sequential wallbox testing. nn=WB type 01-18. Selections to be in numerical order. 3-error blinks upon error.
VOL- / VOL+ changes volume level.   491 then MUTE, forces factory reset, 4-error blinks follow, requires power cycled reboot.

Operating Mode Options

Value	Function Factory Reset = ✖	
401➜419	One-time WB Sequential Test	
450	☑ 50Hz AC Line Frequency	
460	☑ 60Hz AC Line Frequency	✖
470	Randomized AutoPlay Selections	✖
471	Sequential AutoPlay Selections	
472	☑ AP Folder, set as "Save & Run"	✖
473	AP Folder, set as "On The Fly"	
474	☑ WB Folder, set as "Save & Run"	✖
475	WB Folder, set as "On The Fly"	
476	Selection Preview is OFF	✖
477	Selection Preview is ON	

"Randomized AutoPlay" only works with song folders having 33 or more song files, otherwise, the player automatically selects "Sequential AutoPlay".

If "Selection Preview" is on, and a song is playing, the next Wallbox or Remote selection will cancel the current song play and start the new song play.

Wallbox Type Settings

Value	Wallbox Model Description (Factory Reset is 906)
901	Seeburg SC1-SC4, SCH1-SCH4 (160-Select)
902	Wurlitzer 5210 / 5220 / 5250 (200-Select)
903	Seeburg 3W1 & 3W100 (100-Select)
904	Seeburg 3WA (200 Select) / 3W160 (160 Select)
905	Rowe WRA / WRB / WRC (200-Select)
906	AMI W-40 / W-80 / W-120 / WQ-200 (40-200 Select)
907	Wurlitzer 5207 (104-Select)
908	Wurlitzer 5225 (100-Select)
909	Wurlitzer 3020 (24-Select) "Single set"
910	Rock-ola 1558 / 500 (160 Select), 1555 (120/200 Select)
911	Rock-ola 506 (160-Select)
912	Rock-ola 507 (160-Select)
913	Rock-ola "Johnny Rockets" Digital 3W1, 100 Select
914	Rock-ola 1542 / 1548 (120-Select)
915	Rock-ola 1544 / 1546 (120-Select)
916	Wurlitzer 5204A "3-terminal" (104-Select)
917	Rock-ola 1542 / 1548 (120-Select) ALT Configuration
918	Rock-ola 1544 / 1546 (120-Select) ALT Configuration
919	Custom Wallbox Configuration (requires setup steps)

AutoPlay Interval Settings

Value	Autoplay Mode
500	Off (Factory Reset)
501	Continuous
502	1-Min Interval
503	5-Min Interval
504	10-Min Interval
505	20-Min Interval
506	40-Min Interval
507	60-Min Interval

Green LED Error Blink Indications

2	Wallbox type setup error, verify correct value was entered
3	Sequential wallbox test failed (expected code not received)
4	Factory reset was performed, re-power unit to continue
5	Unable to get a song count from Wallbox or AutoPlay folder Wallbox & AutoPlay folders reset to "01", re-power to continue

ABOUT THE SONG FOLDERS AND FILES

Any folder, containing song files, can be assigned for Wallbox and/or AutoPlay selections. The folder name itself, is limited to only two numeric digits 01 to 99. Each song filename, within the folder, starts with the first three numeric digits 001 to 255 and ends with the last four character extension type, such as ".MP3" or ".WAV".

The player supports two Media File format types

MP3   (MPEG-1 Layer 3)   Compressed format, Bit Rates 32 to 320 kbps (Much smaller files ~ 75-95%)
WAV   (Waveform Audio Format)   An uncompressed audio format developed by Microsoft and IBM.

The examples below show the file size differences between the formats

```
001-Rock around the clock.mp3           2,065 KB    MP3 Format Sound    (@ 128 kbps,    Near CD Qual)
002-Rock around the clock.mp3           3,098 KB    MP3 Format Sound    (@ 192 kbps,    CD Quality)
003-Rock around the clock.mp3           5,163 KB    MP3 Format Sound    (@ 320 kbps,    Max bit rate)
004-Rock around the clock.wav          22,751 KB    Wave Sound          (PCM, 44 kHz, 2 Ch, 16-bit)
```

To create the MP3 song files from your CD you would use a program to "Rip" the CD tracks to MP3. **Windows Media Player** can be used but make sure, in the Options menu, that the Format is set for MP3 (not WMA). There are many other rippers, such as one by **www.poikosoft.com**, that will automatically insert the track numbers and song names.

Another consideration is the bit rate. The bit rate is similar to the resolution of a photo, lower resolution will produce a fuzzy image. For music, bit rates below 128Kbps may start to sound grainy. You can't tell much of a difference using the maximum bit rate of 320Kbps other than larger file sizes. Many agree that the bit rate of 192Kbps is very close to CD quality (as we recommend).

EXAMPLE FOLDERS AND THE FILES WITHIN A FOLDER
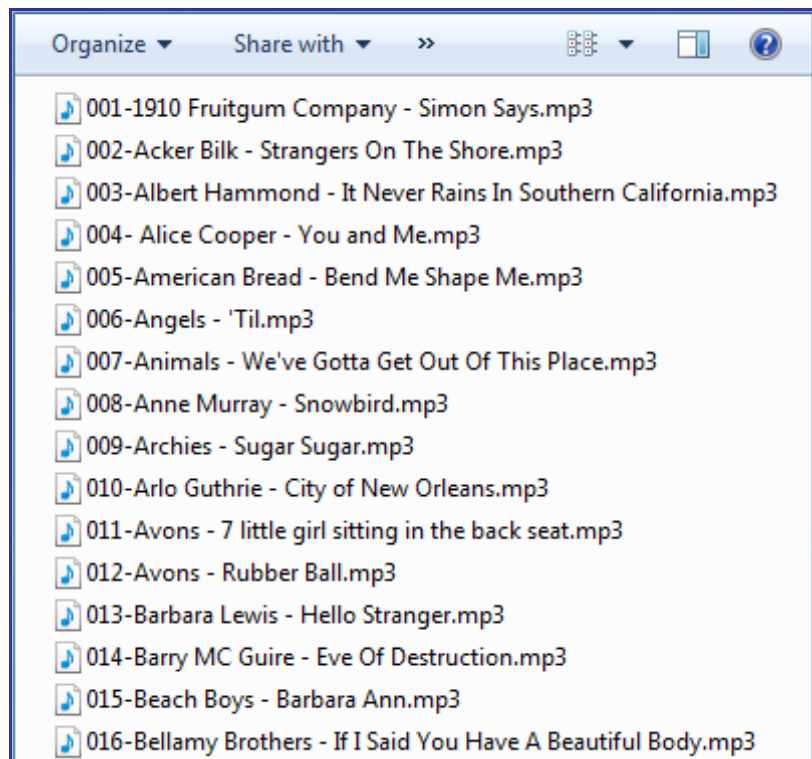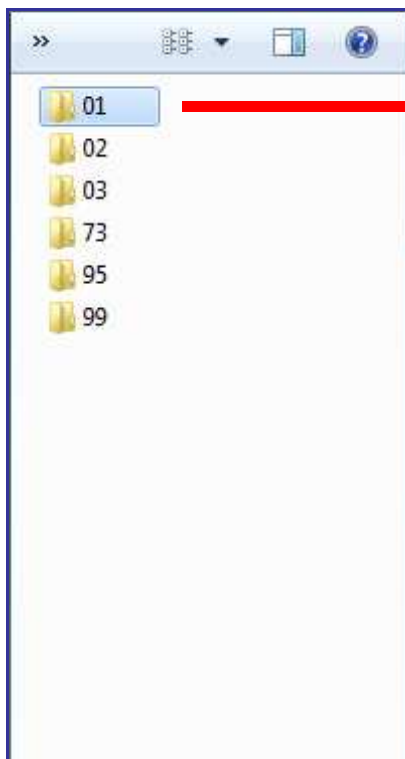
Folder names can only be a two digit number from 01 to 99.

Each folder can have up to 255 song files. The file format types can be either MP3 or WAV.

The first three numeric digits of the filename identify the song number position and must be in sequential order starting with 001 and up to the maximum of 255. Although, some wallboxes would only select up to 200, the AutoPlay feature will select up to the number of available songs.

Setting Up the Remote Control

To set the code for this remote, Press & Hold the "Code Search" button until the LED remains on, then enter digits 0041.

The LED should turn off. Error if blinking, and requires to repeat this step again.

If the LED didn't turn on from the Code Search, remove the battery and hold the POWER button a few seconds. Re-insert the battery and try again.
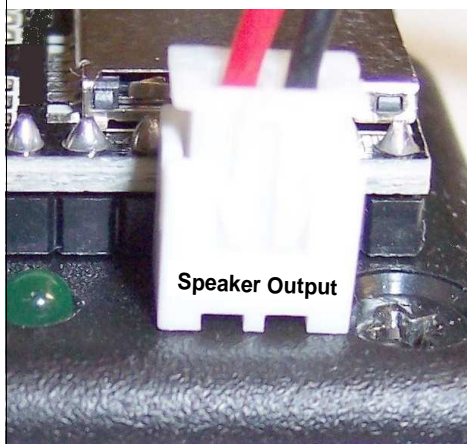
Lost your Remote ?
Most Universal Remotes are available that will work with this player.

See the section to Force the player into "Power-Up Test". When it starts to play, Follow the manufacturers "Code Search" steps for TV. The song stops playing when the POWER code is found.

Wallbox Speaker Connection

Red Wire ✚ ━ Black Wire

Speaker Output

The speaker output audio is produced from a stereo mixer circuit fed into a mono bridged audio power amplifier capable of delivering 3W of continuous average power into a 3Ω load with less than 10% THD.

The Red wire is looped to both the Left and Right speaker connection and the Black wire is connected to speaker COM.

This provides consistent audio from both speakers while allowing the use of the wallbox High -- Low volume switches.

Don't Have A Wallbox Yet ?

Not A Problem !

A wallbox is not necessary to operate this player. You can enter your selections from the Remote. Operates exactly the same way, as if it was from the wallbox.

Provides you with the opportunity to test and evaluate the player for your project.

For comparison, we would say this player is the miniature version of our popular WB-MP3 player, with a few more features.

Wallbox Selections

A wallbox transmits a series of pulses which are decoded by the player to select a song number.

The sequence of song numbers were designed to match the title strips. The top of the 1st title strip selects song 001, the bottom of the strip selects 002. Top of the next title strip selects 003 and the bottom 004. This sequence continues to the end.

Before using the wallbox, you need to set the model type connected. This is done from the setup mode. Press 000 on the remote, after the green LED turns on, enter the 3-digit value from the list.

Throughout the manual, the setup step above will be shown as 000: with the value or range of values provided.

```
000:901-918    Set the wallbox type
000:450/460    Set the line frequency
000:801-899    Set wallbox song folder
```

Two mode options for folder changes ...

```
000:474        WB folder "Save&Run"
000:475        WB folder "On The Fly"
```

"Save&Run" stores the setup value to power-up memory then reboots. If a song was playing, it is stopped and all songs waiting to be played will be erased.

"On The Fly" only changes the run value, and is not saved. If a song was playing, it will continue to play. The next selection will be from the new "run value" folder. ⚠ Although, it can be instantly changed at any time, it does not reboot to renew the song count which may cause song delay. It is recommended that the new folder has a higher or same song count as the original boot-up folder.

Wireless Remote Selections

Remote selections are user direct 3-digit song number selections, from 001 to 255, and uses the same folder number as the wallbox selections.

Both, wallbox and remote selections, are saved to memory and played in the order received.

Selection Preview Mode

If "Selection Preview" is ON, and a song is currently playing, the next Wallbox or Remote selection will cancel the current song play and start the new song play.

```
000:476        Selection Preview  OFF
000:477        Selection Preview  ON
```

💡 Selection Preview was not just a requested feature for song surfers, but also provides the ability to demonstrate, test and verify the wallbox performance

AutoPlay Selections

AutoPlay is a feature that picks songs at a chosen period of time when no Wallbox or Remote selection is available to play.

Any folder can be used for AutoPlay. Two play modes are available, Sequential or Randomized selections. But if a folder has less than 33 song files, the player automatically selects "Sequential Mode"

```
000:500-507    Set AutoPlay interval
000:470        Randomized AutoPlay
000:471        Sequential AutoPlay
000:301-399    Set AutoPlay folder
```

Two mode options for folder changes ...

```
000:472        AP folder "Save&Run"
000:473        AP folder "On The Fly"
```

Selection Preview causes the AutoPlay selection to be cancelled.

Power On Volume Level

At "Power On", the volume level setting saved in power-up memory is used.

The Factory Reset volume level is 622. The Maximum volume level is 630.

```
000:600-630    Set the volume level
```

Set the Equalizer Profile

At "Power On", the EQ profile setting saved in power-up memory is used.

The Factory Reset setting is 700 (no EQ). Six EQ settings are available 700 to 705.

You would need to try each one to see which is suitable for your acoustics.

```
000:700-705    Set the EQ profile
```

One-Time WB Sequential Test

This is actually used as a Factory Test

It works by booting up into test mode as defined by the wallbox type specified.

When started, it is expecting every WB selection to be in sequential order from 001 up to 200.

3-Error blinks indicates a sequence error.

```
000:401-419    Start WB sequence test
```

How to Force Power-Up Test

Hold wallbox input wires across 9-volt battery and power-up unit. Starts up in Continuous AutoPlay at song #1 in Sequential mode from the wallbox folder number. Disconnect battery.

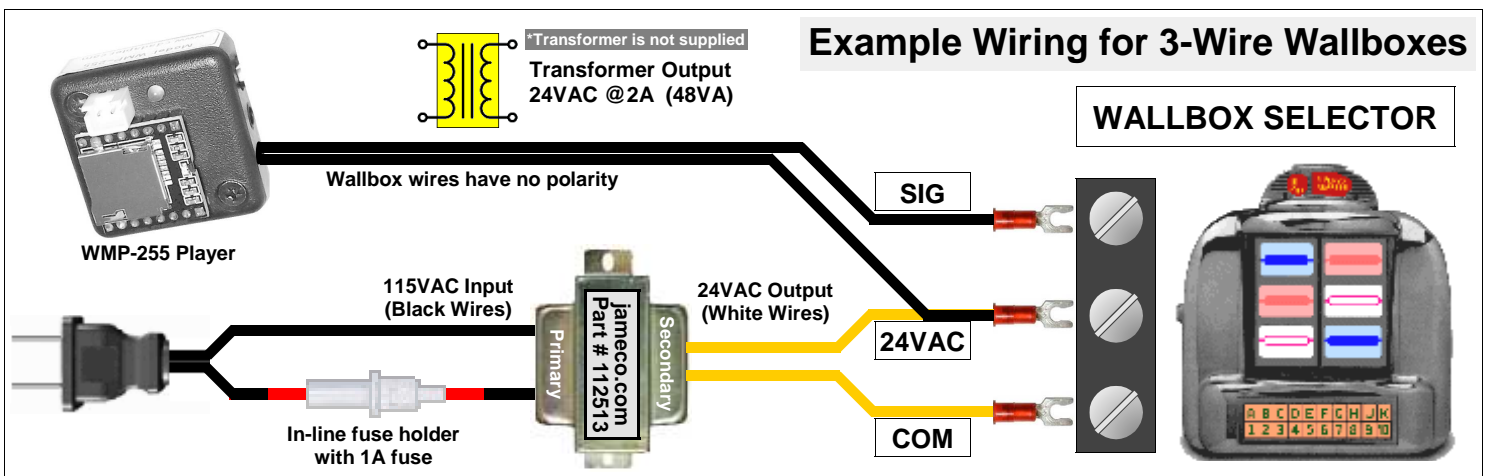If unable to get the song count, shows a 5-blink error and the wallbox folder # is reset to 01.

Re-power the unit to try again. If the same error again, the folder may be empty or memory card is corrupted. Try to reformat and load SD card.

SONG TEST. Enter 3-digit song selections from the Remote. If a song is currently playing, it is cancelled, the new entered selection is started.
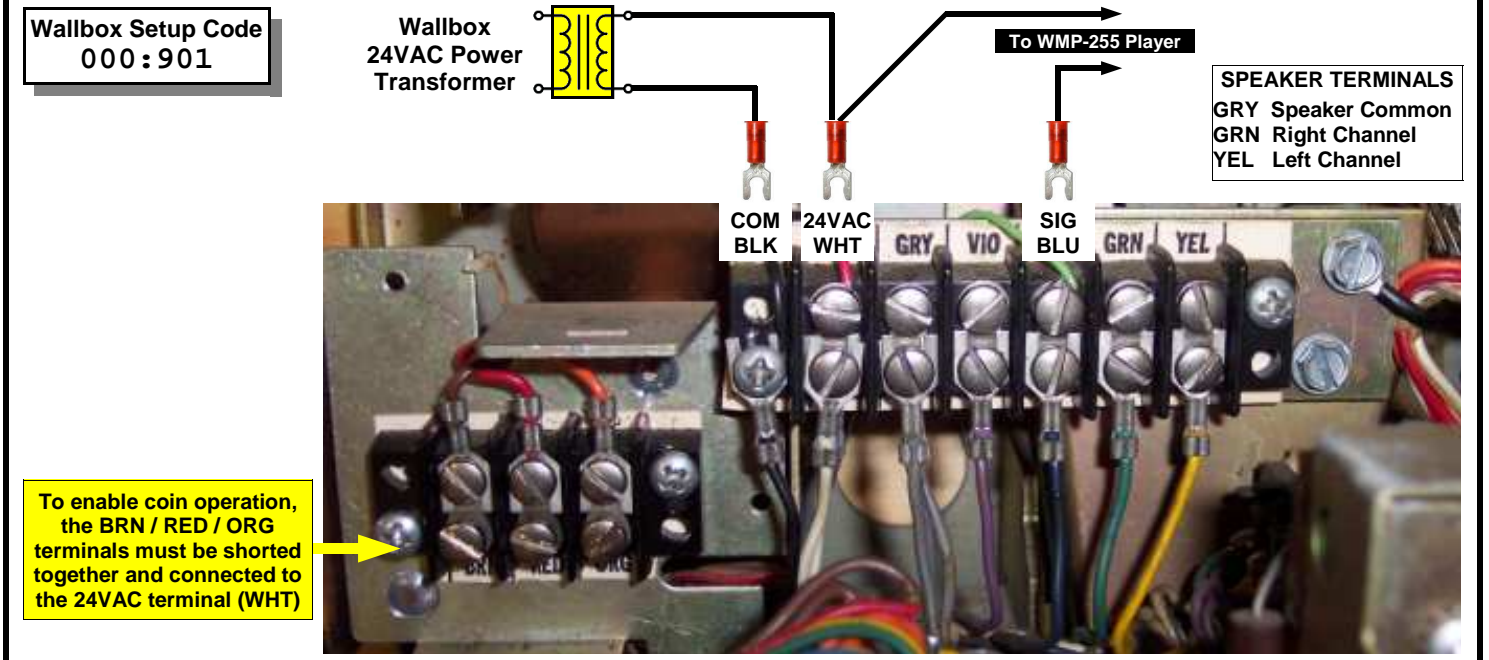
The POWER key cancels the current song play and starts the next sequential song play.

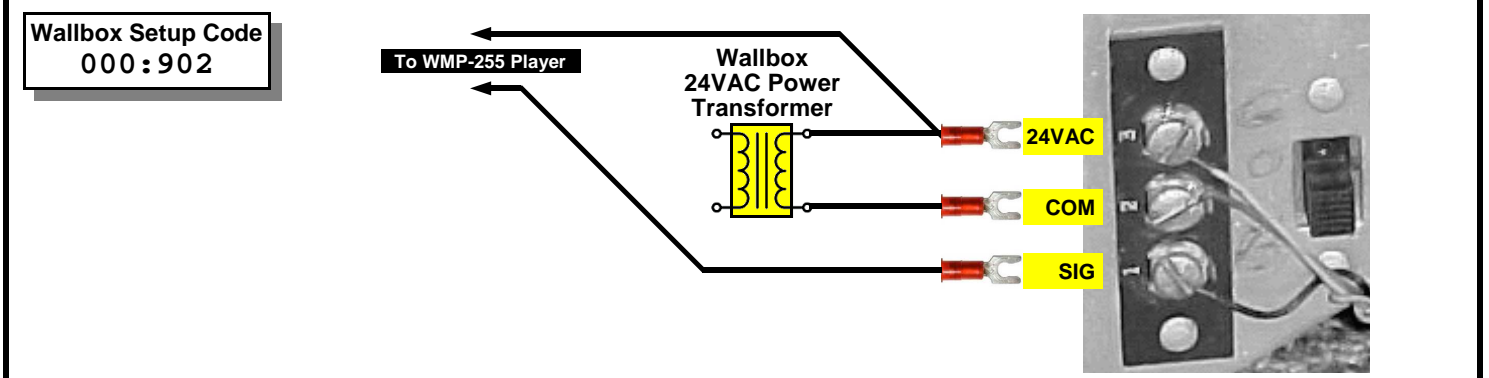The PREV key cancels the current song play and starts the previous song play.

CONNECTING YOUR WALLBOX TO THE WMP-255 PLAYER

Example Wiring for 3-Wire Wallboxes

*Transformer is not supplied
**Transformer Output
24VAC @2A (48VA)**

WMP-255 Player

Wallbox wires have no polarity

WALLBOX SELECTOR

**115VAC Input
(Black Wires)**

jameco.com
Part # 112513
Primary / Secondary

**24VAC Output
(White Wires)**

**In-line fuse holder
with 1A fuse**

SIG

24VAC

COM

Seeburg Consolette SC1 to SC4 and SCH1 to SCH4 (160 select)

**Wallbox Setup Code
000:901**

**Wallbox
24VAC Power
Transformer**

To WMP-255 Player

SPEAKER TERMINALS
GRY Speaker Common
GRN Right Channel
YEL   Left Channel

COM
BLK

24VAC
WHT

GRY   VIO

SIG
BLU

GRN   YEL

To enable coin operation,
the BRN / RED / ORG
terminals must be shorted
together and connected to
the 24VAC terminal (WHT)

Wurlitzer 5210 (200 select)

**Wallbox Setup Code
000:902**

To WMP-255 Player

**Wallbox
24VAC Power
Transformer**

24VAC

COM

SIG

Wurlitzer 5220 (200 select) and Wurlitzer 5225 (100 select)

5220 - Setup Code
000:902

5225 - Setup Code
000:908

24 VAC 3 | 2 | COM G | SIG 1
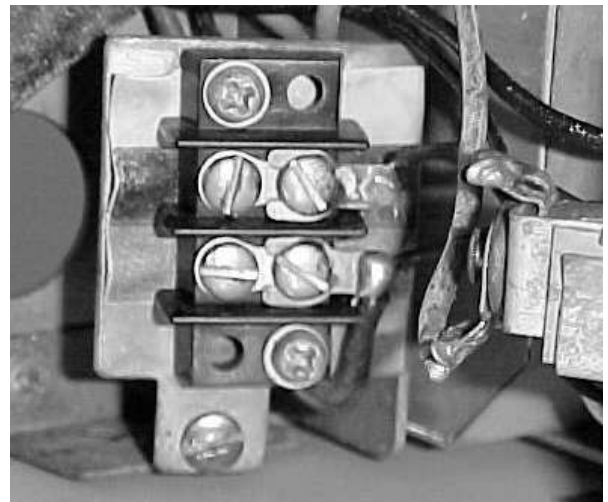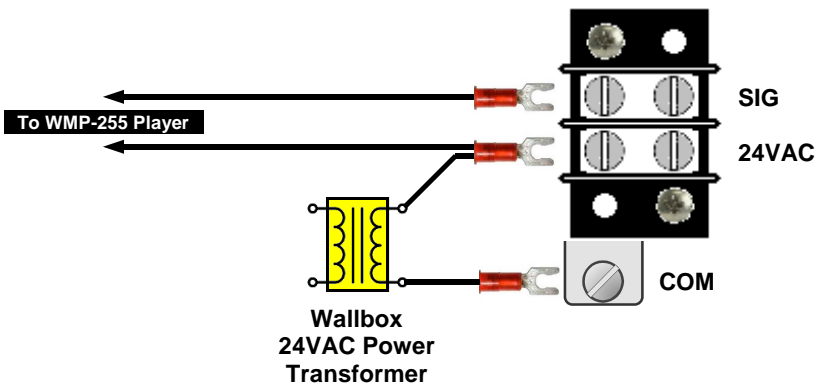
Wallbox 24VAC Power Transformer
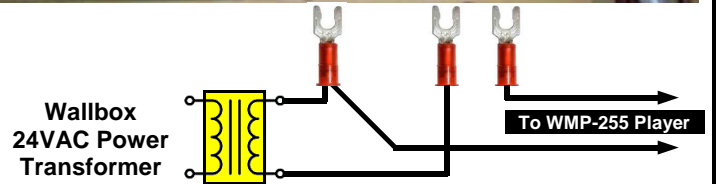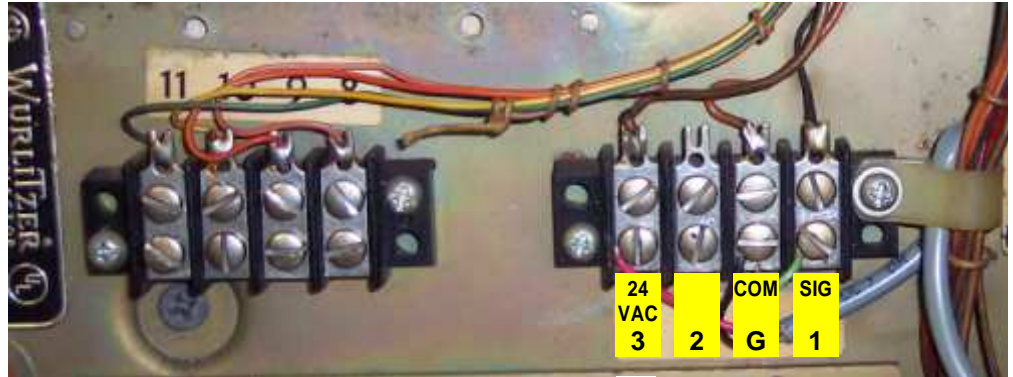
To WMP-255 Player

Wurlitzer 5250 (200 select)

Wallbox Setup Code
000:902

To WMP-255 Player

SIGNAL

24VAC

COM

Wallbox 24VAC Power Transformer

SIGNAL | COM | 24VAC
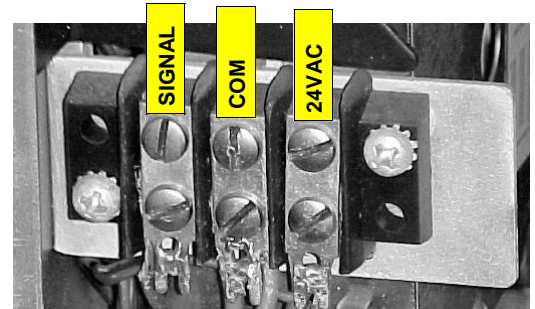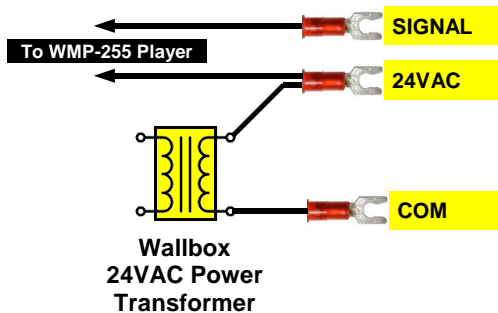
Seeburg Wall-o-matic 3W1 / 3W100 (100 select)

Wallbox Setup Code
000:903

To WMP-255 Player

SIG

24VAC

COM

Wallbox 24VAC Power Transformer

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

Wallbox Setup Code
000:904
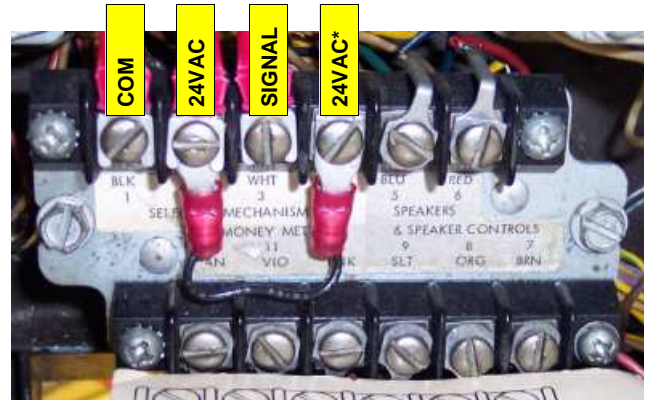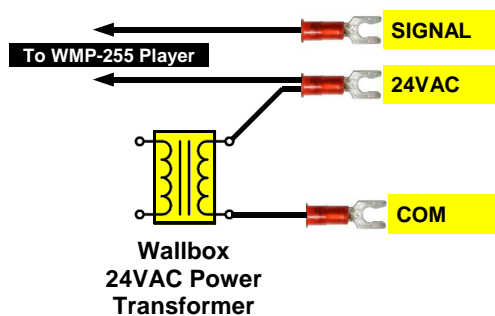
COM 24VAC SIG

To WMP-255 Player

Wallbox
24VAC Power
Transformer
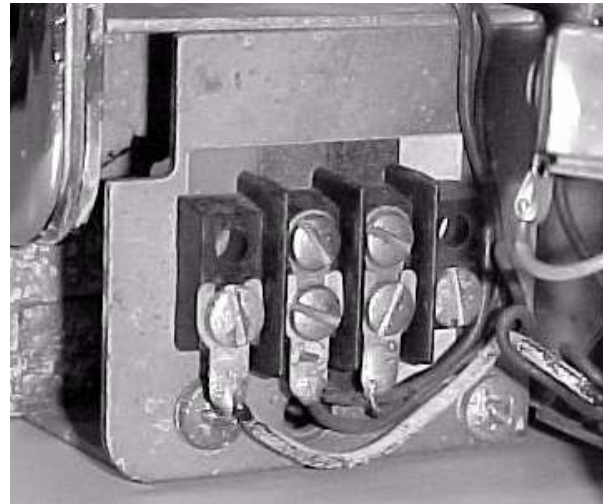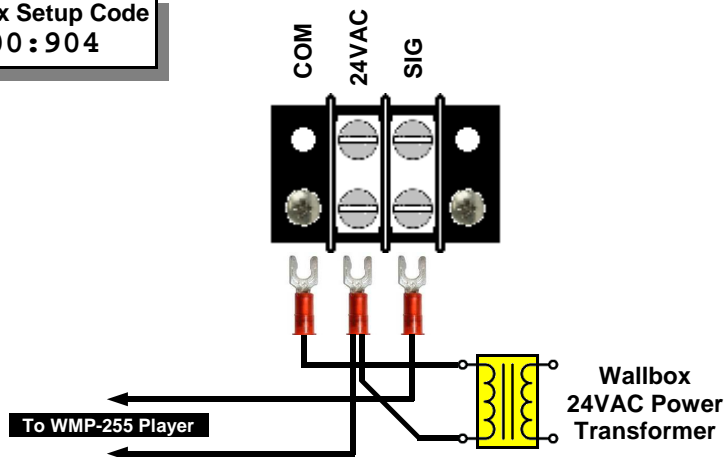
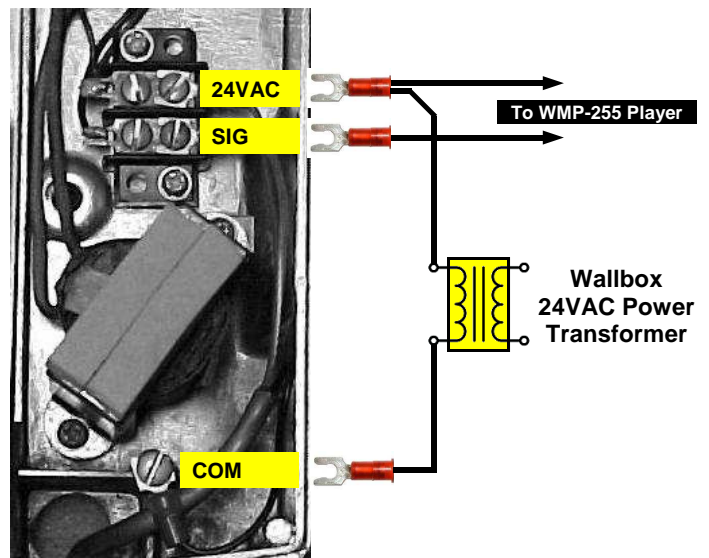### Rowe WRA / WRB / WRC (200 select)

Wallbox Setup Code
000:905

A wire jumper must be inserted from the 24VAC main power terminal (#2) to the 24VAC* keypad motor terminal (#4).

COM 24VAC SIGNAL 24VAC*

SIGNAL

To WMP-255 Player

24VAC

COM

Wallbox
24VAC Power
Transformer

AMI W-40 / W-80 / W-120 (40 / 80 / 120 select)

Wallbox Setup Code
000:906

24VAC

SIG

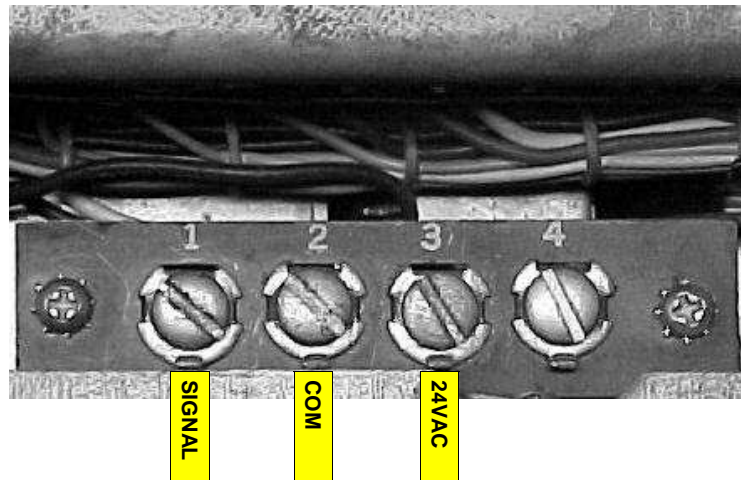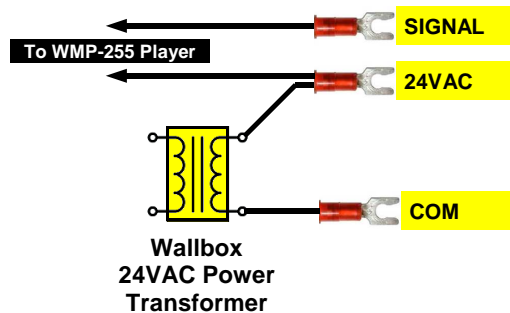To WMP-255 Player

Wallbox
24VAC Power
Transformer

COM

AMI WQ-200 (200 select)

Wallbox Setup Code
000:906

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

SIGNAL
To WMP-255 Player
24VAC
COM

Wallbox 24VAC Power Transformer

COM   24VAC   SIGNAL   24VAC*
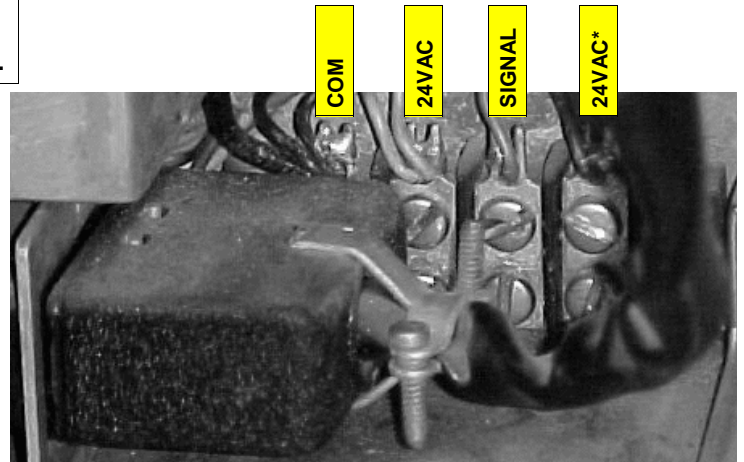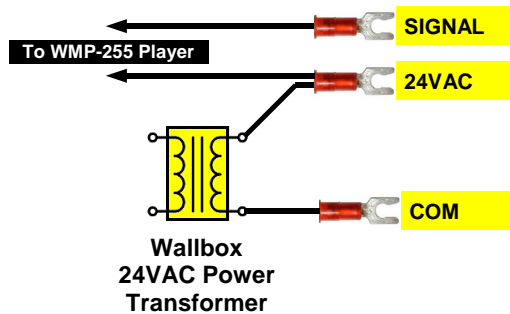
Wurlitzer 5207 (104 select)

Wallbox Setup Code
000:907

SIGNAL
To WMP-255 Player
24VAC
COM

Wallbox 24VAC Power Transformer

1   2   3   4

SIGNAL   COM   24VAC

Wurlitzer Model 3020 Wallbox (24 select)

Wallbox Setup Code
000:909

Warning! 115VAC   SIGNAL   24VAC

115VAC
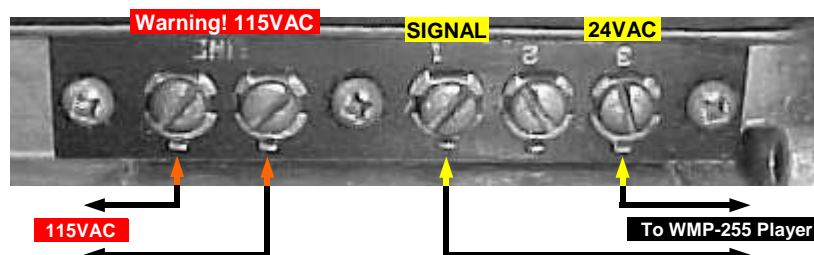
To WMP-255 Player

This wallbox has its own "built-in" transformer and requires a 120VAC power cord.

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

Rock-Ola 1558 (160 select)

Wallbox Setup Code
`000:910`

To WMP-255 Player

SIGNAL

24VAC

COM

**Wallbox
24VAC Power
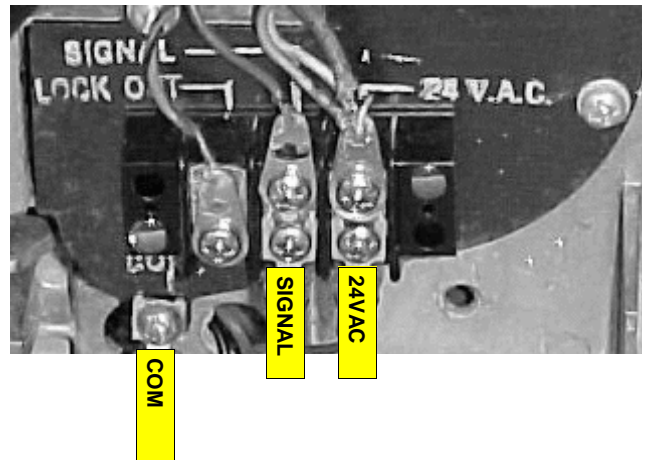Transformer**

SIGNAL
LOCK OUT
24 V.A.C.
COM
SIGNAL
24VAC
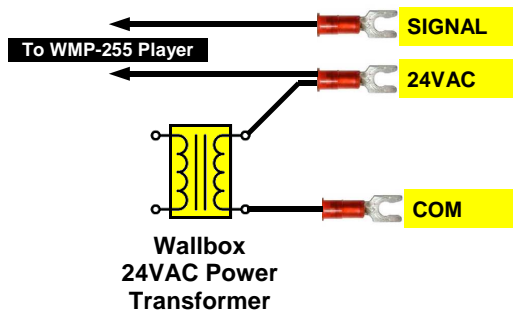
Rock-Ola 500 (160 select)

Wallbox Setup Code
`000:910`

To WMP-255 Player

SIGNAL

24VAC

COM

**Wallbox
24VAC Power
Transformer**

24VAC
SIGNAL
COM
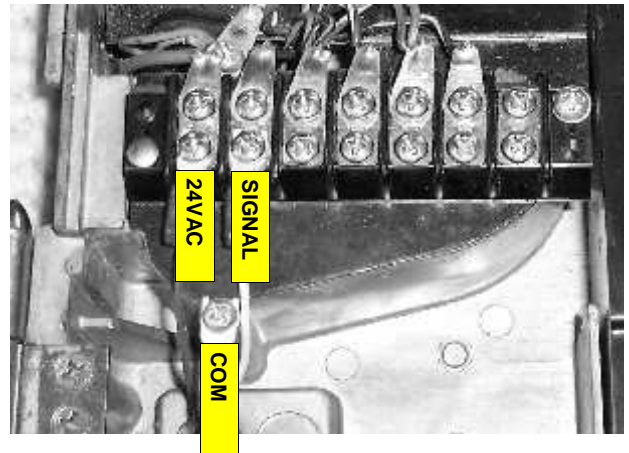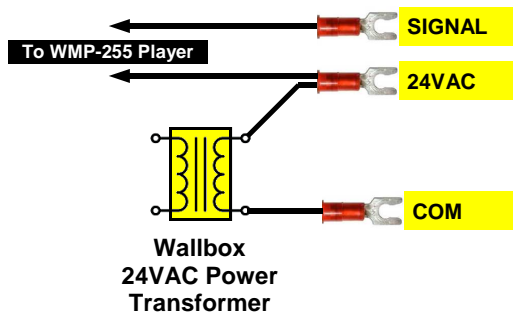
Rock-Ola 1555 (200 select)

Wallbox Setup Code
`000:910`

To WMP-255 Player

SIGNAL

24VAC

COM
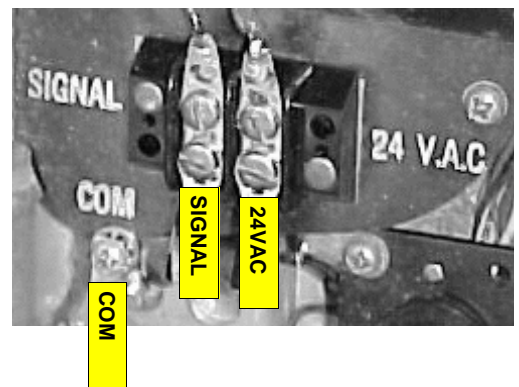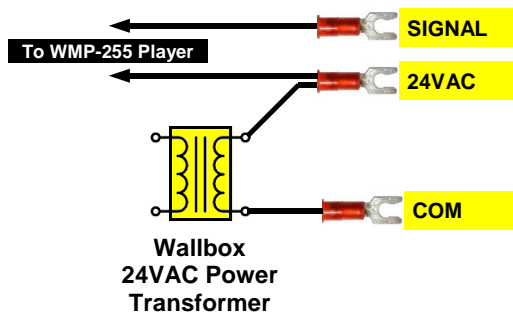
**Wallbox
24VAC Power
Transformer**

SIGNAL
COM
24 V.A.C.
SIGNAL
24VAC
COM

Rock-Ola Tri-Vue 506 and 507 (160 select)

"506" Top P.C. board, green jumper wire, must be at the "A" position)
Signals are wired differently between the 506 and 507 model

Wallbox Setup Code
000:911

506 SIGNAL & COM

SIGNAL

Wallbox 24VAC Power Transformer

COM

24VAC

Wallbox Setup Code
000:912

507 24VAC & SIGNAL

SIGNAL

Rock-Ola Tri-Vue 506 / 507

WALLBOX TERMINAL CONNECTIONS

CHASSIS GROUND

24VAC

SIGNAL

LOCK-OUT

AUDIO CONTROL

LEFT SPEAKER

AUDIO GROUND

RIGHT SPEAKER

COM
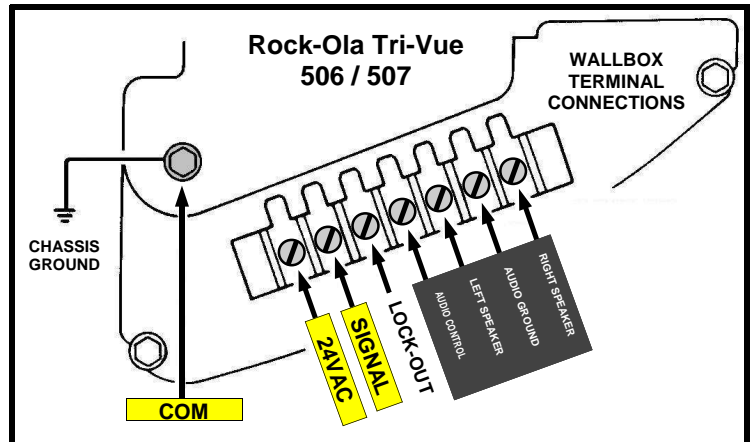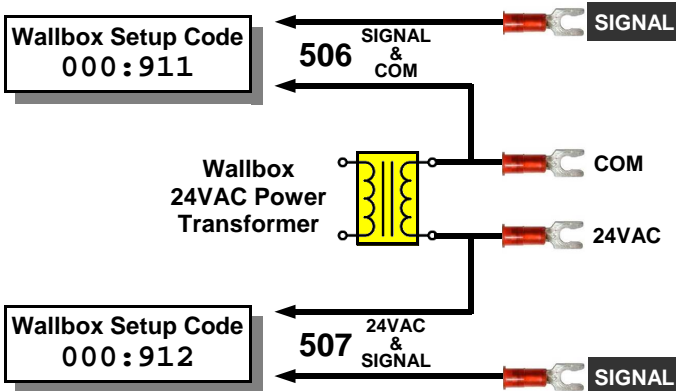
Rock-Ola JR1/JRW, "Johnny Rockets" Seeburg 3W1 Replica Wallbox (100 select)

Wallbox Setup Code
000:913

Diode 1N400x

To WMP-255 Player

BLUE SIG

GRN 24VAC

RED GND

Wallbox 24VAC Power Transformer

Set all dipswitch settings to the OFF (up) position
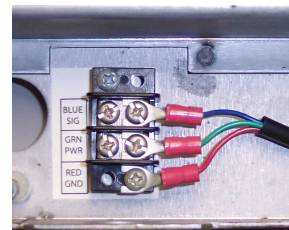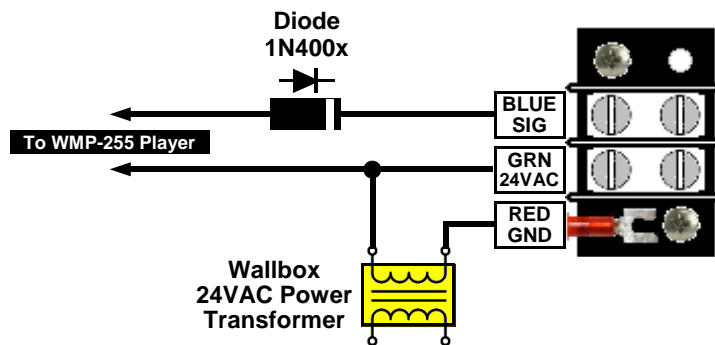
The Johnny Rockets JRW wallbox is an electronic replica of the Seeburg 3W1 mechanical wallbox. Wallbox power is rated for 24VAC @250 mA. This wallbox does not have a coin acceptor (which is notable by the missing coin reject button). Instead, any coin provides a single play or it can be set for Free Play by unplugging the 4-pin J2 connector.

Rock-Ola 1544/1546 (120 select)

Wallbox Setup Code
000:915

To WMP-255 Player

SIG

24VAC

COM

Wallbox 24VAC Power Transformer

Wurlitzer 5204A   (104 select)

Wallbox Setup Code
000:916

SIGNAL

To WMP-255 Player

24VAC

Wallbox
24VAC Power
Transformer

COM

SIGNAL — 1

COM — 2

24VAC — 3
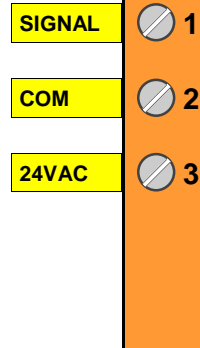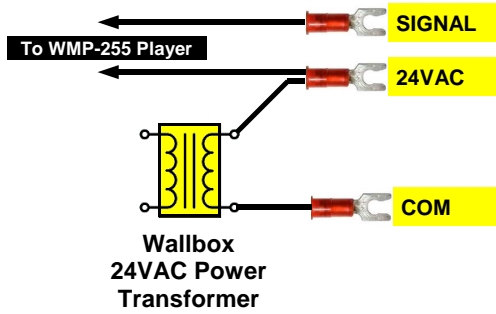
WALLBOX TO SONG NUMBER SELECTION CHART

NBR	LTR	SONG		NBR	LTR	SONG		NBR	LTR	SONG		NBR	LTR	SONG
A1	A1	001		F1	L3	051		L1	A6	101		R1	L8	151
A2	B1	002		F2	M3	052		L2	B6	102		R2	M8	152
A3	C1	003		F3	N3	053		L3	C6	103		R3	N8	153
A4	D1	004		F4	P3	054		L4	D6	104		R4	P8	154
A5	E1	005		F5	Q3	055		L5	E6	105		R5	Q8	155
A6	F1	006		F6	R3	056		L6	F6	106		R6	R8	156
A7	G1	007		F7	S3	057		L7	G6	107		R7	S8	157
A8	H1	008		F8	T3	058		L8	H6	108		R8	T8	158
A9	J1	009		F9	U3	059		L9	J6	109		R9	U8	159
A0	K1	010		F0	V3	060		L0	K6	110		R0	V8	160
B1	L1	011		G1	A4	061		M1	L6	111		S1	A9	161
B2	M1	012		G2	B4	062		M2	M6	112		S2	B9	162
B3	N1	013		G3	C4	063		M3	N6	113		S3	C9	163
B4	P1	014		G4	D4	064		M4	P6	114		S4	D9	164
B5	Q1	015		G5	E4	065		M5	Q6	115		S5	E9	165
B6	R1	016		G6	F4	066		M6	R6	116		S6	F9	166
B7	S1	017		G7	G4	067		M7	S6	117		S7	G9	167
B8	T1	018		G8	H4	068		M8	T6	118		S8	H9	168
B9	U1	019		G9	J4	069		M9	U6	119		S9	J9	169
B0	V1	020		G0	K4	070		M0	V6	120		S0	K9	170
C1	A2	021		H1	L4	071		N1	A7	121		T1	L9	171
C2	B2	022		H2	M4	072		N2	B7	122		T2	M9	172
C3	C2	023		H3	N4	073		N3	C7	123		T3	N9	173
C4	D2	024		H4	P4	074		N4	D7	124		T4	P9	174
C5	E2	025		H5	Q4	075		N5	E7	125		T5	Q9	175
C6	F2	026		H6	R4	076		N6	F7	126		T6	R9	176
C7	G2	027		H7	S4	077		N7	G7	127		T7	S9	177
C8	H2	028		H8	T4	078		N8	H7	128		T8	T9	178
C9	J2	029		H9	U4	079		N9	J7	129		T9	U9	179
C0	K2	030		H0	V4	080		N0	K7	130		T0	V9	180
D1	L2	031		J1	A5	081		P1	L7	131		U1	A0	181
D2	M2	032		J2	B5	082		P2	M7	132		U2	B0	182
D3	N2	033		J3	C5	083		P3	N7	133		U3	C0	183
D4	P2	034		J4	D5	084		P4	P7	134		U4	D0	184
D5	Q2	035		J5	E5	085		P5	Q7	135		U5	E0	185
D6	R2	036		J6	F5	086		P6	R7	136		U6	F0	186
D7	S2	037		J7	G5	087		P7	S7	137		U7	G0	187
D8	T2	038		J8	H5	088		P8	T7	138		U8	H0	188
D9	U2	039		J9	J5	089		P9	U7	139		U9	J0	189
D0	V2	040		J0	K5	090		P0	V7	140		U0	K0	190
E1	A3	041		K1	L5	091		Q1	A8	141		V1	L0	191
E2	B3	042		K2	M5	092		Q2	B8	142		V2	M0	192
E3	C3	043		K3	N5	093		Q3	C8	143		V3	N0	193
E4	D3	044		K4	P5	094		Q4	D8	144		V4	P0	194
E5	E3	045		K5	Q5	095		Q5	E8	145		V5	Q0	195
E6	F3	046		K6	R5	096		Q6	F8	146		V6	R0	196
E7	G3	047		K7	S5	097		Q7	G8	147		V7	S0	197
E8	H3	048		K8	T5	098		Q8	H8	148		V8	T0	198
E9	J3	049		K9	U5	099		Q9	J8	149		V9	U0	199
E0	K3	050		K0	V5	100		Q0	K8	150		V0	V0	200