

# Product Manual

## Pin 2 Sub Isolated Universal

P/N **TPP-1035**

**Connect your Pinball Machine  
To an Active Sub-Woofer**



**Tangles'  
Pin Parts**

Experience a new dimension in sound and enjoyment by pairing your Pinball machine to an Active Sub-Woofer using this adapter.

The Tangles TPP-1035 Pin 2 Sub Universal Isolated adapter is a safe and convenient way to tap the speaker output from your pinball machine and pass it to an active sub-woofer.

### Isolated Connection

The Tangles adapter uses a fully isolated circuit design. This isolation ensures no electrical connection is made between your pinball machine and the external active sub-woofer.

This is of vital importance not only in reducing audio noise and hum, but to ensure that any fault, imbalance or differences in mains power in the external speaker cannot jeopardise your precious pinball electronics.

Isolation between devices is especially important with modern systems employing switch-mode power supplies.

Universal Compatibility  
Document version 1.1

The TPP-1035 is universally compatible with pinball machines that have a cabinet speaker.

By nature of the supplied alligator clips and the built in isolation transformer, the Pin2Sub adapter can safely connect an active external sub-woofer to

Data-East, Williams, Bally, Stern or Gottlieb machines.

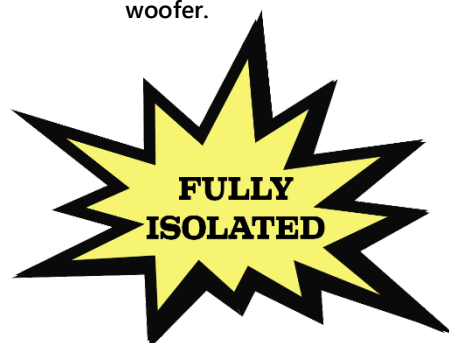
### Subwoofer Requirements

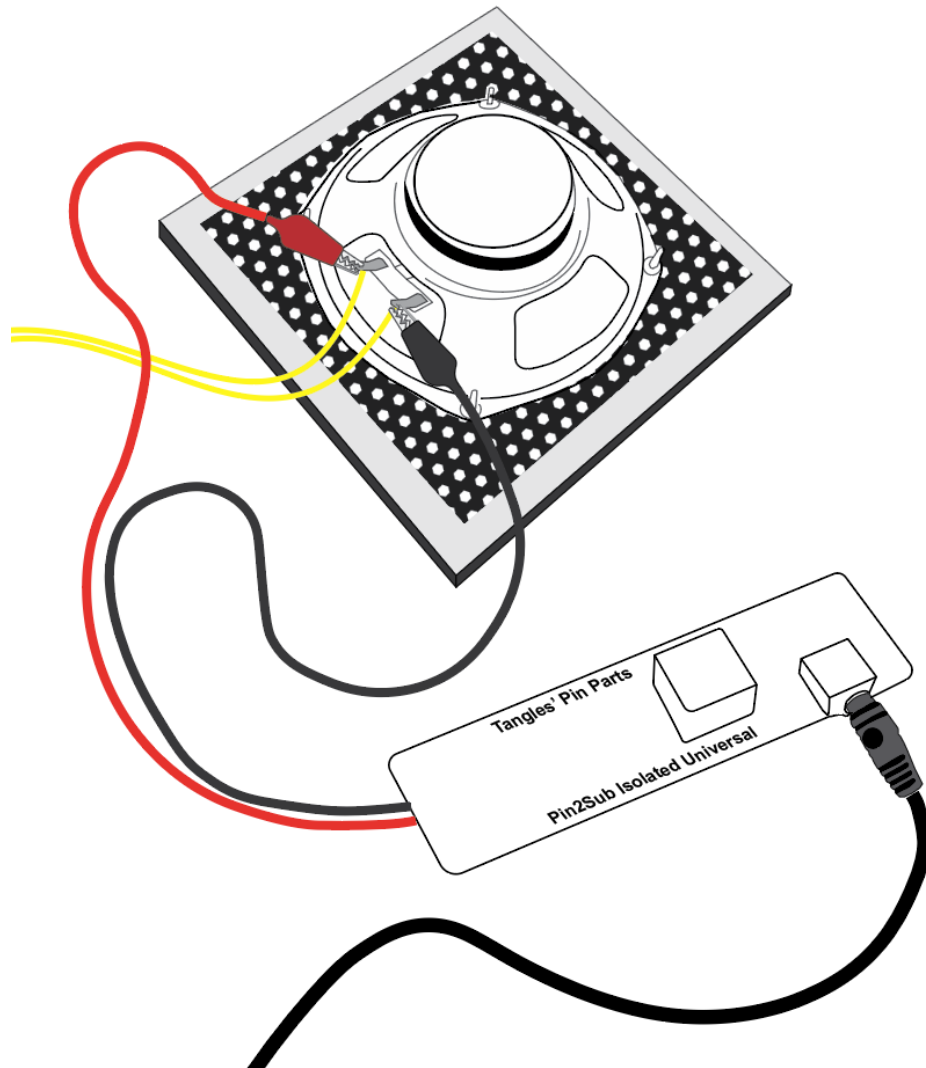
The Tangles Pin2Sub adapter is compatible with any active subwoofers that have line level input via one or two RCA plugs, or AUX input via 3.5 mm plug.

### Installation

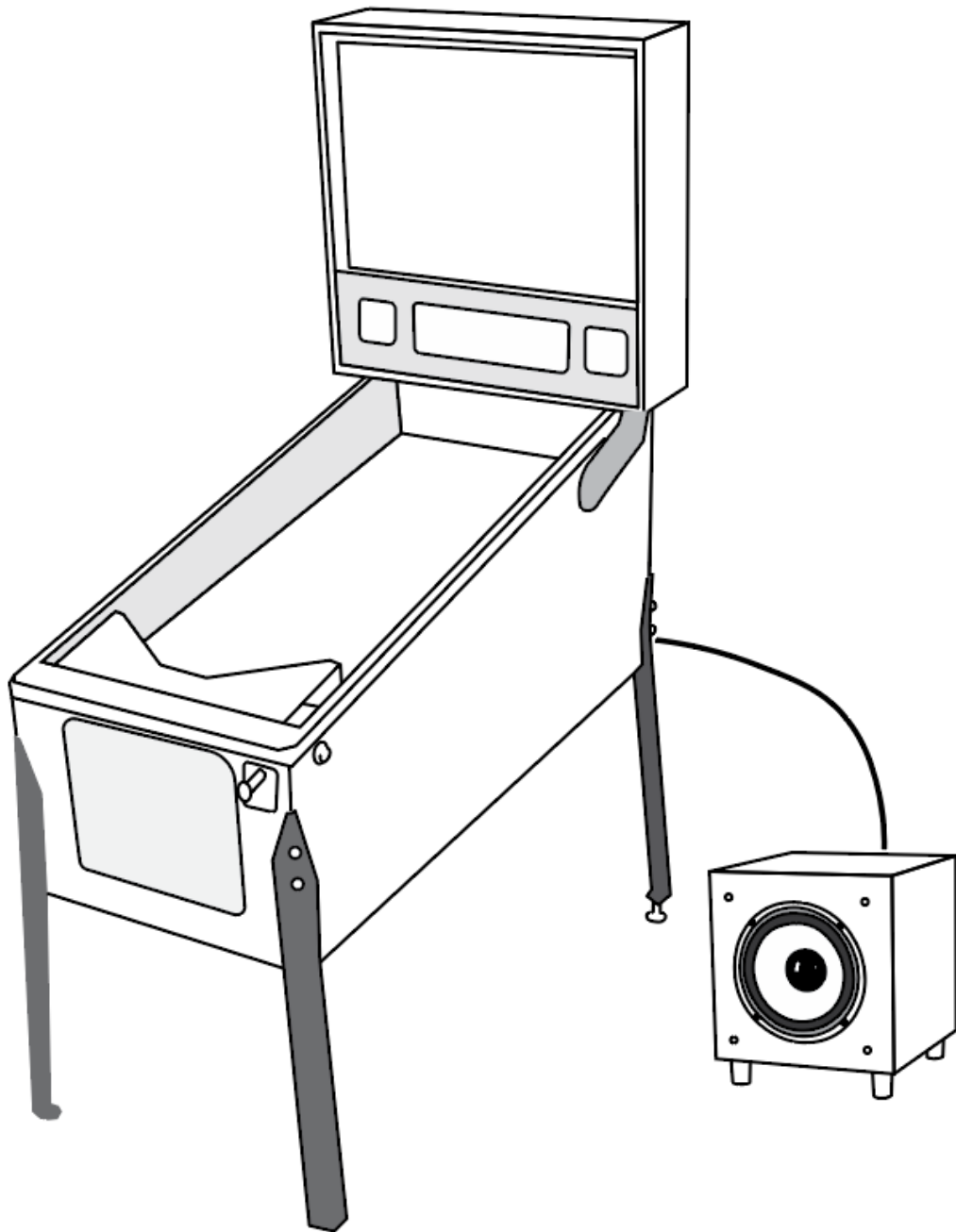
- Remove the pinball glass
- Lift the pinball playfield
- Clip the Pin2Sub alligator clips onto the cabinet speaker terminals (Polarity does not matter)

- Route the supplied 3mm AUX cable out of the pinball cabinet by removing one or two staples from an underneath vent / grill.
- Plug the 3.5mm into the Pin2Sub adapter.
- Position the Active subwoofer beneath or beside the pinball machine.
- Plug the 3m AUX cable into the active subwoofer. Use the supplied 3.5mm to RCA adapter if needed.
- Reinstall the playfield and glass.
- Power on the pinball and the active subwoofer and adjust the subwoofer volume using the volume control on the sub-woofer.

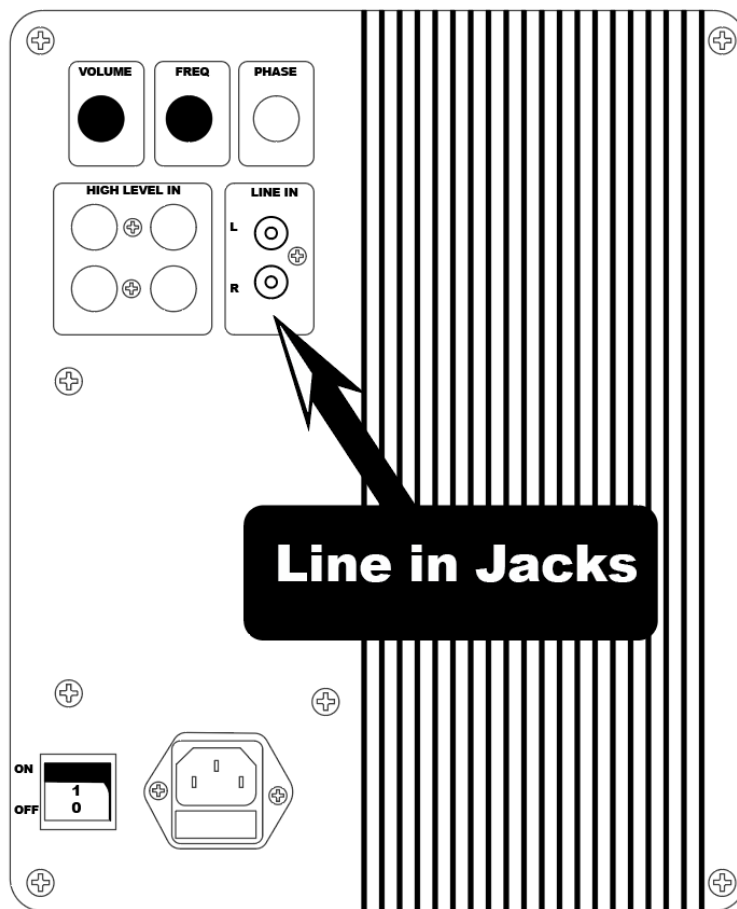




Pin 2 Sub Adapter Clips onto the speaker terminals of the cabinet speaker.



**Position the Active Subwoofer Next to or underneath the pinball machine**



Typical Active Sub-Woofer panel, showing LINE IN jacks.



Pin 2 Sub is supplied with a 3m AUX cable  
and RCA adapter