



Extending a PA System

Some PA systems allow you to extend their reach by adding additional speakers known as slave speakers. These can be either active or passive speakers, and the requirements are different for each. The recommendation will depend on your amplifier's power and capacity remaining, and how many speakers you need to add to it. Often an extra speaker can be added to your system easily, but more may stress the amplifier or overload things.

Active versus passive

Passive (or non-powered) speakers need to be powered by a separate power amplifier i.e. your PA System. The power rating known as the wattage of the PA System must be matched to the speakers and this alters depending on the "ohmage" of the speakers and how many you are adding.

Active (or powered) speakers have an amplifier built into them so that they do not need a separate power amplifier or to take power from your existing amplifier. This means that you can use any of the speakers on their own if you have multiple events happening simultaneously or "daisy chain" the active speakers to your PA System without worrying about the power implications or Ohmage. They can be operated via either AC power or using the built-in batteries.

This makes them simple to use and ideal for schools and churches who have a host of dif-

CHALLENGER-1000 Slave Class D *New 2010 Model*



(Slave shown with both a Repeater receiver and Repeater transmitter installed)

RP-6016 Repeater Module Transmitter



RP6016 Repeater modules slot directly into the latest model Challenger 1000 Class D or Slave speaker. Just a couple of screws and push it in. This is the Transmitter of the "Repeater" system. About 100 metre wireless range!

Challenger 1000 D

Challenger 1000D Slave

ferent locations and applications. The slave / extension speaker are linked using their in and out jacks to form a large wired system or more frequently repeater transmitters are mounted to set up wireless links between the speakers back to the PA System.

Some models of active speaker also have their own inputs for a music source or a cable microphone for when you are using them independently of the main PA System.

Setting up your extended PA System: Challenger 1000 System and Stage Pro System

Overleaf we provide examples of the different ways that you can extend two of our PA Systems.

You can use a matching Challenger Slave or a standard “passive” 8 or 4ohm speaker.

The slave has the same powerful amplifier and batteries built in as the main Challenger or StagePro unit, can operate for extended periods from the built in batteries or mains power, so you double your amplifier power and your coverage! You can add as many wireless extension speakers as you need. If each slave speaker is within 80 metres of the Master unit they only require one receiver fitted in each, or if further than 80 metres a repeater transmitter is needed in each slave speaker as well (but not the last one in the chain).

Each active master and slave unit has a speaker output provided so you can also connect another 80 ohm speaker (or pair of horns) to each unit for even greater local coverage.

The Challenger Slave speakers have the same trolley and handle as the C1000-D for easy portability.

More questions?

Contact us to speak to experienced staff who can provide practical advice on how to extend your PA system.



Connection by
Bluetooth!



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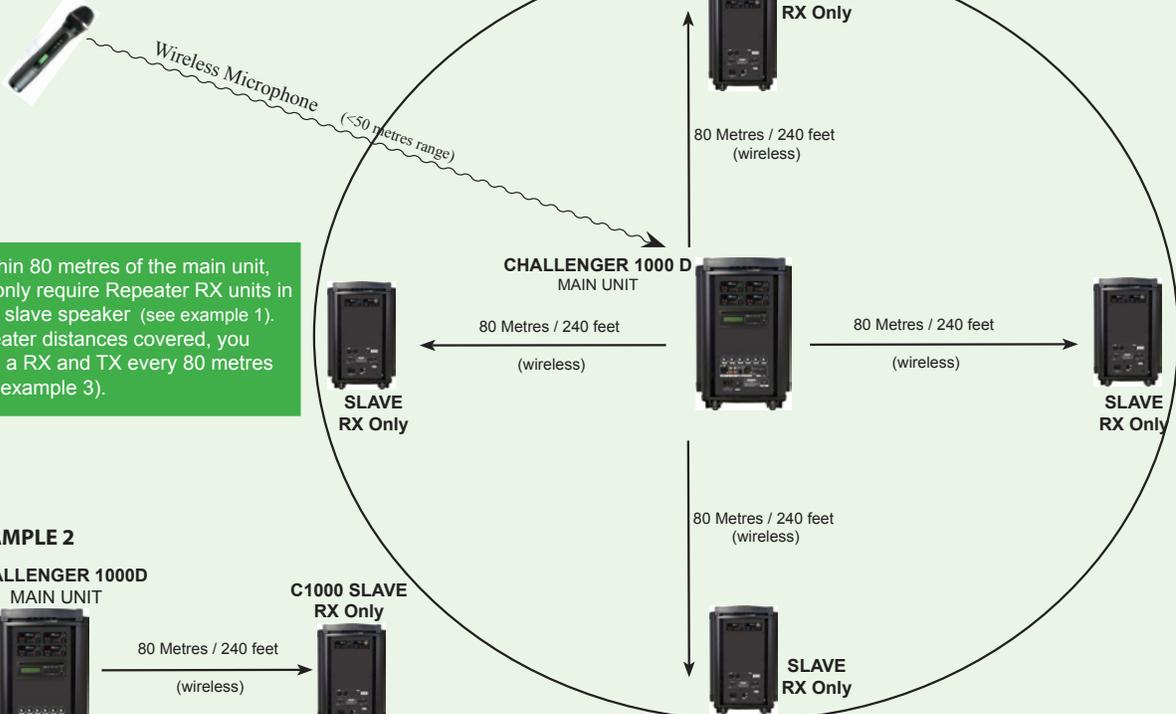


Extending your PA System

Examples of how the wireless repeater system can be used:



EXAMPLE 1

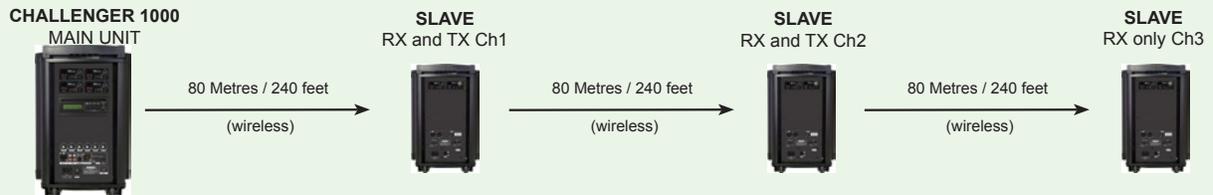


If within 80 metres of the main unit, you only require Repeater RX units in each slave speaker (see example 1). If greater distances covered, you need a RX and TX every 80 metres (see example 3).

EXAMPLE 2



EXAMPLE 3 (250 metres / 700 feet wireless link)



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