

## The Church's Guide To Rechargeables

The Problem.



- Churches use over **50 million** disposable batteries every year.
- Churches spend 20 million dollars on disposable batteries every year.
- Results in churches grossly over-spending and producing excessive environmental waste

### The Solution.



- Churches reduce disposable battery usage by over 1000%
- Churches saves hundreds to thousands per year on battery expense
- Every rechargeable battery utilized eliminates 1000 disposable batteries from the landfill

### **How Much Will Your Church Save?**

## Option #1

Save Money.

Read through our rechargeable guide below and select the best batteries and chargers **by yourself** for your application.

### Option #2

### Save Time & Money.

Click the button below and take two minutes to fill out our rechargeable evaluation form. We select the batteries and chargers best suited for your application & offer a *one-time preferred* discount on the rechargeable system we design for you.



## **Step 1.** Choose The Right Batteries.

All the recommended rechargeable batteries below are **professional grade** and designed to meet the demands of pro-audio. Do **not** try to use consumer grade rechargeables – you will wind up throwing them away in frustration.

First and foremost, you'll need to know the total run-time requirement for your wireless mic or in-ear monitor usage. If your total run-time is less than 5 hours, choose low discharge AA Fujitsu (white) batteries as they have up to 6-7 hours of run-time per charge. This is more than adequate for church services, even if you have 2 services back-to-back.

The advantage of using these cells is they achieve the most recharges available from any cell on the planet! You can use these batteries over and over up to 1500 recharges. The other advantage is these batteries are low-self-discharge battery. They will only discharge about 1% per month which makes it ideal for any application – remotes, LED lights, pre-amps, and anywhere you would use a regular alkaline battery.

If you require more than 5 hours, than choose the *Ansmann 2850 Hybrid*. These high-capacity AA cells yield up to 12-14 hours before they need recharging. They will yield about 500-1000 recharges and only self-discharge about 5% per month.

If your wireless mics are dimension-sensitive, use the either the Fujitsu's or the Ansmann 2850 slimline. Most Shure microphones fall in the slimline category.

Finally, for 9V systems, we recommend using the Ansmann 9V Max E battery which will provide up to 4 hours of run-time per charge and yield up to 500 rRechaecrges. They can also be used for effects pedals, preamps, remotes and any device that will be dormant for extended periods of time. These batteries have minimal self-discharge – only 1 -2% per month.

### **Recommended Batteries**





Click On Image For Product Detail





## **Step 2.** Choose The Correct Charger

The "heart" of your rechargeable system is the battery charger(s.) All the chargers listed here are designed for pro-audio use. They individually monitor each cell and switch to trickle charge when the battery is done charging to keep them topped off, ready for use. Some of them have a refresh/reconditioning function to increase the life of your batteries. All the chargers can be used for either low discharge or high-capacity cells, and some are combination chargers that will accommodate AA, AAA, and 9V cells.

To choose the correct charger(s), simply calculate the total number of wireless mics, in-ear-monitors, and other devices and how many of each battery **size** and **type** you require. Once you have the total number of AA, AAA, and 9V cells, you can simply pick the charger or chargers that will accommodate your requirements.

If you desire the batteries to be stored in a rack, our rackmount chargers are very convenient, and charge up to 22 AA/AAA's at a time. Our desktop chargers can accommodate up to 12 AA's and 10 9V's. It's not necessary to have two complete sets of batteries for each device, but we do recommend a few spare sets in case you need to swap out batteries in a hurry.

Charging times are between 2 and 5 hours, depending on the cell and charging current of the charger <u>and</u> if the cell is completely drained. Most of the time you will not completely drain the cells, so charge time is reduced by about 50%.

Reconditioning the cells Is optional, but it will extend life cycles by about 20%. Chargers that have an automatic refresh or reconditioning function include the *Energy 16 Plus*, *Energy 4*, *Comfort Series*, and *Fischer Amps* rackmount chargers.

Regardless of which charger you choose, you can be assured the charger will completely charge and maintain your cells individually. **This is critical to the success of utilizing rechargeables.** Consumer grade chargers typically charge batteries in "pairs" without individual monitoring. Ansmann and Fischer Amps chargers eliminate the guesswork of whether the cell is completely charged – so there are no surprises.

As with any mission critical application (such as live sound) there is no room for error or compromise.

\*\* Remember, you're about to save hundreds to thousands of dollars every year for the next several years. It makes no sense to skimp on a good charger or buy cheap batteries to save a few dollars . . . and be disappointed with your results.

## **Need Help?**

Let us do the heavy lifting. With over 25 years of experience and over 40,000 churches served, we know how to design a rechargeable system that will work seamlessly with your wireless mics, in-ear monitors and other pro-audio gear. Whether you have 2 wireless mics or 20, we have a system that will provide years of savings – without compromising performance. And, as an added bonus, we provide a one-time discount to our new church clients.



# **Recommended Chargers**

#### **Ansmann Powerline Series**

Click On Image For Product Detail



More Chargers



#### **Ansmann Comfort Series**







Click On Image For Product Detail

#### Ansmann Energy Series & LMS 10-bay 9V







Click On Image For Product Detail

#### Ansmann & Fischer Amps Rackmount







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### **Step 3.** Follow These Simple Guidelines

- Know your required run-time and always start with a fully charged battery.
- Leave the batteries on the charger until ready for use. All **Ansmann** and **Fischer Amps** chargers are equipped with trickle charge to keep the batteries topped off. They will not over-charge.
- Use the rechargeable cell as you would a one-time disposable battery.
  Whether the battey is used for 2 hours or 10, return it to the charger after each use. There is no memory effect with our batteries.
- Due to high self-discharge rate, do not use the Ansmann 2850
  Slimline high-capacity cells with remotes or pedals. Instead, use
  Fujitsu or Ansmann Hybrid cells. These are low discharge batteries that can be left in a dormant device.
- Regularly check the capacity of your rechargeable cells. After a few years of usage, the cells will lose full capacity, and run-tim will need to be adjusted. The Powerline 4.2 Pro or Powerline 4 Ultra are excellent capacity-testing chargers.











#### **About the Author**



David Schliep has over 25 years of experience in pro-audio rechargeable technology and in 1998 began equipping churches with professional grade rechargeable technology. In 2002, Horizon Battery became the premier North American distributor of **Ansmann Energy** and **Fischer Amps**, two German-based companies who specialize in high-tech charging and rechargeable battery engineering.

David's background also includes multiple roles in church ministry – as a music director and worship leader. His first-hand knowledge of church tech lends itself to teaching churches how to utilize money-saving, planet-saving rechargeable technology.