



# ELECRAFT

## K3 and K3S Remote System FAQ

Rev 1.2 November 2015

### Planning Your Remote System

*Note: References to the Elecraft K3S transceiver apply to the original K3 throughout this FAQ*

**Q: What does Elecraft mean by the terms, Terminal, Remote site and Control site?**

A: Elecraft uses these terms to describe the various cable kits and products to implement the K3S-Remote system.

Term	Definition	Discussion
Remote	The location where the fixed station resides. This station will be the point where Transmitting will take place.	<p>Operators commonly think of the station they will connect to as the Main or Fixed point where the transmitting will occur.</p> <p>However, it will become the Remote point when the operator takes Control of it from somewhere else.</p> <p>For this reason, then, it is referred to as the Remote point.</p>
Control	The location where the operator will use the K3/0 Mini to operate the station where Transmitting will occur.	<p>The operator is considered in control of the K3S when they are connected to it without regard to where their physical location is.</p>
Terminal	Specific to the K3S/100 or K3S/10, a special mode that allows them to act as if they are a K3/0 Mini.	<p>Any K3S can enter Terminal mode with a 5 second Hold of the Menu button. To return it to full operation, Hold the Menu button again for 5 seconds.</p> <p>While in Terminal mode, the K3S can be connected to a Remote Rig using a cable set available from Elecraft (RRK3CBL).</p> <p>Operators can then use 2 K3Ss in a back-to-back connection to take Control of one of the K3Ss but then return to local operation when needed.</p>



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Online Communities	Internet-based web sites that offer access to Remote Amateur Radio Stations.	There are Peer, Private and For-fee Online Communities available.  Some offer the experience of operating 'super stations' on a For-fee basis.  Peer sites others offer a club-like experience of sharing one another's stations on a peer basis. Dues or other fees may be optionally assessed depending on the site operators' preferences.  Private communities are typically built by one or a group of operators who want the experience and convenience of
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**Q: How can I use the K3/0 Mini if I do not have a K3S or the Remote Rig devices?**

A: The K3/0 Mini has its own USB port that can connect directly to a Windows-based computer. In this configuration, you can connect to popular Ham Community sites such as:

- <http://www.remotehams.com/k3-0-mini-help.html>
- <http://www.remotehamradio.com/tutorials/>

When using a laptop, you do *not* have to use the Remote Rig device pair. Both of these sites have full support for the K3/0 Mini using applications you will download to the computer, which then controls the K3/0 Mini.

**Q: I have a K3S and want to control it remotely from other locations. How can I do this?**

A: There are 2 methods of connecting the K3/0 Mini to a K3S or K-Line system.

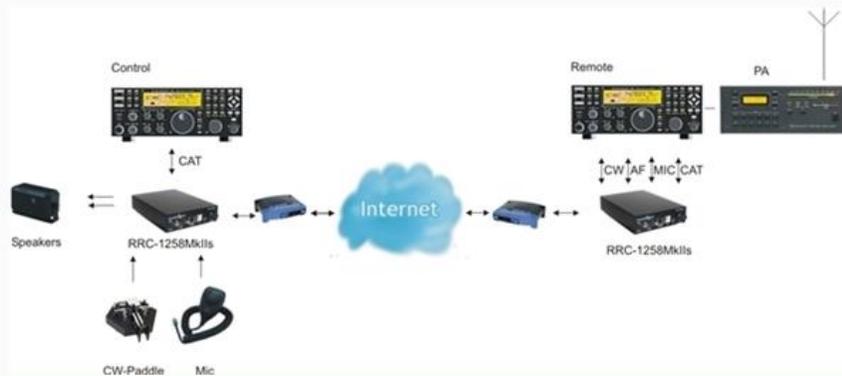
- 1) You can directly connect the K3-Remote system to a K3S



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## Elecraft K3- Twin Concept

The Elecraft K3 Twin concept gives the same feeling as the control panel mode. The Elecraft K3 Twin concept is a high end concept for the serious ham who do not accept any compromise even when remote controlling his station. You can use the K3/0, K3/10 or K3/100 as control. The K3/0 is a specially design control unit.



2) You can also utilize a Community site, [www.RemoteHams.com](http://www.RemoteHams.com) or [www.remotehamradio.com](http://www.remotehamradio.com).

**Q: How will I be able to control a K-Line with the K3-Remote system?**

A: A K3-Remote system can be added to a K-Line, consisting of a K3S, P3, KPA500 and KAT500, at any time.

Even if you are still building out your K-Line, you can still configure the K3-Remote system into it at any time while you build it out. That is, you can add a P3, KPA500 or KAT500 to the mix at any time and in any order. Here are some design considerations for how this can be completed:

	Full Support	Partial Support	Remote Operation Limitations without a computer	Operating Considerations when using a companion computer
<b>K3S</b>	Y			
<b>K3S and P3</b>	Y		P3 should be configured to not power on with K3S.	Response time will slow if the P3 is powered up with the K3S. This is due to additional RS232 traffic between the K3S and P3.
<b>K3S/P3/KPA500</b>		Y	<ul style="list-style-type: none"> <li>Power on/off can be controlled from Mini *</li> <li>STBY/OPER not controlled from Mini</li> </ul>	Complete control of KAT500 and KPA500 is available as
<b>K3S/P3 plus KPA/KAT500</b>		Y		

Legend: \* = Described in the K3-Remote Owner's Manual

**Q: What if I want to share the use of my system with friends? How can I control access?**



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A: Yes, you are the 'gatekeeper' of your own system when you use a Ham Community such as [www.remotehams.com](http://www.remotehams.com).

With your shack system connected to Remote Hams, you can control who gets to operate your station, when they can do so, and what they can do with it. In turn, you can also connect to other systems in the Community with the limitations imposed by the system owner.

**Q: What does it cost to be part of Remotehams.com?**

A: Remotehams.com is a Community system based on equal access with no fees charged for its use. As with many Community sites, the site indicates that donations are accepted to keep it going.

**Q: Is there a way to upgrade a K3/0 Mini into a K3S? That is, is there a kit available to turn a K3/0 Mini into a K3S?**

A: No. The K3/0 Mini contains unique hardware.

**Q: Can I convert a K3S/100 into a K3/0 Mini? Does it require hardware changes to do so?**

A: Yes and it does not require hardware changes.

All K3S/10 and K3S/100 transceivers already have the capability to operate as a K3/0 Mini. A K3S can be placed into TERM mode to accomplish this.

You can confirm your K3S does this by HOLDing the MENU button for 5 seconds. The K3S will indicate TERM on its display. In TERM mode, the K3S can be connected to the Remote Rig and will be able to control a Remote K3S.

Now, HOLD the MENU button again for 5 seconds until NORM shows on the display. You have again returned the K3S to full operation.



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## K3-Remote System - Purchase Questions

**Q: What options do I have for microphones and headphones with the K3/0 Mini? Does the K3/0 Mini ship with a microphone?**

A: The K3/0 Mini can work with many different microphones. In addition to the 8-pin connector on the front, there are jacks on the left side for Phones and a Mic using 3.5mm jacks. The front panel mic jack is disabled automatically

For this reason, the MH2 microphone or the Proset-K2 headphone/boom-mic is available directly from Elecraft. The K3/0 Mini is pre-configured to operate with either of them.

**Q: What items do I need to order to set up my K3S and K-Line for Remote Operation?**

A: You can use K3/0 Mini as a Control Panel to connect to other K3S's available at many popular Online Communities. Some of these sites may require the use of the Remote Rig devices while others do not. Examples are:

- <http://www.remotehams.com/k3-0-mini-help.html>
- <http://www.remotehamradio.com/tutorials/>

<b>K3-Remote System for Online Community sites</b>	
<b>I want to use...</b>	<b>Order these Elecraft product numbers</b>
K3/0 Mini with Online Community sites that require Remote Rig access.	<ul style="list-style-type: none"> <li>- K3/0 Mini-F: The K3/0 Mini Control Panel</li> <li>- RRIGCON: A single Remote Rig device for the K3/0 Mini</li> <li>- RRMINICBL: Cable set to connect the 2 items above</li> <li>- PWR12V1A-US: An additional power supply for the K3/0 Mini.</li> </ul>
K3/0 for use with your computer to access Online Community sites	<ul style="list-style-type: none"> <li>- K3/0 Mini-F: The K3/0 Mini Control Panel</li> <li>- PWR12V1A-US: Power supply for the K3/0 Mini.</li> </ul>

**Q: I want to build my own Private Remote System. What do I need to order?**

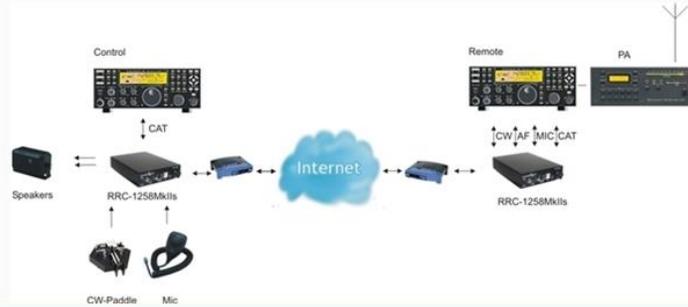
A: Depending on what your K3S or K-Line configuration is will determine what is required for ordering. See the table below to build the system shown below.



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## K3-Remote for your own Private System

If you have...	Order these Elecraft product numbers <i>Note: * = Available in the KPAK3AUX cable kit</i>
A K3S standalone	<ul style="list-style-type: none"> <li>- K3/0 Mini-F: The K3/0 Mini Control Panel</li> <li>- RRIGSET: Set of Remote Rig devices</li> <li>- RRMTCBL: Cable set for the K3S in your shack</li> <li>- RRMINICBL: Cable set for the K3/0 end.</li> <li>- PWR12V1A-US: An additional power supply for the 2<sup>nd</sup> Remote Rig.</li> </ul>
K3S and P3 only	<ul style="list-style-type: none"> <li>- K3/0 Mini-F: The K3/0 Mini Control Panel</li> <li>- RRIGSET: Set of Remote Rig devices</li> <li>- RRMTCBL: Cable set for the K3S in your shack</li> <li>- RRMINICBL: Cable set for the K3/0 end.</li> <li>- PWR12V1A-US: An additional power supply for the 2<sup>nd</sup> Remote Rig.</li> </ul>
K3S/P3/KPA500	<ul style="list-style-type: none"> <li>- K3/0 Mini-F: The K3/0 Mini Control Panel</li> <li>- RRIGSET: Set of Remote Rig devices</li> <li>- RRMTCBL: Cable set for the K3S in your shack</li> <li>- RRMINICBL: Cable set for the K3/0 end.</li> <li>- PWR12V1A-US: An additional power supply for the 2<sup>nd</sup> Remote Rig.</li> <li>- E980190: Y-cable for the AUX cable system*</li> </ul>



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K3S/P3 plus KPA500/KAT500	<ul style="list-style-type: none"><li>- K3/0 Mini-F: The K3/0 Mini Control Panel</li><li>- RRIGSET: Set of Remote Rig devices</li><li>- RRMTCBL: Cable set for the K3S in your shack</li><li>- RRMINICBL: Cable set for the K3/0 end.</li><li>- PWR12V1A-US: An additional power supply for the 2<sup>nd</sup> Remote Rig.</li><li>- E980190: Y-cable for the AUX cable system*</li></ul>
A PR6 or PR6-10 preamp installed	<ul style="list-style-type: none"><li>- E980190: Y-Cable for the AUX cable system*</li></ul>

**Q: Are there wiring diagrams available to illustrate these configurations?**

A: Yes, there are 2 sources for wiring diagrams:

- [The K3-Remote Owner's Manual](#)
- [The Remote Rig Owner's Manual](#). See Section, "Elecraft K3-Twin".

**Q: Why is there a separate Power Supply listed on the Elecraft Order page for the K3/0 Mini?**

A: When the RRIGSET product is ordered, it comes with 1 power supply for the Control side Remote Rig device. The Remote Rig device intended for the Remote K3S station, however, is expected to be connected to the common power supply for the K3S and other station peripherals.

If this is not the case, you can order small 12 volt power supply that handles just that Remote Rig device. Use Elecraft part number, PWR12V1A-US. Note that this power supply will have the US AC plug permanently mounted.

This same power supply can also be used to power the K3/0 Mini when used with a computer.

\*\*\* End of FAQ \*\*\*