

# Using K7CVO Digipeater with Winlink Express

*Benton Co. ARES*

*May 2020*

## Table of Contents

1: Packet Nodes and Digipeaters.....	5
1.1: Digipeaters.....	5
1.2: Nodes.....	5
2: CVO Packet Node/Digipeater.....	7
3: Using Digipeater with Winlink Express - Packet session.....	9
4: Further Reading.....	11

# **1: Packet Nodes and Digipeaters**

Packet “repeaters” come in two basic types, nodes and digipeaters.

## ***1.1: Digipeaters***

A digipeater is a simple store and forward system that collects packets and then re-transmits them on the same frequency with the same radio. This introduces delays as each packet takes twice as long to travel from the source to the destination. However it is very simple in its operation and requires little setup.

## ***1.2: Nodes***

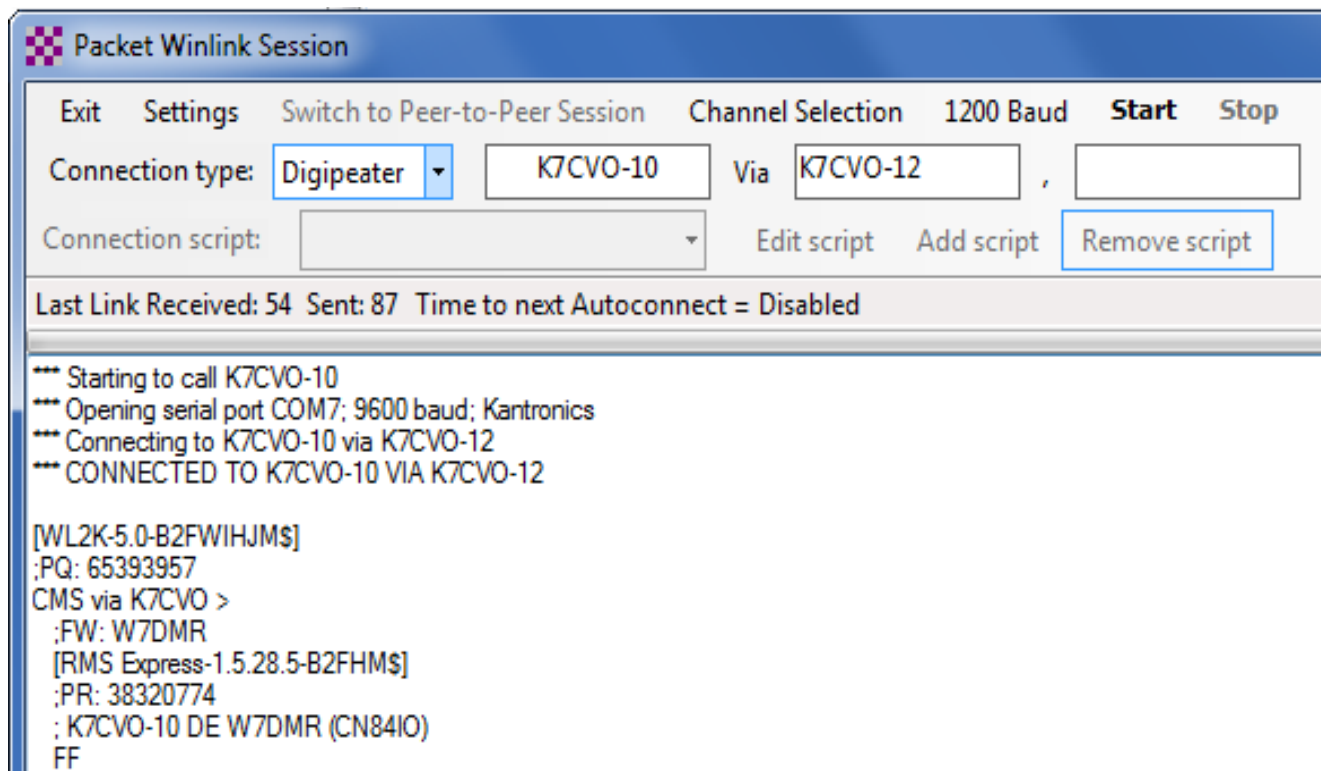
Packet nodes are systems which perform more complex connections between radio channels. A typical node has more than one radio and can send and receive at the same time. A node can make a connection between radios that are on different frequencies. This is faster than digipeating on a single frequency. However added features require added complexity to control them.

## 2: CVO Packet Node/Digipeater

There is a small system on the roof of the Good Samaritan Regional Medical Center in Corvallis which operates as either a node or a digipeater. If called as **K7CVO-11** or *CVO*, it will act as a node, if called as **K7CVO-12** it will act as a digipeater. Since it only has one radio tuned to 144.97 MHz, the node functions are of little use.

### 3: Using Digipeater with Winlink Express - Packet session

In the Winlink Express Packet session windows, there is a drop down menu for “Connection Type”. Set this to “Digipeater”. That will make the Via boxes visible and allow you to enter the digipeater’s callsign in the first one. Use “K7CVO-12”.



The screenshot shows the "Packet Winlink Session" window. The title bar is blue with a checkered icon and the text "Packet Winlink Session". Below the title bar is a menu bar with "Exit", "Settings", "Switch to Peer-to-Peer Session", "Channel Selection", "1200 Baud", "Start", and "Stop". The main area contains several fields: "Connection type:" with a dropdown menu set to "Digipeater", "K7CVO-10" in a text box, "Via" with "K7CVO-12" in a text box, and an empty text box. Below these are "Connection script:" with a dropdown menu, "Edit script", "Add script", and "Remove script" buttons. A status bar shows "Last Link Received: 54 Sent: 87 Time to next Autoconnect = Disabled". The log area contains the following text:

```
*** Starting to call K7CVO-10
*** Opening serial port COM7; 9600 baud; Kantronics
*** Connecting to K7CVO-10 via K7CVO-12
*** CONNECTED TO K7CVO-10 VIA K7CVO-12

[WL2K-5.0-B2FWIHJM$]
:PQ: 65393957
CMS via K7CVO >
:FW: W7DMR
[RMS Express-1.5.28.5-B2FHM$]
:PR: 38320774
: K7CVO-10 DE W7DMR (CN84IO)
FF
```

## 4: Further Reading

I found an introductory article on using both digipeater and nodes here:

[https://www.qsl.net/w4eat/w4eat/Making\\_a\\_packet\\_connection\\_to\\_a\\_.htm](https://www.qsl.net/w4eat/w4eat/Making_a_packet_connection_to_a_.htm)