# Give Your Repeater Worldwide Coverage with WIRES™-II

Wide-Coverage Internet Repeater Enhancement System

# The Newest, Most Flexible Amateur Radio Internet Linking System!

# **WIRES**™II Outline

MIRES<sup>™</sup>-II uses DTMF signaling to establish a bridge, using the Internet, from your repeater or home station to another WIRES<sup>™</sup>-II-equipped station anywhere in the world. No proprietary tones or connection formats are used, so any manufacturer's radio (equipped with a DTMF encoding keypad) may be used to bring up the Internet link.

he flexibility of the WIRES<sup>™</sup>-II concept allows you to configure the system to allow on-the-fly selection of linked or non-linked communications. Therefore, in fast-moving emergency communications situations where both local coordination and longer-distance reporting are required, WIRES<sup>™</sup>-II allows local communications to be interspersed between linked transmissions. And because WIRES<sup>™</sup>-II uses voice-recording technology as a buffer, WIRES<sup>™</sup>-II calls will never interrupt a conversation in progress on a distant repeater.

Internet "bridge" using home stations toestablish link.

Internet

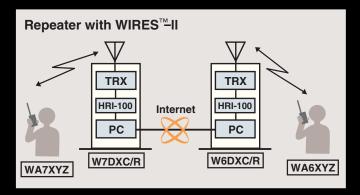
PC

W6DXC

WA6XYZ

At the repeater site, a personal computer is connected to the HRI-100 WIRES™II Interface Box, which serves as a command and audio-patching controller for the Internet bridge to your computer. Either a dial-up connection, or a high-speed line such as a DSL or ISDN line, may be used for connecting to the Internet.

WIRES™II provides two operating network concepts. Up to ten repeaters and/or home stations may join together to form a "Sister Radio Group" for closed-network operations, ideal for emergency, school, or sister-city groups. You can call any repeater within your SRG group using a single DTMF digit. And the host WIRES™II server also maintains a world-wide listing of repeaters operating in the "FRG" mode ("Friends' Radio Group"), any of whom you may call using a six-digit DTMF string to establish a link.







## Your Hand-held or Mobile is Now Your Bridge to the World, and Your "Local" Repeater Will Never Be the Same!

WIRES<sup>™</sup>-II uses DTMF signaling to connect your hand-held or car transceiver, via the HRI-100 Interface Box, to the Internet, and from there the sky really is the limit!

#### WIRES™II Introduces Two Unique Networking Modes for Radio-Internet Linking:

A closed network of up to ten repeaters that have agreed to form a "Sister Radio Group" (SRG). Access to any other group station is accomplished by the sending of a single DTMF digit at the beginning of the first transmission.

Repeaters around the world, as they register into the WIRES™II Host Server, may become part of the "Friends' Radio Group" (FRG), Hepeaters around the world, as they register into the world the next time you're on the air during your morning commute!

# WIRES<sup>™</sup>–II Amateur Radio Internet Linking Kit



#### **HRI-100 Interface Box** (Requires 12 V DC Input)

Connections:

DC In: 12 V ±10 %, negative ground, 1 A max. SP Jack Input from Sound Card, 600 mV rms @ 600  $\Omega$ MIC Jack: Output to Sound Card, 500 mV p-p @ 600  $\Omega$ Radio Jack: TX AF IN 500 mV rms @ 600  $\Omega$ 

DISC OUT 500 mV rms @ 600  $\Omega$ 

PTT (Positive 5 V DC)

Dimensions (W x H x D): 4.4" x 1.0" x 5.3" (111 x 25.4 x 133 mm)

0.66 lb (300 g)

Components



AP01 CD-ROM (Including Manual) **Power Cable** Data Cable (RS-232C DB-9 Plug) Data Cable (8-pin Mini-DIN Plug) Audio Cable (3.5 mm Plug) (2) WIRES<sup>™</sup>-II User/Server Agreement

Optional Accessory: NC-72B AC Adapter

### **System Diagram** LIHE Transceiver (such as ET-8900B) Set Packet Baud Rate to 1200 bps.Connects to standard Packet Jack on Personal Computer HRI-100 ············ 0 0 0 ··· JODEM or LAN DATA IN/OUT 2 12 V e(....)e BS-232C To Internet Line

#### WIRES<sup>™</sup>-II Internet Linking System Requirements

- •WIRES™II Kit (HRI-100 Controller, Cables, Manual, Software)
- •Transceiver or Repeater (XCVR with standard PKT Jack recommended: FT-8900R, FT-817, FT-847, FT-897, etc.)
- Intel® MMX 200 MHz (or faster) processor
- •Internet Connection (56K dial-up, ISDN, DSL, or other high speed lines OK)
- •Microsoft® Windows® 98SE or later operating system

- 30 MB of available Hard Disk space
- •64 MB (or more) RAM
- •CD-ROM Drive for installation
- •640 x 480 color display recommended, with 256-bit color support on video card
- •56 kbps Modem (for dial-up connections)
- •Sound Card with 44.1 kHz sampling rate (some sound cards may not work)

#### Notice! Please note the important conditions regarding the use of this product. (Further detail and terms of your use of this product are contained in the License Agreement included with the Software.)

Only the customer who agrees to abide by the terms of the license with VERTEX STANDARD CO., LTD. may use this software.

The user must agree to abide by the terms of the "WIRES™ END-USER LICENSE AGREEMENT" and register the necessary items in the WIRES™ SERVER, operated by VERTEX STANDARD CO., LTD. After registration, a Server ID Number will be assigned to you, and only then may you connect to the WIRES™ Server at VERTEX STANDARD CO., LTD.

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The specifications, functions of the hardware and software, and the descriptions written in the manuals are subject to characteristics. without notice or obligation.

VERTEX STANDARD CO., LTD. will make reasonable efforts to maintain and operate the WIRES™ Server for the enjoyment of Amateur Radio operators and the development of Amateur Radio technology; however, we may suspend the maintenance and operation of the Server in the future, at our sole discretion.

VERTEX STANDARD CO., LTD. specifically disclaims any responsibility for claims arising out of such discontinuation of



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