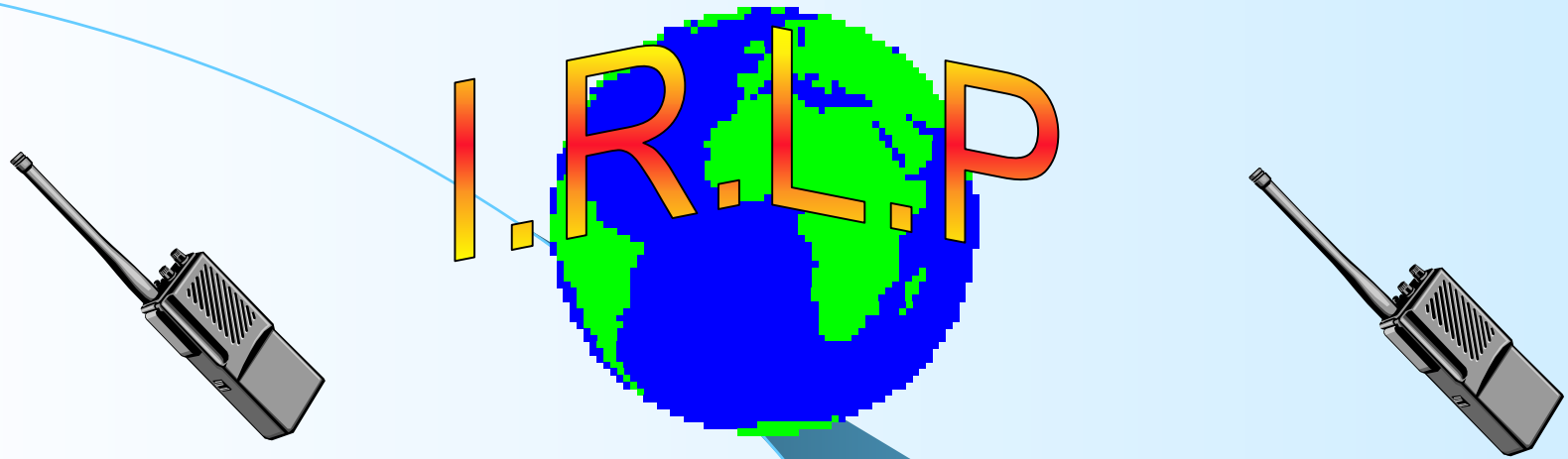


The Internet Radio Linking Project



Presented by VE7LTD

IRLP System Designer

NSARC Meeting, September 21, 2006

Embedded IRLP Nodes

- Why embedded?
- Features
- IRLP Repeater Controller
- Demonstration

Why Embedded?

- Solid state hard disk
- Single voltage operation
 - 12 Volts DC
 - AC adapter included
- Low power consumption
 - 14 watts
- Standardized software
 - All nodes the same
 - User added features easy to propagate to others
- Compact size
 - Same as a ream of paper!

Features

- No hard drive
 - Boots from flash device
 - Runs quickly in RAM drive
 - OS not susceptible to power fluctuations
 - Flash card is easily updatable
 - Reduced noise
 - Reduced power consumption
- Linux pre-installed
 - Node number already assigned and tested (new or existing)
 - All hardware already pre-configured
- Common used IRLP scripts and features already installed
 - EchoIRLP installed
 - IRLP repeater controller
 - Saytime/date
 - Star-69
 - Automated CW ID

Features (cont'd)

- PHP enabled webserver
 - Runs IRLP WEB ADMIN system
 - Easy to add additional PHP scripts to enhance system
- RS232 serial port and minicom installed
 - Allows direct interface to controller at repeater site
 - Serial port can also be used as a serial console (no monitor)
- All wiring internal to case
 - No external parallel port or audio wiring
- Configuration script turns on/off certain features easily

IRLP Repeater Controller

- Fully integrated IRLP node and duplex repeater
 - Used on 145.270 and 441.975 UBC repeaters
 - Used on 443.600 VE7MAN repeater
 - Open source project used all over the world
- Software programmable features
 - DTMF codes, courtesy tones
 - DTMF mute, repeat audio level
 - Usage statistics
 - ANYTHING YOU CAN IMAGINE

Demonstration

On 446.125 simplex

Using

- Kenwood TH-F6 triband handheld
 - standard with COS output
 - 50 milliwatts
- Standard embedded IRLP node 2010
 - Node to be placed in Whistler for 2010 Olympics
- Shared local internet connection
- VPN connection to UBC
- 12 volt draw, 1.2 amps

Questions?

➤ Any questions?