



Establishing an I-gate station using XP laptop with Direwolf and APRSISCE/32

- Note this only connects audio out from radio, do not want radio to transmit APRS data from internet.
1. Power up laptop, start Direwolf. Radio with SignalinkUSB should be on.
 2. Should see APRS traffic on Direwolf window.
 3. Start APRSISCE/32
 4. Zoom to appropriate map view
 5. Pull down "Configure" tab, select "Ports" then select Direwolf (ignore others)
Viewing "Direwolf(KISS) window,
A. check "RF to IS"
B. check "Me not 3rd"
C. check "Enabled"
D. check "Bulletin/Obj"
E. check "Messages"
F. check "Xmit Enabled"
G. check "Beacon"
H. check "Telemetry"
I. uncheck all others
Click "Accept" when done.
 6. Pull down "Enables" tab
A. check "APRS-IS Enabled"
B. check "Beaconing Enabled"
C. check "Internet Access"
D. check "Telemetry Enabled"
E. uncheck all others
 7. Pull down "Enables" tab to "Ports," check "All," "Receive Only," and "Direwolf" uncheck all other ports
 8. Enable internet access on laptop (or PC) and should be I-gating.

- Drawing Index:
- PM-E1000 General Wiring Diagram
 - PM-E1001 Primary Air-to-Ground Wireless Video Wiring Diagram
 - PM-E1002 Secondary Air-to-Ground Wireless Video Wiring Diagram
 - PM-E1003 I-Gate Station Wiring Diagram
 - PM-E1004 UHF Wireless Video Wiring Diagram
 - PM-E1005 Video Receive, Select, and Stream Wiring Diagram
 - PM-E1006 GPS and PulseOx to APRS Transmitter Wiring Diagram
 - PM-E1007 Weather Station Wiring Diagram
 - PM-E1008 Jumper 2-Way Radio Communications Wiring Diagram
 - PM-E1009 Jumper 10-meter HF Global Communications Wiring Diagram
 - PM-E1010 Slow Scan Television SSTV Camera Wiring Diagram

Establishing an I-gate station using Mac laptop per Michael NE6RD

1. Log on to laptop.
 2. Start Terminal window, type in "xastir" (xastir runs in X11).
 3. Setup location for I-gate station:
 - A. bring NE6RD, using zoom out and arrows, to show desired location.
 - B. move mouse to location, right click, "move my station here"
 4. Yaesu VX-5.
 - A. red button power on
 - B. position bump on left knob pointing down (puts squelch in right place)
 - C. frequency to 144.330 MHz
Note: when powering down I-gate hardware, use red button to turn off VX-5.
 5. Connect to hotspot via "System Preferences"
 - A. Select "Network"
 - B. Turn Wi-Fi On
 - C. Log into hotspot
 6. Pulldown "Interface" Interface control,
 - A. Device 1: click "interface server" (start)
 - B. Device 2: click "KISS TNC" (start)
 7. If need to set serial-to-usb (serial port), click DataSender
On DataSender, click "connect," APRS runs at 4800 baud.
 8. To see what's going on, pull down "View" and select "incoming data" and should see "Display Packet Data" with raw APRS text (example below).
- Note: Reboot laptop between each jump as software gets finicky.**
9. After reboot, may need to do a rescan on Datasender.

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2:TNC-> WA6TS-1>APU25N,WIDE2-1:<IGATE,HSC_CNT=34,LOC_CNT=56
2:TNC-> W60TH-3>SM3YRW,WRSABD*,WIDE2-2,GATE:1K'115k/7'SL3
2:TNC-> W6T21-1>AP5AR,K51XA-3*,N62X-3*,WIDE1*:#112318:3608_50N/12021_59W_001/000g00
2:TNC-> KES5TH-9>SVUNWV,WRSABD*,WIDE2-1:2Y_n18/''3u147_180MHz_T094_+060_x
2:TNC-> AEBL-1>APN382,N62X-3*,WIDE2*:13761_88NS12216_08W#PHG53604/W2_NCAn_Downtown
2:TNC-> W4KEL-7>S7RRRV,WIDE1-1,WIDE2-1:2Xv110k/'4''1&2X]'v1!uP8!13
2:TNC-> W4KEL-7>APT314,WIDE1-1,WIDE2-1:W4KEL-7 :UNITS,Volts,Deg,C
2:TNC-> W4KEL-7>APT314,WIDE1-1,WIDE2-1:
2:TNC-> W4KEL-7>APT314,WRSABD*,WIDE2-1:W4KEL-7 :EQNS,0,0,0,0293,0,0,0,489,-273,15
  
```

- When devices in I-gate box are working:
- VX5 green LED will be on when receiving data.
 - OT+ green LED will be on when receiving data.
 - Tripplite Keyspan serial-to-USB green LED will be blinking.

NOTES: UNLESS OTHERWISE SPECIFIED

- 1 APPLY
- 2

REV	DATE	REVISION DESCRIPTION	DRAWN	APP
2	12-6-17	Added XP laptop with DireWolf and APRSISCE/32 option.	MF Wright	
1	10-15-15	Revised instructions.	MF Wright	
0	10-13-15	initial release	MF Wright	

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Parachute Mobile Communication Systems
I-Gate Station Wiring Diagram

DRAWN MF WRIGHT	CHK M. PECHNER	INDEX TEAM POSITION Video Ops	FSCM. NO. DATE 12-6-17	LIMITS UNLESS NOTED
NEXT ASSY	USE ON	CONSULTANT M. PECHNER	AS DWG NO Sheet 1 of 1	REV 2
APPLICATION		TEAM COORDINATOR R. FENN	SCALE NONE	

PM-E1003

FILE NAME: ParachuteMobile_E1003