GE IDA BOARD
(stock controller)

Ham Controller

RC85

J3-4 PL DET
J3-1 COS*
J3-10 PTT*
J4-7 RX audio in
J4-8 TX audio in
J1-3 +13.8
J1-1&4 GND
J4-1 Anlg GND

Add on Proto
Board with 2
2n3904
inverter/buffer
circuits. See
Note2

J1200

PL Detect (active High)
(From TS64 / H41 on system board. See other document for details.)

Carrier Detect COS (active low) *

CAS from GE (0 VDC no sig, 9.4 VDC signal)

To J1203-1 PTT*

DB9 Male

DB9 female

6
7
3
5
4
2
1,8,9

6
7
3
5
4
2
1,8,9

RX AUDIO
TX AUDIO

Note 1

Fuse

Standardized
DB-9 pin
rptr to controller pinout
(follow NHRC2 convention)

4x Molex
12 pin
0.093"

J1201

J1202

Male

J1203

Create Jumper
Cable to break
TX audio path
to insert controller

J1204

RCA female
RCA male

RCA male
RCA female

Female
Tx audio 7
+13.8 3
Gnd 11

Male
7
3
11

Female

Existing
GE
Cable
to J1203

CAS (Sig detect)

13
5

P1102/J1

P1101/J2

P1/J3

GE Base/Repeat chassis

1,2,4-6,8-10,12
straight through

J1203-1 PTT*
(remptt*)

Note 1: We utilize the GE Rx audio processing & muting circuits.
We break the regular output toward the tx audio input and
feed this into the ham controller as the 'receiver audio'.
The ham controllers output is then fed back to the exciter.
The break can be re-enabled (by removing jumper cable) to
allow the existing controller to act as a backup
if the main controller must be serviced.

Note 2: J1200 does not have CAS, we use J1200 just to
power the proto board. We take CAS that from P1102/J1.
 If you want just PL decode without controller being able
to go COS only, take CGMON* from J1200-8 for the pl
detect, else we use the modified TS64 decode off
H41 on system board.

GE Master 2 Base/Repeater with IDA stock controller
to Ham controller wiring diagram
W4XE R. Hogan 3/3/05