



PracticalShow.Tech

PST #080

July 23, 2020

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Keep Comm with Pete...

**Part 2: "making 2-wire
comms useful"**

Master stations,
Dial-ups,
2-4 wire hybrids

 Become a patron

 PayPal

Guest:

Bob Tourkow

bob@cousy.net

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... When you post a question, please repeat the idea which prompted it ...

... Questions will not necessarily be immediately addressed and it will help ...

HANDBOOK OF INTERCOM SYSTEMS ENGINEERING

FIRST EDITION



TELEX

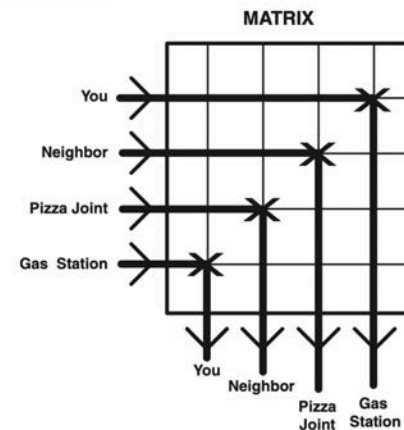
38109-977 Rev. 4

Matrix Systems

Wired Matrix systems are systems in which a large number of individuals have the ability to establish private individual conversations from point A to point B. Again, going back to the telephone system in your neighborhood, you, your next door neighbor, the pizza joint down the street and the local gas station are all connected to the same central office by wires from each location back to the telephone company. At any time, you can be talking to the gas station, while your neighbor is ordering a pizza. The pizza guy does not hear you ask the mechanic about the repairs on your SUV.

Depending on where in the English speaking world you are, you may refer to these types of systems as Matrix systems, crosspoint intercoms, point-to-point systems, private lines (sometimes, confusingly referred to as "PL"), or by some of the brand names used: McCurdy, ADAM™, Zeus™, and others.

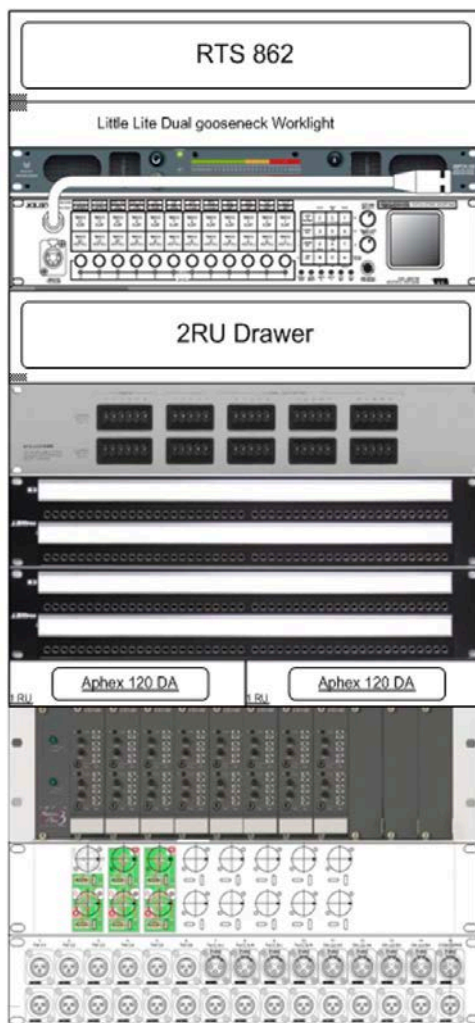
Figure 1.2 Simple Matrix System



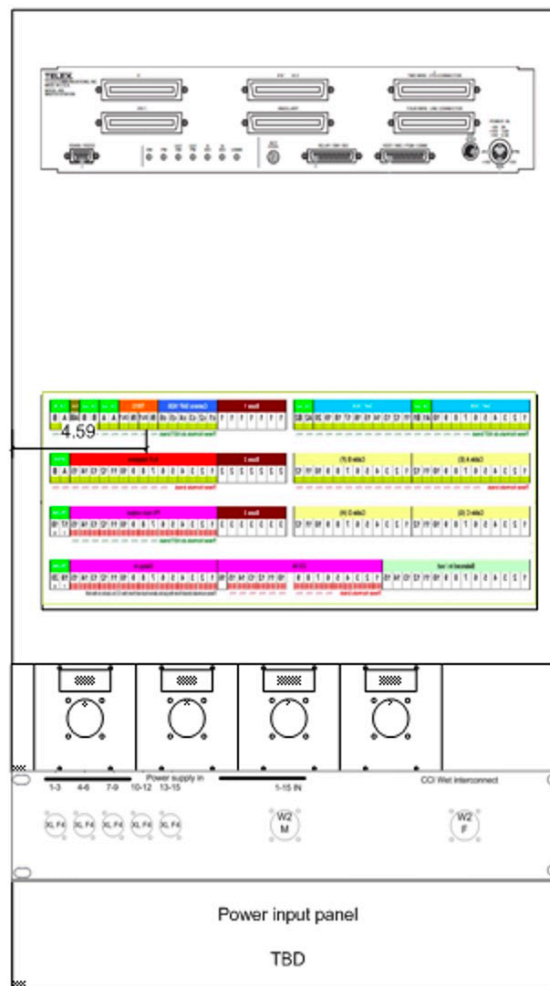
<https://products.rtsintercoms.com/binary/Handbook of Intercom Systems Engineering.pdf>

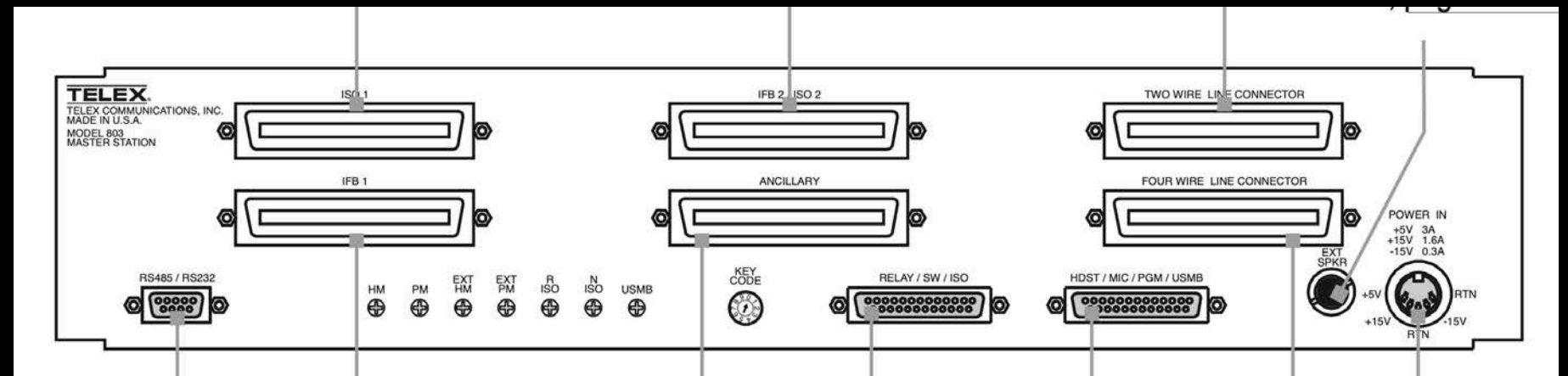
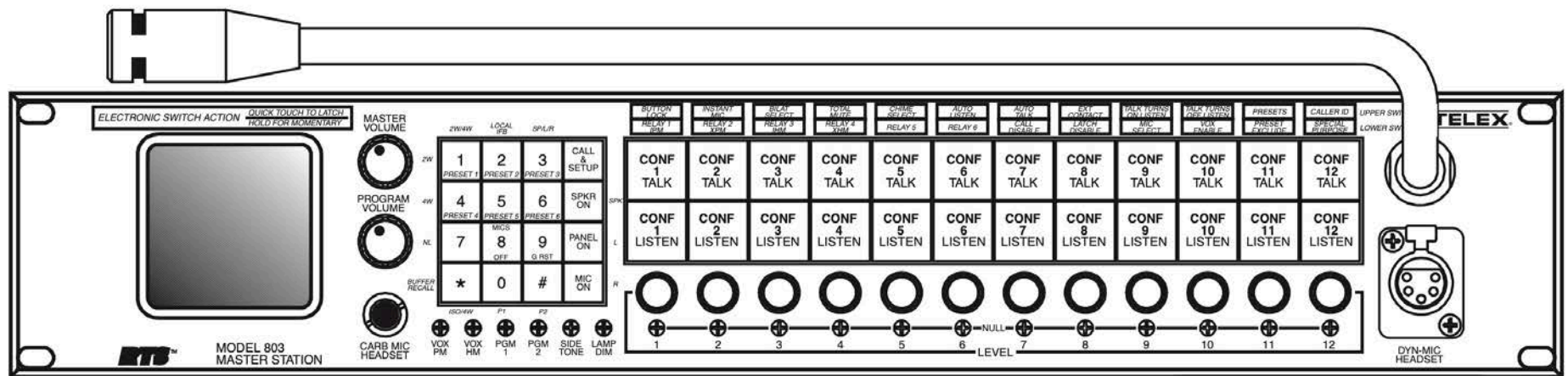
38.5
36.75
35
33.25
31.50
29.75
28.00
26.25
24.50
22.75
21.00
19.25
17.50
15.75
14.00
12.25
10.50
8.75
7.00
5.25
3.50
1.75

Front View

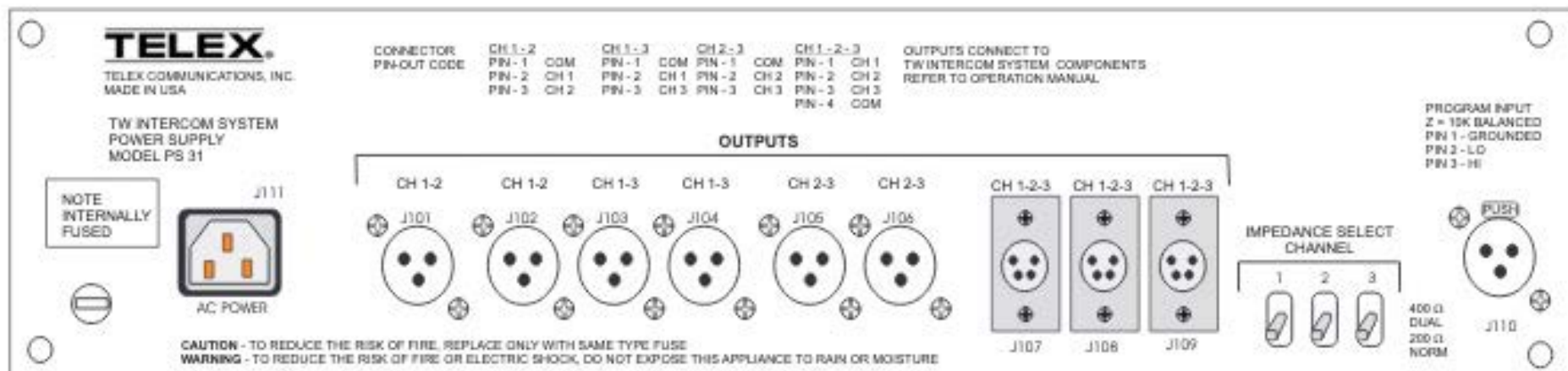
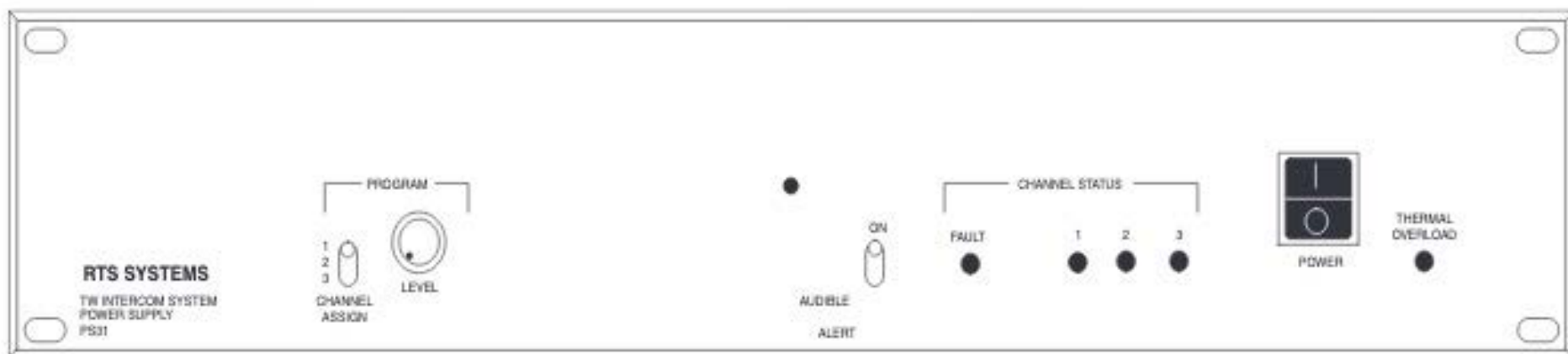


Rear View

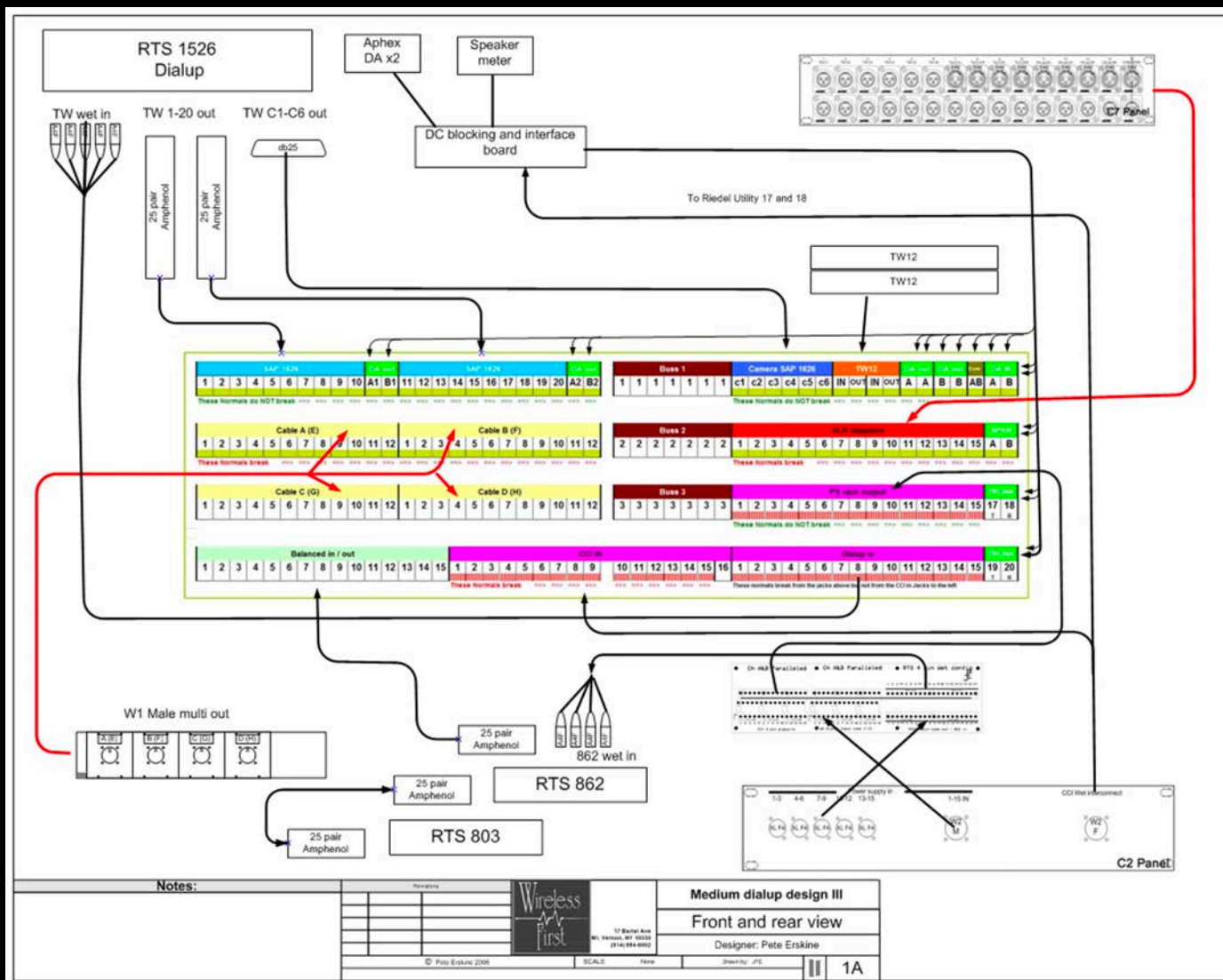


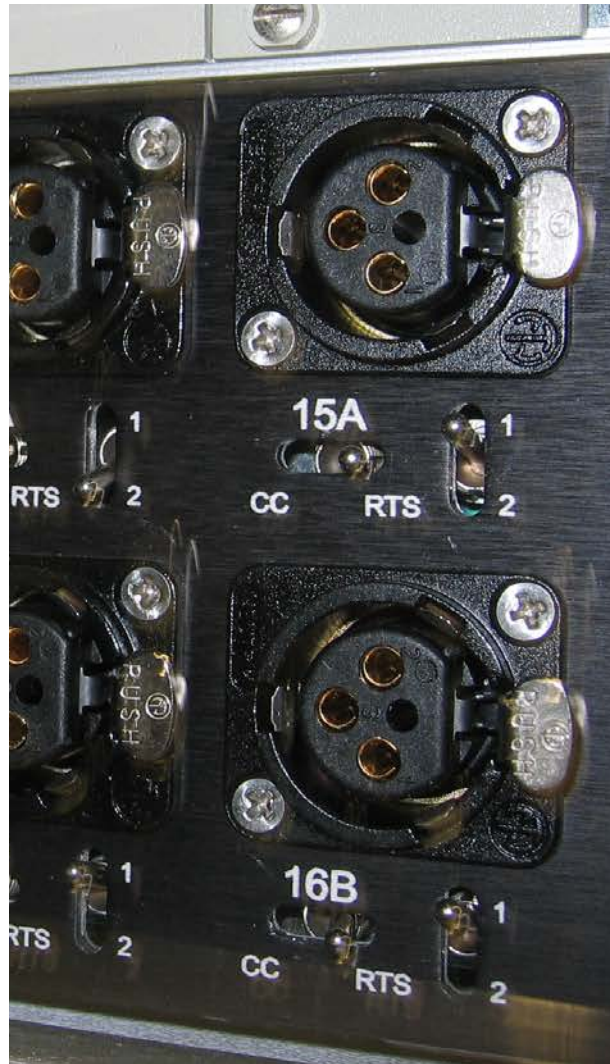
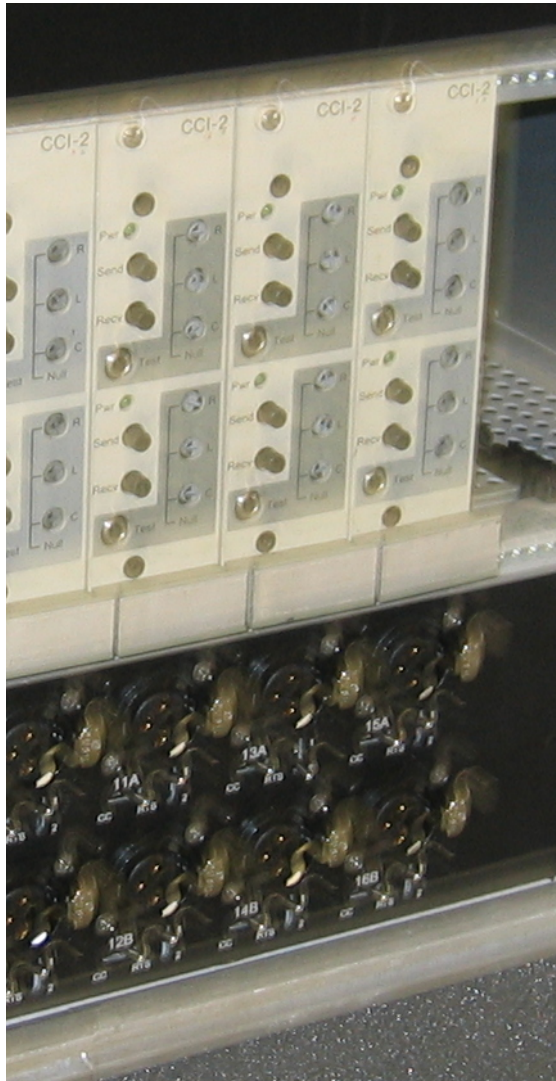


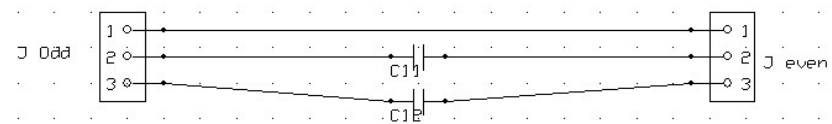




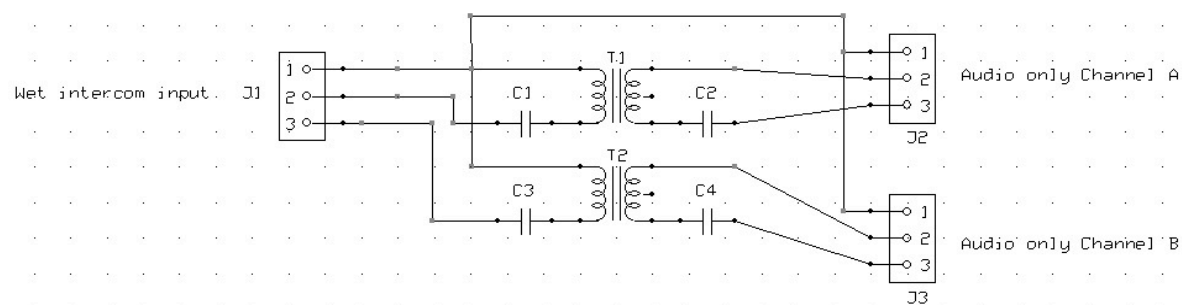




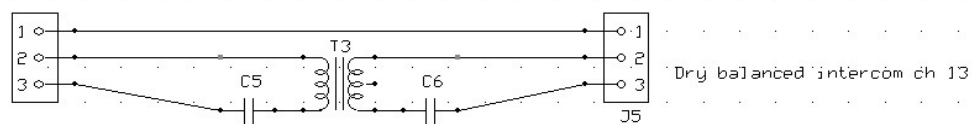




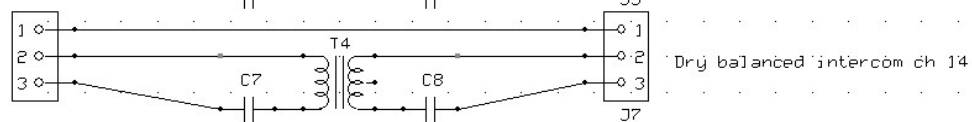
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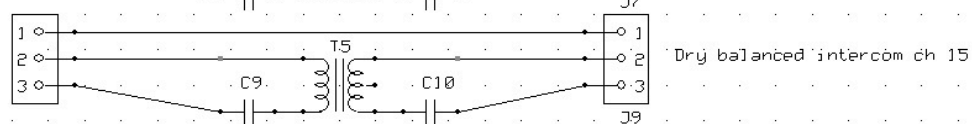
Wet intercom input ch 13 J4

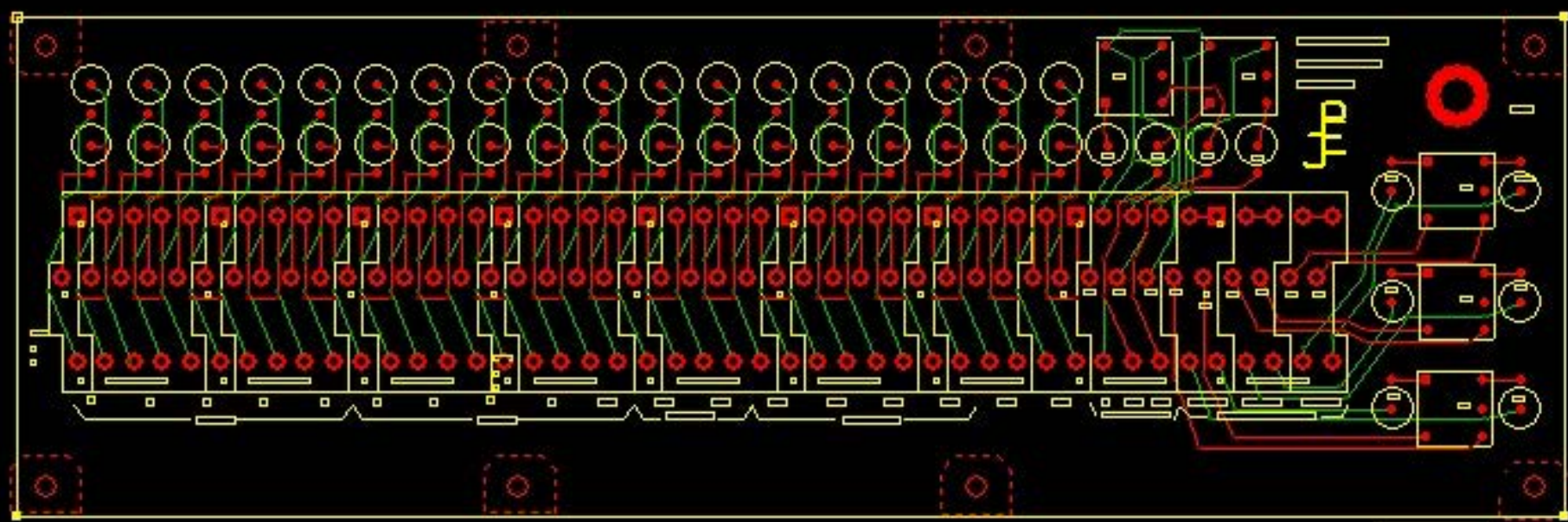


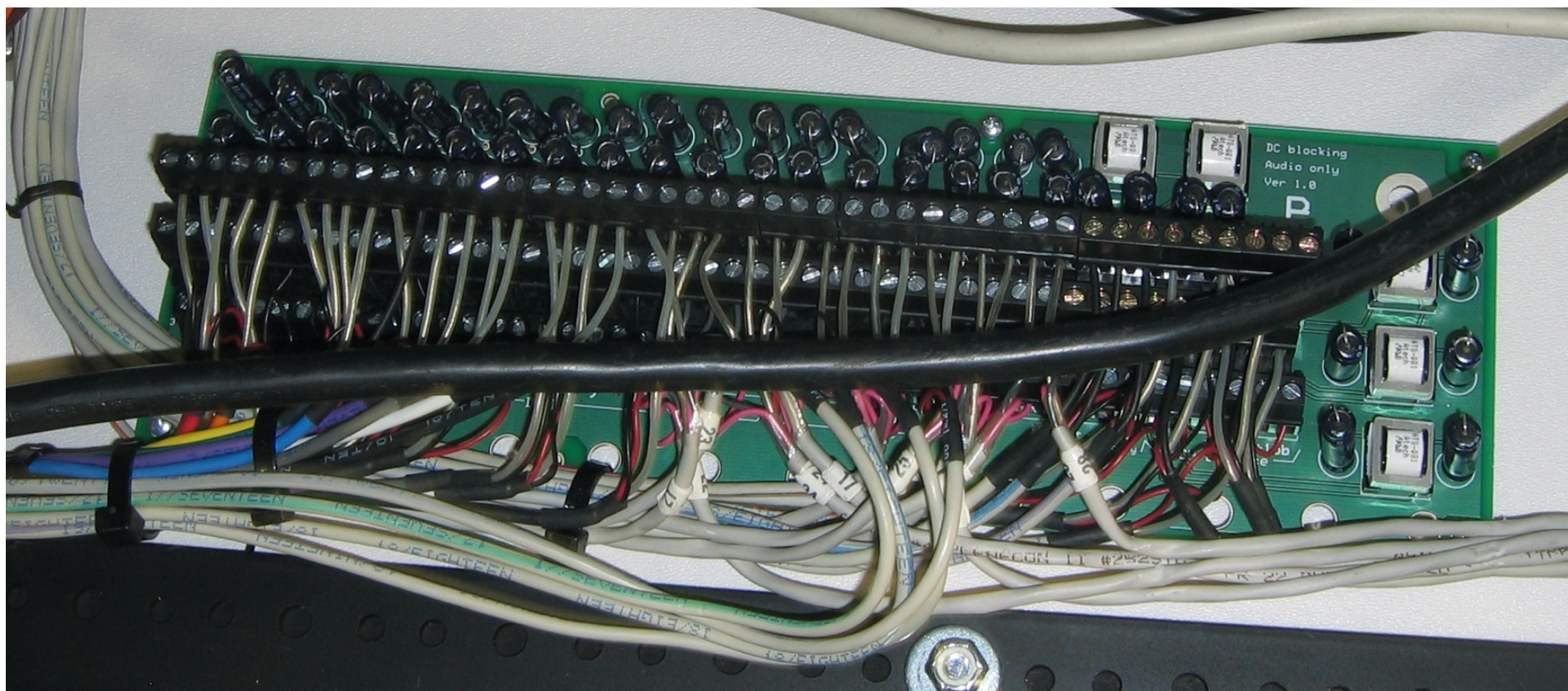
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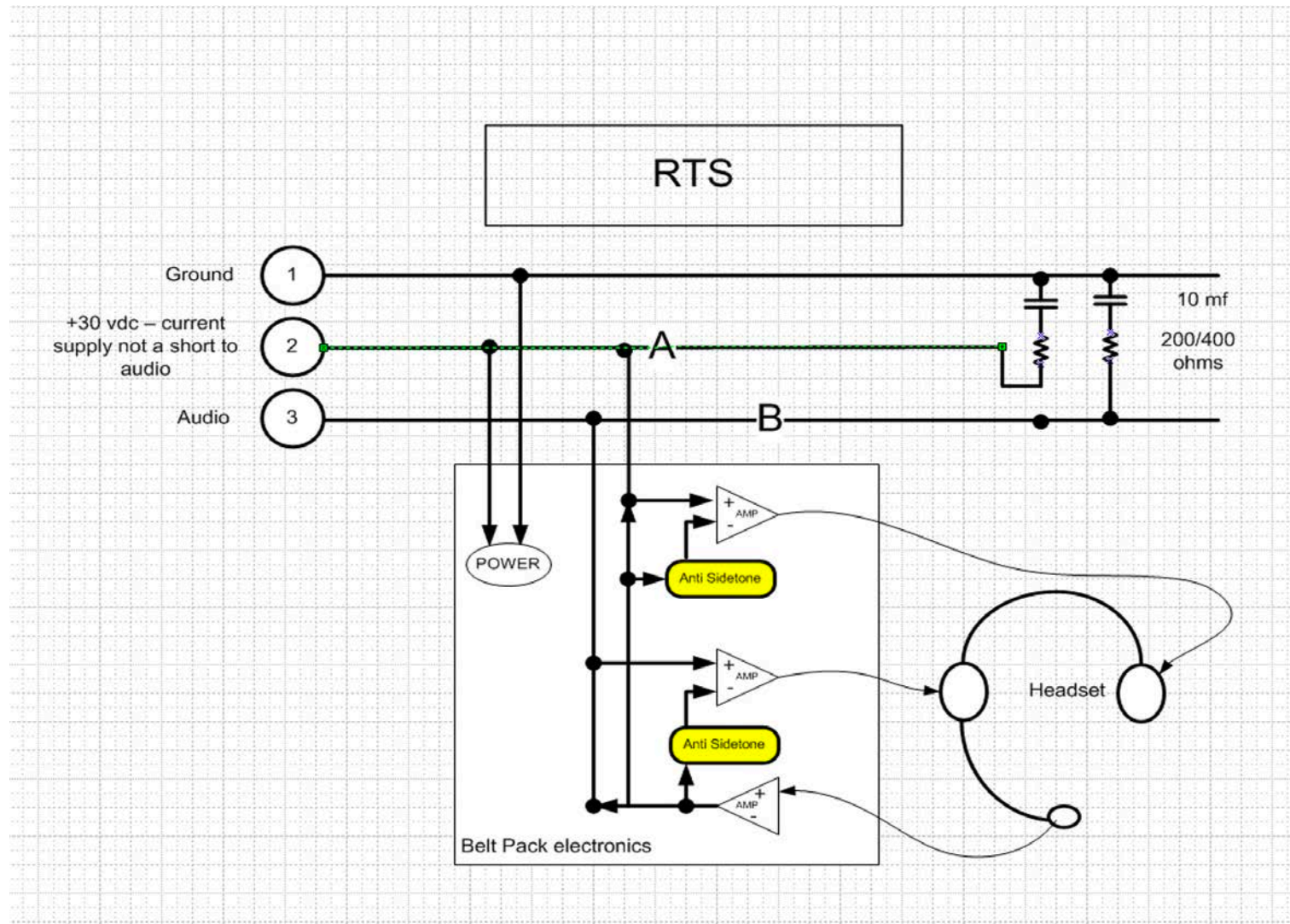


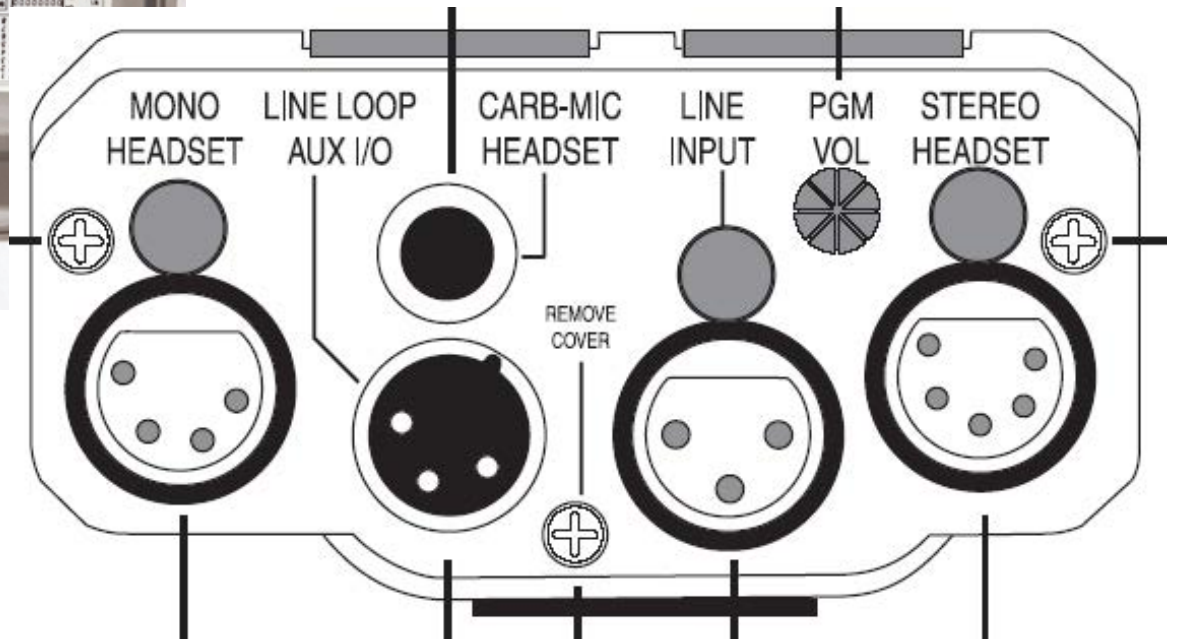
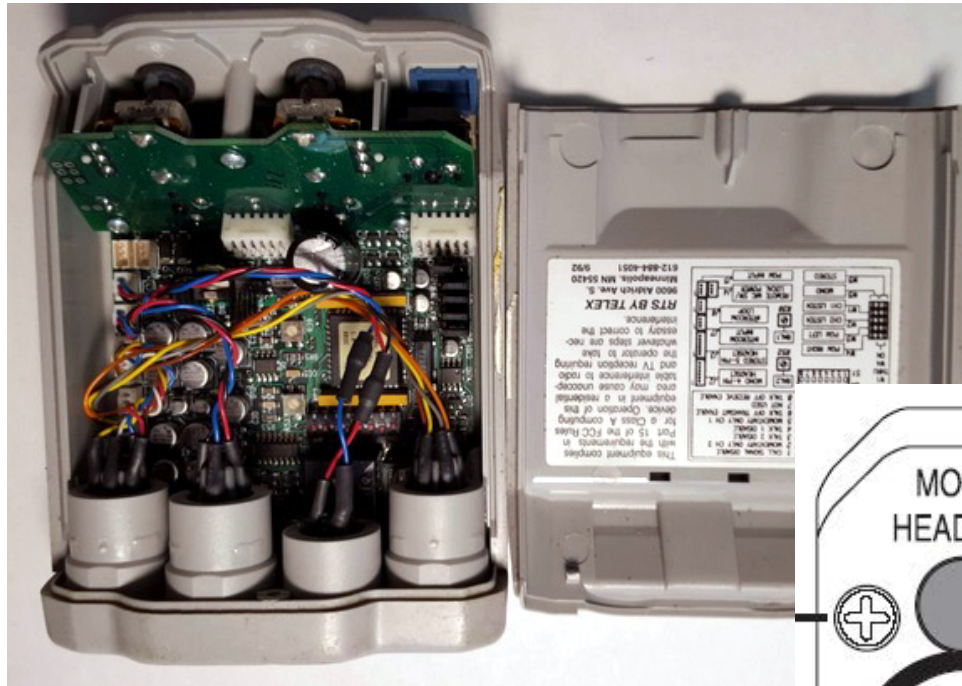
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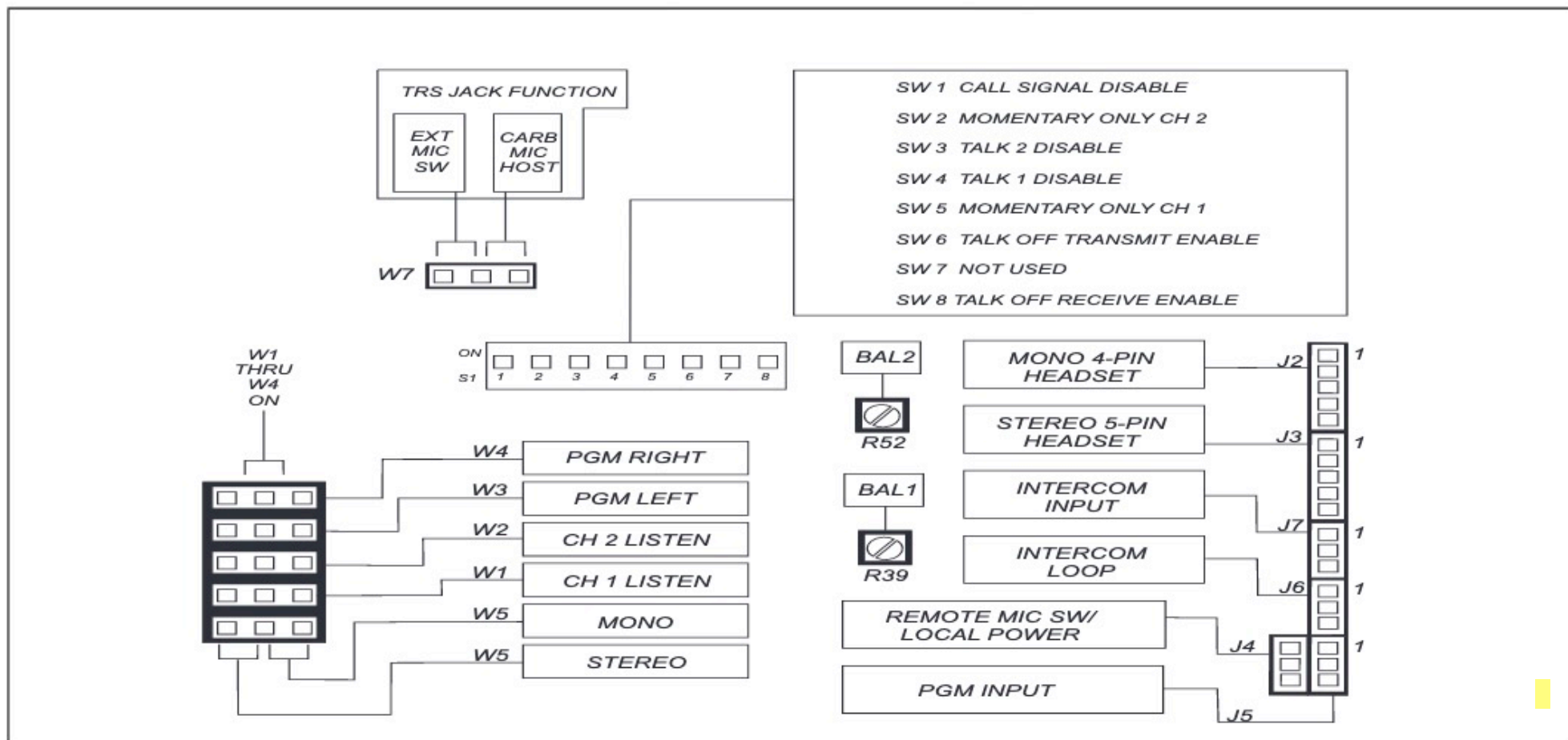




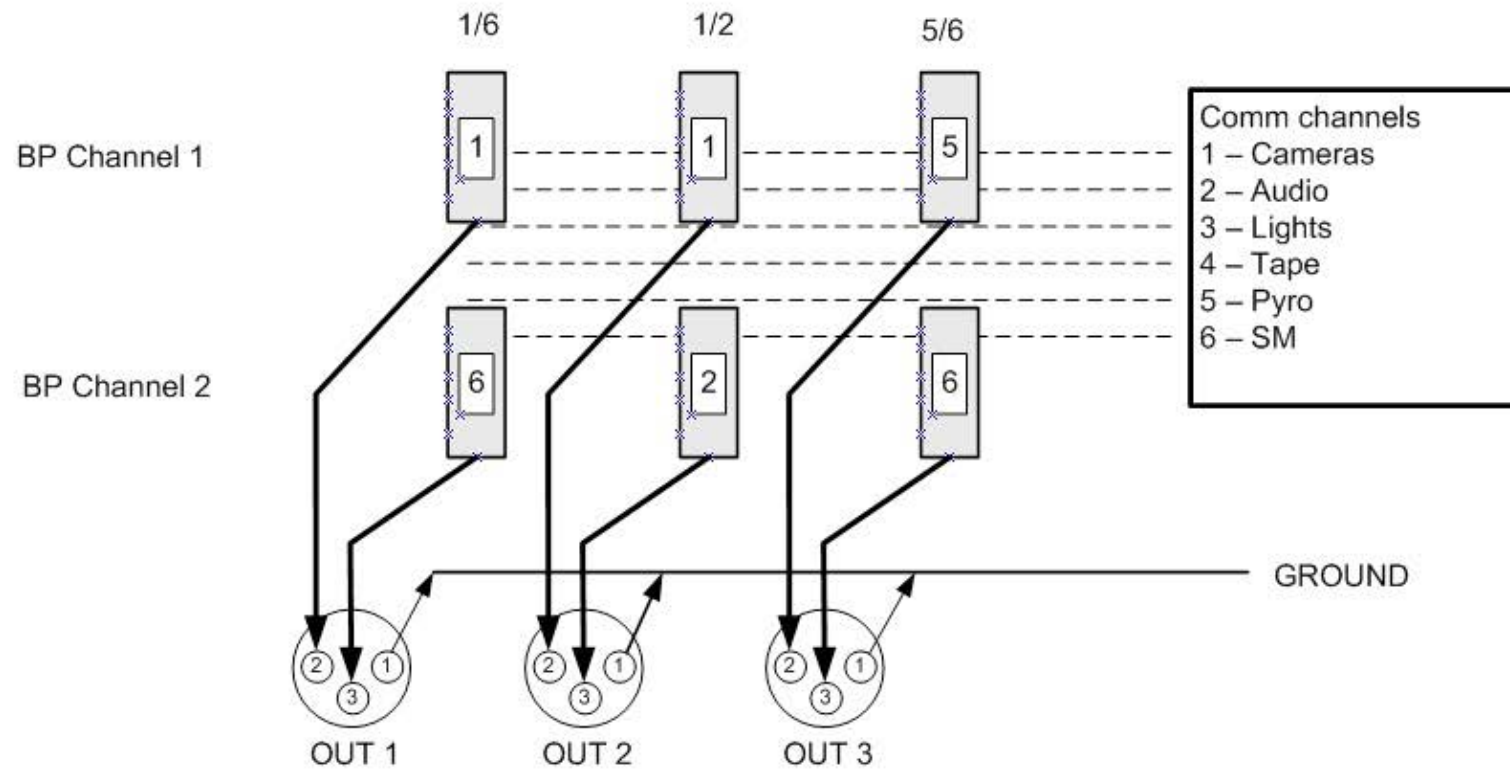








Dial-UP concept





RTS SYSTEMS

TW INTERCOM SYSTEM
SOURCE ASSIGN PANEL
MODEL SAP1626

CHANNEL
SELECT
(CH-1)

CHANNEL
SELECT
(CH-2)

CAMERAS

1 2 3 4 5 6

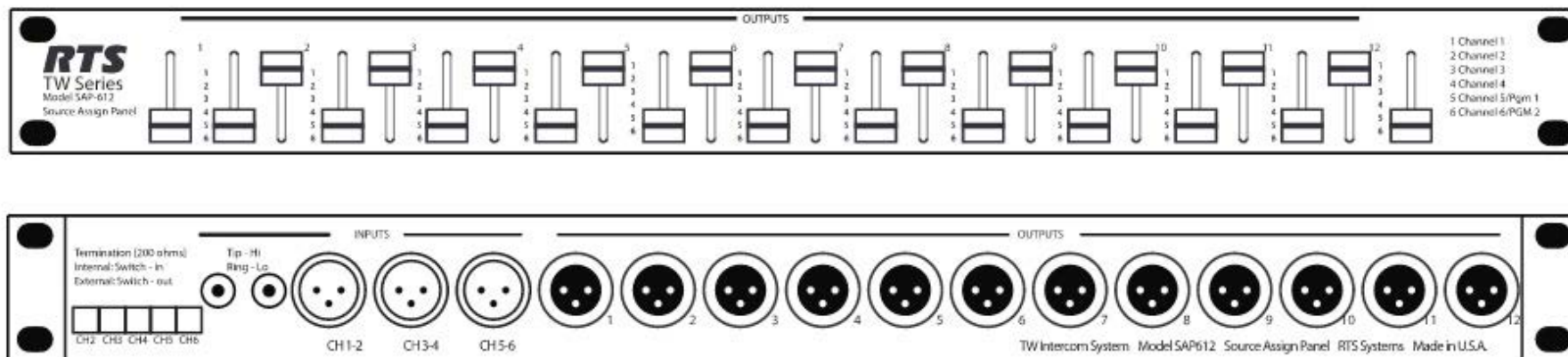
1 2 3

0 0 0 0 0 0

15 15 0

0 0 0 0 0 0

2 2 0

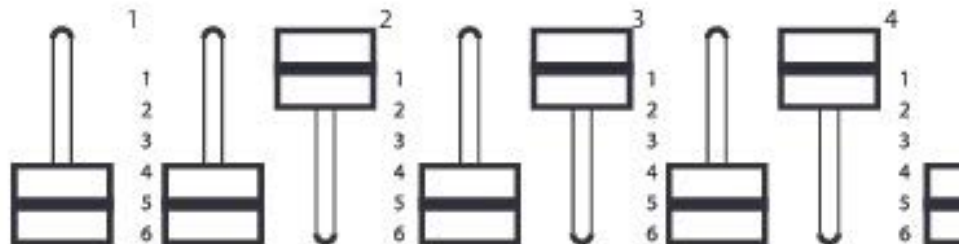


RTS

TW Series

Model SAP-612

Source Assign Panel



Termination [200 ohms]
Internal: Switch - in
External: Switch - out



CH2 CH3 CH4 CH5 CH6

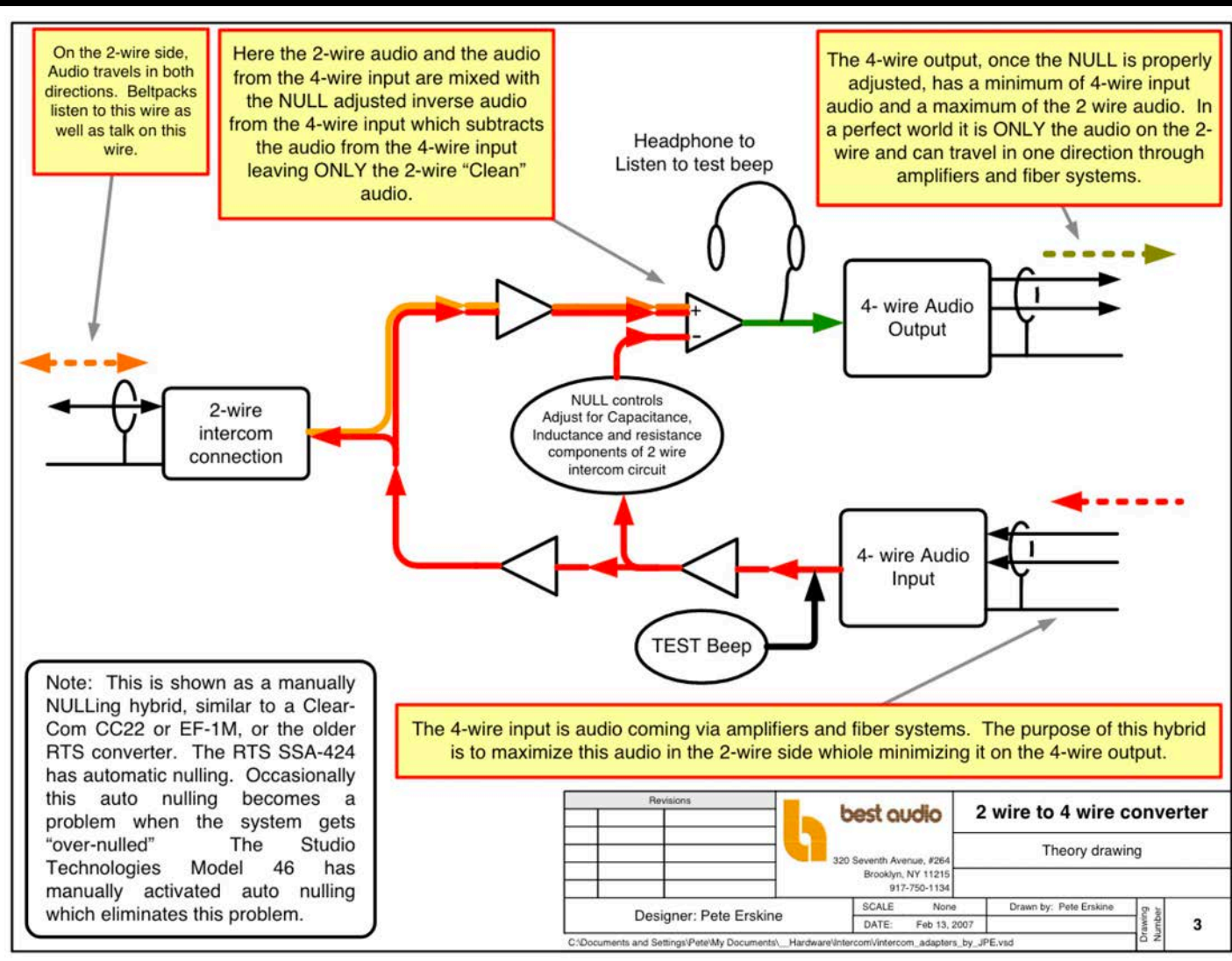
INPUTS



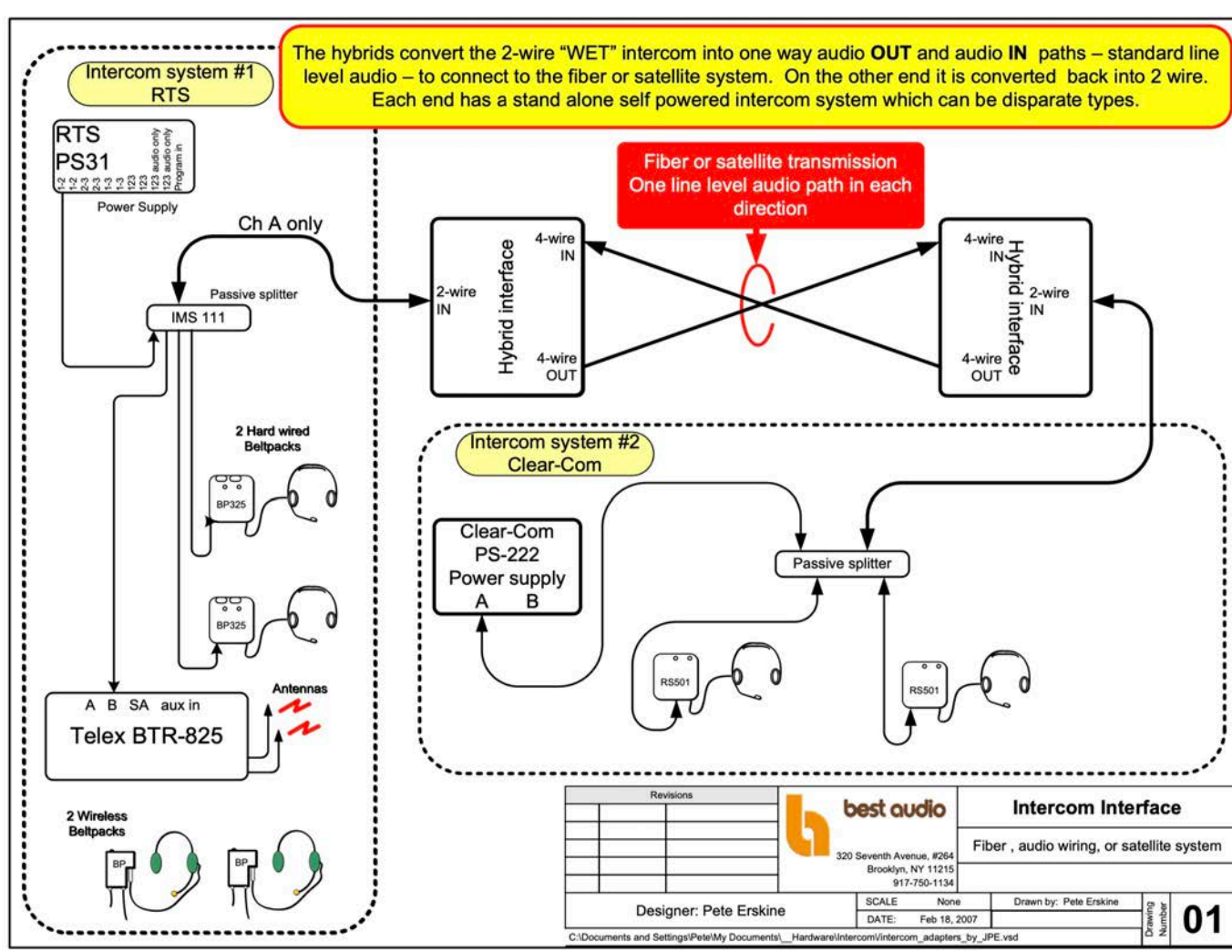
CH1-2

CH3-4

CH5-6



Revisions			 320 Seventh Avenue, #264 Brooklyn, NY 11215 917-750-1134	2 wire to 4 wire converter				
				Theory drawing				
Designer: Pete Erskine				SCALE: None	Drawn by: Pete Erskine		Drawing Number	3
				DATE: Feb 13, 2007				
C:\Documents and Settings\Pete\My Documents\Hardware\intercom\intercom_adapters_by_JPE.vsd								



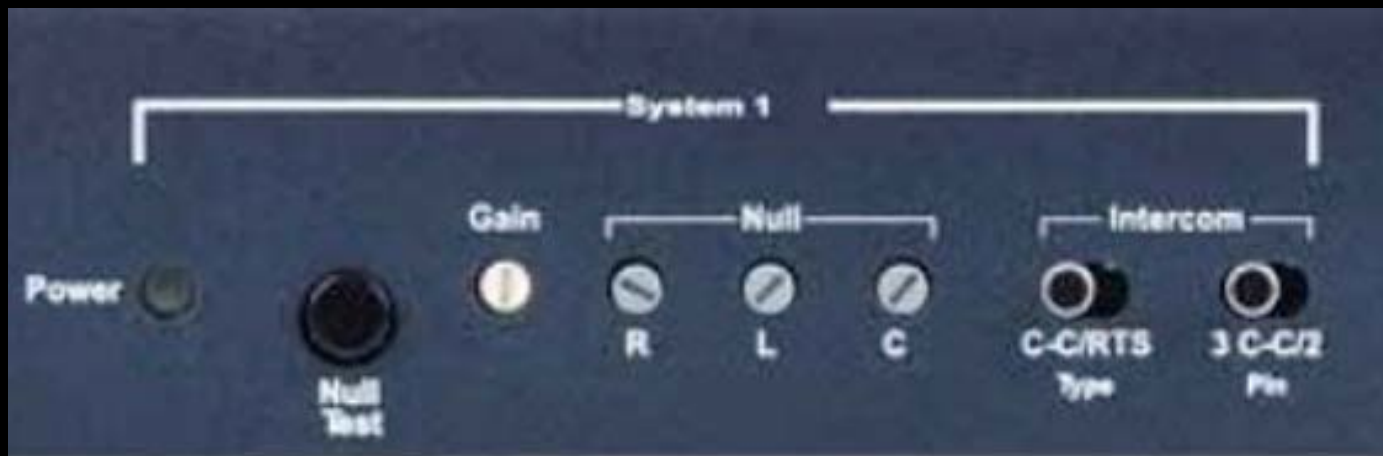
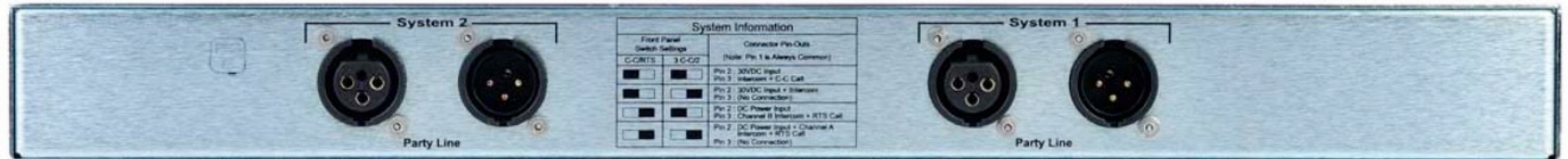
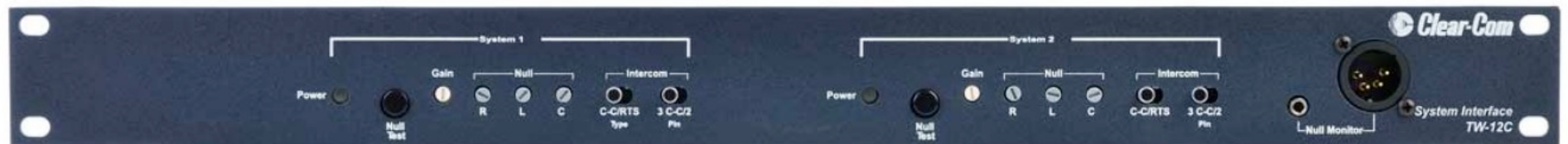
Revisions		

best audio
320 Seventh Avenue, #264
Brooklyn, NY 11215
917-750-1134

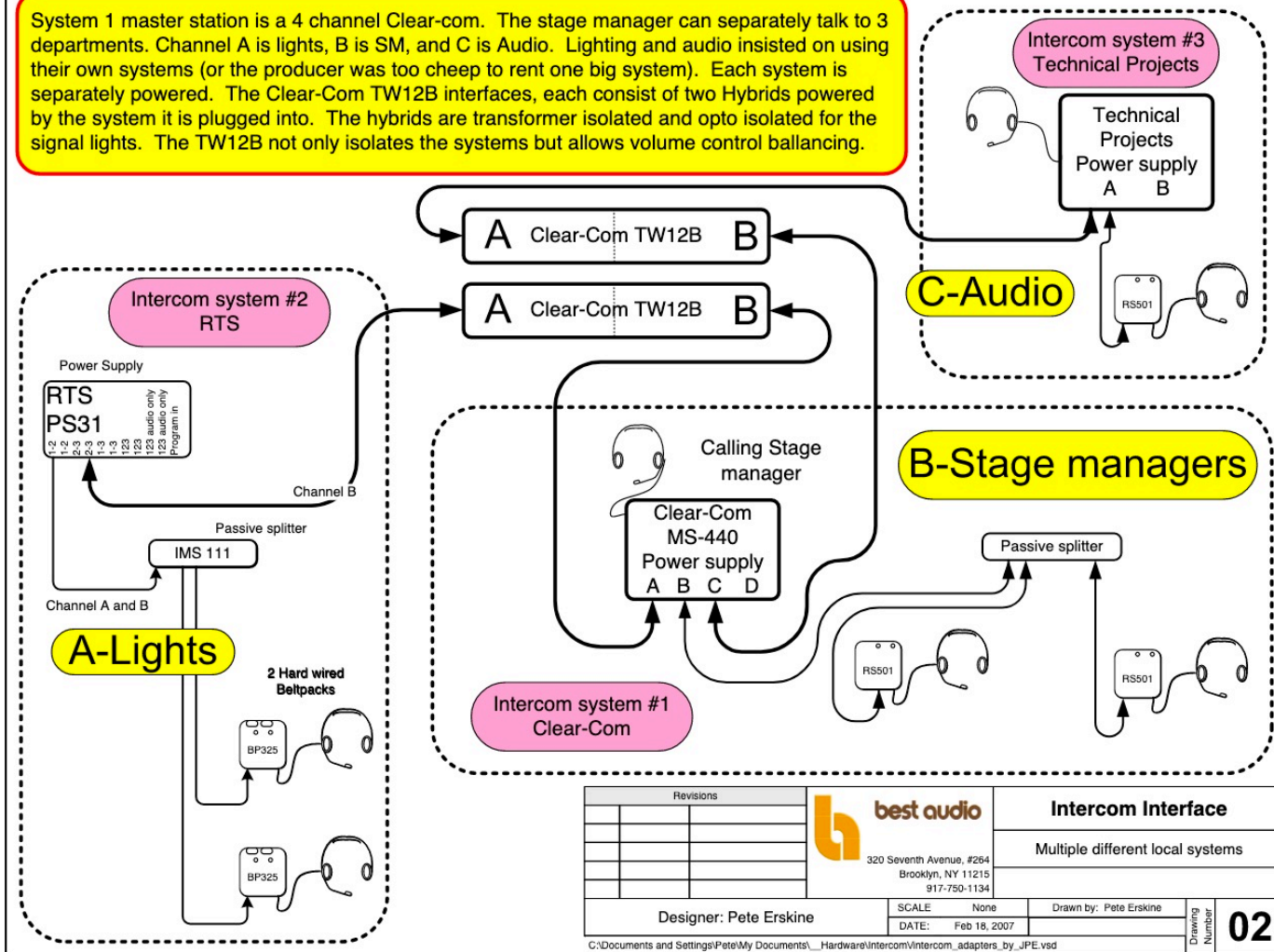
Intercom Interface
Fiber , audio wiring, or satellite system

Designer: Pete Erskine		SCALE: None	Drawn by: Pete Erskine		Drawing Number 01
DATE: Feb 18, 2007					

C:\Documents and Settings\Pete\My Documents\Hardware\intercom\intercom_adapters_by_JPE.vsd



System 1 master station is a 4 channel Clear-com. The stage manager can separately talk to 3 departments. Channel A is lights, B is SM, and C is Audio. Lighting and audio insisted on using their own systems (or the producer was too cheap to rent one big system). Each system is separately powered. The Clear-Com TW12B interfaces, each consist of two Hybrids powered by the system it is plugged into. The hybrids are transformer isolated and opto isolated for the signal lights. The TW12B not only isolates the systems but allows volume control ballancing.



Revisions		



Intercom Interface

Multiple different local systems

Designer: Pete Erskine

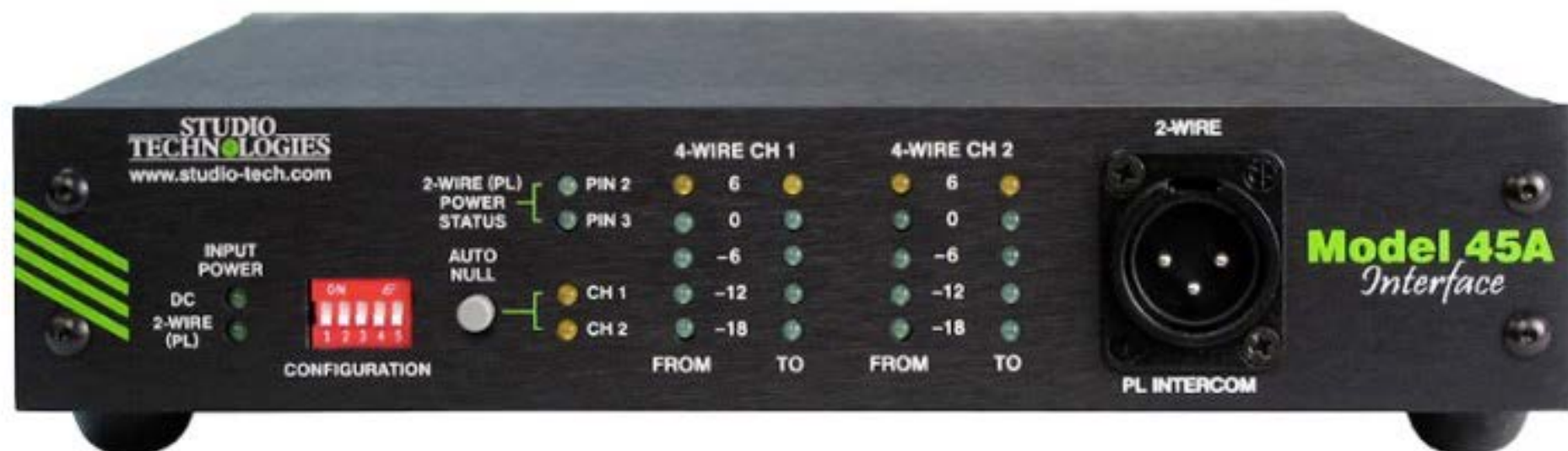
SCALE: None
DATE: Feb 18, 2007

Drawn by: Pete Erskine

Drawing
Number

02

C:\Documents and Settings\Pete\My Documents\Hardware\intercom\intercom_adapters_by_JPE.vsd







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