

40-10 Doublet Testing, Aug 2, 2023

1. Direct antenna to 7300, no internal tuner
2. Direct antenna to 7300, with internal tuner
3. Direct antenna to MFJ Power Meter, to 7300, no Internal tuner
4. Direct antenna to MFJ Power Meter, to 7300, Internal tuner
5. Through 4:1 Transformer in Tuner, 10 Wt, 7300, no tuner
6. Through 4:1 BuddiPole Transformer, 10 Wt, 7300 no tuner
7. Through 2:1 BuddiPole Transformer, 10 Wt, 7300, no tuner
8. Through 1:1 BuddiPole Transformer, 10 Wt, 7300 No tuner
9. Direct from Antenna 10Wt to MFJ 9390 Autotuner, 7300 no tuner
10. Direct from Antenna 10Wt to BuddiPole 4:1 to MFJ 9390 Autotuner, 7300 no tuner
11. Direct from Antenna 10Wt to BuddiPole 1:1 to MFJ 9390 Autotuner, 7300 no tuner
12. Direct from Antenna 10Wt, to ATU 100, 7300 no tuner (to do)

Direct from Antenna 10Wt to IC 7300			
Band	SWR		
			Radio 7300, no tuner
80			> 3.5
60			> 3.5
40			> 3.5
30			> 3.5
20			> 3.5
17			2.0
15			> 3.5
12			> 3.5
10			1.5
6			> 3.5

Direct from Antenna 10Wt to IC 7300			
Band	SWR		
			Radio 7300, internal tuner
80			> 3.5
60			> 3.5
40			> 3.5
30			> 3.5
20			> 3.5
17			1.0
15			> 3.5
12			> 3.5
10			1.0
6			1.0

Direct from Antenna 10Wt, MFJ Meter			
Band	SWR		

	MFJ Tuner Meter		Radio 7300, no tuner	
80	> 5		> 3.5	
60	> 5		> 3.5	
40	> 5		> 3.5	
30	4.5		> 3.5	
20	4.5		> 3.5	
17	2.5		2.0	
15	3.8		> 3.5	
12	5.0		> 3.5	
10	2.0		2.0	
6	3.0		> 3.5	

Through 4:1 Transformer in Tuner, 10 Wt, 7300, no tuner

Band	SWR		
	MFJ Meter		Radio, no tuner
80	>5.1		> 3.5
60	>5.1		> 3.5
40	>5.1		> 3.5
30	>5.1		> 3.5
20	>5.1		> 3.5
17	>5.1		> 3.5
15	>5.1		> 3.5
12	>5.1		> 3.5
10	>5.1		> 3.5
6	>5.1		> 3.5

Through 1:1 BuddiPole Transformer, 10 Wt, 7300 No tuner

Band	SWR		
	MFJ Meter		Radio, no tuner
80	>5.1		> 3.5
60	>5.1		> 3.5
40	>5.1		> 3.5
30	>5.1		> 3.5
20	>5.1		> 3.5
17	3.0		3.1
15	>5.1		> 3.5
12	>5.1		> 3.5
10	5.0		> 3.5
6	3.1		> 3.5

Through 2:1 BuddiPole Transformer, 10 Wt, 7300, no tuner

Band	SWR		
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	MFJ Meter		Radio, no tuner	
80	>5.1		> 3.5	
60	>5.1		> 3.5	
40	>5.1		> 3.5	
30	>5.1		> 3.5	
20	>5.1		> 3.5	
17	2.0		1.7	
15	>5.1		> 3.5	
12	>5.1		> 3.5	
10	3.0		3.4	
6	2.8		> 3.5	

Through 1:1 BuddiPole Transformer, 10 Wt				
Band	SWR			
	MFJ Meter		Radio, no tuner	
80	>5.1		> 3.5	
60	>5.1		> 3.5	
40	>5.1		> 3.5	
30	>5.1		> 3.5	
20	>5.1		> 3.5	
17	2.0		1.7	
15	>5.1		> 3.5	
12	>5.1		> 3.5	
10	3.0		3.4	
6	2.0		> 3.5	

Direct from Antenna 10Wt to MFJ 9390 Autotuner, 7300 no tuner

Band	SWR			
	MFJ Meter		Radio	
80	1.0		1.0	
60	1.0		1.0	
40	1.3		1.5	
30	1.0		1.0	
20	1.0		1.0	
17	1.0		1.0	
15	1.3		1.5	
12	1.1		1.1	
10	1.0		1.0	
6	2.0		1.0	

Direct from Antenna 10Wt to BuddiPole 4:1 to MFJ 9390 Autotuner, 7300 no tuner

Band	SWR			
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	MFJ Meter		Radio	
80	1.1		1.1	
60	1.0		1.0	
40	1.2		1.3	
30	1.0		1.0	
20	1.3		1.3	
17	1.1		1.1	
15	1.1		1.1	
12	1.2		1.2	
10	1.0		1.0	
6	1.2		1.0	

Direct from Antenna 10Wt to BuddiPole 1:1 to MFJ 9390 Autotuner, 7300 no tuner

Band	SWR			
	MFJ Meter		Radio	
80	1.5		1.6	
60	1.2		1.2	
40	1.1		1.1	
30	1.0		1.0	
20	1.1		1.1	
17	1.0		1.0	
15	1.0		1.0	
12	1.8		1.6	
10	1.0		1.0	
6	1.6		1.6	

Direct from Antenna 10Wt, to ATU 100, 7300 no tuner

Band	SWR			Efficiency %
	MFJ Meter	Radio	ATU 100	Shown on ATU 100 screen
80	1.2	1.0	1.60	56%
60	2.5	1.7	2.40	35%
40	5.0	>3.5	9.90	13%
30	3.0	2.6	3.60	28%
20	1.1	1.0	1.00	71%
17	1.1	1.0	1.10	47%
15	1.1	1.0	1.17	60%
12	1.5	1.1	1.27	61%
10	1.1	1.0	1.00	62%
6	1.0	1.0	1.0	41%

Direct from Antenna 10Wt, 4:1 to ATU 100, 7300 no tuner

Band	SWR			Efficiency %
	MFJ Meter	Radio	ATU 100	Shown on ATU 100 screen
80	3.0	2.5	3.90	27%
60	5.0	>3.5	9.99	13%
40	1.1	1.0	1.03	41%
30	1.6	1.4	1.44	40%
20	>5	>3.5	9.99	13%
17	1.0	1.0	1.01	62%
15	>5	>3.5	9.99	13%
12	1.5	1.1	1.27	61%
10	1.1	1.0	1.00	62%
6	1.0	1.0	1.0	41%

Direct from Antenna 10Wt, 1:1 to ATU 100, 7300 no tuner

Band	SWR			Efficiency %
	MFJ Meter	Radio	ATU 100	Shown on ATU 100 screen
80	3.0	2.5	2.60	31%
60	1.1	1.0	1.21	41%
40	1.5	1.1	1.32	41%
30	1..1	1.0	1.00	51%
20	>5	>3.5	9.99	13%
17	1.0	1.0	1.12	41%
15	>5	>3.5	7.90	16%
12	>5	>3.5	7.42	17%
10	1.9	1.3	1.42	65%
6	1.0	1.0	1.1	76%

Direct from Antenna 10Wt, 2:1 to ATU 100, 7300 no tuner

Band	SWR			Efficiency %
	MFJ Meter	Radio	ATU 100	Shown on ATU 100 screen
80	1.1	1.1	1.24	41%
60	3.0	2.5	3.27	28%
40	1.1	1.0	1.03	41%
30	1..1	1.0	1.00	51%
20	>5	>3.5	9.99	13%
17	1.4	1.1	1.16	74%

15	>5	>3.5	7.90	16%
12	2.9	1.9	2.53	34%
10	1.4	1.0	1.03	61%
6	1.0	1.1	1.2	77%

Direct from Antenna 10Wt, 4:1, 2:1, 1:1 to ATU 100, 7300 no tuner						
	4:1		2:1		1:1	
	SWR	Efficiency	SWR	Efficiency	SWR	Efficiency
80	3.90	27%	1.24	41%	2.60	31%
60	9.99	13%	3.27	28%	1.21	41%
40	1.03	41%	1.03	41%	1.32	41%
30	1.44	40%	1.00	51%	1.00	51%
20	9.99	13%	9.99	13%	9.99	13%
17	1.01	62%	1.16	74%	1.12	41%
15	9.99	13%	7.90	16%	7.90	16%
12	1.27	61%	2.53	34%	7.42	17%
10	1.00	62%	1.03	61%	1.42	65%
6	1.0	41%	1.2	77%	1.1	76%

Direct from Antenna 10Wt, 4:1, 2:1, 1:1 to ATU 100, 7300 no tuner								
	SWR Radio				Efficiency ATU 100			
Band	None	4:1	2:1	1:1	None	4:1	2:1	1:1
80	1.0	2.5	1.1	2.5	56%	27%	41%	31%
60	1.7	>3.5	2.5	1.0	35%	13%	28%	41%
40	>3.5	1.0	1.0	1.1	13%	41%	41%	41%
30	2.6	1.4	1.0	1.0	28%	40%	51%	51%
20	1.0	>3.5	>3.5	>3.5	71%	13%	13%	13%
17	1.0	1.0	1.1	1.0	47%	62%	74%	41%
15	1.0	>3.5	>3.5	>3.5	60%	13%	16%	16%
12	1.1	1.1	1.9	>3.5	61%	61%	34%	17%
10	1.0	1.0	1.0	1.3	62%	62%	61%	65%
6	1.0	1.0	1.1	1.0	41%	41%	77%	76%