

DUAL (MAIN/STANDBY) ND500II TRANSMITTER
(INSTALLED IN NAR95 CABINET)

INTRODUCTION

1 When an ND500II radiobeacon transmitter is installed in an NAR95 cabinet, some mechanical information in the transmitter's instruction manual must be changed and the NAR95 cabinet's electrical information is required. This document identifies the mechanical differences. It also provides an electrical parts list and point-to-point wiring information for the NAR95 cabinet. It is recommended that where replacement pages are not provided; affected areas of the instruction manual be highlighted using a suitable marker, or changed using pen and ink, to ensure users of the manual are aware of the differences.

MECHANICAL DIFFERENCES

2 The drawer slide depicted in figure MD-17 of the technical instruction manual has been replaced with a different type of slide. It is not possible to swivel the transmitter when it is installed on this slide. All references, in the technical instruction manual, to rotating the transmitter when it is extended on its drawer slide must be ignored. If it is not possible to access a specific area of the transmitter when it is installed on its drawer slide, the transmitter must be lifted off its slides and placed on a work surface.

CABINET DESCRIPTION (see figure 1)

3 The NAR95 cabinet houses two ND500II radiobeacon transmitters. The upper transmitter is designated as the 'A' transmitter, while the lower transmitter is designated as the 'B' transmitter. The cabinet also contains a type 'N' RF coaxial connector (J1), which is used as the RF output connection point for the RF feed cable; an AC power duplex receptacle (J2); a two-pole, double-throw switch (S1), that selects which transmitter will be the 'main' transmitter; three barrier strips (TB2, TB3 and TB4), which are used as the external wiring interface; and the interconnecting wiring. Refer to figure 3 for an electrical schematic of the NAR95 cabinet. Refer to figure 5 for dimensional information of the NAR95 cabinet.

THEORY OF OPERATION

4 The theory of operation presented in the ND500II instruction manual describes the operation of both the 'A' (ND500II-11x-x20) and the 'B' (ND500II-01x-x20) transmitters. The following provides a brief description for when they are connected in a main/standby dual installation. See figure 3 of this information sheet for interconnecting detail.

4.1 When the transmitter selected by A/B switch S1 is turned on and producing a satisfactory RF output, the following will occur:

- (a) 15 volts DC will be applied to TB1-6 of the other (standby) transmitter, from TB2-1 of the selected (main) transmitter, as the 'standby off' control signal.
- (b) If transmitter 'A' is selected as the 'main' transmitter, the main/standby relay in transmitter A's harmonic filter will be energized and will connect the output of transmitter 'A' to J1 (RF OUT) as the RF output to the antenna system.
- (c) If transmitter 'B' is selected as the 'main' transmitter, the main/standby relay in transmitter A's harmonic filter will be de-energized and the output of the transmitter 'B' will be connected to J1 (RF OUT) as the output to the antenna system.

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- (d) The selected 'main' transmitter will provide 15 volts DC and the manually controlled slewing commands (**ATU CONT**) for the antenna system's antenna tuning unit.
- (e) The selected 'main' transmitter will be providing the 'audio out' (**RMT AUD**) sample.
- (f) If transmitter 'A' is selected as the 'main' transmitter, an open collector **SHTDN ALM (B)** signal will be applied to TB3-5 from TB2-7 ('shutdown') of transmitter 'B', indicating it is not turned on.
- (g) If transmitter 'B' is selected as the 'main' transmitter, an open collector **SHTDN ALM (A)** signal will be applied to TB3-4 from TB2-7 ('shutdown') of transmitter 'A', indicating it is not turned on.

4.2 If the selected 'main' transmitter is shutdown because an abnormal condition was sensed for more than 20 seconds, or for any other reason, the following will occur:

- (a) The +15 volt DC power supply in the selected 'main' transmitter will be switched off, removing +15 volts DC from TB2-1 of the main transmitter and from TB1-6 of the standby transmitter. The standby transmitter will turn on.
- (b) If transmitter 'A' is selected as the 'main' transmitter, the main/standby relay in the transmitter A's harmonic filter will de-energize and route the 'standby' ('B') transmitter's output to J1 (**RF OUT**) as the RF output to the antenna system.
- (c) If transmitter 'B' is selected as the 'main' transmitter, the main/standby relay in the transmitter A's harmonic filter will energize and route the 'standby' ('A') transmitter's output to J1 (**RF OUT**) as the RF output to the antenna system.
- (d) The 'standby' transmitter will provide 15 volts DC and the manually controlled slewing commands (**ATU CONT**) for the antenna system's antenna tuning unit.
- (e) The standby transmitter will be providing the 'audio out' (**RMT AUD**) sample.
- (f) If transmitter 'A' is selected as the 'main' transmitter, an open collector **SHTDN ALM (A)** signal will be applied to TB3-4 from TB2-7 ('shutdown') of transmitter 'A', indicating it is not turned on.
- (g) If transmitter 'B' is selected as the 'main' transmitter, an open collector **SHTDN ALM (B)** signal will be applied to TB3-5 from TB2-7 ('shutdown') of transmitter 'B', indicating it is not turned on.

INSTALLATION INFORMATION

Complete or verify the following requirements are completed during installation of the transmitter/cabinet.

- (a) Ensure the cabinet will not topple, when the transmitters are installed and one or both are extended on their drawer slides, by securely bolting the cabinet to it's mounting surface or by rigidly securing it using some other suitable means. There are four bolt holes in the base of the cabinet to accommodate securing hardware.

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Figure 1 Main/Standby ND500II Radiobeacon Transmitters Installed in NAR95 Cabinet

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- (b) Connect appropriate AC power source wiring (115 Vac, 60Hz or 230 Vac 50/60Hz) to duplex receptacle J2, ensuring wiring passes through and is secured by a cable clamp in cabinet's cable entry hole.
- (c) If used, connect external DC power source wiring to TB4-1 (+) and TB4-2 (-), ensuring wiring passes through and is secured by a cable clamp in cabinet's cable entry hole.
- (d) Connect external control/monitor wiring to TB2 and TB3 as depicted in figure 2 of these instructions, ensuring wiring passes through and is secured by a cable clamp in the cabinet cable entry hole. See figure 4 for interface assembly detail, paying particular attention to note regarding power trim potentiometers.

NOTE

If an external power trim control circuit is to be used, remove or verify both power trim bypass links (link between TB2-4 and TB2-5 and link between TB2-7 and TB2-8) are removed.

If an external power trim control circuit is not used, install or verify both power trim bypass links (link between TB2-4 and TB2-5 and link between TB2-7 and TB2-8) are installed.

- (e) Connect a continuous, insulated, 4AWG copper wire or one-inch copper braid between the station lightning/safety ground and the cabinet's safety ground connection, which is located on the top of the NAR95 cabinet adjacent to RF output connector J1 on the Oop of the NAR95 cabinet. Ensure this wire does not contact any other conductive surface of the cabinet.
- (f) Connect the antenna system's RF feed cable to the exterior portion of the cabinet's RF output coaxial connector (J1).
- (g) Deleted.
- (h) Install transmitters in the cabinet, noting the ND500II-11x-x20 ('A') transmitter is installed on the upper drawer slide and the ND500II-01x-x20 ('B') transmitter is installed on the lower drawer slide. Ensure both transmitters are properly seated on their slides.
- (i) Connect wires #1 thru #32, of the cabinet's wiring harness, to the appropriate transmitter barrier strips; as depicted in figure 3 and tabulated in table 1 of these instructions.

NOTE

Wire #35 and #36 are not the size recommended in the installation instructions of the ND500II manual. They are installed to ensure the transmitter chassis is grounded in conformance with most electrical codes. It is intended that all transient currents flowing in the feed cable will be shunted to the station safety ground by the conductor connected to the ground stud that is adjacent to J1 on the top of the cabinet.

- (j) Connect wire #35 to the 'A' transmitter's safety/ground stud, noting it is located immediately below TB1.
- (k) Connect wire #36 to the 'B' transmitter's safety/ground stud, noting it is located immediately below TB1.
- (l) Verify connector P4 (terminates one end of wire #34) is installed on and fully mated with the interior portion of cabinet's RF output coaxial connector (J1).

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- (m) Install connector P3 (terminates one end of wire #34) on the 'A' transmitter's RF output connector (1A7J2), ensuring it is fully mated.
- (n) Install connector P2 (terminates one end of wire #33) on the 'A' transmitter's RF input connector (1A7J3), ensuring it is fully mated.
- (o) Install connector P1 (terminates one end of wire #33) on the 'B' transmitter's RF output connector (2A7J2), ensuring it is fully mated.
- (p) Connect an AC power cable (W1) between the 'A' transmitter's AC power cable receptacle (1J2) and one side of the cabinet's AC power duplex receptacle (J2).
- (q) Connect an AC power cable (W2) between the 'B' transmitter's AC power cable receptacle (2J2) and the other side of the cabinet's AC power duplex receptacle (J2).

INITIAL START-UP PROCEDURES

6 The 'A' and 'B' transmitters should not be fully interconnected as a dual transmitter system until the initial start-up procedures described in the ND500II instruction manual have been completed. The operating instructions provided in the ND500II instruction manual are applicable, provided the following is observed:

6.1 'A' TRANSMITTER ON-AIR: If the 'B' transmitter is to be serviced and/or tested with the 'A' transmitter on the air, proceed as follows:

- (a) Set 'B' transmitter's **POWER** switch (S3) to **OFF**.
- (b) Disable standby on/off control by disconnecting wire #6 from TB2-1 of the 'A' transmitter.
- (c) Disconnect the coaxial cable (P1) from the 'B' transmitter's RF output coaxial connector (2A7J2).
- (d) Connect a 250-watt, precision, 50-ohm, resistive dummy load to coaxial connector 2A7J2 of the 'B' transmitter using coaxial cable provided.
- (e) Set 'B' transmitter's **LOCAL/REMOTE** switch (S4) to **LOCAL**.
- (f) Set 'B' transmitter **POWER** switch (S3) to **ON** and perform servicing and/or testing procedures on 'B' transmitter.
- (g) On successful completion of maintenance procedures, set 'B' transmitter's **POWER** switch (S3) to **OFF**, disconnect dummy load and reconnect wires disconnected in steps (b) and (c).
- (h) Set 'B' transmitter's **POWER** switch (S3) to **ON** and **LOCAL/REMOTE** switch (S4) to the desired position.

6.2 'B' TRANSMITTER ON-AIR: If the 'A' transmitter is to be serviced and/or tested with the 'B' transmitter on the air, proceed as follows:

- (a) Set **POWER** switch (S3) of both transmitters to **OFF**.

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- (b) Disable standby on/off control by disconnecting wire #6 from TB2-1 of the 'A' transmitter.
- (c) Disconnect connector P1 (terminates one end of wire #33) from the 'B' transmitter's RF output coaxial connector (2A7J2).
- (d) Disconnect connector P3 (terminates one end of wire #34) from the 'A' transmitter's RF output coaxial connector (1A7J2).
- (e) Disconnect connector P4 (terminates one end of wire #34) from the interior portion of the cabinet's RF output coaxial connector (J1).
- (f) Interconnect the 'B' transmitter's RF output coaxial connector (2A7J2) and the interior portion of the cabinet's RF output coaxial connector (J1) using one of the coaxial cables provided.
- (g) Connect a 250-watt, precision, 50-ohm, resistive dummy load to the 'A' transmitter's RF output coaxial connector (2A7J2), using coaxial cable provided.
- (h) Set 'B' transmitter's **POWER** switch (S3) to **ON**.
- (i) Set 'A' transmitter's **LOCAL/REMOTE** switch (S4) to **LOCAL**.
- (j) Set 'A' transmitter's **POWER** switch (S3) to **ON** and perform servicing and/or testing procedures on 'A' transmitter.
- (k) On successful completion of maintenance procedures, set **POWER** switches (S3) of both transmitters to **OFF**.
- (l) Remove the coaxial cable interconnecting 'B' transmitter's RF output connector (2A7J2) and the interior portion of the cabinet's RF output connector (J1).
- (m) Disconnect dummy load from 'A' transmitter's RF output coaxial connector (1A7J2).
- (n) Restore coaxial cables to their original connections.
- (o) Connect wire #6 to TB2-1 of the 'A' transmitter.
- (p) Set **POWER** switch (S3) of both transmitters to **ON** and set their **LOCAL/REMOTE** switches (S4) to the desired position.

CALIBRATION AND TESTING

7 It is recommended that the transmitters to be connected as individual transmitters, as described in paragraphs 6.1 and 6.2, when performing calibration and testing procedures.

7.1 CHECK OF CHANGEOVER UNIT: Check the operation of the main/standby changeover function as follows:

- (a) Verify both transmitters are turned on and their switches are set as specified for 'Operating Setting' in table 4-1 of the ND500II instruction manual.
- (b) Verify the 'A' transmitter is producing the desired RF output and the 'B' transmitter's RF output is

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inhibited.

- (c) Set 'A' transmitter's **KEYING** switch (S1) to **OFF**.
- (d) After approximately twenty seconds the 'A' transmitter's RF output should be inhibited and the 'B' transmitter should be enabled and producing the desired output.

NOTE

If TB1-7 of the 'B' transmitter is connected to ground, the 'B' transmitter's 'standby 1' code variation will be transmitted when the 'B' transmitters turns on.

- (e) Set 'A' transmitter's **KEYING** switch (S1) to **ON**.
- (f) Reset the 'A' transmitter by momentarily setting its **POWER** switch (S3) to **OFF** and then return it to **ON**.

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Figure 2 External Control/Monitor Interconnecting Wiring

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Figure 3 Electrical Schematic - NAR95 Cabinet (Dual ND500II Transmitters)

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Table 1 Wiring List - NAR95 Cabinet (Dual ND500II Transmitters) (DWA02-761)

*	SOURCE	DESTINATION	CODE	SIZE	REMARKS
	TB1-1	1TB2-9	1 Red	14	
	TB1-1	2TB2-9	2 Red	14	
	TB1-2	1TB2-10	3 Black	14	
	TB1-2	2TB2-10	4 Black	14	
	TB2-1	1TB2-6	5 White	20	
	TB2-1	2TB2-6	6 White	20	
	TB2-2	1TB1-5	7 White	20	
	TB2-2	2TB1-5	8 White	20	
	TB2-3	1TB1-4	9 White	20	
	TB2-3	2TB1-4	10 White	20	
	TB2-4	1TB1-3	11 White	20	
	TB2-5	1TB2-1	12 Red	20	
	TB2-6	2TB1-6	13 White	20	
	TB2-7	2TB2-1	14 Red	20	
	TB2-8	2TB1-3	15 White	20	
	TB2-9	1TB1-8	16 White	20	
	TB2-9	2TB1-8	17 White	20	
	TB2-10	2TB1-7	18 White	20	
	TB3-1	1TB1-1	19 Core	22	1-Conductor
	TB3-2	1TB1-2	- Shield	-	Shielded
	TB3-3	2TB1-1	20 Core	22	1-Conductor
	TB3-2	2TB1-2	- Shield	-	Shielded
	TB3-4	1TB2-7	21 White	20	
	TB3-5	2TB2-7	22 White	20	
	TB3-6	1TB2-3	23 White	20	
	TB3-6	2TB2-3	24 White	20	
	TB3-7	1TB2-4	25 White	20	
	TB3-7	2TB2-4	26 White	20	
	TB3-8	1TB2-5	27 White	20	
	TB3-8	2TB2-5	28 White	20	
	TB3-9	1TB2-8	29 Red	20	
	TB3-9	2TB2-8	30 Red	20	
	TB3-10	1TB2-2	31 Black	20	
	TB3-10	2TB2-2	32 Black	20	
	P1-Centre	P2-Centre	33 Core	RG58A/U	Coaxial Cable
	P1-Shell	P2-Shell	- Shield	-	
	P3-Centre	P4-Centre	34 Core	RG58A/U	Coaxial Cable
	P3-Shell	P4-Shell	- Shield	-	
	Safety Ground	Safety Ground Tx 1	35 Green/Yellow	14	
	Safety Ground	Safety Ground Tx 2	36 Green/Yellow	14	
	TB2-11	1TB1-7	37 White	22	
	TB2-12	1TB1-6	38 White	22	
	TB2-6	S1-1	39 White	22	
	TB2-5	S1-3	40 Red	22	
	TB2-7	S1-4	41 Red	22	
	TB2-12	S1-6	42 White	22	
	Safety Ground	Ground at J2	- Green /Yellow	14	
	TB4-1	XF1-1	100 Red	14	
	TB4-2	A1-Ground	101 Black	14	
	XF1-2	CR1-1	102 Red	14	
	XF1-2	CR1-2	103 Red	14	
	CR1-3	A1E2	104 Red	14	
	TB1-1	A1E6	105 Red	14	
	TB1-2	A1-Ground	106 Red	14	

NOTE: Destinations with a '1' prefix are located on the upper ('A') transmitter.

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Destinations with a '2' prefix are located on the lower ('B') transmitter.

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Table 2 Ref Des Index - NAR95 Cabinet (Dual ND500II Transmitters) (DWA02-761)

USE CODE	REF DES	NAME OF PART AND DESCRIPTION	NAUTEL'S PART NO.	JAN/MIL/OEM PART NO.	OEM CODE
*	-	Cabinet Assembly, 115 Vac, 60Hz	NAR95/1A	158-7100-03	37338
\$	-	Cabinet Assembly, 230 Vac, 50/60Hz	NAR95/2A	158-7100-04	37338
	1	Transmitter, Main, 125W, DSB	-	ND500II-11x-x20	37338
	2	Transmitter, Standby, 125W, DSB	-	ND500II-01x-x20	37338
	CR1	Rectifier Assy, Diode Pair (+ve), 400V, 15A	UL27	R704	83003
	F1	Fuse, 20A, 500VDC, Non Time Delay, KLM	FA34	KLM-20	71400
	J1	Adapter, RF Coaxial, Type N	JA05	UG30B/U	02660
*	J2	Connector, Duplex, 115V	JDP30	5262	74545
\$	J2	Connector, Duplex, 250V	JDP32	5662	74545
	P1	Connector, RF Coaxial, Type N, Crimp	JDP22	82-5375	02660
	P2	Connector, RF Coaxial, Type N, Crimp	JDP22	82-5375	02660
	P3	Connector, RF Coaxial, Type N, Crimp	JDP22	82-5375	02660
	P4	Connector, RF Coaxial, Type N, Crimp	JDP22	82-5375	02660
	S1	Switch, Toggle, 2PDT	SCP03	8373K017	08372
	TB1	Terminal Block, Barrier, 3-Terminal	JC23	21303	13150
	TB2	Terminal Block, Barrier, 12-Terminal	JB14	14312	13150
	TB3	Terminal Block, Barrier, 12-Terminal	JB14	14312	13150
	TB4	Terminal Block, 4-position, Double, 30A	JB33	21004	13150
*	W1	Cable Assembly, AC Power, 115 Vac	JN25	17250	70903
\$	W1	Cable Assembly, AC Power, 230 Vac	158-7109	158-7109	37338
*	W2	Cable Assembly, AC Power, 115 Vac	JN25	17250	70903
	XF1	Fuseblock, 1-pole, 30A, 600VDC, FNQ Fuses	FD08	BM6031SQ	71400
	A1	24-48 VDC Power Supply PWB	NAPS23	158-7030	37338
	A1C1	Capacitor, Ceramic, 1.0uF 20% 100V	CAP16	RPE114Z5U105M100V	72982
	A1C2	Capacitor, Tantalum, Dipped, 10uF 10% 35V	CCP36	TAP106K035G	96095
	A1C3	Capacitor, Ceramic, 0.47uF 10% 50V	CCG09	CKR06BX474KRV	56289
	A1C4	Capacitor, Ceramic, 0.0047uF 10% 100V	CCG03	CKR05BX472KRV	56289
	A1C5	Capacitor, Ceramic, 0.01uF 10% 100V	CCG04	CKR05BX103KRV	56289
	A1C6	Capacitor, Ceramic, 0.001uF 10% 200V	CCG01	CKR05BX102KRV	56289
	A1C7	Capacitor, Ceramic, 0.1uF 10% 100V	CCG07	CKR06BX104KRV	56289
	A1C8	Capacitor, Elect, 820uF 100V	CT33	URZA100VH821U25X64LL	1W344
	A1C9	Capacitor, Elect, 820uF 100V	CT33	URZA100VH821U25X64LL	1W344
	A1C10	Capacitor, Elect, 820uF 100V	CT33	URZA100VH821U25X64LL	1W344
	A1C11	Capacitor, Ceramic, 1.0uF 20% 100V	CAP16	RPE114Z5U105M100V	72982
	A1C12	Capacitor, Elect, 820uF 100V	CT33	URZA100VH821U25X64LL	1W344
	A1C13	Capacitor, Tantalum, Dipped, 10uF 10% 35V	CCP36	TAP106K035G	96095
	A1C14	Capacitor, Mica, Dipped, 5100pF 2% 500V	CCC32	CD19FD512G03	14655
	A1C15	Capacitor, Ceramic, 0.47uF 10% 50V	CCG09	CKR06BX474KRV	56289
	A1C16	Capacitor, Tantalum, 6.8uF 10% 35V	CCP19	CSR13F685KM	56289
	A1CR1	Not Used	-	-	37338
	A1CR2	Diode, General Purpose, 400V, 1A	QE28	1N4004	04713
	A1DS1	Diode, LED, Green	QK12	HLMP-3554	50434
	A1E1	Not Used	-	-	37338
	A1E2	Connector, Quick-Dis, M, 1/4 Tab, PWB	HR26	1287	91833
	A1E3	Not Used	-	-	37338
	A1E4	Not Used	-	-	37338
	A1E5	Not Used	-	-	37338
	A1F1	Fuse, 12A, 500VDC, Non Time Delay, KLM	FA33	KLM12	71400
	A1L1	Inductor, Choke, 2.5 Turns, J Mtl	LA16	82-152-J	33062
	A1L2	Inductor Assy	176-3014-01	176-3014-01	37338
	A1L3	Toroid, Ferrite, 6mm, B Mtl	LY09	11-122-B	33062
	A1L4	Toroid, Ferrite, 6mm, B Mtl	LY09	11-122-B	33062
	A1L5	Inductor Assy	176-3014-01	176-3014-01	37338

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Table 2 Ref Des Index - NAR95 Cabinet (Dual ND500II Transmitters) (Continued) (DWA02-761)

USE CODE	REF DES	NAME OF PART AND DESCRIPTION	NAUTEL'S PART NO.	JAN/MIL/OEM PART NO.	OEM CODE
A1Q1		Transistor, FET, N Channel	QA43	IRFP260	81483
A1Q2		Transistor, FET, N Channel	QA43	IRFP260	81483
A1Q3		Not Used	-	-	37338
A1Q4		Transistor, NPN, General Purpose	QAP04	2N2219A	04713
A1Q5		Transistor, PNP, Switch/Amplifier	QA23	2N2905A	04713
A1R1		Resistor, MF, 1210 Ohms, 1%, 1/4W	RAB26	MF55D1211F	59124
A1R2		Resistor, MF, 4750 Ohms, 1%, 1/4W	RAB33	MF55D4751F	59124
A1R3		Resistor, Variable, Film, 1000 Ohms, 1/2W	RV06	3339P-1-102	80294
A1R4		Resistor, MF, 1.0M Ohms, 1%, 1/4W	RAC13	MF55D1004F	59124
A1R5		Resistor, MF, 1000 Ohms, 1%, 1/4W	RAB25	MF55D1001F	59124
A1R6		Resistor, MF, 12.1K Ohms, 1%, 1/4W	RAB38	MF55D1212F	59124
A1R7		Resistor, MF, 22.1K Ohms, 1% 1/4W	RAB41	MF55D2212F	59124
A1R8		Resistor, MF, 1500 Ohms, 1% 1/4W	RAB27	MF55D1501F	59124
A1R9		Resistor, MF, 22.1K Ohms, 1% 1/4W	RAB41	MF55D2212F	59124
A1R10		Resistor, MF, 18.2K Ohms, 1% 1/4W	RAB40	MF55D1822F	59124
A1R11		Resistor, MF, 39.2K Ohms, 1%, 1/4W	RAB44	MF55D3922F	59124
A1R12		Resistor, Film, 100 Ohms, 5%, 2W	RBP07	GS-3, 100 Ohms	75042
A1R13		Not Used	-	-	37338
A1R14		Not Used	-	-	37338
A1R15		Resistor, Wirewound, 0.1 Ohms 5%, 10W	RT35	NH-10 0.1 OHM ñ5%	35005
A1R16		Resistor, Wirewound, 0.1 Ohms 5%, 10W	RT35	NH-10 0.1 OHM ñ5%	35005
A1R17		Resistor, MF, 10.0K Ohms, 1%, 1/4W	RAB37	MF55D1002F	59124
A1R18		Resistor, Film, 5.0 Ohms, 1% 30W	RA43	MP930-5.0-1%	
A1R19		Resistor, Wirewound, 25 ohms, 5%, 25W	RA47	L25J25R	44655
A1R20		Resistor, Wirewound, 25 ohms, 5%, 25W	RA47	L25J25R	44655
A1R21		Resistor, MF, 18.2K Ohms, 1% 1/4W	RAB40	MF55D1822F	59124
A1R22		Resistor, MF, 1000 Ohms, 1%, 1/4W	RAB25	MF55D1001F	59124
A1U1		IC, Switchmode PWM Control Circuits	UM39	MC33060AP	04713
A1U2		Rect/Assy, Diode Pair, 600V, 50A	UN42	HFA50PA60C	81483
A1U3		Not Used	-	-	37338
A1U4		IC, Voltage Regulator, +15V, 3A, Plastic	UX20	MC78T15ACT	04713
A1XE3		Header Mod, Single - 3 PIN	161-3008-03	161-3008-03	37338
A1XF1		Fuseblock, 1-Pole, 30A, 600V, FNQ Fuses	FD08	BM6031SQ	71400
A1XU1		Socket, IC, 14-pin	UC02	2-641261-1	00779

USE CODE EXPLANATION: * - Denotes used when AC power source is 115 Vac, 60Hz.
\$ - Denotes used when AC power source is 230 Vac, 50/60Hz.

DUAL (MAIN/STANDBY) ND500II TRANSMITTER
(INSTALLED IN NAR95 CABINET

Figure 4 Assembly Detail - Interface Panel (Part No. 158-7103)

DUAL (MAIN/STANDBY) ND500II TRANSMITTER
(INSTALLED IN NAR95 CABINET

Figure 5 Dimensional Information – Dual (Main/Standby) ND500II Transmitter installed in NAR95 Cabinet

DUAL (MAIN/STANDBY) ND500II TRANSMITTER
(INSTALLED IN NAR95 CABINET

Figure 6 Electrical Schematic – Typical Interconnection of Nautel Dual ND500II Transmitter System

DUAL (MAIN/STANDBY) ND500II TRANSMITTER
(INSTALLED IN NAR95 CABINET

Figure 7 Electrical Schematic – +24-48 VDC Power Supply PWB (NAPS23)