

The technical bulletin board of SKANTI



Technical Information

Referred products:

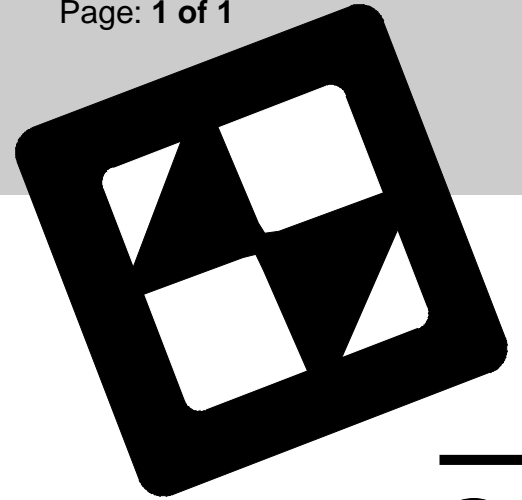
- AP 9000 and CP 9000
- DSC 3000 and DSC 9000
- PC 9000
- SCANCOMM Telex
- SCANSAT-CG
- TRP 7000 Series
- TRP 8000 Series
- TRP 9500 Series
- VHF 3000
- Miscellaneous



Technical Information

AP 9000
and
CP 9000

Product: AP 9000 series



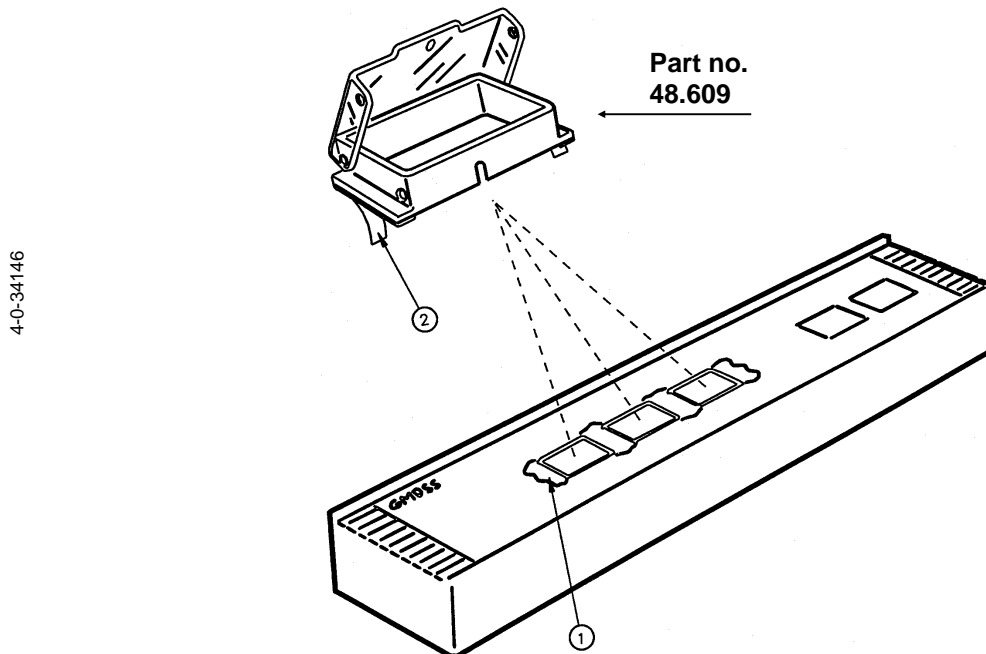
Technical Information

SUBJECT: Compulsory key cover for the Alarm Panel Transmit key

The IMO has revised the requirements on distress buttons in order to reduce the number of false alerts. The revised requirements which will be effective from the 23rd of November 1996, specify that the distress button should be protected against inadvertent operation and that distress alert initiation should require at least two independent actions. These requirements are specified in A.803(19) 2.7.2 and 2.8 for VHF, A.804(19) 2.6.2 and 2.7 for MF, A.806(19) 2.6.2 and 2.7 for MF/HF and A.807(19) 3.4.2 and 3.5 for INM-C.

To comply with these requirements SKANTI has introduced a key cover to fit over the transmit keys of the Alarm Panels.

Fitting the key cover



1. Clean the two marked parts(1) of the keypad using isopropyl alcohol.
2. Remove the protective paper from the key cover(2).
3. Carefully align and fit the key cover over the transmit keys.

CAUTION: Do not touch the key cover for 24 hours unless a distress situation occurs.
Key cover part no.: **48.609**

**SKANTI**



Technical Information

DSC 3000
and
DSC 9000

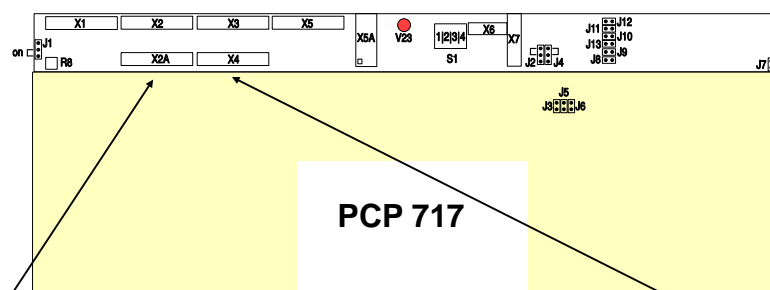
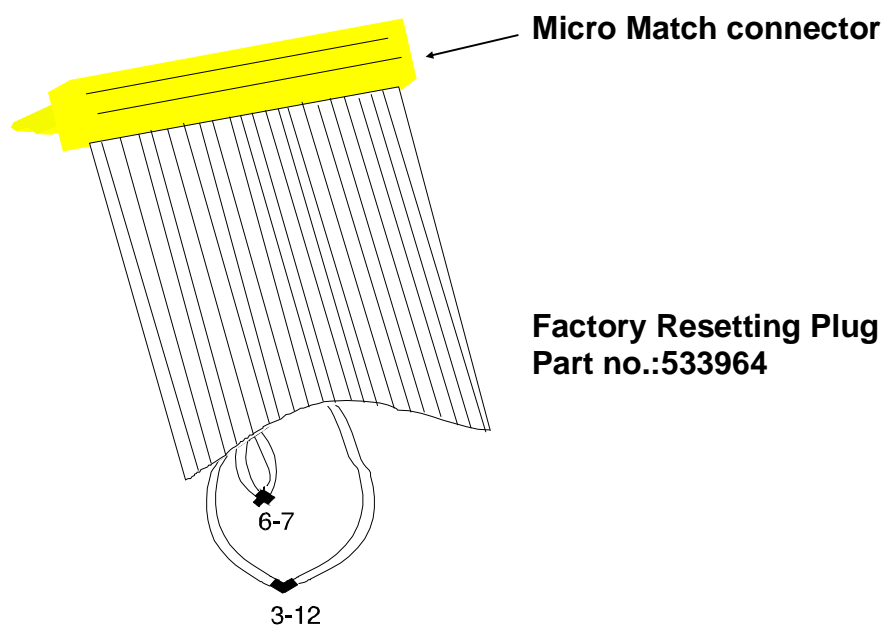
Product: **DSC 3000, DSC 9000, TRP 7200 and TRP 9500**

SUBJECT: COMBINED FACTORY RESETTING
PLUG FOR DSC/TELEX MODEM
PCP 717

We are pleased to introduce a combined Factory Resetting Plug for the DSC/Telex modem PCP 717. This plug will Factory Reset a PCP 717 modem installed in one of the following products:

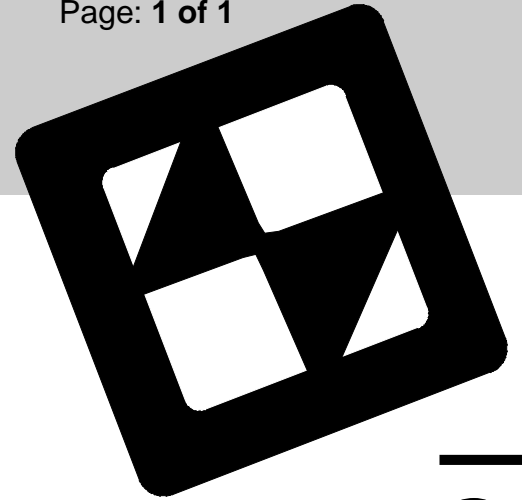
DSC 3000, DSC 9000, TRP 7200 and TRP 9500*

*Please note that the PCP 717 for the TRP 9500 is a combined DSC and Telex modem. Both DSC and Telex will be reset when a Factory Reset is performed.



X2A: Factory Reset in DSC 3000,
DSC 9000 or TRP 9500

X4: Factory Reset in TRP 7200

Product: **DSC 3000 and DSC 9000**

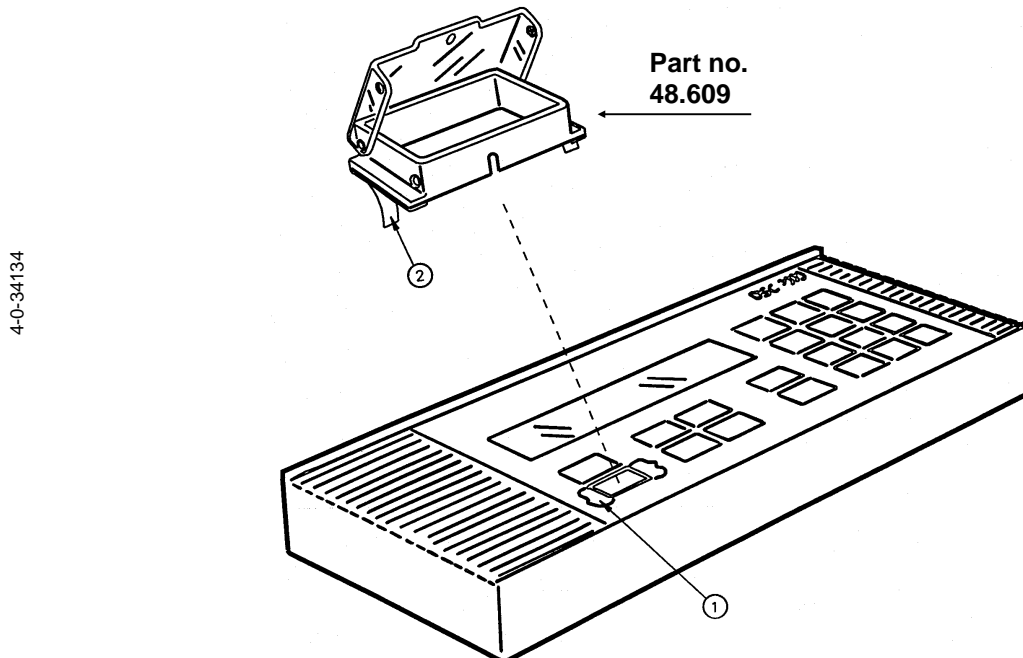
Technical Information

SUBJECT: Compulsory key cover for the
DSC Distress key

The IMO has revised the requirements on distress buttons in order to reduce the number of false alerts. The revised requirements which will be effective from the 23rd of November 1996, specify that the distress button should be protected against inadvertent operation and that distress alert initiation should require at least two independent actions. These requirements are specified in *A.803(19) 2.7.2 and 2.8* for VHF, *A.804(19) 2.6.2 and 2.7* for MF, *A.806(19) 2.6.2 and 2.7* for MF/HF and *A.807(19) 3.4.2 and 3.5* for INM-C.

To comply with these requirements SKANTI has introduced a key cover to fit over the distress key of the DSCs.

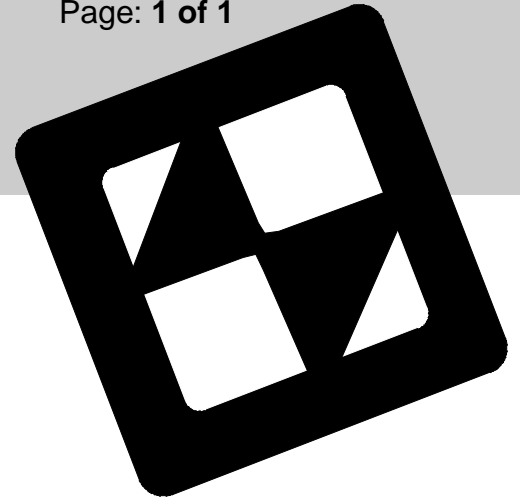
Fitting the key cover



1. Clean the two marked parts(1) of the keypad using isopropyl alcohol.
2. Remove the protective paper from the key cover(2).
3. Carefully align and fit the key cover over the distress key.

CAUTION: Do not touch the key cover for 24 hours unless a distress situation occurs.
Key cover part no.: **48.609**

**SKANTI**

Product: **DSC 3000 & DSC 9000**

Subject: New Software for
DSC 3000 & DSC 9000

SKANTI has the pleasure to introduce new revised software versions for DSC 3000 and DSC 9000:

DSC 3000 version 3.06 REVISED

DSC 9000 version 1.15 REVISED

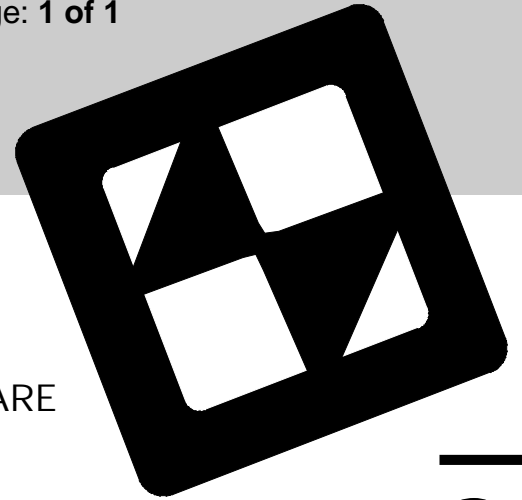
The new software versions are in compliance with the coming ITU-R M.493-7 recommendations:

1. New Nature of Distress option 'Armed robbery attack'.
2. New Nature of Distress option 'Man over board'.
3. When the DSC is connected to a GPS receiver for automatic update of position information, the **time** of the position is now taken from the GPS instead of the time information of the internal clock.
4. Optional alarm when position information has not been updated for 4 hours.

When the audio alarm sounds - the latest position information is displayed. The actual position should be entered and the update alarm is selected On or Off.

5. 'Undesignated distress' is automatically selected when the Distress button is pressed.

**SKANTI**

Product: **DSC 3000 and DSC 9000**

Technical Information

SUBJECT: NEW DSC CONTROL UNIT SOFTWARE
VERSION 1.08

SKANTI hereby has the pleasure of introducing a new/improved software for the DSC 3000/9000 Control Unit.

In addition to the facilities of the software ver. 1.07, SKANTI has improved the operation with two DCUs and DSC printer, which lead to the release of the new software ver. 1.08.

The improvements are:

- Full operation from two DCUs with DSC printer connected to DCU
- DCU sound sequence in selftest shortened
- Contrast set to value after self-test

Please note that all DSC 3000 / 9000 from serial no. 39795 contain the new software version 1.08 in the DCU.

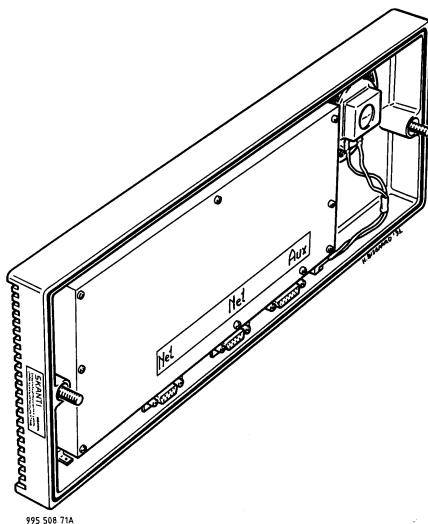
For further information on the ver. 1.08 software release, kindly contact the SKANTI service department.

Instructions in exchanging this software are provided in Technical Information no. 4-9-34008 "DSC CONTROL UNIT SOFTWARE EXCHANGE PROCEDURE".

**SKANTI**

Product: **DSC 3000 and DSC 9000****SUBJECT: DSC CONTROL UNIT SOFTWARE
EXCHANGE PROCEDURE**

The procedure described below should be followed when exchanging the PROM of the DSC 3000 or DSC 9000 Control Unit for a new software version.



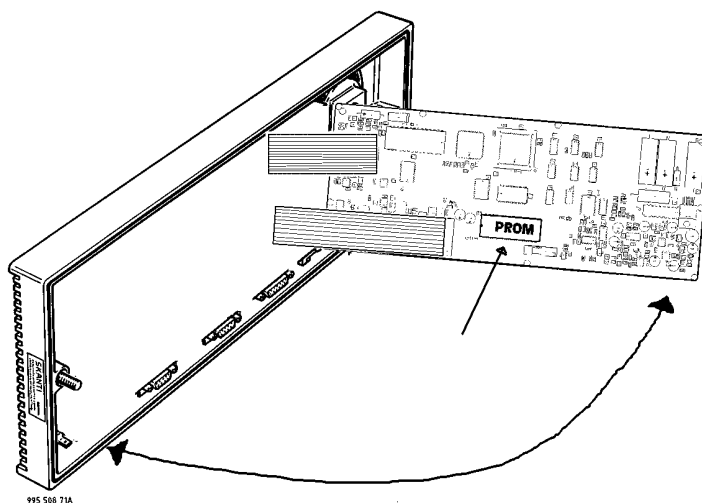
1. Switch off the DSC.
2. Loosen the 2 screws on the DCU front panel. Carefully remove the DCU from its position and disconnect the cables.
3. Loosen the 10 screws of the DCU screen cover and remove the cover.

4. Swing out PCB 901 and locate the position of the PROM.

5. Carefully lift the PROM out of its socket using a small screwdriver.

6. Fit the new version PROM into the socket. Note that the marked end is pointing towards the ribbon cables - and that all pins go into the socket.

7. Swing PCB 901 back into position and re-assemble the DCU .



Technical Information

**SKANTI**

Product: **DSC 9000**

SUBJECT: DSC 9000 - NEW SOFTWARE
VERSION 1.13.

DSC9000/DU9000 SW Ver. 1.13

***In general all functions referred to on "DSC 9000 SW STATUS"
(yellow sheet up to now enclosed with technical manual)
are now fully implemented.***

Changes relative to version 1.08:

Capable of controlling an additional DU.

Direct-dial fully implemented.

Short-dial facility (Save) implemented.

Programming of *MMSI Lists* implemented.

Programming of *Telephone Lists* implemented.

Programming of *Sound* implemented.

Programming of *Automatic Ack* enhanced.

Test of EEPROM included in *Selftest*.

Printer handshake with DU implemented.

Configuration of Radio Interface (*T+bus/T+bus one way/NMEA*) implemented.

Configuration of *Formats* implemented.

Configuration of *Messages* implemented.

Remote Control Interface implemented.

Reception of selective calls with *own self-ID* enabled.

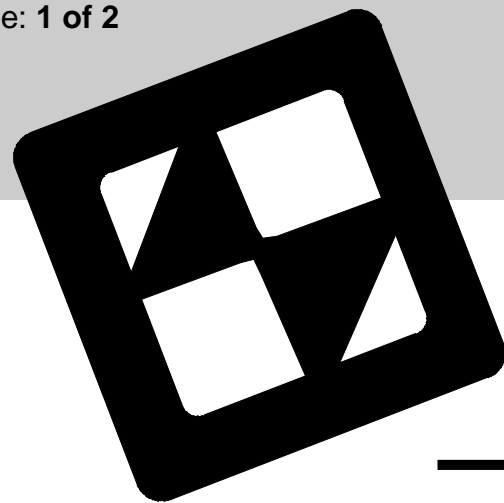
Functionality of *Cancel* and *Call* keys enhanced.

Distress key warning beeps added.

Text changed to 'Awaiting automatic repeat'.

Editing of distress watch removed for ship stations.

Distress relay default when selecting distress category.



Technical Information



>ACCEPT< END replaced by >SET UP< QUIT.

>SET UP< added after Tx-ack.

'Press Enter to continue connection' added.

Reception of telecommand Data + no information (106+126) enabled.

All ships, Area and Group calls treated as viewed after 4.5 min.

Ack to coast stations on 2189.5 kHz implemented.

'Alarm off' issued to control units at power up.

Reliability of Handset hook function improved.

Power off on radio reflected to RTM.

Software compatibility: DU version 1.13 is compatible with DCU version 1.07.



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Product: **DSC 3000**

SUBJECT: DSC 3000 - NEW SOFTWARE
VERSION 3.03.

DSC3000/DU3000, SW Ver 3.03

In general all functions referred to on "DSC 3000 SW STATUS" (yellow sheet up to now enclosed with technical manual) are now fully implemented.

Changes relative to version 3.01:

External key output now available at DU Aux connector pin 22.

Direct-dial fully implemented.

Short-dial facility (Save) implemented.

Programming of *MMSI Lists* implemented.

Programming of *Telephone Lists* implemented.

Programming of *Automatic Ack* enhanced.

Configuration of *Messages* implemented.

Configuration of Radio Interface (*VHF3000/none*) implemented.

Remote Control Interface implemented.

Reception of selective calls with *own self-ID* enabled.

Functionality of *Cancel* and *Call* keys enhanced.

Distress key warning beeps added.

Distress relay default when selecting distress category.

Recall of VHF setting after received distress ack removed.

Set-up to CH16 after sending of distress ack and relay added.

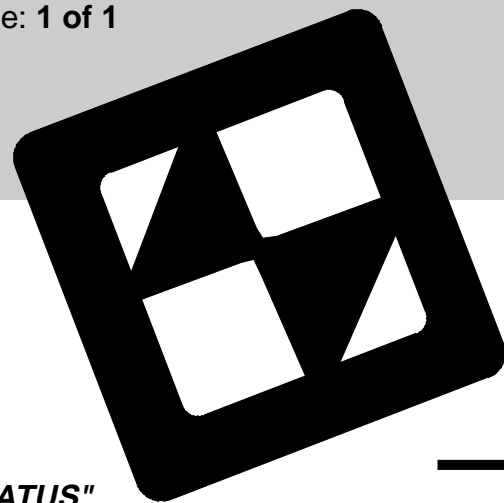
>SET UP< added after Txack.

Storage of VHF setting prior to set up of RX-CALL added.

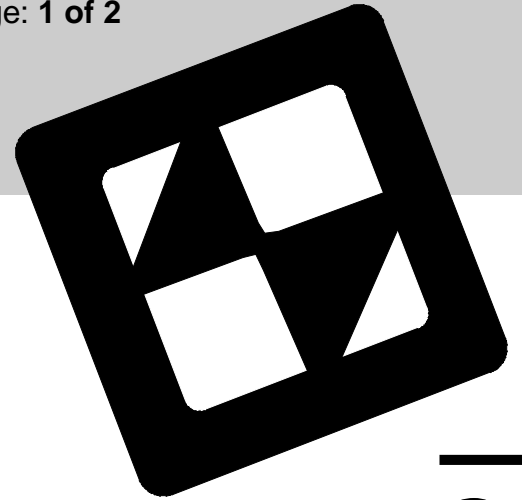
Reception of telecommand *Data + No information* (106 + 126) enabled.

All ships, Area and Group calls treated as viewed after 4,5 min.

Software compatibility: For version 3.02 and up the PCB 570 PROM version must be 1.01 or higher.



Technical Information

Product: **DSC 9000**

SUBJECT: DSC 9000 SOFTWARE EXCHANGE PROCEDURE

The procedure described below should be followed when exchanging the PROMs of the DSC 9000 for a new software version.

1. Switch the DSC 9000 off.

Ref. fig.1:

2. Remove the six screws from the top cover of DSC Unit DU 9000 and remove the top cover.

3. Disconnect the ribbon cables from the 3-module board assembly, carefully noting their position.

4. Disconnect the coaxial cable from the board assembly noting its position.

5. Loosen the four screws on the board assembly and pull the board assembly out from the DU cabinet.

6. Disconnect the 2 back-up battery connectors from the PCP 717 module.

7. Open the board assembly by removing the two screws and lift off the plate with the battery container.

8. Slide out the 711 and 915 modules together.

9. Slide out the 717 module and remove the top shielding cover.

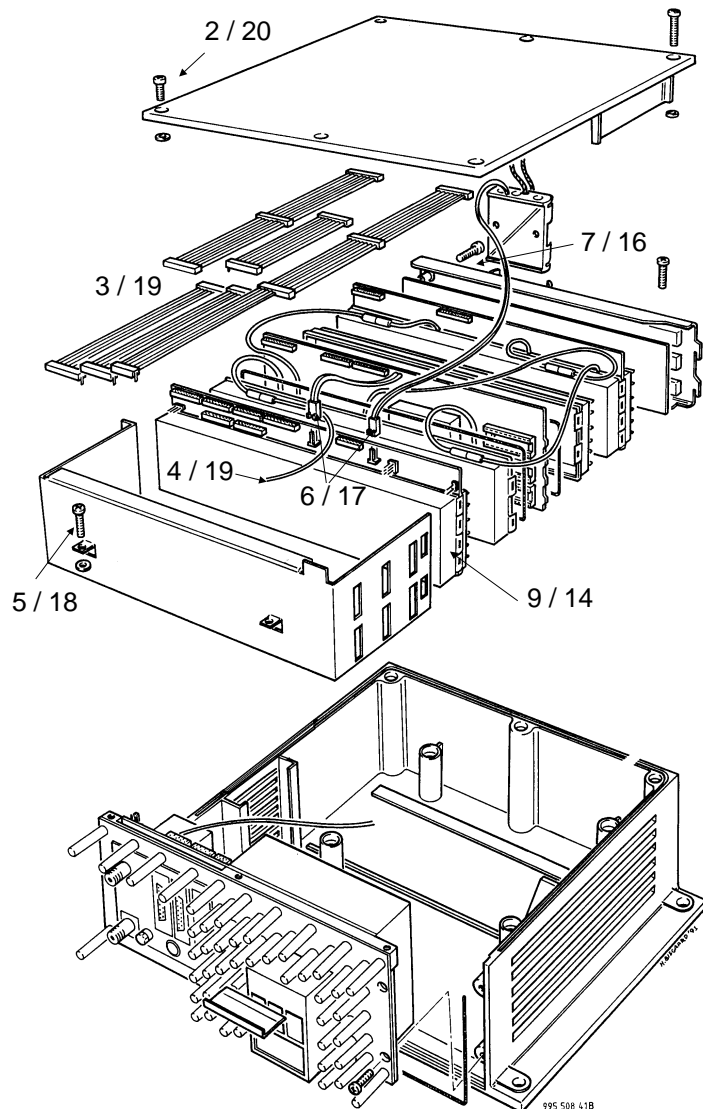


Fig.1

Technical Information



10. Locate the LSB/EVN PROM on PCB 717 (fig.2) and carefully lift it out of its socket using a small screwdriver.

11. Fit the new version LSB/EVN PROM into the socket. Note that the marked end is pointing toward the PCB edge - and that all pins go into the socket.

12. Steps 10 and 11 are now repeated with the MSB/ODD PROM.

13. All 4 dip switches on S1 are set to position off.

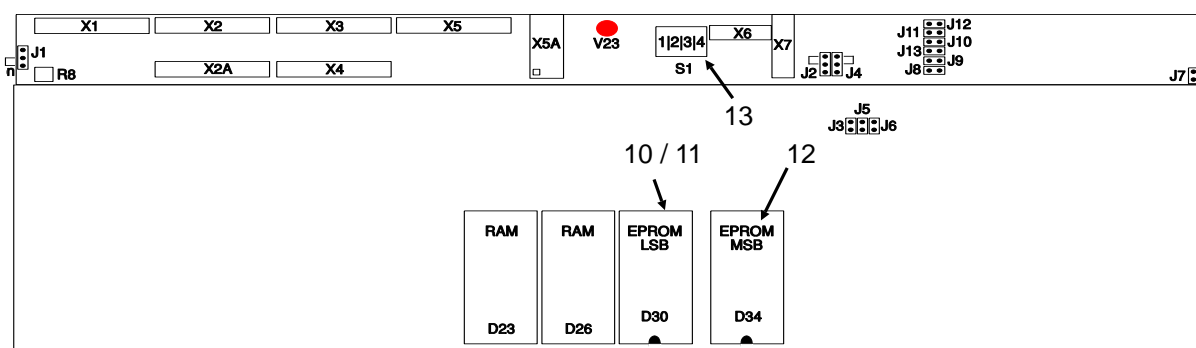


Fig.2

14. Fit the top shielding cover and slide the 717 module back into the board assembly.

15. Slide the 711 and 915 modules together back into the board assembly.

16. Fit the plate with the battery container back on the board assembly and tighten the two screws.

17. Connect the 2 back-up battery connectors to the PCP 717 module.

18. Re-fit the board assembly in the DU cabinet and tighten the four screws.

19. Connect the coaxial cable from the SMPS/Intercon module to the board assembly and carefully connect all the ribbon cables.

20. Re-fit the top cover of DU 9000 and tighten the six screws.

21. Factory resetting:

Insert a factory resetting plug (25 pin D-sub male connector with connection between pins 4 and 14) in the COM connector. Switch supply voltage on for 30 seconds. Switch supply voltage off and remove the factory resetting plug.

22. Switch on the DSC 9000 and test that STATUS is displayed(fig.3) indicating that operation is OK.

23. Reprogramme your MMSI number and other special settings (as all settings are now set to factory default).

STATUS	1107 UTC
Distress watch: 2 4 6 8 12 16 MHz	
Calling watch: 01 02 03 04 05 06	
>WATCH ON/OFF< STATUS CHANGE	

Fig.3



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Product: **DSC 3000**

SUBJECT: DSC 3000 SOFTWARE EXCHANGE PROCEDURE

The procedure described below should be followed when exchanging the PROMs of the DSC 3000 for a new software version.

1. Switch the DSC 3000 off.
2. Loosen the 6 screws of the connector panel (fig.1) and carefully take the board assembly out of the cabinet.

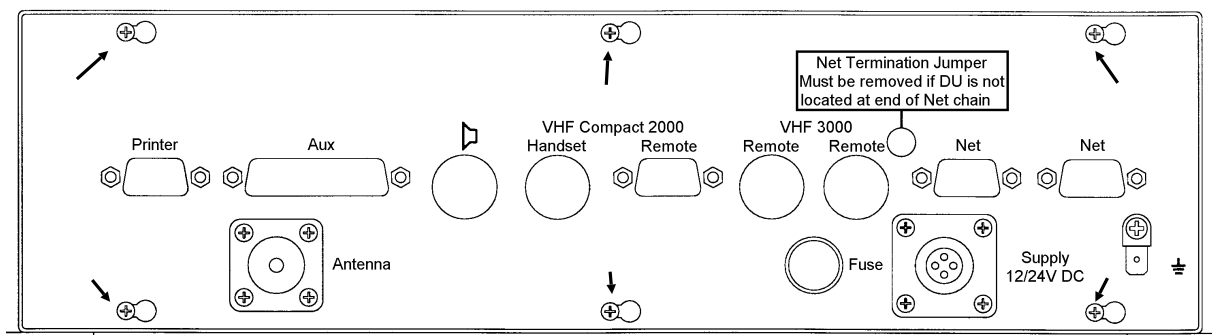


Fig.1

3. Locate the LSB/EVN PROM on PCB 717 (fig.2) and carefully lift it out of its socket using a small screwdriver.

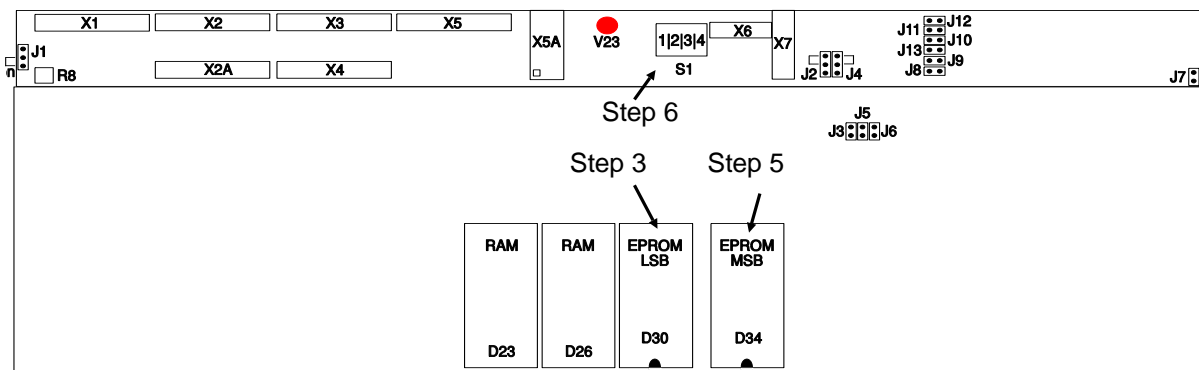


Fig.2



4. Fit the new version LSB/EVN PROM into the socket. Note that the marked end is pointing towards the PCB edge - and that all pins go into the socket.

5. Steps 3 and 4 are repeated with the MSB/ODD PROM.

6. Check that all 4 dip switches on S1 (fig.2) are set to position off.

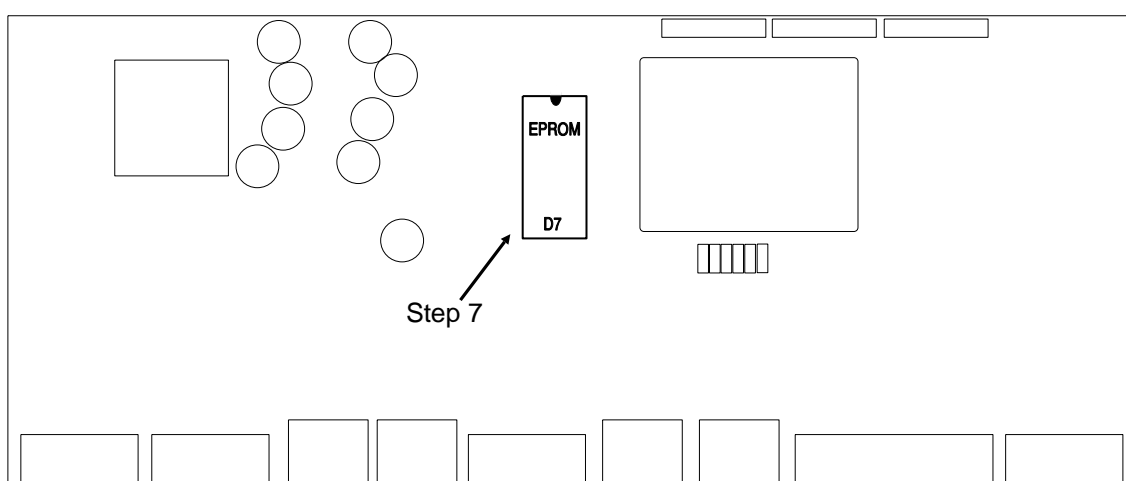


Fig.3

7. **If the PROM on PCB 570 also must be exchanged** - turn around the board assembly and locate the PROM on PCB 570 (fig.3) - repeat steps 3 and 4 with this PROM.

8. Re-fit the board assembly in the cabinet and fasten the 6 screws.

9. Factory resetting:

Insert a factory resetting plug (25 pin D-sub male connector with connection between pins 10 and 22) in the AUX connector. Switch supply voltage on for 30 seconds. Switch supply voltage off and remove the factory resetting plug.

10. Switch on the DSC 3000 and test that STATUS is displayed (fig.4) indicating that the operation is OK.

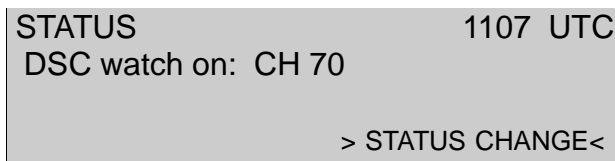
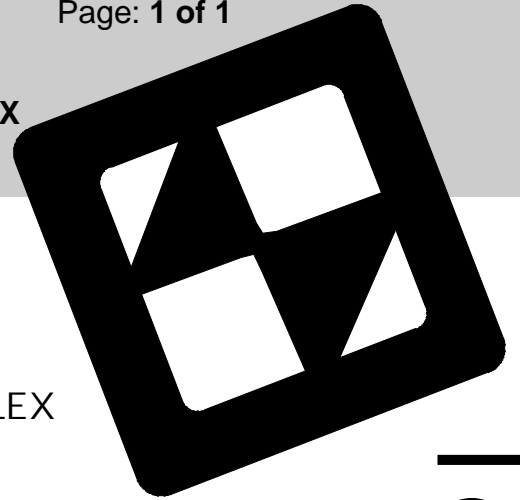


Fig.4

11. Reprogramme your MMSI number and other special settings (as all settings are now set to factory default).



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Product: **DSC 3000, DSC 9000, Telex modem PCP717TLX**

Technical Information



SUBJECT: CHANGING SELF-ID ON DSC AND TELEX

If a new Self-ID (Maritime Mobile Service Identity / Telex identity number) must be assigned to a SKANTI DSC or Telex modem a Factory Resetting is required. A Factory Resetting is performed as follows:

1. Switch equipment on and disconnect the supply voltage.
2. Insert the Factory Resetting plug (described below) in the appropriate socket:
**DSC 3000-AUX, DSC 9000-COM, TRP 7200/PCP717TLX-COM
or PC 9000/RTM986-RADIO.**
3. Switch supply voltage on for 30 seconds. (Activity LED on PCP717 or RTM986 will flash rapidly).
4. Disconnect the supply voltage and remove the Factory Resetting plug.
5. Reconnect the supply voltage.

Note: To proceed changing the Self-ID of a DSC 3000 or DSC 9000 a password must be entered before you may change the configuration. The password is "**SKANTI**" which is entered by the numeric keys "**741573**".

The Factory Resetting plug is a 25 pin D-sub male connector with a connection between 2 pins. The pins to be connected are: **(10-22) on DSC 3000, (4-14) on DSC 9000, (4-18) on TRP 7200/PCP717TLX and (4-23) on PC 9000/RTM986 .**

One common Factory Resetting plug to be used with all four products are produced as described in fig.1. This plug may be obtained from SKANTI.

Note: The common Factory Resetting plug will work with PC 9000/RTM986 from program version 2.9 and up.

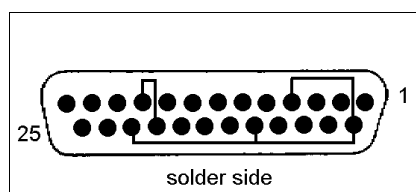


Fig.1

TECHNICAL INFORMATION

SUBJECT: DSC 3000 / DSC 9000 EQUIPMENT LOCK PROBLEM

We have learned that some DSC installations tend to lock if a navigator is connected to the NMEA input of the DSC Control Unit (DCU). The problem will not occur if no navigator is connected or if a navigator is connected to the DSC Unit (DU).

We have found that the problem lies in the DSC Control Unit software and we have issued a revised version of this software to solve the problem.

Note: If you want to connect a navigator to the NMEA input on the DSC Control Unit, please check that the software is: **DCU Program version 01.07.00 Date 930621.**

The software version is read out on the DCU display by selecting the following sequence: "MAIN MENU", "TEST", "INFO" AND "VERSION".

TECHNICAL INFORMATION

SUBJECT: DSC 9000 SERIES, REVISED SOFTWARE VERSION

We are pleased to inform that the DSC 9000 now includes a number of new features relative to previous versions, the more noticeable being:

- *Printer and NMEA interface* now available at DCU 9000.
- *Alarm-In interface* now available at DU 9000.
- Configuration of *Alarm-1-Out* and *Alarm-2-Out* implemented.
- Configuration of *Handset-hook interface* implemented.
- Programming of *Printer* and *Contrast* implemented.
- *Distress watch MF/HF*: 2 and 8 MHz now cannot be deselected.
- Returns to *STATUS display* if not operated for 10 minutes, unless in Distress transmit or RX-CALL states.
- Interchange of Tx and Rx working frequencies in *Acknowledgement calls* implemented.
- Handling of set-up to radiotelex improved.
- The 20 last received distress calls and 20 last received other calls are now always retained in memory (cannot be deleted).
- *Reliability* of SW in general improved.
- *Validation* of numerical information in Tx-calls implemented.
- Functionality of *[Cancel]* key has been enhanced.
- *DSC frequencies* may now be selected by number.

These features are included with DSC 9000s delivered from SKANTI from 11th January 1993. To obtain the same features in DSCs delivered before this date it is necessary to replace the PROMs of the DSC. The new PROM versions are:

DCU Program version 01.05 Date 930107

DU Program version 01.08 Date 930107

Notes:

Due to the software expansion of the DU program 2 Mbit PROMs are now required instead of the 1 Mbit PROMs used with previous versions.

After a PROM replacement a 'Factory resetting' must be performed.

TECHNICAL INFORMATION

**Subject: DSC 9000 INSTALLATION WITH
SKANTI TRANSCEIVERS**

SOFTWARE COMPATIBILITY

During tests with DSC 9006 along with a TRP 7200 or a TRP 8000 transceiver we have discovered two minor software faults in TRP 7200 and TRP 8000 respectively.

TRP 7200 series:

When the DSC 9006 is switched off it occasionally "locks" the TRP 7200 transceiver. The TRP 7200 can then only be "unlocked" if the battery supply is disconnected.

This problem is solved by replacing the TRP 7200 TU software by **version 5.21.0**.

TRP 8000 series:

In installations where the TRP 8000 receiver is operating as DSC scanning receiver (Watch-receiver 2) and the transmitter is off, an attempt to send a DSC call will fail because the transmitter will not be automatically switched on.

This problem is solved by replacing the TRP 8000 CU software by **version 40.9**.

TECHNICAL INFORMATION

Subject: DSC 9000 INSTALLATION WITH SKANTI TRANSCEIVERS

When SKANTI DSC Controller-Receiver DSC 9000 is installed in connection with a SKANTI TRP 7000 or TRP 8000 transceiver the below listed items must be observed.

TRP 7000 series

- The optional Interface-A 718 must be installed in the Transceiver Unit TU 7200.
- A telex filter must be installed in Transceiver Unit 7200.
- Interface-A 718 must be set to DSC operation in the TRP 7200 configuration: Configuration no. 75 is set to value 6 (default).
- Transceiver Unit 7200 software must be version 5.20 or higher.

Note. If 10 Hz stability is required for the full frequency range up to 30 MHz in the temperature range -20°C - +55°C, Master Oscillator 713 must be installed.

TRP 8000 series

- Control Unit 8000 software must be **version 40.9 *** or higher to enable full DSC operation including automatic set-up to working frequencies and scanning control of transceiver.
- A telex filter must be installed in Transceiver Unit 8000.
- TRP 8000 must be configured for Autotelex operation in the Control Unit 8000 configuration prom: Address 4077 dec. / FED hex. Data 82 dec. / 52 hex.
- Second function Option bit "275" must be set to "0" to disable phone call interrupts in Autotelex mode.

Note. If 10 Hz stability is required for the full frequency range up to 30 MHz in the temperature range -20°C - +55°C, Master Oscillator 615 must be installed.

For enhancement of the automatic control functions the installation of DSC 9000 with TRP 8000 types requires a hook-switch. This optional hook-switch can be ordered under part no. 107 609 00.

A new handset including holder with built-in hook-switch will be available as standard for the TRP 8000 series during third quarter of 1992. Please note that an extra DIN connector (part no. 751 001 72) is required for this combination of DSC 9000 - TRP 8000.

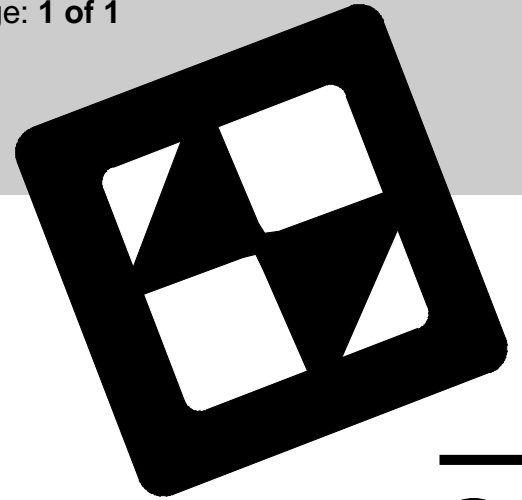
*** Revised.**



Technical Information

PC 9000

Product: **PC 9000**



Technical Information

SUBJECT: PC 9000 CPU BOARD 486
REPLACEMENT

From serial number 41874 and up every PC 9000 unit delivered from SKANTI will contain the new flash EPROM memory board with a 486 processor.

In case a problem should arise with the board and a replacement is necessary, please be aware that the board must always be returned as a complete unit. This means that no cables or RAM circuits may at any time be removed from the board prior to sending it back to SKANTI.

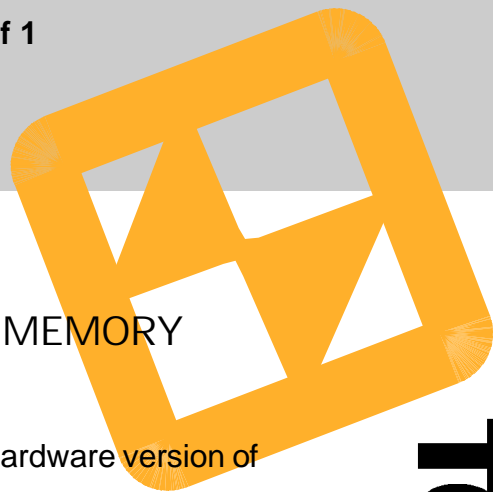
The new board you will receive from SKANTI will consequently be in the same full operational condition.

For further information on the CPU 486 replacement procedure, kindly contact the SKANTI service department.



SKANTI

Product: PC 9000



Technical Information

SUBJECT: PC 9000 WITH FLASH EPROM MEMORY

SKANTI has the pleasure hereby to introduce a new updated hardware version of the PC 9000.

In the previous version of the PC 9000 the CPU, VGA, and ROM boards were three separate boards. In the new PC 9000 there is only one combined board containing CPU, Display Controller and Flash EPROM Memory.

When the new version of PC 9000 is delivered from SKANTI, the Flash EPROM will be without an application software. The Scancomm or Scansat-CG software is easily installed on the PC 9000 by means of one of the two Installation Disks enclosed with the PC.

It is also possible to reconfigure a Scancomm version to a Scansat-CG and vice versa by means of the Installation Disks.

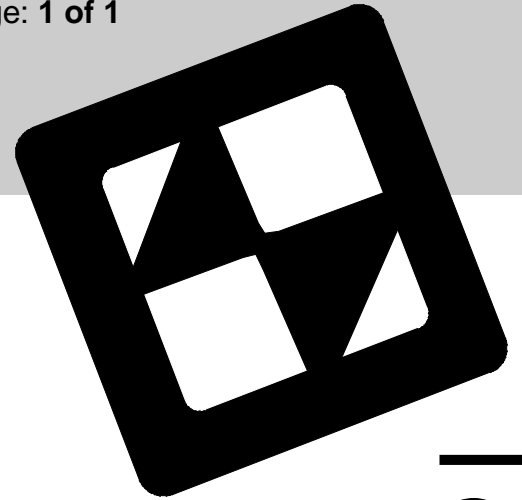
From serial number 41874 onwards every PC 9000 unit delivered from SKANTI will contain this new Flash EPROM Memory board.

We are pleased to enclose copies of the installation disks.

For further information on the new PC 9000 hardware release, kindly contact the SKANTI service department.

Product: **PC 9000**

SUBJECT: PC 9000, Replacement of
Display Controller Board



Technical Information

When the PC 9000 Display Controller Board was recently upgraded to a new type we found that the 26 way cable connector of the ribbon cable which is connecting the Display Controller Board to the ISA Bus Board 980 would not fit into the connector of the new type of Display Controller Board because the cable connector coding tab was on the opposite side of the board connector coding notch.

The reason to this is that the connector up till now has been mounted wrongly on the ribbon cable. This has not been noted before because the connectors on the previous type of Display Controller Board was without the coding notch. The ribbon cable is now corrected, but the problem described above will occur in a service situation where the old type of Display Controller Board must be replaced by the new type.

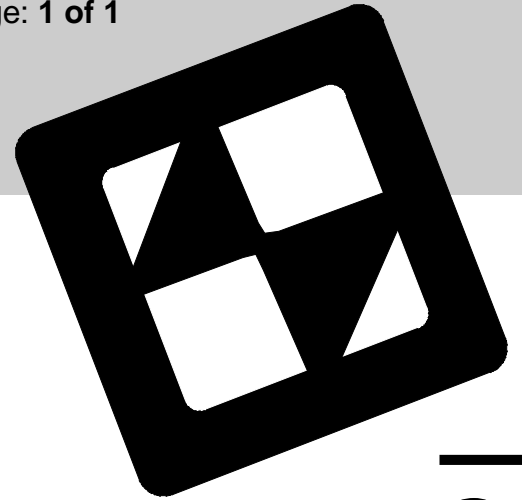
We therefore kindly ask you to include an order for a new ribbon cable when ordering a replacement Display Controller Board for a PC 9000 with a serial number less than **31541**. We shall then be pleased to enclose this ribbon cable free of charge. The part number of the 26 way ribbon cable is **106 402 50**.

**SKANTI**



Technical Information

SCANCOMM TELEX

Product: **SCANCOMM Telex software**

Technical Information

SUBJECT: SCANCOMM - REVISION
OF SOFTWARE VER.1.5

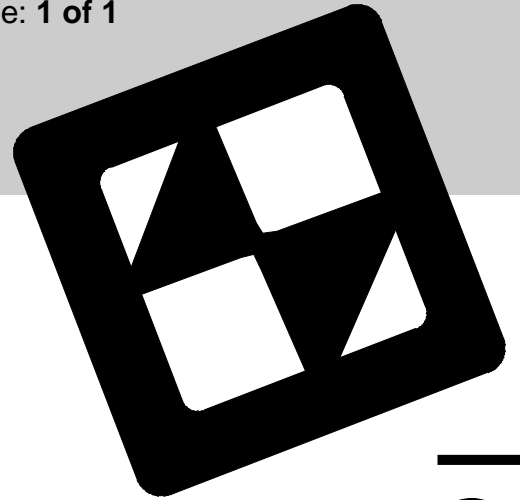
We have detected a problem with the SCANCOMM Telex software version 1.5.

The problem will cause that all set-ups (except for the PCP-modem set-up) made by the user are not recovered from the back-up disk during start of SCANCOMM. Consequently the user set-ups such as Ship name, Printer type and Page length have to be entered manually each time the SCANCOMM program is started.

This problem applies to installations where the PC has the Solid State Disk (Rom board) installed. For PCs with a hard disk installed the problem may be avoided by booting from the hard disk. On SKANTI PC 9000 this is done by pressing the hard disk key on the front immediately after pressing the power-on key.

To solve the problem a software exchange from software version **1.5** to **1.6** is required.

**SKANTI**

Product: **Telex modems PCP717TLX and RTM986**

Technical Information

SUBJECT: REVISED TELEX MODEM SOFTWARE

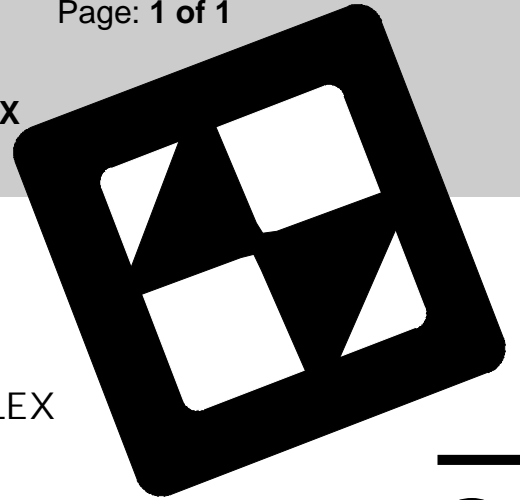
Unfortunately we have found a software problem in previous versions of the SKANTI telex modems. This problem applies both to the PCP717TLX for the TRP 7200 and the RTM986 for the TRP 8000 - but it will only occur if the frequency of the transceiver master oscillator is not aligned within the specified range.

The problem will cause a major reduction of the receiving sensitivity in ARQ operation when the modem is receiving text (Information **R**eceiving **S**tation).

The above problem is solved by a software exchange to version **2.10.0** for both the PCP717TLX and the RTM986 software. However - the transceiver master oscillator alignment should also be performed as described in the technical manual of the transceiver.

*PLEASE NOTE: Modem software version 2.10.0 will require SCANCOMM software version **1.4.0** and up.*

**SKANTI**

Product: **DSC 3000, DSC 9000, Telex modem PCP717TLX**

SUBJECT: CHANGING SELF-ID ON DSC AND TELEX

If a new Self-ID (Maritime Mobile Service Identity / Telex identity number) must be assigned to a SKANTI DSC or Telex modem a Factory Resetting is required. A Factory Resetting is performed as follows:

1. Switch equipment on and disconnect the supply voltage.
2. Insert the Factory Resetting plug (described below) in the appropriate socket:
**DSC 3000-AUX, DSC 9000-COM, TRP 7200/PCP717TLX-COM
or PC 9000/RTM986-RADIO.**
3. Switch supply voltage on for 30 seconds. (Activity LED on PCP717 or RTM986 will flash rapidly).
4. Disconnect the supply voltage and remove the Factory Resetting plug.
5. Reconnect the supply voltage.

Note: To proceed changing the Self-ID of a DSC 3000 or DSC 9000 a password must be entered before you may change the configuration. The password is "SKANTI" which is entered by the numeric keys "741573".

The Factory Resetting plug is a 25 pin D-sub male connector with a connection between 2 pins. The pins to be connected are: **(10-22) on DSC 3000, (4-14) on DSC 9000, (4-18) on TRP 7200/PCP717TLX and (4-23) on PC 9000/RTM986 .**

One common Factory Resetting plug to be used with all four products are produced as described in fig.1. This plug may be obtained from SKANTI.

Note: The common Factory Resetting plug will work with PC 9000/RTM986 from program version 2.9 and up.

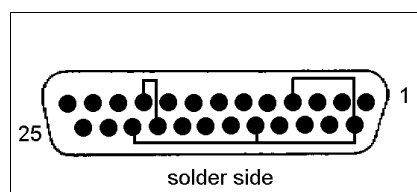
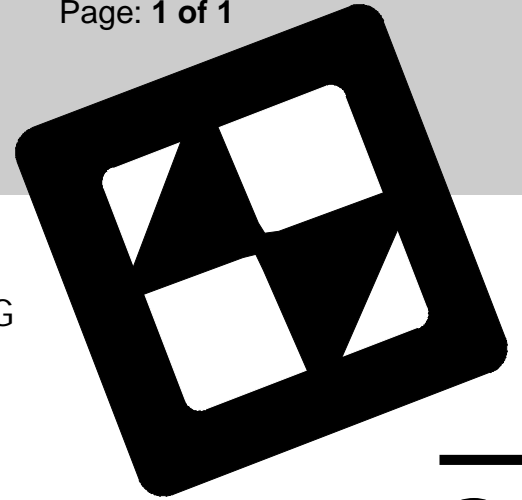


Fig.1



Technical Information

SCANSAT-CG

Product: **Scansat-CG**

Technical Information

SUBJECT: NEW SOFTWARE FOR SCANSAT-CG
VERSION 4.20

SKANTI has the pleasure to introduce a new/updated software for the Scansat-CG Inmarsat-C terminal.

In addition to the previous facilities in the software version 4.11, SKANTI has made some updates which lead to the release of the new software version 4.20.

The new features are:

- Support for the NMEA GLL Sentence (NMEA v. 2.0)
- Support for Type 9 Polls
- Enhanced print routing
- Password protection for Auto Quick Send mode
- The Dropped Characters problem for high-speed PC's has been solved

Once a Scansat CG transceiver has been loaded with the new version 4.20 software, the software for the belonging PC 9000 must be upgraded to ver. 4.20 as well. For PC 9000's below s/n 41874 the update requires new Eproms for the solid state disk. For s/n 41874 or higher the update is performed by a flash memory installation floppy disk.

Please note that all Scansat-CG units from Transceiver Serial Number 0080278039 and delivered from Skanti since October 11, 1996, will contain the new software version.

For further information on the version 4.20 software release, kindly contact the SKANTI service department.

D



Technical Information

TRP 7000 Series

Product: TRP 7200

SUBJECT: ATU 7200 COIL WIRE PROBLEM

Due to a mistake in our production a coil of the Antenna Tuning Unit 7200 was not fitted properly in a number of ATU boards 740.

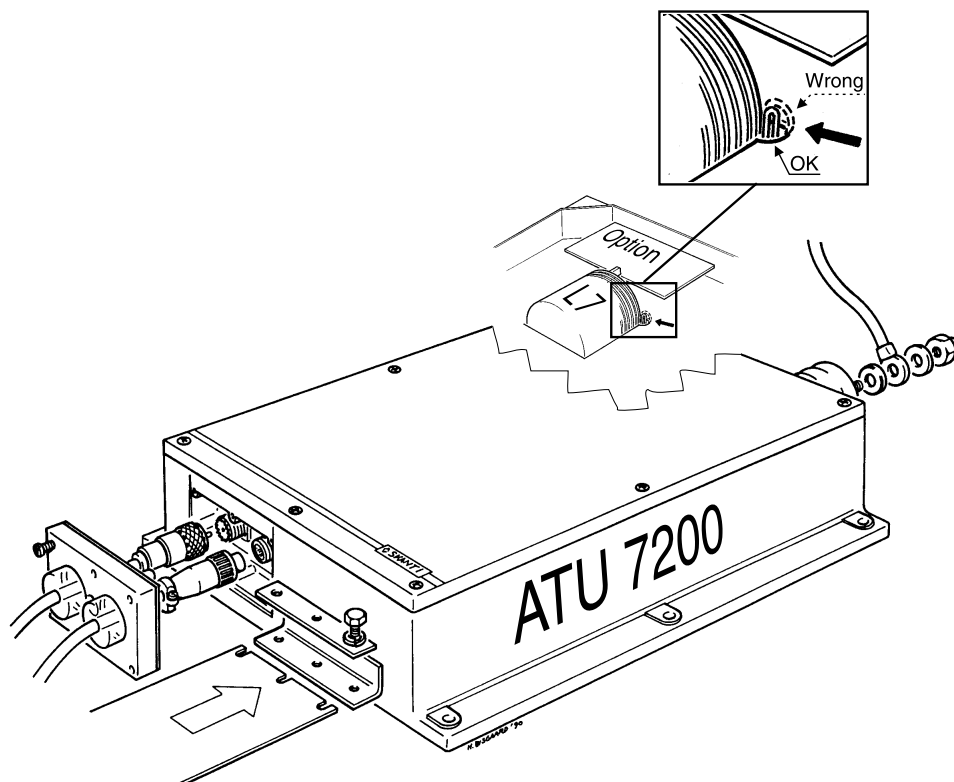
The problem is the bending of the L7 coil wire where routed to the bottom side of the board. If the wire bending is not sufficiently sharp (indicated on fig. by dashed lines), it may cause sparks inside the ATU.

The problem is solved by carefully making a more sharp bend on the wire (filled lines on fig.) leaving space between the wire and the board.

The serial numbers of the ATU's which have this problem lies in the range: **46129 - 51902.**

We recommend that an ATU 7200 which has a serial no. in the listed range is checked for this problem before installation. If the ATU is already installed the check should be performed on the next service call.

For further information, kindly contact the SKANTI service department.



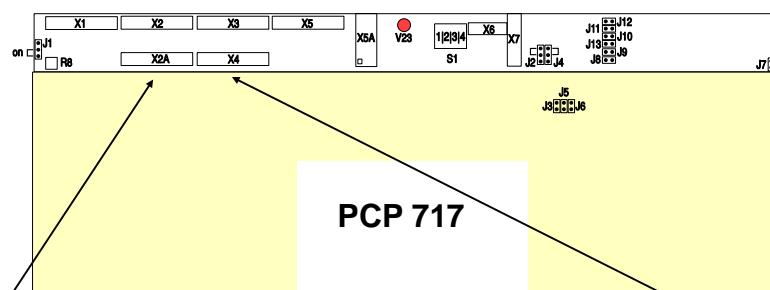
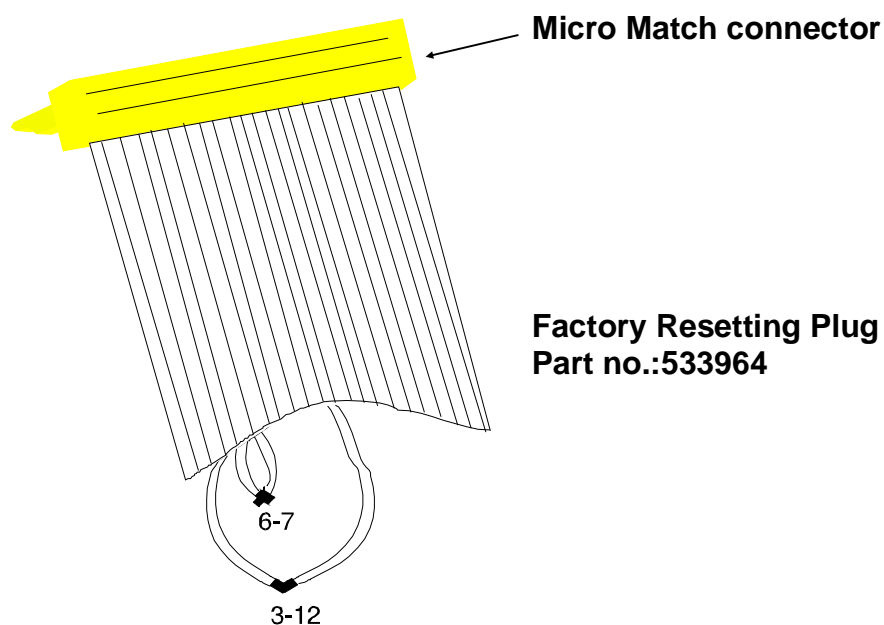
Product: **DSC 3000, DSC 9000, TRP 7200 and TRP 9500**

SUBJECT: COMBINED FACTORY RESETTNG
PLUG FOR DSC/TELEX MODEM
PCP 717

We are pleased to introduce a combined Factory Resetting Plug for the DSC/Telex modem PCP 717. This plug will Factory Reset a PCP 717 modem installed in one of the following products:

DSC 3000, DSC 9000, TRP 7200 and TRP 9500*

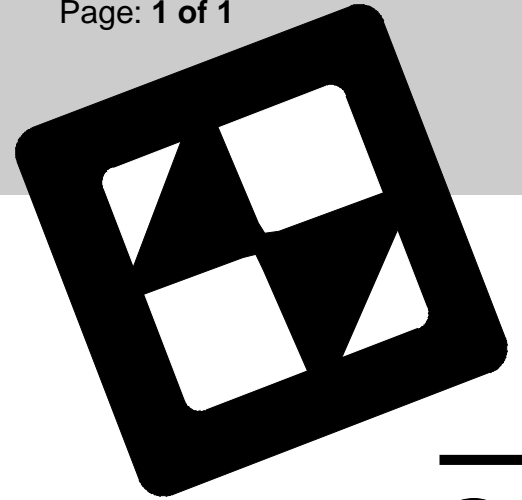
*Please note that the PCP 717 for the TRP 9500 is a combined DSC and Telex modem. Both DSC and Telex will be reset when a Factory Reset is performed.



X2A: Factory Reset in DSC 3000,
DSC 9000 or TRP 9500

X4: Factory Reset in TRP 7200

Product: TRP 7200



Technical Information

SUBJECT: New type of plug for the
CU 7000 keyboard cable

The flex cable plug for the keyboard on the CU 7000 Control Board 701 has been changed for a new type of plug. From serial no. 50600 there is therefore no longer compatibility between the 'new' CU Control Board 701 and the 'old' CU Control Board 701.

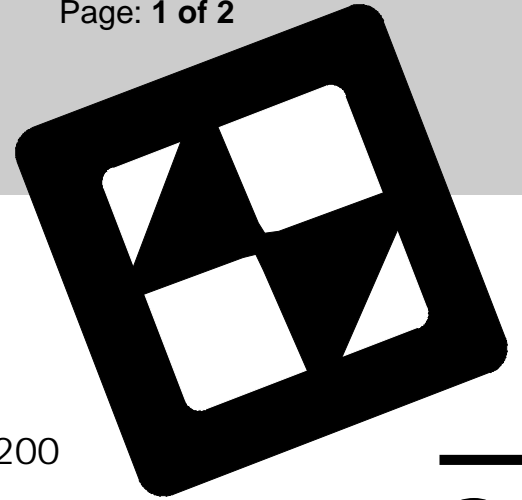
To introduce this hardware change in the most convenient way for the customers and for the SKANTI Service Agents, the CU 7000 will from now on be included as part of our PCB exchange programme.

To ensure that all Service Agents are still able to carry out efficient service on the TRP 7200 we recommend that a CU 7000 excl. handset is included in your SKANTI Spares Kit. The price for the spare CU 7000 is 475.00 XEU.

When a CU 7000 is returned to SKANTI for exchange/repair please be advised that the unit is to be returned **WITHOUT** the handset, since the new/restored unit which will be sent to you from SKANTI will be without handset.

**SKANTI**

Product: TRP 7200



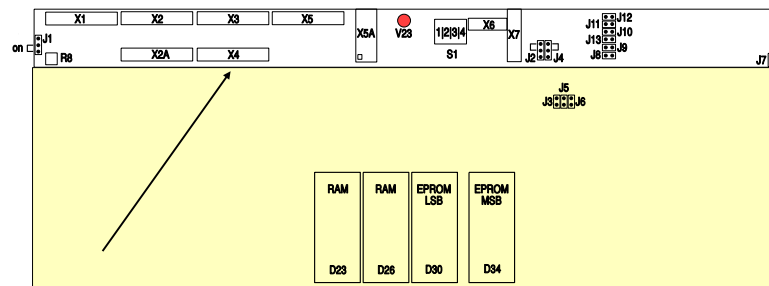
SUBJECT: FACTORY RESETTING OF TELEX MODEM 717 INSTALLED IN TRP 7200

Factory Resetting is required in case a new Self-ID (Telex identity number) must be assigned to a SKANTI TRP 7200 with Telex modem PCP 717 or if the Telex modem PROMs are exchanged.

Technical Information no. 00965095 was issued on this subject, but due to the fact that 'Telex Alarm' output lines now have been implemented in the TRP 7200 occupying the 'Com' connector pins 4 and 18 which formerly were used for the 'Factory Resetting' - this new procedure for 'Factory Resetting' of TRP 7200 with Telex modem PCP 717 is issued.

Factory Resetting:

1. Switch equipment on and disconnect the supply voltage.
2. Remove the Transceiver Unit 7200 top cover.
3. Disconnect the ribbon cable connecting the PCBs 730 and 717.
4. Insert the 'Micro-MaTch' Factory Resetting plug (description enclosed) in the 20 way 'Micro-MaTch' socket X4 of PCB 717.

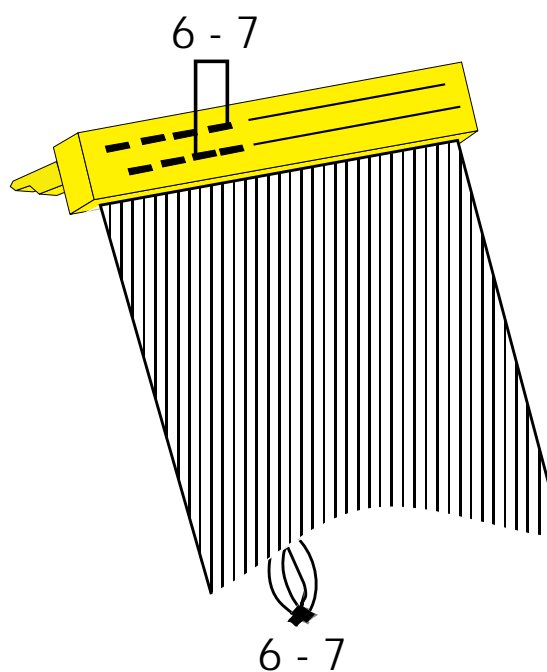


**'Micro-MaTch' Factory Resetting Plug:**

Fit a piece of 20-wire ribbon cable into a 20 way 'Male-on-wire Micro-MaTch' connector.

Connect the ends of the 2 wires 6 and 7 and isolate the connection.

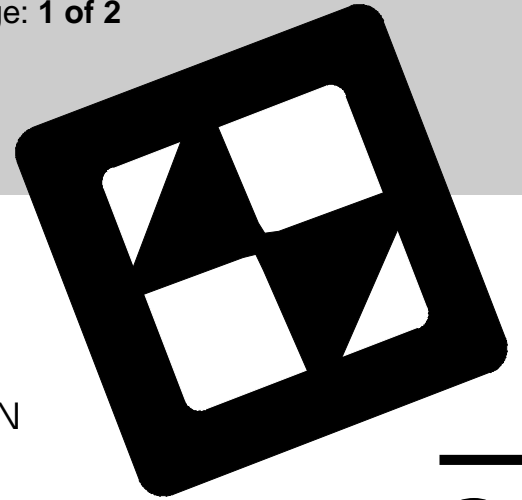
Or just fit a single wire between connectors 6 and 7.



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Member of the  Group

Product: TRP 7200



SUBJECT: TRP7200 ANTENNA INSTALLATION

In the past there have been some misunderstandings of the statement " the TRP 7200 ATU will tune whip and/or wire antennas from 5 to 18 metres".

It is correct that the ATU will tune the abovementioned antennas in normal installations, and provide 50 ohm to match the power amplifier. However, if the forwarded power is measured between the transceiver and the ATU, full power eg. 200/250 Watt will only be obtained if the relay max. current 3.2 Amp. and the max. allowed voltage 4kV. are not exceeded, as this would destroy the ATU by burning relays or having flash-overs. To prevent damage of the ATU, the TU will automatically increase the output power until either max. current, max voltage or max. peak envelope power is obtained.

This is the protection system chosen for the TRP 7200 (and TRP 8000). Most other manufacturers are not reducing the transceiver output power, but they are instead dissipating most of the forwarded power in the ATU as heat, and will thereby get less power radiated in the antenna. This allegation has also been confirmed by several distributors and endusers.

The TRP 7200 was designed to tune antennas down to 5 meters to fulfil the requirements for the vehicle market. This does **not** imply that short antennas are feasible and efficient for marine installations. In general, short antennas on low frequencies will always give a poor performance, as it is the *antenna length* compared to the *wave length* that matters.

The 1/4 wave length at 2 Mhz. is 37.5 metres.

The 1/4 wave lenght at 20 Mhz. is only 3.75 metres.

Please see the enclosed copy of the ATU efficiency.

To obtain the best performance of the TRP 7200 we recommed an antenna length between 12 and 18 metres for marine applications. To avoid any capacitive loading on the base of the antenna, keep the distance between the antenna installation and any metal parts as long as possible. Please refer to the Installation chapter in the Technical Manual.

Technical Information

**SKANTI**



Due to the big price difference, it is difficult to compare the performance of the TRP 7000 and the TRP 8000, but it is important to remember that the lower price of the TRP 7000 does not justify a cheaper and less efficient antenna installation. When installing any transceiver, please remember that the basic physical laws of MF/HF communication:

ATU grounding

ANTENNA installation

GROUNDWAVE propagation

SKYWAVE propagation

SUNSPOT figures

TIME of day

have not changed even though transceivers have become more and more advanced.

Best regards

Skandinavisk Teleindustri SKANTI A/S

Henning Munch



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TECHNICAL INFORMATION

SUBJECT: TRP 7200 SMPS/INTERCONNECTION 730 MODIFICATION

A modification to the TRP 7200 SMPS/Interconnection has been carried out in order to prevent damage to some components during conditions of high input voltage. If the modification is not included the transceiver may slowly develop an unstable supply on/off circuit.

We have found that this modification to the TRP 7200 SMPS/Interconnection 730 by mistake was carried out in our production much later than we had planned. This means that some transceivers with a serial number below "1100" may develop a problem in switching the supply on and off. On some transceivers the problem will be that you cannot switch the supply on or off on the "Supply On/Off" switch and on other transceivers the problem will be that the transceiver is sometimes switched off automatically.

If you find this type of problem we ask you to replace the TRP 7200 SMPS/Interconnection and return it to SKANTI for exchange. We will then establish if the problem is caused by this missing modification and if so replace the module free of charge.

TECHNICAL INFORMATION

SUBJECT: TRP 7200 POWER SUPPLY - MAX. POWER CONSUMPTION

The P 7200 AC power supply for the TRP 7200 series transceiver was designed to supply a "stand alone" TRP 7200 transceiver. Therefore if you intend to use the P 7200 in a system supplying additional equipment please note:

- **P 7200/PCB 750 must be version A9 (see grey label on PCB 750).**
- **One P 7200 (incl. PCB 750 ver. A9) may now be used in a system to supply:
one TRP 7200 and one PC 9000 with printer PRN 9000
or one TRP 7200 and one DSC 9000 series DSC Controller/Receiver.**
- **If more equipment must be supplied then additional power supplies are required.**

TECHNICAL INFORMATION

SUBJECT: TRP 7200 FREQUENCY ADJUSTMENT WITHOUT COUNTER

We are pleased to inform that a frequency stability check now can be performed on the TRP 7200 series without using a frequency counter.

This feature is intended for service as an alternative to the more accurate frequency counter check or it may be used by the radio officer as a simple means to read out or adjust the frequency error of the transceiver when the vessel is at sea.

The check is performed by receiving an AM broadcast station and then pressing the "Prog-code" for the frequency stability check (Prog 31 Enter).

The TX display will show "OSC F" and the RX display will read "+" or "-" and the frequency error of the TRP 7200. If required, the frequency error can be adjusted to "0" on the Master Oscillator using a small screwdriver. A tone is heard in the loudspeaker for adjustment guidance. The tone will be interrupted by a beep every time the frequency error reading is updated.

The TRP 7200 will compare the received frequency to its own frequency and display the difference. The feature will work even under limited receive conditions. For the best result an AM broadcast station with a known good frequency stability should be selected e.g. the BBC on 12095 kHz.

The requirements to the transceiver are:

- A narrow band filter must be installed as "Optional" filter (e.g. Telex filter).
- TU program prom must be from version 5.92 and up.

Enclosure: Preventive maintenance and adjustment instructions.

PREVENTIVE MAINTENANCE

Due to the modern design of the TRP 720X preventive maintenance can be reduced to a minimum provided the equipment is correctly installed. To ensure maximum performance and minimum repair trouble we recommend you to follow the below stated headlines for preventive maintenance.

1. The condition of the battery should be checked at frequent intervals. The battery must always be fully charged and should be topped up frequently with distilled water (liquid should be 5 to 10 mm above the plates).
2. Check the condition of antenna installation, groundconnection and cables at regular intervals.
3. Keep antenna feed-through insulators clean and dry.
4. Ensure that no objects are obstructing the free airflow through the cooling channels of the Transceiver Unit and keep the units free of dust accumulation to prevent overheating.
5. For cleaning use a damp cloth. Sticky dirt may be removed using a cloth with a weak soap solution. Wipe off with a clean cloth.

Realignment of Master Oscillator 712 713

The Master Oscillator frequency should be checked at least once a year. The Master Oscillator determines the exact transmit and receive frequencies of the equipment. All oscillators age very slowly with time, typically with the highest drift rate the first year, approaching zero drift after some years.

There are two methods to realign the Master Oscillator. The first method is the most accurate and utilize a frequency counter. The adjustment should be performed by a qualified technician with the necessary test equipment at his disposal. The second method is based on the reception of an AM broadcast station or a CW signal with known good frequency accuracy. By using the User Programmable function: "Prog" "31" "Enter" (Show Frequency Error) TRP 7200 is able to display it's own frequency error, which may be reduced to zero by simple adjustment of the Master Oscillator frequency. This method eliminates the need for an accurate frequency counter.

Method 1: Realignment using a frequency counter.

1. Measuring Equipment:

- | | | |
|-----|--------------------|-------------------------------|
| 1.1 | Frequency Counter: | Frequency range 100 MHz |
| | | Input impedance = 50 ohm |
| | | Sensitivity at least 0.2 Vrms |
| | | Accuracy better than 0.01ppm |

2. Preparations:

- | | |
|-----|--|
| 2.1 | Switch on the power at least 30 minutes before adjustment. |
|-----|--|

- 2.2 Remove the front cover of the Transceiver Unit.
- 2.3 Locate and disconnect X10 carrying the 2. Local Oscillator signal from the Synthesizer Board 711 to RX/EX Signal Path 715. Connect the frequency counter to the X10 socket on the synthesizer.
- 2.4 The ambient temperature should be within 10 to 30 deg. Celsius. Do not adjust the Master Oscillator shortly after long keying sequences of the transmitter. Be sure that thermal equilibrium has taken place before adjustment.

3. Realignment of Master Oscillator:

- 3.1 Locate the Master Oscillator adjustment hole in the metal shield of Synthesizer Board 711. Use a small screwdriver to gently adjust the frequency.
- 3.2 Adjust the frequency as close as possible to 44.544 000 MHz. Adjustment tolerance +/-1Hz.
- 3.3 Connect X10 and refit the front cover.

Method 2: Realignment using the built-in 'Frequency Error' test.

Note: A telex- or a narrow CW-filter must be installed before this method can be used.

Most AM broadcast stations have a frequency error in the order for 1 to 3 Hz and some have extremely high accuracy as they are frequency locked to atomic standards.

As the necessary measurement time is shorter on higher receiver frequencies choose higher frequencies for quick adjustment. The displayed frequency error of the equipment will be updated every 4 seconds when frequencies above 16 MHz are received. Below 500 kHz the displayed frequency error is updated every 256 seconds.

If the frequency accuracy of the received station is not known use the "Prog" "31" "Enter" feature on several stations to get a general picture of the frequency error.

This function can also be used frequently to check the frequency error of the equipment.

1. Preparations:

- 1.1 Switch on the power at least 30 minutes before adjustment.
- 1.2 The ambient temperature should be within 10 to 30 deg. Celsius. Do not adjust the Master Oscillator shortly after long keying sequences of the transmitter. Be sure that thermal equilibrium has taken place before adjustment.
- 1.3 Remove the front cover of the Transceiver Unit.
- 1.4 Choose a strong AM or CW signal with know good frequency stability.
- 1.5 Enter as receiver frequency the exact carrier frequency of the station to be used.
- 1.6 If an AM broadcast station is used, select AM mode and observe that the signal is received with not too strong fading and a reasonable signal to noise ratio. If these requirements are not fulfilled choose another station.

- 1.7 Press "Prog" "31" "Enter". The frequency error on the actual receiver frequency is shown in the receiver display and a clean 300 Hz tone should be heard in the loudspeaker. After each error measurement, at intervals depending on the magnitude of the receiver frequency, the display is updated and a short beep is heard in the loudspeaker.

2. Realignment of Master Oscillator:

- 2.1 Locate the Master Oscillator adjustment hole in the metal shield of Synthesizer Board 711. Use a small screwdriver to gently adjust the frequency.
- 2.2 Adjust the Master Oscillator until the displayed frequency error is as close as possible to zero. A clean 300 Hz tone should be heard in the loudspeaker.
- 2.3 If the bar-graph in the display, indicating the received signal strength, is changing rapidly by a large amount or the 300 Hz tone heard in the loudspeaker is not clean choose another station with better reception quality.
- 2.4 Connect X10 and refit the front cover.

Replacement of Backup Battery

TRP 7000 uses standard 1.5 V alkaline batteries to back-up the memory when the power supply is switched off. Use only the best quality for replacement to avoid leakage.

Skanti recommends:

DURACELL
Alkaline
1.5 V
MN1500 / LR6 / Size AA
3 pieces

The battery life time depends especially on temperature and working conditions, but is estimated to 3 to 4 years.

Every time the power supply is switched on the capacity of the back-up batteries is checked. When the capacity is becoming low the "Bat" annunciator in the display is switched on, showing that it is time to replace batteries. If the capacity becomes critically low the "Bat" annunciator will flash, indicating that memory contents may be lost when the power supply is switched off.

Note that only last set-up, user-programmable memory, Scan, Sweep and Sleep programs and user-configurable parameters are lost with a low voltage back-up battery, and that TRP 7000 is fully operational even without a back-up battery.

Replacement:

Switch on the power supply to ensure no loss of memory contents when the battery pack is removed. Remove the front cover of the Transceiver Unit. The back-up battery pack is located in the Transceiver Unit opposite to the heatsink. Disconnect the battery supply socket X7 on Transceiver Control Board 710 and remove the battery pack by pulling the nylon string. Change all three batteries and be sure to replace with correct polarity. Refit battery pack, socket and front cover. The power supply may now be switched off.

Cleaning the Air Filter

TRP 7200 uses a fan to cool all circuitry inside the Transceiver Unit. To keep the cooling air clean an Air Filter is placed in front of the fan. This Air Filter should be cleaned frequently, especially under dusty working conditions. A dusty Air Filter will block efficient cooling and the transmitter output power is hence reduced to avoid over heating.

Remove the front cover of the Transceiver Unit and gently pull out the Air Filter located in front of the fan. Clean the Air Filter refit and assemble the unit.

TECHNICAL INFORMATION

SUBJECT: TRP 7200 NOW FEATURING 250 WATT

We are pleased to inform that the TRP 7200 transceiver now has been upgraded to 250 Watt output power for all 24V versions except TRP 7208 (FCC version).

Service considerations regarding replacement of modules

The increased output power has required four different modifications. When replacing one of the four parts listed below it should be considered that:

- All four parts must be of the "new" version to obtain the 250 Watt output power.
- Any combination of "old" and "new" versions of the four parts will give 200 Watt output power, except the combination below.
- Only the combination of a "old" version program prom in an "new" version TU Control Board 710 must not be used.

MODIFIED PARTS:

Part no.	Designation	"Old" Version No.	"New" Version No.
107 803 10	24V Power Amplifier Assembly	Up to B3	B4 and up
107 805 30	TU Control Board 710	Up to A8	A9 and up
Version dependent	TU Program Proms	Up to 5.91	5.92 and up
Version dependent	TU Configuration Prom	Up to 2.10	2.11 and up



Technical Information

TRP 8000 Series

Product: **TRP 8000 series**

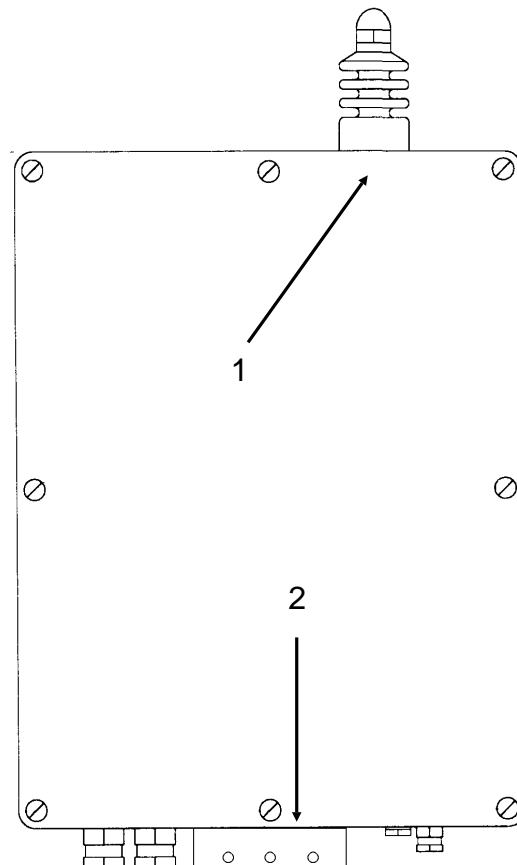
SUBJECT: ATU 8000
Cabinet improvements

The cabinet of the Antenna Tuning Unit of the TRP 8000 series has been modified. The purpose of the modifications is to improve the watertightness of the cabinet.

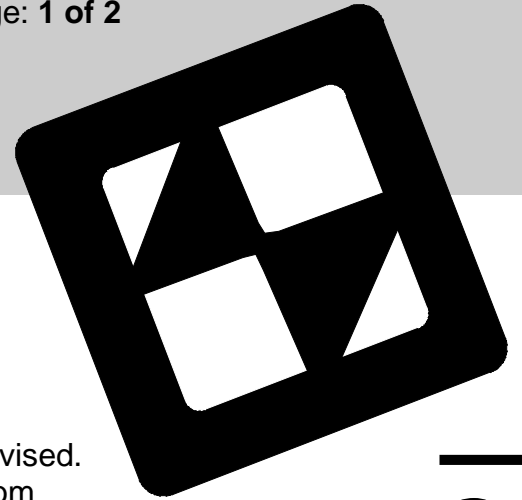
1. The Antenna Horn has been moved from the center to the right half of the cabinet top in order to move the strain of the Antenna Horn to a more rigid part of the cabinet top. The antenna should still be connected to the Antenna Horn as described in the instructions enclosed with the ATU 8000.

2. A Mounting Angle has been fitted to the Earth Terminal Bolts at the bottom of the cabinet to avoid unscrewing of these bolts when installing the ATU 8000. The strap for grounding should be fitted to the new Mounting Angle.

The above modifications are implemented in the Antenna Tuning Unit 8000 from serial number 31126.



Product: TRP 8000 series



SUBJECT: CU 8000
Control Board Replacement

The Control Board 600 of the Control Unit 8000 has been revised. The main reason was to widen the applicable range of E-Prom types used on Control Board 600.

Therefore the below listed instructions should be used for reference when replacing a Control Board 600 of version B1 or lower - by a version B2 or higher.

Standard procedure:

Dis-assemble the Control Unit 8000.

Take out the defective Control Board. Remove and dispose the small capacitor and wire fitted between the Control Board and the Control Unit speaker frame.

As the new Control Board is fitted with a new Program Prom* - only remove the Configuration Prom from the defective Control Board and fit it into the belonging 24 pin socket of the new Control Board.

Fit and connect the new Control Board. Note - if the Control Board connector will not fit into the Audio Board 601 connector - this is presumably caused by coding tabs on the Audio Board connector. These tabs are removed using a pair of pliers. The tab molded on the Control Board connector will ensure correct positioning.

Re-assemble the Control Unit

Considerations:

If a new **Configuration Prom** is required - the compatible E-Prom types are as follows.

Type / 24 pin socket
2532

Types / 28 pin socket
2764
27128

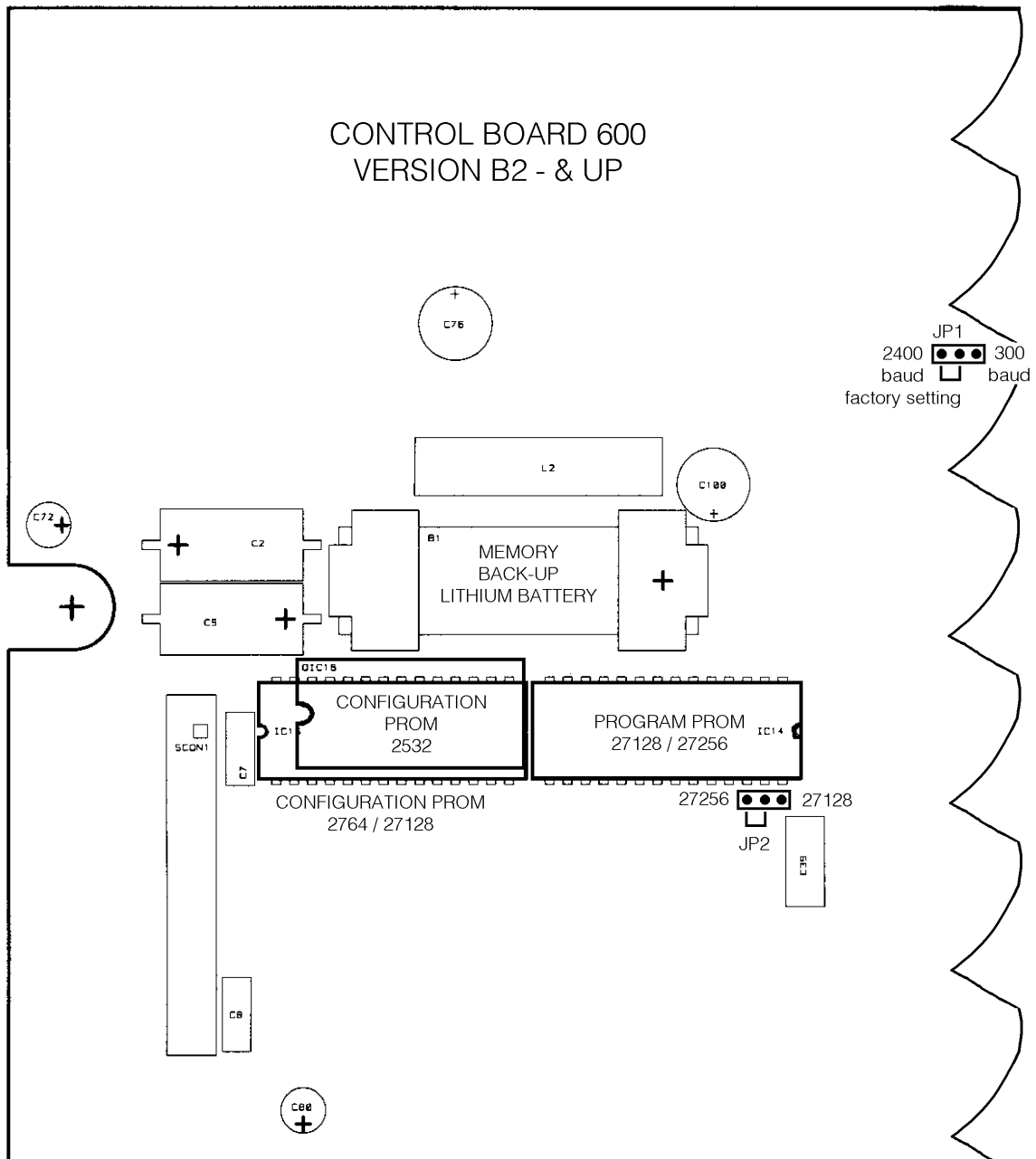
* The **Program Prom** (type 27128) of the defective Control Board may alternatively replace the Program Prom (type 27256) fitted on the new Control Board and the selection link/jumper JP2 for Program Prom type is set to the 27128 position connecting the free pin to the center pin. Please refer to the figure of the Control Board on the next page.

Compatible Program Prom types are 27128 or 27256. Selection link/jumper JP2 for Program Prom type must be set accordingly.



**Additional feature:**

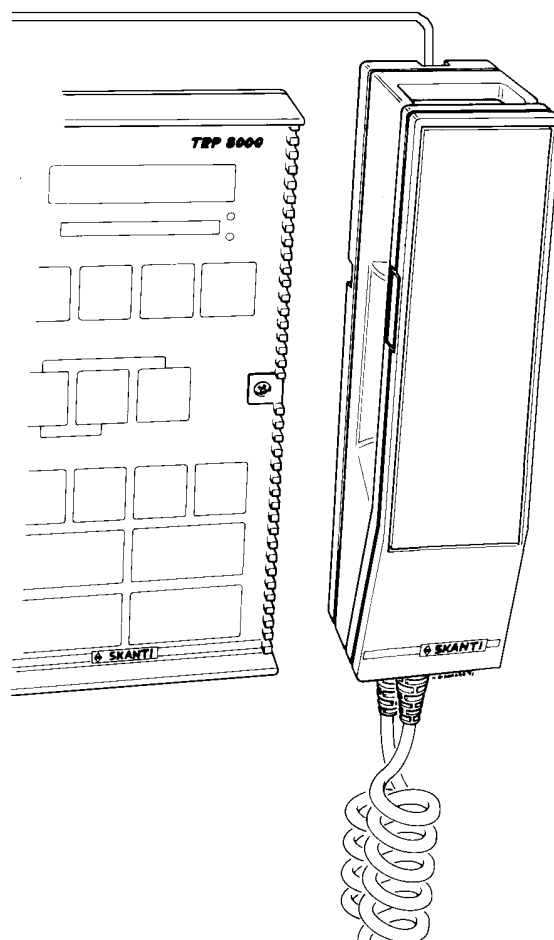
With Control Board version B2 and higher it is possible to replace the memory back-up lithium-battery while the Control Board is still fitted in the Control Unit 8000. A soldering iron is required to remove the battery from its holder. The part number of the spare battery is 107 612 90.

**SKANTI**

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Telex 37292 skanti dk

TECHNICAL INFORMATION

Subject: NEW TRP 8000 SERIES HANDSET



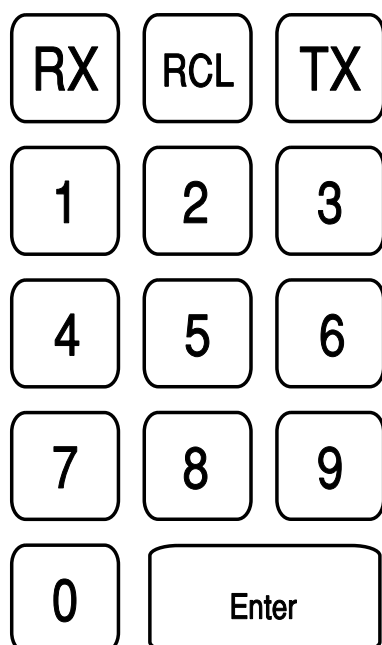
Following the new design of Control Unit CU 8000 we are pleased to announce that a new type of Control Unit handset will be delivered with TRP 8000 series transceivers from now on.

The handset and the handset holder will match the revised design of Control Unit CU 8000 and has a built-in Hook-switch which may be used in connection with a SKANTI DSC 9000 series MF/HF DSC Controller-Receiver.

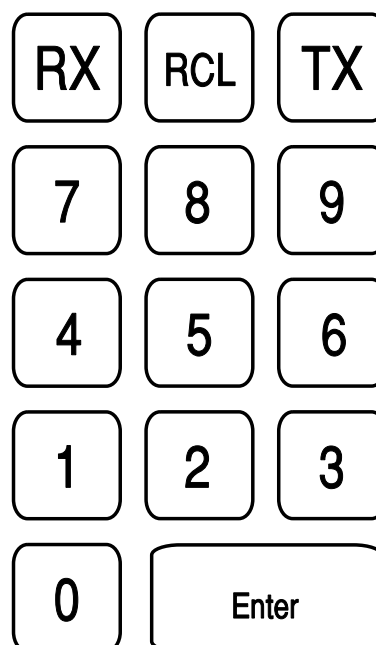
When ordered for replacement this new handset may be connected without any modifications to the CU 8000, using the included handset-holder/CU8000 interconnection cable.

TECHNICAL INFORMATION

Subject: NEW TRP 8000 SERIES STANDARD KEYBOARD



New Numeric Keyboard:
CCITT Type



Old Numeric Keyboard:
Calculator Type

In connection with our new design of CU 8000 (updated front and colour) we have a different location of the numbers on the Control Unit Numeric Keyboard (Membrane Overlay)

This means: If the old type of keyboard is replaced with the new type then the Configuration E-PROM inside the Control Unit also must be replaced or re-programmed to ensure harmony between the activated key and the displayed number .

New Keyboard: CCITT type with "1" located in top left corner of the Numeric Keyboard.

Old Keyboard: Calculator type with "7" in top left corner of the Numeric Keyboard.

Serial No.: The new Keyboard type is introduced as standard with TRP 8000 serial number 10063.

Configuration PROM: The "Special System Parameters" address 4079 decimal / FEF hex designation "Numeric keyboard type" must be programmed as follows:
32 decimal / 20 hex using the new type of keyboard.
255 decimal / FF hex using the old type of keyboard.

When Ordering: It is important to inform the Transceiver serial number and/or Keyboard type when ordering a spare Keyboard or Configuration PROM.

TECHNICAL INFORMATION

Subject: Synthesizer pcb 611, IC replacement.

We have unfortunately been supplied with a batch of ICs of poor quality for the TRP 8000 synthesizer board pcb 611.

The weakness of this IC has been detected after some TRP 8000s including the IC have been shipped from SKANTI.

We will kindly ask you to check and to replace this IC if the serial number on TRP 8000s recently received from SKANTI is included in the list below.

We thank you for your cooperation.

Serial Numbers of TRP 8000 to be checked. :

from **8110** to **8133** (start and end no. included)
from **8137** to **8140**
from **8147** to **8171**
from **8173** to **8174**
from **8180** to **8183**

IC component location: PCB 611 IC 14

IC type to be replaced: Motorola MC14016BCP

New and correct IC type: Phillips HEF4016BP

Enclosure: Replacement ICs



Technical Information

TRP 9500 Series

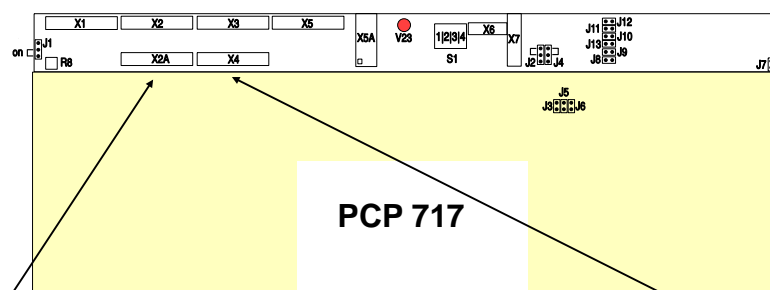
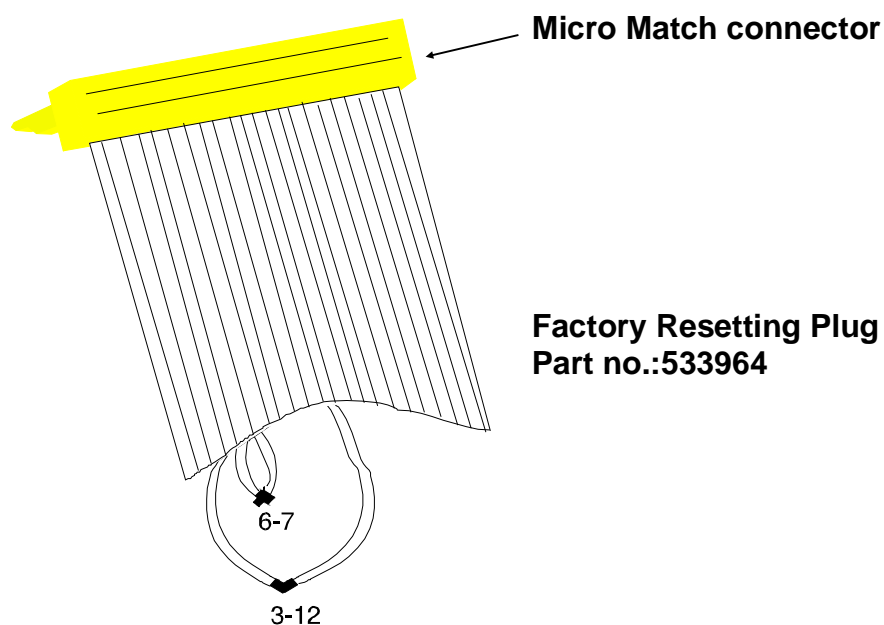
Product: **DSC 3000, DSC 9000, TRP 7200 and TRP 9500**

SUBJECT: COMBINED FACTORY RESETTING
PLUG FOR DSC/TELEX MODEM
PCP 717

We are pleased to introduce a combined Factory Resetting Plug for the DSC/Telex modem PCP 717. This plug will Factory Reset a PCP 717 modem installed in one of the following products:

DSC 3000, DSC 9000, TRP 7200 and TRP 9500*

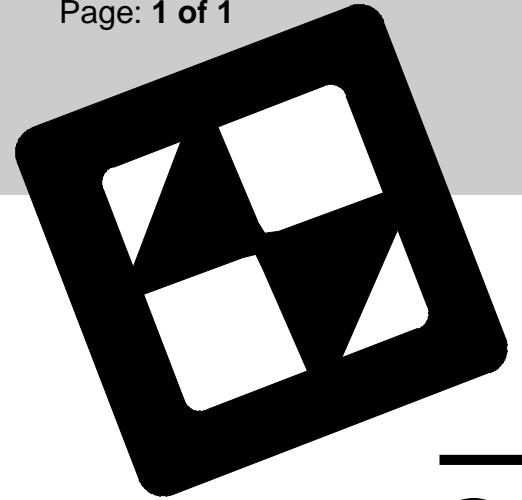
*Please note that the PCP 717 for the TRP 9500 is a combined DSC and Telex modem. Both DSC and Telex will be reset when a Factory Reset is performed.



X2A: Factory Reset in DSC 3000,
DSC 9000 or TRP 9500

X4: Factory Reset in TRP 7200

Product: TRP 9500 S D6T



SUBJECT: DSC Printer Connection
for TRP 9500 S D6T

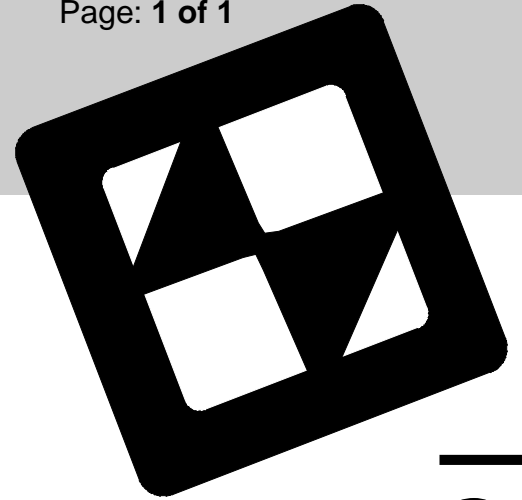
Please be advised that the previous and current software for the TRP 9500 S D6T only accepts a DSC printer when it is connected to the **AUX** port in the DCU 9000 control unit and **not** to the PRN/RCI connector in the TU 9000.

In the next software release it will be possible to connect a DSC printer to both the TU 9000 and to the DCU 9000.

Please contact the Skanti Service department for further information.

Technical Information

Product: TRP 9500 S D6T with DSC/TELEX



Technical Information

SUBJECT: New Software for
TRP 9500 S D6T with DSC/TELEX

Skanti has the pleasure hereby to introduce a new/improved software for the DSC/TELEX modem inside TRP 9500 D6T:

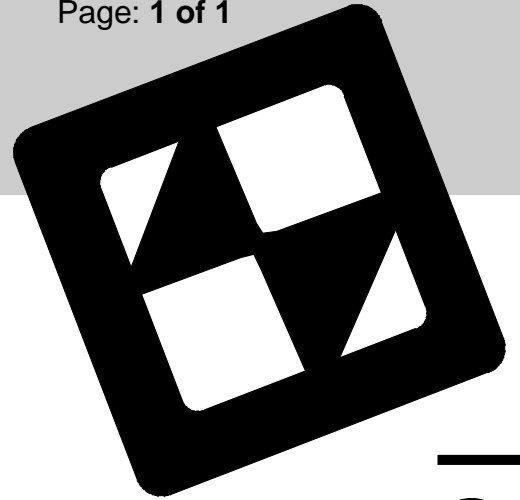
PCB 717 DSC/Telex modem version 4.05

The new software version is in compliance with the coming ITU-R M.493-7 recommendations:

1. New Nature of Distress option 'Armed robbery attack'.
2. New Nature of Distress option 'Man over board'.
3. When the DSC is connected to a GPS receiver for automatic update of position information, the **time** of the position is now taken from the GPS instead of the time information of the internal clock.
4. Optional alarm when position information has not been updated for 4 hours. When the audio alarm sounds - the latest position information is displayed. The actual position should be entered and the update alarm is selected On or Off.
5. 'Undesignated distress' is automatically selected when the Distress button is pressed.
6. It is now possible to connect NMEA position information to either TU 9500 or DCU 9000.

**SKANTI**

Product: TRP 9500



Technical Information

SUBJECT: TRP 9500 S D6T with
DSC/Telex SW version 4.04

Please be advised that the current combined DSC/Telex software version 4.04 for PCB 717 inside TRP 9500 only accepts NMEA input on the NMEA connector in the TU 9000 and **NOT** on the AUX connector in the DCU 9000 control unit.

In the next software release it will be possible to connect the NMEA input to both the TU 9000 and to the DCU 9000.

Please contact the SKANTI Service Department for further information.



SKANTI



Technical Information

VHF 3000

TECHNICAL INFORMATION

SUBJECT: VHF 3000 INSTALLATIONS WITH DSC 3000

VHF 3000 is factory programmed for correct operation with a DSC 3000 Controller/Receiver from serial number "13401". If a VHF 3000 with a serial number below "13401" is used for an installation with DSC 3000 please note that the below listed conditions must be fulfilled to ensure correct DSC operation:

- **The Transceiver Unit program must be the right version in order to allow the DSC 3000 to interface to the VHF 3000.**

Press "Prog" and "2" to read out the program version.

Nine digits will be displayed. The first six digits show the release date and the last three digits show the program version.

If the Transceiver program version is below version 9.0 or in the range 50.0 - 59.0 it must be replaced by version 60.0 but if the version is in the range 9.0 - 17.0 it must be replaced by version 18.0

- **Channel 70 must be programmed correctly to give the DSC full usage of the DSC channel.**

Select channel 70 and press "Prog" and "6" to read out the programming.
The eight digits (displayed one by one) must be "4 1 2 2 3 1 2 2".

If the reading was wrong then perform the following programming:

Switch on the VHF while the two pins of PCB 551/X6 are connected together.

Select channel 70 and press the "Prog" key until "Protec" and "Prog" are displayed.

Press the "SQL" key and enter the ten digits "4 4 1 2 2 3 3 1 2 2".

Press the "Prog" key twice to terminate the new programming of channel 70.

The new programming will have effect the next time channel 70 is selected.

- **As the DSC must hold the highest priority in controlling the transceiver (priority no. 1) the priority of Control Units connected must lie in the range 2 - 9.**

Press "Prog" and "5" to read out the priority of the Control Unit in use.

Three digits will be displayed one by one. The second digit is the priority.

If the priority was "1" then program the new priority as follows:

Switch on the VHF while the two pins of PCB 551/X6 are connected together.

Press the "Prog" key until "Protec" and "Prog" are displayed.

Press the "6" key and enter the new priority (2 - 9) for the Control Unit in use.

Press the "Prog" key twice to terminate the priority assignment.

Switch the VHF off and then on to make the new Control Unit priority effective.

TECHNICAL INFORMATION

Subject: **VHF 3000 Configuration, CU Priority**

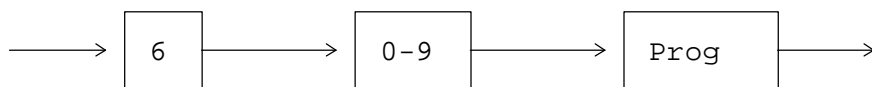
The CU Priority Numbers which may be used when configuring the CU priority to a Control Unit in a standard Multi-User System, has been changed from numbers "1 - 9" to "2 - 9". This means that you must assign the CU Priority Number "2" to a Control Unit if you want to assign the highest Priority.

This change has effect from CU software version 4.0 / TU software version 8.0 and up. From this version and up "CU Priority number 1" is reserved for the External Keying facility. If CU Priority Number "1" is used by mistake in a standard Multi-User System it might cause a problem of uncontrolled keying of the VHF.

Turn over this paper to see the corrected page 3-8 "CU priority" for the Operation & Configuration manual for the SKANTI VHF 3000.

CU priority**CU priority**Description

Gives priority code to the individual CU in a multi-user system, concerning control of the TU and the external speaker.

Keying sequence

Display ID = 6.
Number of digits : 1.

The actual priority is entered as follows.
0: is reserved for the TU, 0 will be defaulted to 9.
1: is reserved for the External Keying facility.
2 - 9: are the available priority numbers.

The new priority will have effect after the set has been switched off and on.

Example

To give a CU the highest priority the digit to programme is 2, and to give the lowest priority the digit to programme is 9.

See also

Speaker Priority.

TECHNICAL INFORMATION

Subject: VHF 3000, Turn on problem.

We have received reports from some of our customers that the SKANTI VHF 3000 in some conditions appears to be impossible to turn on from the ON/OFF key of the Control Unit unless the main-switch of the Transceiver Unit is turned off and then on.

We have been missing a sample vhf with this fault but have finally been able to reproduce the problem and our conclusion is: The fault is caused by a marginal timing problem due to a hardware fault in the micro-processor. The timing problem has been increased as the size of the software program has been expanded and when the latest software version was released the problem occurred in some VHF 3000.

We have decided to make a new version of the software program which will eliminate the timing problem and this version will be included in the VHF 3000s delivered from now on.

We will kindly ask you to let us know how many VHF 3000 that you have with this problem and we shall then ship the number of program proms required. We shall be glad to refund the cost of the proms when we have received the replaced proms from you. If you only require one master-prom to do the re-programming of proms yourself it will be delivered to you free of charge.

Prom type: MBM 27C64-25 (850 276 41)

Prom location : Pcb 551, N22.

Prom versions to be replaced: 50.0 (383 565 01) or 12.0 (383 526 21)

Prom versions to replace with: 53.0 (383 565 31) or 13.0 (383 526 31)

Note. 53.0 must replace 50.0 and 13.0 must replace 12.0.



Technical Information

Miscellaneous

Subject: TRP 6000, PCB 434 Capacitor replacement.

Due to difficulties in getting the capacitors for the TRP 6000 PA-filter (PCB 434) from our suppliers, it has been necessary to make the changes listed below.
We will kindly ask you to note these changes when ordering or replacing the listed capacitors.

IF

The capacitor to be replaced is listed in one of the following sections -

THEN

All capacitors listed in the section must be removed and replaced with :

<u>Section</u>	<u>Pos.</u>	<u>Value</u>	<u>SKANTI code</u>		<u>Pos.</u>	<u>Value</u>	<u>SKANTI code</u>
A	C4	200pF	645 220 00		C4	600pF	607 260 00
	C6	200pF	645 220 00		C6	*	
	C7	200pF	645 220 00		C7	*	
B	C9	200pF	645 220 00		C9	380pF	607 238 00
	C11	180pF	645 218 00		C11	*	
C	C13	200pF	645 220 00		C13	*	
	C16	220pF	645 222 00		C16	410pF	607 241 00

* shall be removed.

